



EUROPEAN COMMISSION
DG Competition

***CASE M.7962 – CHEMCHINA /
SYNGENTA***

(Only the English text is authentic)

**MERGER PROCEDURE
REGULATION (EC) 139/2004**

Article 8(2) Regulation (EC) 139/2004

Date: 5.4.2017

This text is made available for information purposes only. A summary of this decision is published in all EU languages in the Official Journal of the European Union.

Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets.



Brussels, 5.4.2017
C(2017) 2167 final

Public version

COMMISSION DECISION

of 5.4.2017

**declaring a concentration to be compatible with the internal market and the EEA
Agreement (Case M.7962 - ChemChina/Syngenta)**

(Only the English text is authentic)

TABLE OF CONTENTS

1.	THE PARTIES.....	10
2.	THE CONCENTRATION	11
3.	UNION DIMENSION	11
4.	THE PROCEDURE	11
5.	FRAMEWORK OF THE ASSESSMENT	12
6.	OVERVIEW OF THE CROP PROTECTION INDUSTRY.....	13
6.1.	Regulatory framework	14
6.2.	Overview of the value chain for crop protection products (including Lawn and Garden products).....	15
6.3.	Overview of the players in the value chain.....	16
6.3.1.	Integrated global R&D players	17
6.3.2.	Other players	18
6.3.3.	Consolidation and barriers to entry in the agrochemical value chain	21
6.4.	Distinction between R&D and generic players: Implications for competition	22
7.	OVERVIEW OF THE PARTIES' ACTIVITIES.....	24
7.1.	Syngenta.....	24
7.1.1.	Overview of the activities	24
7.1.2.	Syngenta is the leading global integrated R&D player.....	24
7.2.	Adama	27
7.2.1.	Overview of the activities	27
7.2.2.	Adama's overall position in the crop protection markets	28
7.2.2.1.	Introduction.....	28
7.2.2.2.	Product scope and geographic breadth of portfolio	29
7.2.2.3.	Number of AIs and formulated products registration	35
7.2.2.4.	R&D, formulation, registration and sales and distribution resources	36
7.2.2.5.	Conclusion.....	37
7.2.3.	ChemChina as a state-owned enterprise	37
8.	MARKET DEFINITION	39
8.1.	Relevant product markets.....	39
8.1.1.	Raw materials.....	39
8.1.1.1.	Past decisional practice	39
8.1.1.2.	The Parties' views.....	40
8.1.1.3.	The Commission's assessment	40
8.1.2.	Active ingredients	40

8.1.2.1. Past decisional practice	40
8.1.2.2. The Parties' views.....	40
8.1.2.3. The Commission's assessment	41
8.1.3. Herbicides	41
8.1.3.1. Past decisional practice	41
8.1.3.2. The Parties' views.....	42
8.1.3.3. The Commission's assessment	42
8.1.4. Insecticides.....	44
8.1.4.1. Past decisional practice	44
8.1.4.2. The Parties' views.....	44
8.1.4.3. The Commission's assessment	44
8.1.5. Fungicides	45
8.1.5.1. Past decisional practice	45
8.1.5.2. The Parties' views.....	45
8.1.5.3. The Commission's assessment	46
8.1.6. Plant growth regulators	46
8.1.6.1. Past decisional practice	46
8.1.6.2. The Parties' views.....	46
8.1.6.3. The Commission's assessment	46
8.1.7. Seed treatment.....	47
8.1.7.1. Past decisional practice	47
8.1.7.2. The Parties' views.....	47
8.1.7.3. The Commission's assessment	47
8.1.8. Post-harvest treatment products	47
8.1.8.1. The Parties' views.....	48
8.1.8.2. The Commission's assessment	48
8.1.9. Nutrients.....	48
8.1.9.1. The Parties' views	48
8.1.9.2. The Commission's assessment	48
8.1.10. Lawn and Garden products	48
8.1.10.1.Past decisional practice	48
8.1.10.2.The Parties' views.....	49
8.1.10.3.The Commission's assessment	49
8.2. Relevant Geographic Markets.....	49
8.2.1. Raw materials.....	49

8.2.1.1.	Past decisional practice	49
8.2.1.2.	The Parties' views.....	49
8.2.1.3.	The Commission's assessment	50
8.2.2.	Active Ingredients	50
8.2.2.1.	Past decisional practice	50
8.2.2.2.	The Parties' views.....	50
8.2.2.3.	The Commission's assessment	50
8.2.3.	Herbicides, Insecticides, Fungicides, Seed Treatment, PGRs, Post-harvest treatment, nutrients and Lawn and Garden Products	51
8.2.3.1.	Past decisional practice	51
8.2.3.2.	The Parties' views.....	51
8.2.3.3.	The Commission's investigation	52
8.2.3.4.	The Commission's assessment	52
9.	COMPETITIVE ASSESSMENT - HORIZONTAL OVERLAPS IN THE MARKETS FOR ACTIVE INGREDIENTS.....	52
9.1.	Analytical framework for the competitive assessment	53
9.1.1.	Legal test	53
9.1.2.	The concept of closeness between the merging parties' products.....	54
9.1.3.	Standard of Proof	54
9.2.	Drivers and trends in the supply and sourcing of AIs.....	55
9.3.	Overview Horizontal overlaps	56
9.4.	The Parties' views.....	58
9.5.	The Commission's assessment	58
9.5.1.	Alternative suppliers	59
9.5.2.	Spare capacity and barriers to expansion/entry.....	60
9.5.3.	Switching costs for AI customers	60
9.6.	Conclusion.....	61
10.	COMPETITIVE ASSESSMENT - VERTICAL RELATIONSHIP MERCHANT ACTIVE INGREDIENTS AND CROP PROTECTION PRODUCTS.....	61
10.1.	Overview vertical links	61
10.2.	Input foreclosure	62
10.2.1.	The Parties' arguments	62
10.2.2.	The Commission's assessment	63
10.2.2.1.	AIs supplied by both Parties	63
10.2.2.2.	AIs supplied by Syngenta	64
10.2.2.3.	AIs supplied by ChemChina /Adama.....	64

10.2.2.4.	Feedback from market participants	65
10.2.2.5.	Conclusion.....	67
10.3.	Customer foreclosure	67
10.3.1.	The Parties' arguments	68
10.3.2.	The Commission's assessment	68
10.3.3.	Conclusion.....	71
10.4.	Conclusion.....	72
11.	COMPETITIVE ASSESSMENT - VERTICAL RELATIONSHIP RAW MATERIAL/ADJUVANTS AND MERCHANT ACTIVE INGREDIENTS	72
11.1.	Overview vertical links	72
11.2.	Input foreclosure	72
11.2.1.	The Parties' views.....	72
11.2.2.	The Commission's assessment	73
11.3.	Customer foreclosure	75
11.3.1.	The Parties' views.....	75
11.3.2.	The Commission's assessment	75
11.4.	Conclusion.....	76
12.	COMPETITIVE ASSESSMENT - HORIZONTAL OVERLAPS IN LAWN AND GARDEN MARKETS	76
13.	COMPETITIVE ASSESSMENT - HORIZONTAL OVERLAPS IN CROP PROTECTION MARKETS.....	77
13.1.	Methodology introduction.....	77
13.1.1.	Methodology for market shares calculation.....	77
13.1.2.	Methodology of assessment	79
13.2.	Cereals.....	80
13.2.1.	Overview of the crop.....	80
13.2.2.	Fungicides for cereals	81
13.2.2.1.	General overview	81
13.2.2.2.	Markets where the Transaction would not significantly impede effective competition	86
13.2.2.3.	Markets where the Transaction would significantly impede effective competition ..	94
13.2.3.	Insecticides for cereals	98
13.2.3.1.	Wheat	98
13.2.3.2.	Barley	105
13.2.3.3.	Other cereals.....	109
13.2.4.	PGR for cereals	110

13.2.4.1. Overview of PGR for cereals	110
13.2.4.2. Markets where the Transaction would not significantly impede effective competition	114
13.2.4.3. Markets where the Transaction would significantly impede effective competition	120
13.2.5. Seed treatment for cereals	136
13.2.5.1. Overview of seed treatment for cereals.....	136
13.2.5.2. Markets where the Transaction would not significantly impede effective competition	140
13.2.5.3. Markets where the Transaction would significantly impede effective competition	142
13.2.6. Selective Herbicides.....	146
13.2.6.1. General overview	146
13.2.6.2. Markets where the Transaction would not significantly impede effective competition	148
13.2.6.3. Markets where the Transaction would significantly impede effective competition	152
13.2.7. Conclusion.....	156
13.3. OSR.....	156
13.3.1. Overview of the crop.....	156
13.3.2. Fungicides	157
13.3.2.1. Markets where the Transaction would not significantly impede effective competition	157
13.3.2.2. Markets where the Transaction would significantly impede effective competition	158
13.3.3. Selective Herbicides.....	165
13.3.3.1. Markets where the Transaction would not significantly impede effective competition	166
13.3.4. Insecticides.....	168
13.3.4.1. Markets where the Transaction would not significantly impede effective competition	168
13.3.4.2. Markets where the Transaction would significantly impede effective competition	169
13.3.5. Conclusion.....	178
13.4. Sugar beet.....	178
13.4.1. Overview of the crop.....	178
13.4.2. Fungicides	179
13.4.2.1. Markets where the Transaction would not significantly impede effective competition	179
13.4.3. Seed treatment.....	179
13.4.3.1. Markets where the Transaction would significantly impede effective competition	180
13.4.4. Selective herbicides.....	181

13.4.4.1. Markets where the Transaction would not significantly impede effective competition	181
13.4.5. Conclusion.....	181
13.5. Corn.....	181
13.5.1. Overview of the crop.....	181
13.5.2. Insecticides.....	182
13.5.2.1. Markets where the Transaction would not significantly impede effective competition	182
13.5.2.2. Markets where the Transaction would significantly impede effective competition	183
13.5.3. Selective herbicides.....	186
13.5.3.1. Markets where the Transaction would not significantly impede effective competition	186
13.5.3.2. Markets where the Transaction would significantly impede effective competition	190
13.5.4. Conclusion.....	196
13.6. Fruits.....	196
13.6.1. Overview of the crops.....	196
13.6.2. Fungicides.....	197
13.6.2.1. Markets where the Transaction would not significantly impede effective competition	197
13.6.2.2. Markets where the Transaction would significantly impede effective competition	202
13.6.3. Selective herbicides.....	205
13.6.3.1. Markets where the Transaction would not significantly impede effective competition	205
13.6.4. Insecticides.....	205
13.6.4.1. Markets where the Transaction would not significantly impede effective competition	205
13.6.4.2. Markets where the Transaction would significantly impede effective competition	210
13.6.5. Nutrients.....	218
13.6.5.1. Markets where the Transaction would not significantly impede effective competition	218
13.6.6. Post-harvest treatment.....	218
13.6.6.1. Markets where the Transaction would not significantly impede effective competition	218
13.6.7. Conclusion.....	218
13.7. Vegetables.....	218
13.7.1. Overview of the crop.....	218
13.7.2. Fungicides.....	219

13.7.2.1. Markets where the Transaction would not significantly impede effective competition	219
13.7.2.2. Markets where the transaction would significantly impede effective competition..	228
13.7.3. Selective Herbicides	233
13.7.3.1. Markets where the Transaction would not significantly impede effective competition	233
13.7.3.2. Markets where the transaction would significantly impede effective competition..	238
13.7.4. Insecticides	243
13.7.4.1. Markets where the Transaction would not significantly impede effective competition	243
13.7.4.2. Markets where the Transaction would significantly impede effective competition	250
13.7.5. Seed treatment	258
13.7.5.1. Markets where the Transaction would not significantly impede effective competition	258
13.7.6. Conclusion	259
13.8. Sunflower	260
13.8.1. Overview of the crop	260
13.8.2. Fungicides	260
13.8.2.1. Markets where the Transaction would not significantly impede effective competition	260
13.8.3. Insecticides	261
13.8.3.1. Markets where the Transaction would not significantly impede effective competition	261
13.8.4. Seed treatment	261
13.8.4.1. Markets where the Transaction would not significantly impede effective competition	261
13.8.5. Selective Herbicides	262
13.8.5.1. General overview	262
13.8.5.2. Markets where the Transaction would not significantly impede effective competition	262
13.8.5.3. Markets where the Transaction would significantly impede effective competition	265
13.8.6. Conclusion	270
13.9. Other crops	270
13.9.1. Cotton - Selective Herbicides	270
13.9.1.1. Markets where the Transaction would not significantly impede effective competition	270
13.9.2. Soybeans - Selective Herbicide	271

- 13.9.2.1. Markets where the Transaction would not significantly impede effective competition 271
- 14. COMPETITIVE ASSESSMENT - NON-HORIZONTAL EFFECTS IN CROP PROTECTION MARKETS 271
- 14.1. Foreclosure through bundling practices 271
- 14.2. Other foreclosure effects 272
- 14.2.1. Increased difficulties for smaller generic players to maintain and renew authorizations and registrations of AIs and products in the EEA 272
- 15. CONCLUSION 274
- 16. MODIFICATIONS TO THE TRANSACTION 274
- 16.1. General principles for the assessment of remedies 274
- 16.2. Description of the Initial Commitments 276
- 16.3. Assessment of the Initial Commitments 278
- 16.3.1. The Parties' arguments 278
- 16.3.2. The Commission's assessment 279
- 16.3.2.1. Removal of competition concerns 279
- 16.3.2.2. Viability of the Divestment Business 280
- 16.4. Description of the Final Commitments of 27 January 2017 286
- 16.5. Assessment of the Final Commitments 287
- 16.6. Conclusion on remedies 287
- 17. CONDITIONS AND OBLIGATIONS 287

COMMISSION DECISION

of 5.4.2017

declaring a concentration to be compatible with the internal market and the EEA Agreement (Case M.7962 - ChemChina/Syngenta)

(Only the English text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings¹, and in particular Article 8(2) thereof,

Having regard to the Commission's decision of 28 October 2016 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations²,

Having regard to the final report of the Hearing Officer in this case³,

Whereas:

- (1) On 23 September 2016, the Commission received a notification of a proposed concentration pursuant to Article 4 of Regulation (EC) No 139/2004 ("the Merger Regulation") by which the undertaking China National Chemical Corporation ("ChemChina", China) acquires control of the whole of the undertaking Syngenta AG ("Syngenta", Switzerland) by way of purchase of shares.⁴ The proposed acquisition ("the Transaction") falls within Article 3(1)(b) of the Merger Regulation. ChemChina is also referred to as "the Notifying Party". ChemChina, including its subsidiaries, and Syngenta are collectively referred to as the "Parties".

1. THE PARTIES

- (2) **ChemChina** is a Chinese State-owned enterprise ("SOE"). ChemChina is active in the agrochemical sector through its agrochemical company China National Agrochemical Corporation ("CNAC"). In particular, CNAC controls its wholly-owned subsidiary ADAMA Agricultural Solutions Ltd ("Adama"). Adama is an Israel-based company which, until recently, was jointly controlled by the Israeli

¹ OJ L 24, 29.1.2004, p. 1. With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this Decision.

² OJ C200. , p....

³ OJ C200. , p....

⁴ Regulation (EC) No 139/2004.

company Koor Industries Ltd ("Koor") and ChemChina.⁵ Adama is primarily active in the manufacturing and/or distribution of off-patent formulated products for crop protection and professional pest control, including a wide range of herbicides, insecticides and fungicides, seed treatment, and products for lawn and gardens. It also sells active ingredients ("AIs"). Adama is active at a global level. CNAC manufactures and sells chemical products for agricultural uses (crop protection), including off-patent AIs, and formulated products used for agricultural crop protection products, mainly outside the European Economic Area (EEA).

- (3) **Syngenta** is a global business operating in the agro-chemical sector, with its headquarters in Switzerland. It produces and sells crop protection products, seeds, and products for lawn and gardens. It is active on a vertically-integrated basis in the research, development, manufacture and marketing of a wide range of crop protection products and seeds.

2. THE CONCENTRATION

- (4) On 2 February 2016, ChemChina and Syngenta entered into an agreement to effect the Transaction by means of a public tender offer for all of Syngenta's publicly held registered shares and the American depository shares (listed on the New York Stock Exchange).
- (5) Following completion of the Transaction, Syngenta would be wholly owned and controlled by the Notifying Party.
- (6) The Transaction therefore gives rise to a concentration within the meaning of Article 3(1) (b) of the Merger Regulation.

3. UNION DIMENSION

- (7) The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million⁶ [ChemChina: EUR 37 321 million; Syngenta: EUR 12 087 million]. Each of them has an aggregate Union-wide turnover in excess of EUR 250 million [ChemChina: EUR [...]; Syngenta: EUR [...]], and they do not achieve more than two-thirds of their aggregate Union-wide turnovers within one and the same Member State. The Transaction therefore has a Union dimension within the meaning of Article 1(2) of the Merger Regulation.

4. THE PROCEDURE

- (8) Based on the results of the Phase I investigation, the Commission raised serious doubts as to the compatibility of the Transaction with the internal market and adopted a decision to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation on 28 October 2016 (the "Article 6(1)(c) Decision").

⁵ The Commission has approved ChemChina's acquisition of sole control over Adama in case M.8170 – ChemChina/Adama.

⁶ Turnover calculated in accordance with Article 5 of the Merger Regulation and the Commission's Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "Jurisdictional Notice") (OJ C 95, 16.4.2008, p. 1).

- (9) The Parties submitted their written comments to the Article 6(1)(c) Decision on 9 November 2016 ("Response to Article 6(1)(c) Decision").
- (10) During the Phase II investigation, the Commission sent several requests for information to the Parties and to third party market participants. Information was also provided to the Commission at several meetings and conference calls with the Parties and with third parties. The Commission also analysed internal documents of the Parties and data from the Parties and some third parties.
- (11) On 10 January 2017, the Parties proposed formal commitments to eliminate the Commission's serious doubts that the Transaction would give rise to a significant impediment to effective competition. The Commission launched the market test for the commitments on the same day.
- (12) Taking into account the Commission's comments and the feedback from the market test, the Parties subsequently submitted a final set of commitments on 27 January 2017.

5. FRAMEWORK OF THE ASSESSMENT

- (13) At the time of notification, the Commission was informed that other concentrations were planned in the agrochemical industry, and that those concentrations could affect the assessment of the Transaction as the parties to the other anticipated transactions operated in the same markets as the Parties.
- (14) On 22 June 2016, before the notification of the Transaction, the Dow Chemical Company ("Dow"), ultimate parent company of the undertakings comprising the Dow group, and E.I. du Pont de Nemours and Company ("DuPont"), ultimate parent company of the undertakings comprising the DuPont group, notified the Commission of their intention to enter into a merger falling within Article 3(1)(a) of the Merger Regulation ("the Dow-DuPont transaction").⁷ That concentration was cleared subject to commitments on 27 March 2017. In addition, another major transaction between the agrochemical companies Bayer and Monsanto was announced in September 2016.
- (15) Consistent with its previous practice, the Commission undertakes to review notified concentrations affecting identical or overlapping markets in the order in which they are notified to it on a "first come, first served" basis, based on the date of notification.⁸
- (16) The Commission notes in that regard that, in assessing the competition effects of a proposed Transaction under the Merger Regulation, it needs to compare the competitive conditions that would result from the notified concentration with those that would have prevailed in the absence of the concentration. As a general rule, the competitive conditions prevailing at the time of notification constitute the relevant

⁷ Case M.7932 – DOW/DUPONT.

⁸ See, for example, Commission Decision in Case M.6214 – Seagate/HDD Business of Samsung, OJ C165/05, 19.10.2011; Commission Decision in Case M.6203 – Western Digital/Viviti Technologies, OJ C241/06, 23.11.2011; Commission Decision in Case M.4942 – Nokia/Navteq, OJ C 013/06, 02.07.2008; Commission Decision in Case M.4854 – TomTom/Tele Atlas, OJ C 237/12, 16.09.2008; Commission Decision in Case M.4601 – KarstadtQuelle/My Travel, OJ C 113/01, 23.05.2007 and Commission Decision in Case M.4600 – TUI/First Choice, OJ C137/05, 21.06.2007.

framework for evaluating the effects of a transaction.⁹ In some circumstances, however, the Commission may take into account future changes to the market that can be reasonably predicted.¹⁰

- (17) Based on those principles and the provisions of the Merger Regulation, the Commission considers that, in cases of parallel investigations into proposed concentrations affecting the same markets and industries (as in this Decision), the first Transaction to be notified should be assessed on its own merits and on the basis of the market structure prevailing at the time of that notification. It is not necessary or appropriate to take into account future changes to market conditions that may come about as a result of transactions requiring approval from the Commission that are notified subsequently.
- (18) Therefore, given the circumstances in this case, the Transaction should be assessed taking into account the Dow-DuPont transaction notified on 22 June and cleared subject to commitments on 27 March 2017, but disregarding any potential changes that may be brought about by future Transactions in the industry, which have not yet been notified to the Commission or which were notified after notification of the Transaction.
- (19) The starting point for the Commission's assessment of the Transaction is therefore a market structure where the integrated research and development ("R&D") players that are active - that is to say, the agrochemical companies active at all four stages of the value chain and active globally, of which Dow and DuPont are two – are the following: Syngenta, Bayer, BASF, Dow/DuPont and Monsanto. If Dow and DuPont were to be considered as two separate entities, the competitive assessment would, in any event, remain the same.

6. OVERVIEW OF THE CROP PROTECTION INDUSTRY

- (20) Crop protection products (also known as "pesticides" or "agrochemicals" and, under the European Union legal acts, as "plant protection products"), are used for application in agricultural production in order to protect a crop from biological organisms (pests) that can negatively affect the crop development, either by attacking it or by depriving the crop of its resources. Depending on the type of organism they target, crop protection products can be categorised into three major types, including herbicides (to control weeds), insecticides (to control insects), fungicides (to control diseases triggered by fungi), as well as other products such as Plant Growth Regulators ("PGRs")¹¹. Crop protection products are generally applied on crops or plants.¹² Some crop protection products can also be applied on seeds to protect them

⁹ See, for instance, Case T-342/99 *Airtours v. Commission* [2002] ECR II-2585, paragraph 82 ("*the level of competition obtaining in the relevant market at the time when the Transaction is notified is a decisive factor in establishing whether a collective dominant position has been created for the purposes of Regulation No 4064/89*"), as well as Case T-2/93 *Air France v. Commission* [1994] ECR II-323, paragraphs 70-72; Case T-374/00 *Verband der freien Rohrwerke and Others v. Commission* [2003] ECR II-2275, paragraph 170.

¹⁰ See, for example, point 9 of the Horizontal Merger Guidelines, OJ C 31, 5.2.2004, page 5.

¹¹ PGRs can be either natural or synthetic compounds that are applied directly to a plant to alter its life processes or structure in some beneficial way to enhance yields, improve quality or facilitate harvesting.

¹² A crop is any cultivated plant that is harvested for food, fuel or other purposes. "Plants" is a broader term which captures also plants that are not cultivated for a particular purpose, such as garden plants.

from insects and diseases (seed treatments). Crop protection for agricultural production represents the most important part of the industry. Crop protection products which are used for domestic purposes (in households or professional establishments) are referred to in this Decision as "Lawn and Garden" products.¹³

- (21) The global market for crop protection products (excluding Lawn and Garden)¹⁴ is estimated to have a value of USD 56.6 billion in 2014.¹⁵ Total sales in Europe and in the EEA are estimated at USD 14 billion and USD 10 billion, respectively. Herbicides are the largest component of the market (44.7% in Europe), followed by fungicides (38.2%) and insecticides (13.6%).¹⁶
- (22) In 2014, the leading national markets for crop protection products in Europe were France (USD 2.9 billion), Germany (USD 2.3 billion), Italy (USD 1.4 billion), Spain (USD 1.1 billion) and the United Kingdom (USD 0.9 billion). The most important crops in Europe are cereals, fruit and vegetables, maize, oilseed rape ("OSR"), sugar beet, and sunflower.
- (23) The global crop protection market is expected to grow strongly in the near future due to economic and population growth, declining arable land and changes in diet, all fuelling a requirement for higher crop yields. The European market however is already considered mature and is therefore expected to grow only moderately in the next few years. Nevertheless, the European market consists of a sizeable proportion of the global market and continues to pose numerous challenges including heightened regulatory requirements, growth of resistance to existing agrochemicals and development of new pests.
- (24) The market for Lawn and Garden products was worth USD 6.6 billion globally in 2014¹⁷ and USD [...] in 2015 at EEA level.¹⁸ Lawn and Garden products are developed in the same way as agricultural crop protection products and are produced by the same companies.

6.1. Regulatory framework

- (25) According to relevant European Union legal acts^{19,20} crop protection products must undergo two regulatory steps before they can be marketed in the EEA.
- (26) In the first step, an AI must be registered as an approved substance²¹ under specific plant protection framework regulation.²² If granted approval, an active substance is

¹³ In addition to herbicides, insecticides and fungicides, Lawn and Garden products include rodenticides – products for exterminating rodents.

¹⁴ Excluding sales of herbicide tolerant and insect resistant seeds, as well as non-crop agrochemicals.

¹⁵ Phillips McDougall – AgriService, Industry Overview, 2014 Market.

¹⁶ Phillips McDougall – AgriService, Industry Overview, 2014 Market. The available data from Phillips McDougall refers to sales of crop protection products in Europe (namely the geographical area), while the Transaction concerns sales within the EEA.

¹⁷ Phillips McDougall – AgriService, Industry Overview, 2014 Market.

¹⁸ Form CO, paragraph 6636.

¹⁹ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH"), establishing a European Chemicals Agency (OJ L 396/1, 2006) ("Regulation (EC) No. 1907/2006").

²⁰ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC 1107/2009 (OJ L 309/1, 2009) ("Regulation (EC) No. 1107/2009").

valid in all EU Member States for a maximum period of 10 years. A renewal of the approval is possible for a maximum period of 15 years providing the AI still meets the requirements.²³ If approval of the AI is not renewed, there is a grace period of maximum 18 months during which existing stocks of the AI must be withdrawn from the market or disposed of.^{24,25} Test and study reports submitted during regulatory approval of an AI benefit from data protection for 10 years or 30 months for studies submitted for renewal of registration, during which they cannot be used to approve crop protection products from other parties using that AI.²⁶

- (27) In the second step, formulated plant protection products that contain the AI (or a mix of several AIs) must be authorised by each Member State in which it is to be marketed, pursuant to Regulation (EC) No. 1107/2009. Regulation (EC) No. 1107/2009 also introduces a mutual recognition procedure pursuant to which formulated products which have been authorized by one Member State should be authorized by other Member States, where agricultural, plant health and environmental (including climatic) conditions are comparable. The regulation defines three zones within Europe on the basis of homogeneous conditions (the "zonal system").²⁷ In the EU regulatory system the process from filing an application for the approval of an AI to the authorisation of a crop protection product containing the AI can take between 3 and 5 years.
- (28) Section 6.4 describes the impact of patent strategies on the market as one further element of the regulatory framework.

6.2. Overview of the value chain for crop protection products (including Lawn and Garden products)

- (29) The key components of crop protection products are AIs, which produce the desired biological effect (killing the pest). The value chain, encompassing the launch of a new AI to its commercialisation as a final formulated product, can be described in four stages (see also Figure 1):
- (a) *Discovery*: The discovery process includes the synthesis of candidate molecules for new AIs, which are then screened to determine their biological activity. Molecules are moved forward in the development process based, among other things, on their efficacy, toxicological, and environmental properties.
 - (b) *Development*: Product development includes further safety testing, testing of formulations using the new AI, biological development to investigate the activity of the AI against different pests and in different environmental

²¹ REACH, which concerns the registration, evaluation, authorization and restriction of chemicals (including, but not limited to, AIs for agrochemicals).

²² Regulation (EC) No. 1107/2009.

²³ Regulation (EC) No. 1107/2009, article 14.

²⁴ Regulation (EC) No. 1107/2009, article 20.

²⁵ In cases where the approval was not renewed due to environmental or health concerns, the AI must be immediately withdrawn.

²⁶ Regulation (EC) No. 1107/2009, article 59.

²⁷ The zones are defined in Regulation (EC) No.1107/2009 (Annex I) as follows. Zone A – North: Denmark, Estonia, Latvia, Lithuania, Finland, Sweden; Zone B – Centre: Belgium, Czech Republic, Germany, Ireland, Luxembourg, Hungary, Netherlands, Austria, Poland, Romania, Slovenia, Slovakia, United Kingdom; Zone C – South: Bulgaria, Greece, Spain, France, Italy, Cyprus, Malta, Portugal.

situations and further assessment of the AI's regulatory profile. After discovery and development, the results of the AI developmental studies are submitted for regulatory approval under the relevant EU law (see Section 6.1).

- (c) *Mixture/formulation*: Once a new AI meets regulatory requirements, it is mixed with other AIs and/or substances such as safeners²⁸, synergists²⁹ and co-formulants^{30,31} to obtain a final formulation based on a solo AI³² or a mixture of AIs. Registration of the formulated product at Member State-level is required so that the product can be sold to customers (see Section 6.1).
 - (d) *Distribution*: The formulated product is then distributed to final customers (farmers) through established distribution channels. Most of the time, crop protection products are sold to non-exclusive distributors who then resell to retailers or directly to farmers, but they may sometimes be sold to farmer cooperatives. Lawn and Garden products may be sold to retailers, professional pest control operators, industrial customers or local authorities and municipalities.
- (30) The launch of a new AI requires significant time and financial resources due to the rigorous testing that the AI must undergo before being commercialised. The average overall costs for the discovery and development of a new AI and introduction of a formulated product based on that AI are estimated at USD 286 million, taking approximately 10 years.³³ There are therefore only a limited number of companies globally with the resources to afford these costs (namely mainly integrated R&D companies - see Section 6.3).

6.3. Overview of the players in the value chain

- (31) In its review of the Transaction the Commission considers that there are two types of players in the market for crop protection products: (i) R&D players and (ii) other players (which mainly include generic players). These companies are characterized by different capabilities in the production chain for crop protection products and are active at different stages of the value chain. Figure 1 provides an overview of the main players and their activities in the value chain.

²⁸ "Safeners" are "substances or preparations which are added to a plant protection product to eliminate or reduce phytotoxic effects of the plant protection product on certain plants". Regulation (EC) No. 1107/2009, Article 2(3)a.

²⁹ "Synergists" are "substances or preparations which, while showing no or only weak activity(...)can give enhanced activity to the active substance(s) in a plant protection product". Article 2(3)b.

³⁰ "Co-formulants" are "substances or preparations which are used or intended to be used in a plant protection product or adjuvant, but are neither active substances nor safeners or synergists". Regulation (EC) No. 1107/2009, Article 2(3)c.

³¹ "Adjuvants" are "substances or preparations which consist of co-formulants or preparations containing one or more co-formulants, in the form in which they are supplied to the user and placed on the market to be mixed by the user with a plant protection product and which enhance its effectiveness or other pesticidal properties". Regulation (EC) No. 1107/2009, Article 2(3)d.

³² A "solo AI" refers to products based on one AI rather than a mixture of different AIs.

³³ Phillips McDougall, "The cost of new agrochemical product discovery, Development and Registration in 1995, 200, 2005-2008, 2010-2014. R&D expenditure in 2014 and expectations for 2019," a consultancy study for CropLife International, CropLife America and the European Crop Protection Association, March 2016. Study was undertaken for third parties.

Figure 1 - Value chain in the production of crop protection products: Key players³⁴



6.3.1. Integrated global R&D players

- (32) *Integrated R&D players* (referred to hereafter as "R&D players") are agrochemical companies which are active at all four stages of the value chain and which are active globally. They have the ability to undertake the research, discovery, development and registration of new AIs, as well as having access to distribution. These companies' product offerings tend to be characterised by high-value patented AIs. They also often have large sales teams that offer direct tailored advice and support to customers (farmers) from experts.³⁵ Sales by R&D players account for around 70% of the global agrochemical market.^{36,37}
- (33) There are currently five major R&D global players, namely Syngenta, Bayer Crop Science, BASF, Dow and DuPont³⁸, and in addition (to a lesser extent) Monsanto, the global agriculture and seed leader thanks to its genetically modified crops.³⁹ Their global agrochemical revenues in 2014 ranged from USD 4.9 billion (Monsanto) to USD 11 billion (Bayer).⁴⁰

³⁴ Form CO, pages 62-71; Replies to question 4 of Questionnaire (Q3) to crop protection competitors.

³⁵ Minutes of the conference call with a distributor of 10 August 2016.

³⁶ The term, "*agrochemical market*" refers to all chemicals used in agriculture, including crop protection and also fertilisers. Crop protection accounts for the majority of agrochemical products.

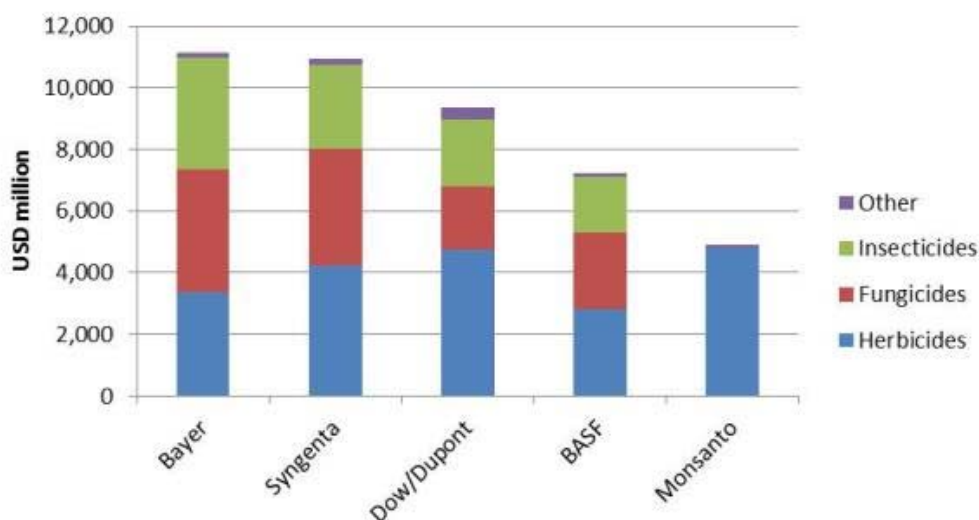
³⁷ Form CO, page 55.

³⁸ There are four major R&D global players when accounting for the notified merger of Dow and Dupont.

³⁹ Monsanto has a significant crop protection products business in herbicides. However Monsanto devotes the vast majority (97%) of its R&D expenditure to its seeds and genome business rather than agrochemicals.

⁴⁰ Phillips McDougall – AgriService, Industry Overview, 2014 Market.

Figure 2 - Major R&D companies and their agrochemical activities globally⁴¹



6.3.2. Other players

(34) The main category of *other* players (namely those companies which are not integrated R&D players) is that of the *generic* players. Generic players are agrochemical businesses which are not active in the first two stages of the value chain; that is, they undertake no (or little) research into the discovery of new AIs. Rather, generic players produce off-patent AIs (either for their own use or to resell as a "merchant AI") and/or they develop and register formulated products based on off-patent AIs. Their activities are largely dependent on access to AIs originally developed by R&D players. According to the Parties, generic players generally fall into three main categories:⁴²

- (a) "*Pure*" generic players (for example Sipcam, Gowan, Belchim), which generally operate on specific regions or relatively few countries, focus primarily on selling "me too"/copycat products or products which are relatively un-differentiated from the original product, either under their own name or as private label products for distributors. They compete primarily on price and cost.
- (b) "*Differentiated*" generic players (for example, Adama, Nufarm, Arysta/Chemtura⁴³, FMC/Chemnova) operate globally and try to differentiate themselves from the "pure" generic players by, in addition to producing "me too" versions, also creating alternative mixtures which are not simply copies but attempt to offer differentiated benefits to existing products already available in the market.
- (c) Finally, "*generic active ingredient producers*" are players based in India and China which do not generally try to market or register products themselves

⁴¹ Based on Phillips McDougall, AgriService 2014.

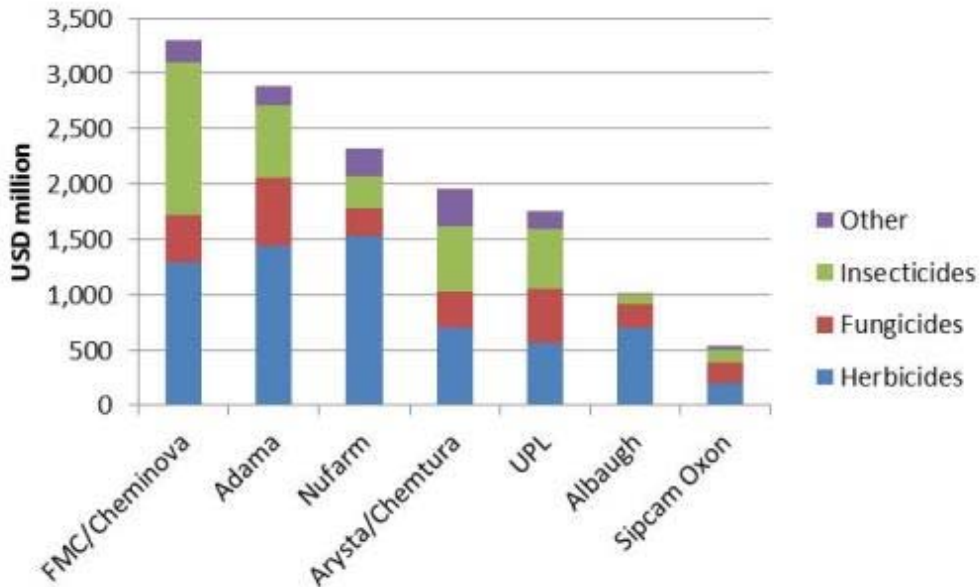
⁴² Form CO, page 68.

⁴³ Chemtura was acquired by Platform Specialty Products Corporation in 2014 and Arysta was acquired by Platform Specialty Products Corporation in 2015. The companies are referred to here as Arysta/Chemtura to reflect this. Previous to the acquisition, Chemtura was categorised as a "pure" generic player.

outside their home countries. They only sell AIs to other players that carry out all the formulation, registration, and marketing.

- (35) There are 7 main generic players active globally, with 2014 global revenues ranging from USD 544 million (Sipcam Oxon) to USD 3.3 billion (FMC/Cheminova).⁴⁴ Other generic players exist in the EU which are not active globally (for example Belchim).

Figure 3 - Main generic players and their agrochemical activities globally^{45, 46}



⁴⁴ Phillips McDougall – AgriService, Industry Overview, 2014 Market.

⁴⁵ Since 2015, Chemtura and Arysta Life&Science have been part of the same group, Platform Specialty Products Corporation.

⁴⁶ Based on Phillips McDougall, AgriService 2014.

(36) According to the responses provided by competitors during in the market investigation, the main 6 generic players active in the EU can be profiled as follows:

Table 1: Strengths and weaknesses of non-R&D players active in EU⁴⁷

Company	Strengths	Weaknesses
Adama	Product range, market presence, low price, distribution, customer support, proprietary mixtures, strong regulatory know-how	Supply chain issues, aggressive, product quality
Arysta/Chemtura	Strong in specialty products, low price, regulatory knowledge, customer support	Market presence, lacks big products, limited range, old portfolio
Belchim	Market presence, market range, strong in specialty products and potatoes, good pipeline/crop focus, new mixtures/uses, strong distribution and sales force, access to proprietary products through ISK	Dependent on third party suppliers, limited presence in big crops, limited presence outside of EU
Nufarm	Strong in grass herbicides, strong in cereal herbicides, strong seed portfolio, good market coverage, low price, collaboration with Sumitomo	Small and old portfolio, market presence, no clear strategy, supply chain issues, weak in fungicides
UPL	Quality of products, low price, strong registration capability, strong sales force, strong seeds portfolio, strong in sugar beet herbicides and some fungicides	Bad image, limited portfolio, weak in fungicides
FMC	Strong in Oilseed Rape herbicides, strong in insecticides, new mixtures/uses, quality of products	Small/shrinking portfolio, market presence, no cereal range, weak in fungicides

(37) Another category of *other* agrochemical players exists, which encompasses players that are active in the research of new AIs but do not engage in development. This category includes companies such as Sumitomo Chemical Co. Ltd. (with global revenues of approximately USD 2 billion in 2014), Nihon Nohyaku Co. Ltd., Kumiai Chemical Industry Co. Ltd., Ishihara Sangyo Kaisha and Mitsui Chemicals Inc. (with global revenues of approximately USD 500 million in 2014).⁴⁸ These players are active in the discovery of new AIs in certain market segments, but do not compete across the board with the main integrated R&D players. They also tend to focus on offering products based on off-patent AIs, like the generic players.

⁴⁷ Replies to question 61 of Questionnaire (Q3) to crop protection competitors.

⁴⁸ Phillips McDougall – AgriService, Industry Overview, 2014 Market.

6.3.3. Consolidation and barriers to entry in the agrochemical value chain

- (38) The crop protection and seed industries have gone through different waves of consolidation over the past 10 years, as illustrated in Figure 4. Figure 5 also shows that further consolidation is happening in the market currently. Apart from the Transaction, there is the notified merger of Dow and DuPont, and the publicly announced acquisition by Bayer of Monsanto. There have also been waves of consolidation amongst generic players. Notably, in 2014 and 2015 Platform Specialty Products Corporation acquired Chemtura AgroSolutions, the Agriphar Group and Arysta LifeScience Limited to form a vertically integrated agrochemical company.⁴⁹ In 2014 FMC acquired Cheminova.⁵⁰ Finally, in 2011, Sumitomo Chemical Corp increased its shareholding in Nufarm Limited to 21.7%.⁵¹

Figure 4 - Consolidation in the crop protection industry between 2005 and 2014⁵²

[...]

Figure 5 - Consolidation also taking place among generic players⁵³

[...]

- (39) In the market investigation, two thirds of competitors who responded indicated that there are unlikely to be new R&D entrants in the crop protection market in the next five years.⁵⁴ Barriers to entry include building inventive capability, regulatory costs, development skills, expense of research, cost of investment, risk, difficulty to obtain high enough market access, time for registration, and demanding technical requirements.⁵⁵
- (40) Half of the respondents indicated that further generic entry *is* likely, while one fifth indicated the contrary.⁵⁶ One respondent noted that many AIs will become off-patent in coming years⁵⁷ (stimulating generic entry) and others reported that generic Chinese and Indian suppliers are likely to become more global in the future.⁵⁸ However, significant barriers to entry exist also for generic players. These include the costs of registration/re-registration⁵⁹, cost of regulatory data, registration knowledge, access to distribution channels, access to production and formulation capabilities and low returns to investment.⁶⁰ Given these barriers to entry, competitors estimate that it takes between 1-5 years (sometimes longer) for a generic version to appear on the market after a product loses patent protection.⁶¹

⁴⁹ <http://www.arystalifescience.com/2015release/ArystaLifeScienceacquiredbyPlatform.pdf>.

⁵⁰ <http://www.fmccrop.com.au/fmc-to-acquire-cheminova/>.

⁵¹ <https://www.sumitomo-chem.co.jp/english/newsreleases/docs/20110510e.pdf>.

⁵² Notifying Party's response to Commission's request for information RFI 11, annex 18, page 40 - [...].
⁵³ Form CO, annex 5.4.2_5.4.-(1), page 33.

⁵⁴ Replies to question 74 of Questionnaire (Q3) to crop protection competitors.

⁵⁵ Replies to question 74.1 of Questionnaire (Q3) to crop protection competitors.

⁵⁶ Replies to question 75 of Questionnaire (Q3) to crop protection competitors.

⁵⁷ Replies to question 75.1 of Questionnaire (Q3) to crop protection competitors.

⁵⁸ Replies to question 75.1 of Questionnaire (Q3) to crop protection competitors.

⁵⁹ Registration / re-registration was the terminology used by Directive 91/414 which have been repealed by Regulation (EC) No. 1107/2009. This introduced a new terminology (cf Art. 41 and 43 of Reg 1107/2009).

⁶⁰ Replies to question 75.1 of Questionnaire (Q3) to crop protection competitors.

⁶¹ Replies to question 46 of Questionnaire (Q3) to crop protection competitors.

6.4. Distinction between R&D and generic players: Implications for competition

- (41) The distinction between the capabilities of R&D players and those of generic players has important implications for competition in the crop protection industry. Generic players are not present in the upstream discovery and development of new AIs and therefore do not compete in the discovery of new AIs.
- (42) Furthermore, patent strategies adopted by the major R&D players, in order to pay off their investment in R&D, further limit the ability of generic players to compete. At the early stages of the research process, agrochemical businesses commonly seek patents (known as a "compound patent") on new AIs.^{62,63} When AIs are protected by compound patents, those patents grant the patentee the exclusive right to manufacture the AI, to incorporate that AI into formulated products and to put those formulated products on the market for the first time. In that situation it is difficult or impossible for generic players to manufacture the same AI and to incorporate it into formulated products without infringing the compound patent. The patent therefore grants the holder exclusivity over the use of that AI in the production of a downstream formulated product,⁶⁴ Generic players cannot use patent-protected AIs to produce new formulations that compete with those of the patent holder. Around [20-30]% of Syngenta's 2013 sales were in products with patented AIs.⁶⁵
- (43) Even beyond the compound patent protection of new AIs, R&D companies commonly adopt a "post-patent strategy", which involves employing tools to maximise the profitability of their AIs and avoid generic competition, even after the expiry of the compound patent. For instance, they may mix AIs that have just lost their patent protection with other (patented or off-patent) AIs and then obtain a patent for the formulated mixture. Indeed, Syngenta employs a Post Patent Strategy as a[...] part of its product life cycle management, and describes it as a [...].⁶⁶

Figure 6 - Syngenta's post-patent management strategy⁶⁷

[...]

- (44) Given that they do not compete in innovation of new AIs or in formulations based on patented AIs, generic players compete mainly in solo and mixture products based on off-patent AIs. This was confirmed by a number of competitors during the market investigation.⁶⁸ Generic players may also compete in market segments where an off-patent AI is a viable substitute to a patented AI, as noted by some competitors in the market investigation.^{69,70} The Figure 7 illustrates how Syngenta distinguishes between R&D and other (generic) players, which confirms the above description.

⁶² Notifying Party's response to Commission's request for information RFI 2, question 16.

⁶³ Patents can also be obtained to protect new formulations, new mixtures of AIs, new process technologies or new uses of AIs.

⁶⁴ Occasionally the patent holder may sub-license the AI to third parties.

⁶⁵ Syngenta's internal document, [...].

⁶⁶ Syngenta's internal document, [...].

⁶⁷ Form CO, graph 6.0.3.

⁶⁸ Replies to question 49 of Questionnaire (Q3) to crop protection competitors.

⁶⁹ Reply to question 51.1 of Questionnaire (Q3) to crop protection competitors; "*[the] price of new R&D solutions is limited by good generic old solutions*".

⁷⁰ Replies to question 49 of Questionnaire (Q3) to crop protection competitors; "*Even if a certain formulation or mixture is patent-protected, there are always several other products that can be used to*

Figure 7 - Differences in business models of integrated R&D players and other players⁷¹

[...]

- (45) In light of the different business model, generic and R&D companies also have different business strategies. Whereas R&D players typically offer premium high-value products based on their on-patent AIs, generic players push their products through aggressive pricing strategies. Based on the results of the market investigation, a majority of farmers consider that generic products are able to address only some of their crop protection needs.⁷² Farmers also explain that price is the main differentiator between R&D and generic products.⁷³ Some of the respondents also indicate that quality and effectiveness may greatly vary between R&D and generic products. Conclusively, the Commission understands from the market investigation that a majority of farmers would buy a generic product if its price was between 20-30% lower than the R&D product, to protect a given crop.⁷⁴
- (46) For the part of the market that cannot be protected through patents and other means, the constraint from generic players may be substantial. According to one competitor: *"Entry of a generic product will tend to decrease share, reduce brand premium, and decrease profit margin for the original developer."*⁷⁵ Another competitor explained: *"Generic products usually lower price levels after patent expiry so that the R&D companies either have to follow to a certain extent or need to provide innovation to the market in order to support a sustainable business model"*.⁷⁶ Therefore, for the sub-set of products where generic players compete, they can exert significant price competition on R&D players.
- (47) Nevertheless, generic players appear to represent only a partial constraint on R&D players. They do not generally compete on the more profitable part of an R&D player's portfolio, but mainly exert a constraint only on the subset of formulated products based on off-patent AIs that the R&D player cannot protect through other means, which represents only part of the overall market. For these reasons, the market shares of Adama have to be interpreted together with the available evidence on closeness between the products of the Parties on a market-by-market basis.
- (48) In addition, even when generic companies appear to hold a substantial share of the market, that share is dependent on access to AIs which tend to be originated by large R&D players.
- (49) A notable point raised during the market investigation was that the global integrated R&D companies do not appear to actively pursue competition in off-patent AIs.⁷⁷ Rather, they leave that role to generic players, and focus instead on competing through developing new AIs and mixtures that can be sold at a premium. One

control a certain target pest, in many cases including off-patent or non-patented mixture or non-mixture product."

⁷¹ Form CO, annex 5.4.2_5.4.-(1), page 32.

⁷² Replies to question 20 of Questionnaire (Q1) to crop protection customers (Farmers).

⁷³ Replies to question 19 of Questionnaire (Q1) to crop protection customers (Farmers).

⁷⁴ Replies to question 21 of Questionnaire (Q1) to crop protection customers (Farmers).

⁷⁵ Reply to question 51.1 of Questionnaire (Q3) to crop protection competitors.

⁷⁶ Reply to question 52 of Questionnaire (Q3) to crop protection competitors.

⁷⁷ One third of the competitors (all generic players) confirmed this was the case: see replies to question 54 Questionnaire (Q3) to crop protection competitors. One third of the competitors (mostly R&D) indicated that this was not the case.

competitor described the strategy of R&D companies as follows: *"In general, R&D focused companies will not access the straight goods of a generic product to compete in the market after the patent has expired, however, R&D companies will access generic AIs to create mixtures with other generic or proprietary AIs in order to create new innovations or value to the market."*⁷⁸ Another competitor commented: *"There is a big respect between the Majors. They respect each other[s] molecules."*⁷⁹

7. OVERVIEW OF THE PARTIES' ACTIVITIES

7.1. Syngenta

(50) Syngenta is a R&D player which focuses primarily on the development of new patented AIs and the continued innovation of off-patent AIs. Syngenta invests heavily in R&D to discover new AIs, developing new formulations and mixtures.

7.1.1. Overview of the activities

(51) In 2015, Syngenta had global revenues of about EUR 12 billion. Of these revenues, EUR [...] were generated by sales of crop protection products (mainly herbicides, insecticides, fungicides, seed treatment and PGR), EUR [...] were generated by sales of merchant active ingredient, EUR [...] were generated by the sales of chemical Lawn and Garden products. The remainder mainly relates to activities such as the sale of seeds.⁸⁰

(52) Table 2 presents an overview of Syngenta's EEA agrochemical sales in 2015 by crop protection product.

Table 2: Share of Syngenta's 2015 EEA agrochemical sales by crop protection product

Herbicides	Fungicides	Insecticides	PGRs	Seed treatment	Lawn and Garden
[30-40]%	[30-40]%	[10-20]%	[0-5]%	[5-10]%	[0-5]%

7.1.2. Syngenta is the leading global integrated R&D player

(53) Syngenta has a portfolio of over [60-70] key AIs and sells approximately [750-1,250] formulated crop protection products worldwide as herbicides, fungicides, insecticides, plant growth regulators, and seed treatments (and [1,000-1,500] if Lawn and Garden products are included).

(54) With only some exceptions, Syngenta's crop protection products are sold under Syngenta's brand in the EEA (only very limited volumes are supplied under private label to distributors). [50-60]% of Syngenta's products sold in the EEA are based on a single AI, while [40-50]% are mixtures.

(55) In 2014, Syngenta was the leading integrated R&D player in crop protection markets at the global level.

⁷⁸ Reply to question 54.1 of Questionnaire (Q3) to crop protection competitors.

⁷⁹ Reply to question 54.1 of Questionnaire (Q3) to crop protection competitors.

⁸⁰ Form CO, paragraph 362-380.

Figure 8 - Overview of the leading agrochemical companies at global level in 2014⁸¹

Leading 15 Companies: Agrochemical Sales 2014

Rank	Agrochemical Company Sales (\$m.)	2014	2013	% Change from 2012
1	Syngenta	11,847	11,413	+3.8
2	Bayer CropScience	11,142	10,418	+6.9
3	BASF	7,232	6,942	+4.2
4	Dow AgroSciences	5,686	5,523	+3.0
5	Monsanto	4,897	4,804	+1.9
6	DuPont	3,690	3,558	+3.7
7	Adama	3,029	2,876	+5.3
8	Nufarm	2,322	2,297	+1.1
9	FMC	2,174	2,146	+1.3
10	Sumitomo Chemical	2,050	2,020	+1.5
11	UPL	1,755	1,607	+9.2
12	Arysta	1,599	1,501	+6.5
13	Cheminova	1,126	1,101	+2.3
14	Albaugh	1,008	1,060	-4.9
15	Sipcam	544	514	+5.8

- (56) In its internal documents, Syngenta sees itself indeed as the number 1 player in the crop protection markets,⁸² as well as the player with the "[...]".⁸³

⁸¹ Phillips McDougall – AgriService, Industry Overview, 2014 Market.

⁸² Form CO, annex 5.4.2_5.4.-(1), page 39.

⁸³ Form CO, annex 5.4.2_5.4.-(1), page 40.

Figure 9 - Syngenta no.1 in CP markets⁸⁴

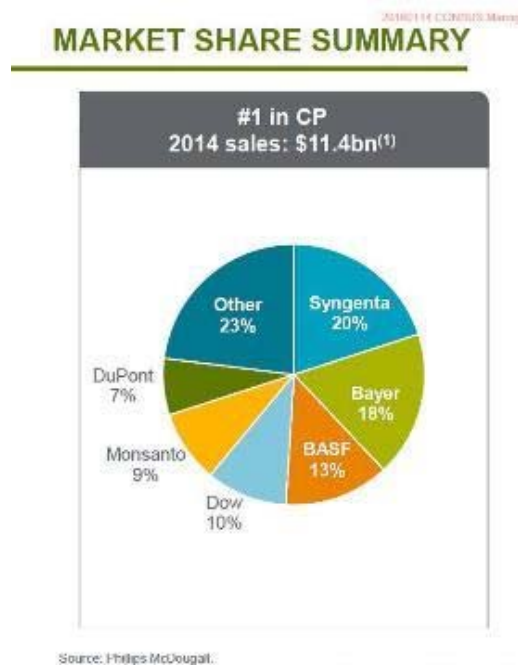
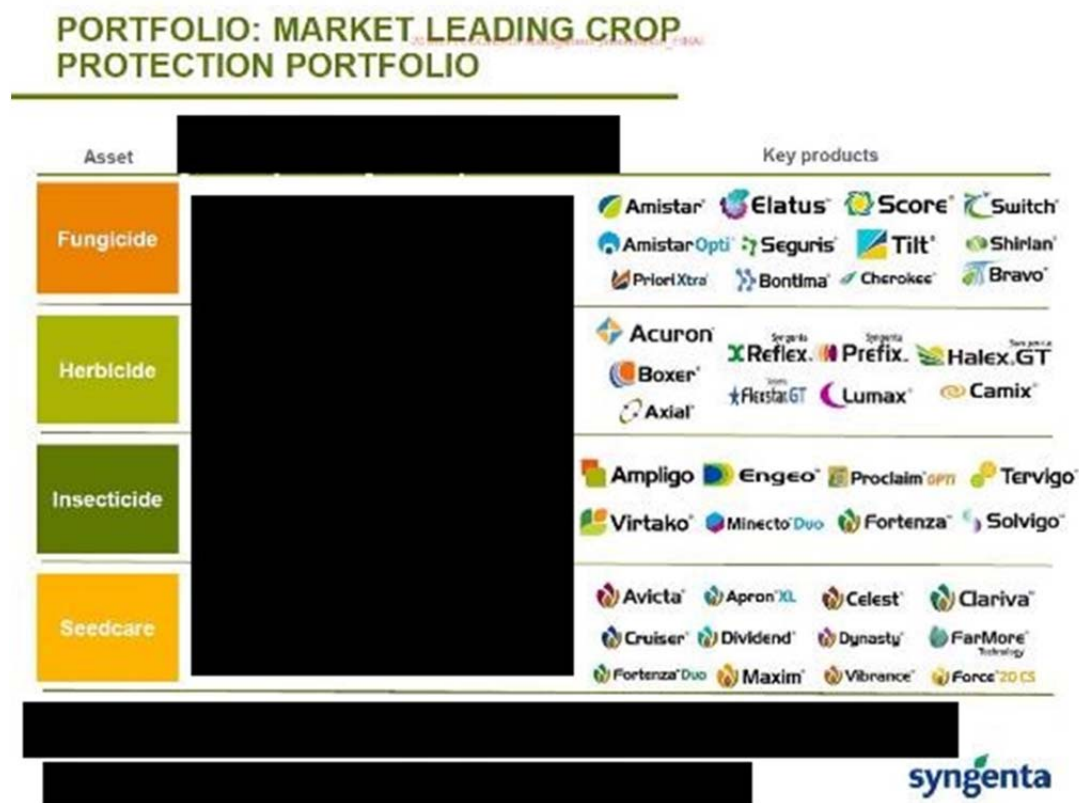


Figure 10 - Syngenta's market-leading crop protection portfolio⁸⁵



⁸⁴ Form CO, annex 5.4.2_5.4.-(1), page 39.

⁸⁵ Form CO, annex 5.4.2_5.4.-(1), page 40.

(57) According to data collected by Phillips McDougall, in 2014, Syngenta was the second biggest agrochemical company in the European market.⁸⁶ However, considering the market share data provided by the Parties, in 2015 Syngenta was estimated to be the third biggest company of the overall crop protection market in the EEA.

Table 3: Market shares on EEA-level (2015)⁸⁷

SECTOR	Adama	Syngenta	Dow	DuPont	Bayer	Monsanto	BASF	Market size ('000 USD)
Fungicides	[5-10]%	[10-20]%	[0-5]%	[0-5]%	[20-30]%	[0-5]%	[20-30]%	[...]
Insecticides	[5-10]%	[10-20]%	[5-10]%	[5-10]%	[10-20]%	[0-5]%	[0-5]%	[...]
Non-selective Herbicides	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[10-20]%	[20-30]%	[0-5]%	[...]
Plant Growth Regulators	[5-10]%	[10-20]%	[0-5]%	[0-5]%	[5-10]%	[0-5]%	[20-30]%	[...]
Seed Treatment	[0-5]%	[20-30]%	[0-5]%	[0-5]%	[40-50]%	[0-5]%	[5-10]%	[...]
Selective Herbicides	[5-10]%	[10-20]%	[10-20]%	[5-10]%	[20-30]%	[0-5]%	[10-20]%	[...]
All sectors ⁸⁸	[5-10]%	[10-20]%	[5-10]%	[5-10]%	[20-30]%	[0-5]%	[10-20]%	[...]

(58) In any case, the Commission notes that the reported change in Syngenta's position in the EEA market is due to a relative loss of competitiveness or a consequence of the methodology followed by the Parties to produce market share data for 2015 (Section 13.1.2).

7.2. Adama

(59) Adama is a generic player, primarily active in the manufacture and sale of off-patent formulated products, with the majority of Adama's sales being derived from products based on off-patent AIs. Adama invests minimally in new product development and does not undertake any research activities to discover new AIs, instead focusing on maintaining and expanding product registrations.

7.2.1. Overview of the activities

(60) In 2015, Adama had global revenues of USD 3 064 million, of which USD 2 884 million of agrochemical products. [80-90]% of Adama's global agrochemical sales were represented by crop protection products, [10-20]% by Lawn and Garden products, and [5-10]% by merchant AIs.

⁸⁶ Phillips McDougall – AgriService, Companies Section Part 1, 2014 Market, p. 8.

⁸⁷ Case-team's calculation based on market shares provided by the Parties

⁸⁸ "All sectors" include the sectors Nutrients and Post Harvest Treatment, in addition to the sectors mentioned in Table 3.

Table 4: Adama's activities in crop protection products

Sales of agro- chemicals (USD)	Global: 2,884 m Europe: [30-40]% R&D: [0-5]%
Portfolio distribution	Herb: [50-60]% Fung: [20-30]% Insect: [20-30]%

(61) Table 5 presents an overview of Adama's EEA agrochemical sales in 2015 by crop protection product.

Table 5: Adama's 2015 EEA agrochemical sales by crop protection product

Herbicides	Fungicides	Insecticides	PGRs	Seed treatment	Lawn and Garden
[50-60]%	[20-30]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%

7.2.2. Adama's overall position in the crop protection markets

(62) This Section presents the Commission's assessment of the competitive strength of Adama compared to other major generic players. Specifically, the Section illustrates (i) the methodology and criteria used to compare Adama to other players; (ii) the analysis of the product scope and geographic breadth of the portfolios; (iii) the analysis of the number of AIs and formulated product registrations; (iv) the analysis of R&D, formulation, registration, sales and distribution resources.

7.2.2.1. Introduction

(63) Adama is the largest generic player in the EEA, with a market share of circa [5-10]% overall in crop protection products.

(64) The market investigated highlighted the size and strength of Adama. As explained by one competitor, "*Adama is the largest (in Europe larger than DuPont in fact) and has a significant position within the industry, with one of the largest active ingredient portfolios*".⁸⁹ Another competitor confirms "*Adama is the largest generic player world-wide, other generic players are rather small*".⁹⁰ In general, the vast majority of competitors who responded indicated that Adama represents a particularly strong constraint on R&D companies.⁹¹ A competitor referred to Adama as the "*next largest crop protection company following the R&D companies*".⁹² A distributor referred to Adama as "*the leading generic Companies [sic] in PGRs, Herbicides, Fungicides, Insecticides*".⁹³ Another distributor described Adama as follows: "*Adama seems to be the strongest generic (off patent) producer on the market both in terms of the services it provides and the range of products. It is the largest player after the big R&D companies*".⁹⁴ Another distributor states that Adama

⁸⁹ Minutes of the conference call with a competitor of 26 April 2016.

⁹⁰ Minutes of the conference call with a competitor of 26 April 2016.

⁹¹ Replies to question 66 of Questionnaire (Q3) to crop protection competitors.

⁹² Reply to question 66.1 of Questionnaire (Q3) to crop protection competitors.

⁹³ Reply to question 76.1 of Questionnaire (Q2) to crop protection distributors.

⁹⁴ Minutes of the conference call with a competitor of 25 August 2016.

"[a]cts like a [sic] R&D company in areas of marketing, trials, packaging, environmental stewardship, responsibilities to the industry".⁹⁵

- (65) The Commission has therefore investigated whether Adama enjoyed this position as the leading generic player in the EEA by means of any features which differentiate it from other generic companies. To this end, the Commission gathered data from all major generic competitors in order to assess whether and to what extent Adama has unique features compared to other players.
- (66) For each major generic competitor, the data gathered by the Commission consisted of personnel, measured in terms of full time equivalents (FTEs), working in field testing supporting Active Ingredient R&D and registration for the EEA; working in Active Ingredient registration and re-registration for the EEA; working on R&D relating to formulations and mixtures (as opposed to new Active Ingredients); involved in formulated product registration and involved in sales, marketing and advisory to farmers.
- (67) In addition to the data gathered from all major generic competitors, in order to conduct its assessment of Adama's position in the crop protection markets, the Commission used the data on AIs and formulated product registrations contained in the Homologa⁹⁶ database as well as the market shares data provided by the Parties.

7.2.2.2. Product scope and geographic breadth of portfolio

- (68) The Commission assessed Adama's position compared to generic competitors in terms of product scope and geographic breadth of the portfolio.⁹⁷
- (69) First, in terms of commercial presence at the EEA level, Adama is by some distance the largest generic player, with an EEA share of [5-10]% compared to the next largest generics (Nufarm and FMC) that have a share of [0-5]% each. Adama appears to be particularly strong in fungicides and selective herbicides, where it has a market share of [5-10]% and [10-20]% respectively and is the only generic player with a market share of at least 1% (see Figure 11). Even looking at a more granular level (sector/crop), Adama appears to be the only generic player who has managed to achieve at EEA level sizeable revenue shares across all major crops and sector (see Table 6).

⁹⁵ Reply to question 77.1 of Questionnaire (Q2) to crop protection distributors.

⁹⁶ The Homologa database has been submitted by the Parties and is a comprehensive dataset listing all formulated products (and corresponding company owning that product) registered in the EEA for a particular crop and segment. The data presented in this Decision is based on the version of the Homologa database submitted by the Parties on 1 December 2016.

⁹⁷ The Commission notes that the analysis in this section is based on the market share data submitted by the Parties, which only includes markets where Adama is present. As such, the available data disregards a number of markets where the other main generic players may be present while Adama is not. The Commission considers that the available data is nevertheless informative on the relative position of Adama and its main generic competitors because Adama is active in most major crop markets and therefore the available data is considered to be rather comprehensive.

Figure 11 - Revenue share for the main players, EEA level, 2015⁹⁸

	Fungicides	Selective Herbicides
Adama	[5-10]%	[10-20]%
Bayer	[20-30]%	[20-30]%
BASF	[20-30]%	[10-20]%
Dow	[5-10]%	[10-20]%
Syngenta	[10-20]%	[10-20]%
Other	[20-30]%	[20-30]%

(70) Second, as shown in Table 7 and Table 8, Adama is the only generic player with a substantial geographic coverage across the EEA. Counting the number of countries per sector and crop in which a generic player has a market share of at least 1%, it appears that Adama has a significantly larger geographic coverage than its direct competitors, as in each crop / sector combination, Adama is present in more EEA countries than its major generic competitors.

Table 6: Revenue share for the main generic players, EEA level, by sector/crop, 2015⁹⁹

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Fungicides	Cereals - Barley	[0-5]%		[0-5]%			
Fungicides	Cereals - Other	[5-10]%					
Fungicides	Cereals - Wheat	[5-10]%					
Fungicides	Fruits - Citrus	[0-5]%			[0-5]%		
Fungicides	Fruits - Grapes	[5-10]%					
Fungicides	Fruits – Other Fruit	[0-5]%		[0-5]%		[0-5]%	
Fungicides	Fruits – Pome Fruit	[5-10]%				[5-10]%	
Fungicides	Oilseed Rape / Rapeseed	[5-10]%					[10-20]%
Fungicides	Potatoes	[0-5]%	[5-10]%				
Fungicides	Sugar Beet			[0-5]%			
Fungicides	Sunflower	[10-20]%					
Fungicides	Vegetables - Concurbits	[0-5]%					
Fungicides	Vegetables – Industrial Vegetable Crops	[0-5]%					[0-5]%
Fungicides	Vegetables – Leafy / Brassica / Orca	[0-5]%					
Fungicides	Vegetables – Pepper / Eggplant	[0-5]%					
Fungicides	Vegetables - Tomatoes	[0-5]%					
Insecticides	Cereals - Barley	[5-10]%		[5-10]%			
Insecticides	Cereals - Other	[0-5]%		[10-20]%			[5-10]%
Insecticides	Cereals - Wheat	[5-10]%		[10-20]%			
Insecticides	Corn	[5-10]%				[5-10]%	
Insecticides	Fruits - Citrus	[5-10]%					[5-10]%
Insecticides	Fruits - Grapes	[0-5]%					
Insecticides	Fruits – Other Fruit	[5-10]%		[0-5]%			[5-10]%

⁹⁸ Commission's own elaboration based on market shares submitted by the Parties.

⁹⁹ Commission's own elaboration based on market shares submitted by the Parties.

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Insecticides	Fruits – Pome Fruit	[0-5]%					[0-5]%
Insecticides	Oilseed Rape/Papeseed	[10-20]%		[0-5]%			
Insecticides	Potatoes	[0-5]%					
Insecticides	Sugar Beet	[0-5]%					
Insecticides	Sunflower	[5-10]%		[10-20]%		[20-30]%	
Insecticides	Vegetables - Concurbits	[0-5]%					
Insecticides	Vegetables – Industrial Vegetable Crops	[0-5]%					
Insecticides	Vegetables – Leafy / Brassica / Orca	[0-5]%					
Insecticides	Vegetables – Pepper / Eggplant						
Insecticides	Vegetables - Tomatoes	[5-10]%					
Non-selective Herbicides	Cereals - Other			[10-20]%		[5-10]%	
Non-selective Herbicides	Cereals - Wheat			[5-10]%			
Non-selective Herbicides	Fruits - Citrus	[0-5]%					
Non-selective Herbicides	Fruits - Grapes	[0-5]%			[5-10]%		
Non-selective Herbicides	Fruits – Other Fruit	[5-10]%		[0-5]%	[0-5]%	[0-5]%	
Non-selective Herbicides	Fruits – Pome Fruit	[5-10]%			[5-10]%		
Non-selective Herbicides	Oilseed Rape / Rapeseed				[5-10]%		
Non-selective Herbicides	Other Speciality	[10-20]%					
Non-selective Herbicides	Sunflower				[5-10]%		
Non-selective Herbicides	Vegetables – Industrial Vegetable Crops	[5-10]%					
Seed Treatment	Cereals - Barley	[0-5]%				[0-5]%	
Seed Treatment	Cereals - Other	[0-5]%					
Seed Treatment	Cereals - Wheat	[0-5]%		[0-5]%	[0-5]%	[0-5]%	
Seed Treatment	Corn						
Seed Treatment	Potatoes	[0-5]%					[0-5]%
Seed Treatment	Sugar Beet	[0-5]%					[5-10]%
Seed Treatment	Sunflower	[0-5]%				[10-20]%	
Seed Treatment	Vegetables – Industrial Vegetable Crops	[0-5]%					
Selective Herbicides	Cereals - Barley	[5-10]%					
Selective Herbicides	Cereals - Other	[5-10]%					
Selective Herbicides	Cereals - Wheat	[5-10]%					
Selective Herbicides	Corn	[0-5]%					

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Selective Herbicides	Cotton	[10-20]%			[5-10]%	[5-10]%	
Selective Herbicides	Fruits - Citrus	[10-20]%		[5-10]%			
Selective Herbicides	Fruits - Grapes	[0-5]%	[30-40]%				[5-10]%
Selective Herbicides	Fruits – Other Fruit	[10-20]%		[0-5]%	[0-5]%	[5-10]%	
Selective Herbicides	Fruits – Pome Fruit	[0-5]%			[10-20]%		
Selective Herbicides	Oilseed Rape / Rapeseed	[10-20]%	[0-5]%	[0-5]%			
Selective Herbicides	Potatoes	[10-20]%	[5-10]%				
Selective Herbicides	Soybeans						
Selective Herbicides	Sugar Beet	[20-30]%					
Selective Herbicides	Sunflower	[10-20]%					
Selective Herbicides	Vegetables - Concurbits	[20-30]%		[5-10]%			
Selective Herbicides	Vegetables – Industrial Vegetable Crops	[10-20]%	[10-20]%				
Selective Herbicides	Vegetables – Leafy / Brassica / Orca	[5-10]%	[10-20]%				
Selective Herbicides	Vegetables – Pepper / Eggplant	[10-20]%	[5-10]%	[10-20]%			
Selective Herbicides	Vegetables - Tomatoes	[20-30]%		[10-20]%			

Table 7: Number of EEA countries where market share is above 1%, by generic player, by sector/crop, 2015 (Fungicides and Insecticides)^{100,101}

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Fungicides	Cereals - Barley	[10-20]%		[0-5]%	[0-5]%		
Fungicides	Cereals - Other	[10-20]%		[0-5]%			[0-5]%
Fungicides	Cereals - Wheat	[20-30]%		[5-10]%	[0-5]%		[0-5]%
Fungicides	Fruits - Citrus	[0-5]%		[0-5]%			[0-5]%
Fungicides	Fruits - Grapes	[10-20]%	[0-5]%	[0-5]%	[5-10]%		[0-5]%
Fungicides	Fruits – Other Fruit	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Fungicides	Fruits – Pome Fruit	[10-20]%		[0-5]%	[0-5]%	[10-20]%	
Fungicides	Oilseed Rape / Rapeseed	[10-20]%		[0-5]%	[0-5]%		
Fungicides	Potatoes	[10-20]%	[5-10]%	[0-5]%	[0-5]%		
Fungicides	Sugar Beet	[5-10]%		[0-5]%			[0-5]%
Fungicides	Sunflower	[0-5]%					

¹⁰⁰ Four sector / crop combinations (Non-selective herbicides / Cereals – Other & Sunflower & Vegetables – Industrial Vegetable Crops as well as Selective Herbicides / Vegetables – Pepper / Eggplant) appear in Table 6 but not in Table 7 and Table 8 because in these markets the Parties have an overlap in 2015 at the EEA level but not at country level (namely the Parties are active in different countries).

¹⁰¹ Commission's own elaboration based on market shares submitted by the Parties.

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Fungicides	Vegetables - Concurbits	[5-10]%					
Fungicides	Vegetables – Industrial Vegetable Crops	[5-10]%	[0-5]%		[0-5]%		
Fungicides	Vegetables – Leafy / Brassica / Orca	[0-5]%					
Fungicides	Vegetables – Pepper / Eggplant	[0-5]%					
Fungicides	Vegetables - Tomatoes	[5-10]%	[0-5]%				
Insecticides	Cereals - Barley	[10-20]%	[0-5]%	[5-10]%	[0-5]%	[5-10]%	[5-10]%
Insecticides	Cereals - Other	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Insecticides	Cereals - Wheat	[10-20]%	[0-5]%	[10-20]%	[0-5]%	[5-10]%	[5-10]%
Insecticides	Corn	[5-10]%	[0-5]%	[0-5]%		[0-5]%	[0-5]%
Insecticides	Fruits - Citrus	[5-10]%		[0-5]%			[0-5]%
Insecticides	Fruits - Grapes	[5-10]%		[0-5]%		[0-5]%	[0-5]%
Insecticides	Fruits – Other Fruit	[5-10]%		[0-5]%	[0-5]%	[0-5]%	[0-5]%
Insecticides	Fruits – Pome Fruit	[10-20]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%	[0-5]%
Insecticides	Oilseed Rape / Rapeseed	[10-20]%	[0-5]%	[5-10]%	[0-5]%	[5-10]%	[0-5]%
Insecticides	Potatoes	[5-10]%			[0-5]%	[5-10]%	[0-5]%
Insecticides	Sugar Beet	[0-5]%		[0-5]%	[0-5]%	[0-5]%	
Insecticides	Sunflower	[0-5]%	[0-5]%	[0-5]%	[0-5]%		
Insecticides	Vegetables - Concurbits	[5-10]%	[0-5]%	[0-5]%		[0-5]%	[0-5]%
Insecticides	Vegetables – Industrial Vegetable Crops	[10-20]%		[0-5]%	[0-5]%	[0-5]%	[0-5]%
Insecticides	Vegetables – Leafy / Brassica / Orca	[5-10]%					[0-5]%
Insecticides	Vegetables – Pepper / Eggplant	[0-5]%					
Insecticides	Vegetables - Tomatoes	[5-10]%		[0-5]%		[0-5]%	

Table 8: Number of EEA countries where market share is above 1%, by generic player, by sector/crop, 2015 (Herbicides and Seed Treatment)¹⁰²

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Non-selective Herbicides	Cereals - Wheat	[0-5]%					
Non-selective Herbicides	Fruits - Citrus	[0-5]%			[0-5]%		
Non-selective Herbicides	Fruits - Grapes	[5-10]%		[0-5]%	[0-5]%	[0-5]%	
Non-selective Herbicides	Fruits – Other Fruit	[0-5]%		[0-5]%	[0-5]%	[0-5]%	[0-5]%
Non-selective Herbicides	Fruits – Pome Fruit	[5-10]%		[0-5]%	[0-5]%	[0-5]%	
Non-selective Herbicides	Oilseed Rape / Rapeseed	[0-5]%		[0-5]%	[0-5]%	[0-5]%	

¹⁰² Commission's own elaboration based on market shares submitted by the Parties.

Sector	Crop	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Non-selective Herbicides	Other Speciality	[5-10]%		[0-5]%	[0-5]%	[0-5]%	[0-5]%
Seed Treatment	Cereals - Barley	[5-10]%		[0-5]%	[0-5]%	[0-5]%	
Seed Treatment	Cereals - Other	[5-10]%		[0-5]%		[0-5]%	
Seed Treatment	Cereals - Wheat	[5-10]%		[0-5]%	[0-5]%	[0-5]%	
Seed Treatment	Corn	[0-5]%		[0-5]%	[0-5]%		
Seed Treatment	Potatoes	[0-5]%					
Seed Treatment	Sugar Beet	[0-5]%					
Seed Treatment	Sunflower	[0-5]%		[0-5]%	[0-5]%		
Seed Treatment	Vegetables – Industrial Vegetable Crops	[0-5]%					
Selective Herbicides	Cereals - Barley	[10-20]%		[5-10]%	[10-20]%		[0-5]%
Selective Herbicides	Cereals - Other	[10-20]%		[0-5]%	[5-10]%		[0-5]%
Selective Herbicides	Cereals - Wheat	[20-30]%		[0-5]%	[10-20]%	[0-5]%	[0-5]%
Selective Herbicides	Corn	[10-20]%	[0-5]%	[5-10]%	[5-10]%		
Selective Herbicides	Cotton	[0-5]%		[0-5]%		[0-5]%	[0-5]%
Selective Herbicides	Fruits - Citrus	[0-5]%		[0-5]%	[0-5]%		
Selective Herbicides	Fruits - Grapes	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Selective Herbicides	Fruits – Other Fruit	[0-5]%		[0-5]%	[0-5]%	[0-5]%	
Selective Herbicides	Fruits – Pome Fruit	[0-5]%			[0-5]%		
Selective Herbicides	Oilseed Rape / Rapeseed	[10-20]%	[0-5]%	[5-10]%		[5-10]%	[0-5]%
Selective Herbicides	Potatoes	[20-30]%	[5-10]%	[5-10]%		[5-10]%	[0-5]%
Selective Herbicides	Soybeans	[0-5]%		[0-5]%			
Selective Herbicides	Sugar Beet	[10-20]%	[0-5]%			[0-5]%	
Selective Herbicides	Sunflower	[10-20]%		[0-5]%		[5-10]%	[0-5]%
Selective Herbicides	Vegetables - Concurbits	[0-5]%		[0-5]%			
Selective Herbicides	Vegetables – Industrial Vegetable Crops	[10-20]%	[0-5]%	[5-10]%	[0-5]%	[5-10]%	
Selective Herbicides	Vegetables – Leafy / Brassica / Orca	[5-10]%	[0-5]%			[0-5]%	
Selective Herbicides	Vegetables - Tomatoes	[0-5]%		[0-5]%			

Table 9: Number of AIs^{103,104}

Sector	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Fungicides	[80-90]	[30-40]	[60-70]	[40-50]	[50-60]	[60-70]
Insecticides	[20-30]	[20-30]	[30-40]	[10-20]	[30-40]	[40-50]
Non-selective Herbicides	[10-20]	[5-10]	[5-10]	[10-20]	[5-10]	[5-10]
Plant Growth Regulators	[0-5]	[0-5]	[5-10]	[10-20]	[10-20]	[10-20]
Seed Treatment	[5-10]	[5-10]	[5-10]	[0-5]	[10-20]	[5-10]
Selective Herbicides	[80-90]	[30-40]	[90-100]	[90-100]	[30-40]	[50-60]
Total	[200-250]	[100-150]	[200-250]	[150-200]	[150-200]	[150-200]

7.2.2.3. Number of AIs and formulated products registration

- (71) The Commission assessed Adama's position compared to generic competitors in terms of AIs and formulated products registrations.¹⁰⁵
- (72) First, in terms of portfolio of AIs (see Table 9), Adama holds a similar number of AIs ([200-250]) as another major generic player (FMC: [200-250]) and there is another generic player with a slightly smaller portfolio (Nufarm: [150-200]). Looking at the sector level, Adama does not appear to have a number of AIs significantly above its rivals. The only exceptions are fungicides, where Adama has the highest number of AIs ([80-90]) but the second generic player, FMC, also has a significant number ([60-70]).

Table 10: Number of formulated product registrations¹⁰⁶

Sector	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Fungicides	[2,000-2,500]	[550-600]	[1,000-1,250]	[1,000-1,250]	[1,000-1,250]	[750-800]
Insecticides	[2,000-2,500]	[300-350]	[2,250-2,500]	[600-650]	[2,000-2,250]	[1,500-1,750]
Non-selective Herbicides	[900-1,000]	[450-500]	[1,500-1,750]	[1,750-2,000]	[750-800]	[150-200]
Plant Growth Regulators	[100-150]	[10-20]	[90-100]	[450-500]	[90-100]	[100-150]
Seed Treatment	[150-200]	[20-30]	[30-40]	[80-90]	[200-250]	[50-60]
Selective Herbicides	[3,500-4,000]	[600-650]	[1,750-2,000]	[2,750-3,000]	[1,250-1,500]	[600-650]
Total	[8,500-9,000]	[2,000-2,500]	[7,000-7,250]	[7,000-7,250]	[5,750-6,000]	[3,250-3,500]

- (73) Second, in terms of number of registered formulated products¹⁰⁷ (see Table 10), while Adama is the player with the highest number of formulated products (circa [8,500-9,000]), there are other generic players (FMC and Nufarm) who have also a very significant number of registered products (circa [7,000-7,250] each).

¹⁰³ Includes the main generic players based on EEA-wide sales in crop protection.

¹⁰⁴ Notifying Party's submission of 1 December 2016, "Homologa database".

¹⁰⁵ The analysis is based on the data contained in the Homologa database submitted by the Parties.

¹⁰⁶ Includes the main generic players based on EEA-wide sales in crop protection.

¹⁰⁷ In the Homologa database, a product is identified by its name, formulation type, active ingredient(s), level of concentration, crop of application and country of registration.

Looking at mixtures only (see Table 11), it appears that Adama owns slightly fewer registrations than Nufarm, with FMC and PSP not too far behind.

Table 11: Number of mixtures registrations¹⁰⁸

Sector	Adama	Belchim	FMC	Nufarm	PSP	Sumitomo
Fungicides	[550-600]	[150-200]	[200-250]	[100-150]	[100-150]	[150-200]
Insecticides	[80-90]	[0-5]	[30-40]	[40-50]	[450-500]	[70-80]
Non-selective Herbicides	[90-100]	[10-20]	[30-40]	[300-350]	[40-50]	[5-10]
Plant Growth Regulators	[0-5]	[0-5]	[0-5]	[100-150]	[0-5]	[20-30]
Seed Treatment	[30-40]	[0-5]	[20-30]	[0-5]	[100-150]	[0-5]
Selective Herbicides	[450-500]	[90-100]	[500-550]	[800-850]	[250-300]	[80-90]
Total	[1,250-1,500]	[250-300]	[800-850]	[1,250-1,500]	[1,000-1,250]	[350-400]

7.2.2.4. R&D, formulation, registration and sales and distribution resources

(74) This section presents the Commission's assessment of Adama's position compared to other generic competitors in terms of R&D, formulation, registration resources, as well as sales and distribution resources.

(75) In terms of size of the registration teams, the Commission's investigation has established that Adama has the largest structure dedicated to the registration of AIs in the EEA. It is the largest EEA wide player in terms of number of people (full time equivalent) working for AI registration or re-registration (for the EEA). However, several other generic competitors appear to have significantly (sometimes by more than 100%) larger teams compared to Adama for the registration of formulated products. At national level, Adama is never the largest player in terms of number of employees (full time equivalent) working for AI registration or re-registration.

(76) The difference in the structure and size of the registration teams can be explained in light of the differences in the business models of the various players (see also Section 6). The work on the registration of AIs can be shared/outsourced. Some players choose indeed to join efforts with other companies to reduce the costs of the AI registration effort. Other players may even decide to completely "outsource" the AI registration part and just get access through license agreements to the right to use certain AIs in their products. On the contrary, the registration work on the specific products commercialized in each Member State cannot be shared and is unique to each product. However, the differences between the overall sizes of the teams can be explained in light of the different commercial strategies of the various players, who might be in some cases more focused on certain national markets or more widely present across different markets.

(77) Looking at the sales force numbers by country (on sales, marketing and advisory to farmers), it appears that Adama has a larger sales force in the EEA compared to the other generic players. In particular, Adama appears to have a significantly stronger presence in [...]. However, it is entirely absent in 4 Member states where other similar undertakings are represented. Moreover, in about a majority of member

¹⁰⁸ Includes the main generic players based on EEA-wide sales in crop protection.

States, it is not the strongest player compared with other similar undertakings, including in some of the EEA largest crop protection markets.

7.2.2.5. Conclusion

(78) Overall, the Commission finds that Adama is the leading and largest generic player in Europe (in terms of strength and geographic breadth of its portfolio). In addition, Adama appears to have the largest sales force and registration teams amongst the generic players in Europe.

(79) However, the investigation also showed that a number of other major generic players do not significantly lag behind and that no significant differences exist between generic players in the way they operate their business. As a result, the Commission considers that Adama is not a special or unique competitor to an extent that other generic players could not replace its role in the market.

7.2.3. ChemChina as a state-owned enterprise

(80) Seventeen local, regional and national Chinese SOEs are active in the production and sale of active ingredients which overlap with the active ingredients that Syngenta sells on a merchant basis to third parties.

Figure 12 - Selected SOEs active in the sale of Overlapping Merchant Active Ingredients Worldwide and in the EEA¹⁰⁹

Overlapping merchant active ingredients sold by Chinese SOEs	Name of SoE	Central/Regional/Local	WW Sales (Y/N)	Sales in the EEA (Y/N)
Abamectin	North China Pharmaceutical Group Aino Co., Ltd.	R	Y	Y
	Zhejiang Hisun Chemical Co., Ltd.	R	Y	N
	Zhejiang Qianjiang Biochemical Co., Ltd.	L	Y	N
Lambda-cyhalothrin	Jiangsu Youth Chemical Co., Ltd.	C	Y	Y
Pirimicarb	Hunan Haili Chemical Industry Co., Ltd.	R	Y	N
Pymetrozine	Shenyang Sciencreat Chemicals Co., Ltd.	C	Y	N
	Shandong United Pesticide Industry Co., Ltd.	C	Y	N
Profenofos	Qingdao Shuangshou Pesticide and Chemical Co., Ltd.	R	Y	N
	Shandong United Pesticide Industry Co., Ltd.	C	Y	N
Cypermethrin	Jiangsu Yangnong Chemical Co., Ltd.	C	Y	N
Pirimiphos-methyl	Hunan Haili Chemical Industry Co., Ltd.	R	Y	N
Thiamethoxam	Shandong United Pesticide Industry Co., Ltd.	C	Y	N
Glyphosate	Jiangsu Youth Chemical Co., Ltd.	C	Y	Y
	Sichuan Lifeng Chemical Co., Ltd.	R	Y	N
	Anhui Jinbang Chemical Co., Ltd.	C	Y	N
	Guangxi Research Institute of Chemical Industry	R	Y	N
	Nantong Jiangshan Agrochemical & Chemical Co., Ltd.	C	Y	Y
Dicamba	Jiangsu Youth Chemical Co., Ltd.	C	Y	Y
	Jiangsu Youjia Crop Protection Co., Ltd.	C	Y	N
Trinexapac-ethyl	Jiangsu Youth Chemical Co., Ltd.	C	Y	Y
Mesotrione	Shenyang Sciencreat Chemicals Co., Ltd.	C	Y	Y
Propiconazole	Jiangsu Yangnong Chemical Co., Ltd.	C	Y	N
	Lier Chemical Co., Ltd.	C	Y	Y
Azoxystrobin	Shandong United Pesticide Industry Co., Ltd.	C	Y	N
	Chongqing Unisplendour International Chemical Co.	R	Y	N
	Lier Chemical Co., Ltd.	C	Y	N
Paclobutrazol	Shenyang Sciencreat Chemicals Co., Ltd.	C	Y	N
	Sichuan Lifeng Chemical Co., Ltd.	R	Y	N
Paraquat	Shandong Kexin Biochemical Co., Ltd.	R	Y	N

(81) As regards the assessment of SOEs, Article 106 of the TFEU establishes the principle of non-discrimination between public and private undertakings. Recital 22 of the EUMR further states, with regard to SOEs, that account has to be taken of

¹⁰⁹ Form CO, annex 3.1.1.

“undertakings making up an economic unit with independent power of decision, irrespective of the way in which their capital is held or of the rules of administrative supervision applicable to them.”

- (82) As set forth in the Jurisdictional Notice with respect to SOEs, *“where the undertakings (the acquiring and acquired undertakings that are companies owned by the same State or by the same public body or municipality) were formerly part of different economic units having an independent power of decision, the operation will be deemed to constitute a concentration and not an internal restructuring. However, where the different economic units will continue to have an independent power of decision also after the operation, the operation is only to be regarded as an internal restructuring, even if the shares of the undertakings, constituting different economic units, should be held by a single entity, such as a pure holding company. However, the prerogatives exercised by a State acting as a public authority rather than as a shareholder, in so far as they are limited to the protection of the public interest, do not constitute control within the meaning of the Merger Regulation to the extent that they have neither the aim nor the effect of enabling the State to exercise a decisive influence over the activity of the undertaking.”*¹¹⁰
- (83) Chinese SOEs are managed in China by an administrative body named Central SASAC, which is the State-owned Assets Supervision and Administration Commission of the State Council through which the Central Government supervises and manages the state-owned assets of its State owned enterprises. The Parties submit that that ChemChina is independent from Central SASAC so that it cannot be regarded as one economic entity with other companies owned by the Chinese Central Government for the following reasons.^{111 112}
- (84) First, the Parties submit that under Article 6 the SoE Act¹¹³, Central SASAC must observe two fundamental principles while exercising its contributor’s functions and rights: (i) the principle of separation of government bodies and enterprises and (ii) the principle of non-intervention in the legitimate and independent business operations of Central SoEs like ChemChina.¹¹⁴
- (85) Second, the Parties submit under Chinese laws, Central SASAC is entrusted with exercising the ownership functions of Central SoEs on behalf of the State Council, China’s top executive government body. Accordingly, the Parties submit that under

¹¹⁰ Jurisdictional Notice, paragraphs 52 and 53.

¹¹¹ Form CO, paragraphs 114-129.

¹¹² In the past, Central SoEs were directly owned and controlled by the central government in China, while Regional SoEs were owned and controlled by regional governments in China through various agencies. In 1996, the State Council launched a “corporatization process” through which China’s state-owned or collective enterprises were reorganized as companies according to the Company Law of PRC promulgated by the Standing Committee of the National People’s Congress in 1993. To further advance the corporatization process, enhance SoEs’ profitability and promote the independence of SoEs from government authorities that also perform public administration functions, in 2003, pursuant to article 6 of the Interim Regulations on the Supervision and Administration of State-Owned Assets of Enterprises, a new agency, Central SASAC, was created under the State Council and, simultaneously, local counterparts of this new agency (each a “Regional SASAC”) were created under local governments at the provincial level (“Provincial SASACs”) and at the municipal level (“Municipal SASACs”).

¹¹³ Law of the People’s Republic of China on the State-Owned Assets of Enterprises (the “SoE Act”), dated 28 October 2008. Decree of the State Council of the People’s Republic of China No. 378, 27 May 2003.

¹¹⁴ Article 6 of the SoE Act.

the SoE Act, Central SASAC's authority over Central SoEs is restricted to performing the responsibilities of an investor and that the rights conferred by Chinese laws to Central SASAC do not go beyond typical minority shareholders protection rights and do not relate to "strategic decisions", within the meaning of the Jurisdictional Notice.

- (86) Third, the Parties submit that ChemChina has the independent authority to decide its budget, business plan and commercial strategies. Central SASAC's supervision over ChemChina is essentially limited by Chinese law to protecting the value of the State's assets. Central SASAC does not have the authority to exercise decisive influence over ChemChina's commercial strategy.
- (87) Fourth, the Parties submit that the Chinese State is unable to coordinate the commercial conduct of ChemChina with other SoEs by imposing or facilitating coordination because there are no interlocking competition between directorships in ChemChina and other SoEs and the Anti-Monopoly Law of the People's Republic of China (the "AML") prohibits the exchange of competitively sensitive information between competing companies, including between competing SoEs and Central SASAC.
- (88) However, for the purpose of the Transaction, whether ChemChina is regarded as one economic entity with other companies owned by the Chinese Central Government or not, does not have an impact for the competitive assessment of the Commission. Therefore, for the purpose of the Transaction the Commission will leave the nature of the link between the Central SASAC/other SoEs and ChemChina open and consider the most restrictive approach under which ChemChina is regarded as one economic entity with other companies owned by the Chinese Central Government.

8. MARKET DEFINITION

8.1. Relevant product markets

- (89) According to the Commission notice on the definition of relevant market for the purposes of Community competition law ("Market Definition Notice"), a relevant product market comprises all those products which are regarded as interchangeable or substitutable by the consumers by reason of the products' characteristics, their prices and their intended use (paragraph 7). According to paragraph 13 of the Market Definition Notice, *"firms are subject to three main sources or competitive constraints: demand substitutability, supply substitutability and potential competition"*.
- (90) The Commission notes that the main criteria for the definition of the relevant market is demand side substitutability according to which *"the range of products which are viewed as substitutes by the consumer"* should be in the same relevant market (paragraph 15 of the Market Definition Notice).

8.1.1. Raw materials

8.1.1.1. Past decisional practice

- (91) Raw materials are inputs used for the production of chemical products and in particular active ingredients for crop protection products.

(92) In past decisions, the Commission has considered that raw materials for chemical application form different product markets.¹¹⁵

8.1.1.2. The Parties' views

(93) The Parties submit that each of the raw materials they source or supply constitutes a separate product market, as these raw materials are not substitutable with one another from a demand side as they have different uses.

(94) The Parties submit that the precise definition of the product market with regard to raw materials can be left open for the purpose of the Transaction as the competitive assessment would not change under any of the possible product market definitions.

8.1.1.3. The Commission's assessment

(95) The Commission notes that each raw material is characterized by different chemical structures which are associated to different properties. In light of their structure and properties, each raw material is suitable to be used as a building block for the production of specific active ingredients. From a demand perspective, there is no substitutability between different raw materials.

(96) For the purpose of the Transaction, in line with its precedents, the Commission will therefore consider each raw material as a distinct market.

8.1.2. *Active ingredients*

8.1.2.1. Past decisional practice

(97) Active ingredients are inputs used for the production of crop protection products.

(98) As regards product market, in past decisional practice¹¹⁶ the Commission found that each AI constitutes a separate product market, although it left open whether for off-patent ingredients broader markets exist including all AIs within the same class of molecules.¹¹⁷

8.1.2.2. The Parties' views

(99) The Parties submit for the purpose of the Transaction, as far as patented AIs are concerned, they may be considered to constitute separate product markets. However, they also submit that, in practice, AIs which are still patented are not frequently sold on a stand-alone basis by the holders of the patent to third parties.

(100) The Parties submit that AIs which are off-patent and fall within the same chemical class (for example, neonicotinoids and pyrethroids) are typically substitutable for each other from both a demand and supply-side point of view, because they usually control a similar spectrum of pests, at broadly comparable prices.

¹¹⁵ See Commission Decision in Case M.2231 – Huntsman International/Albright & Wilson Surfactants Europe, OJ C165/07, 08.06.2001; Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 44.

¹¹⁶ See Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002.

¹¹⁷ See Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011.

8.1.2.3. The Commission's assessment

- (101) The Commission understands that from an end-user/farmer's point of view there might be a certain degree of substitutability among different groups of AIs, which for instance are able to address the same crop/pest combination. Nonetheless, the Commission notes that from a direct demand perspective there is no substitutability across different AIs for crop protection product manufacturers. This is because each crop protection manufacturer can only rely on a specific AI for the production of its registered crop protection product. Indeed, each crop protection product registration authorizes the use of specific AIs, which cannot be substituted or changed unless a new product registration application is filed. Also, crop protection product manufacturers would try to diversify their portfolio as much as possible and would rarely have AI products within their portfolio that could be substitutable to each other as this would cannibalize part of their potential sales.
- (102) Therefore, for the purpose of the Transaction, the Commission will consider each AI as a distinct market.

8.1.3. *Herbicides*

8.1.3.1. Past decisional practice

- (103) Herbicides are crop protection products that control weeds. In some previous cases, the Commission has considered a distinction between (i) selective herbicides and (ii) non-selective herbicides.¹¹⁸ Non-selective herbicides are defined as crop protection products designed to tackle weeds after the harvest of any crop and prior to the sowing of the next. In contrast, selective herbicides are created to kill only the weeds while leaving intact the crop to which they are applied.
- (104) In addition, the Commission has considered the different types of crops as a relevant segmentation.¹¹⁹ More specifically, within cereals, the Commission previously left open whether barley herbicides formed a separate relevant market.¹²⁰
- (105) In previous decisions¹²¹, the Commission also considered a further possible distinction between the following selective herbicides: (i) broadleaf weed herbicides, (ii) graminicides (control of grass weeds) and (iii) broad spectrum herbicides. Indeed, if a farmer faces harmful grass weeds in his crop fields, he needs to use herbicides capable of controlling these particular weeds. In addition, broad spectrum herbicides consist of products active against the two different types of weeds: broadleaf and grass. In previous cases, the Commission underlined that the two market segments may be linked through the presence of broad spectrum herbicides.
- (106) Moreover, the Commission considered a distinction between herbicides based on the stage of application, notably between (i) pre-sowing, (ii) pre-emergence and

¹¹⁸ See for instance Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 48; Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 21.

¹¹⁹ See for instance Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000; Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011.

¹²⁰ See Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002.

¹²¹ See for instance Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraph 577; Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 21.

(iii) post-emergence herbicides.¹²² Pre-sowing or pre-plant herbicides are typically not crop specific and refer to non-selective herbicides. Pre-emergence herbicides are applied to a target crop before it has germinated whereas post-emergence herbicides are applied after germination. The Commission noted that there was some degree of flexibility for farmers and thus some degree of substitutability between the three types of herbicides.

8.1.3.2. The Parties' views

(107) The Parties submit that the relevant market for herbicides should be subdivided into non-selective herbicides and selective herbicides and the latter further subdivided by type of crop. With respect to broadleaf herbicides, graminicides and broad spectrum herbicides, the Parties are of the view that there might be a further breakdown that can be considered from the end-consumer perspective based on so-called herbicides activation, namely, the mode of action.¹²³

8.1.3.3. The Commission's assessment

(108) Herbicides, and in general crop protection products, consist of finished products ready to be applied for their respective purpose. The Commission considers that farmers buy a crop protection product to address their particular needs. They will choose based on the crop, pest(s), timing, etc., they want to target. In line with the Market Definition Notice, this implies a narrow relevant product dimension consisting of a crop/pest combination.

(109) In general, a crop protection product that applies to a given crop/pest combination is not substitutable from the farmer's point of view with another product that applies to a different crop/pest combination. Moreover, all formulated products have a label that typically indicates AIs, formulation, permitted use crops, pests targeted, options for compatible tank mixing, crops that can be sown after a crop treated with the product, safety instructions, etc.

(110) Based on the above and according to previous Commission decisions, from a demand-side perspective, the Commission considers that the relevant product markets correspond to a crop/pest combination. From a practical point of view, as there is a very high number of pests (different weeds, different insects, etc.) and different crops, it might be particularly challenging to assess competition based on the narrowest possible crop pest combination (for example herbicides against one specific weed in barley). Therefore, in order to conduct a meaningful assessment, the Commission will consider groupings of crop/pest combinations which are considered relevant by the industry players and third parties.¹²⁴ In the case of herbicides, the market can be distinguished notably by target crop, target pest, graminicides or broadleaf (or both) and time of application. The findings of the market investigation supported this delineation of the product market.

(111) First, a large majority of crop protection competitors confirmed the relevance of the distinction between selective and non-selective herbicides and within selective

¹²² See for instance Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 21.

¹²³ Form CO, paragraphs 508-9.

¹²⁴ See for instance categorization used by industry data providers, such as Philipps McDougall and Sigma.

herbicides by crop.¹²⁵ Likewise, a large majority of distributors stated that they distinguish between selective herbicides and non-selective herbicides and, within selective herbicides, each crop.¹²⁶ A majority of distributors also confirmed that a distinction between selective and non-selective herbicides is also relevant for perennial crops (for example fruits).¹²⁷

- (112) For the purpose of the Transaction, the Commission takes the view that the proposed product market distinction between (i) selective herbicides and (ii) non-selective herbicides and, within selective herbicides, (iii) by crop is relevant for the assessment of competition.
- (113) Second, the Commission notes that the large majority of respondents also agreed that selective herbicides for cereals should be further distinguished based on the specific type of cereal crop (namely wheat, barley and other cereals).¹²⁸ Some distributors suggested that such distinction might sometimes be very blurred. *"Non selective herbicides are mainly multi cereals crop. Moreover, cereals growers have mainly a mix of different cereals that would make it nearly impossible to have one product for each type of cereals."*¹²⁹ The vast majority of competitors also considered the further segmentation within selective herbicides for cereals as relevant.¹³⁰ However, some competitors expressed diverging opinions on this issue: *"The segmentation between wheat and barley is key as some herbicides used in wheat can't be used in barley"*, whereas another competitor submits that *"a further segmentation by crop within cereals is not appropriate. In particular in broadleaf cereal herbicides, most of the active ready mixes are registered for use on wheat and barley"*.¹³¹
- (114) For the purpose of the Transaction, the Commission consider that, within selective herbicides for cereals, a distinction among wheat herbicides, barley herbicides, and "other cereal" herbicides is appropriate. This conclusion is based on the principle that each farmer has specific needs for its crop/pest combinations that can only be met by selective herbicides products which will target and be effective on its specific crop.
- (115) Third, a large majority of distributors¹³² and competitors¹³³ highlighted the relevance of sub-segmentations depending on the type of weeds targeted (broadleaf, grass, or both in cross-spectrum products) and depending on the timing of application.
- (116) The Commission takes the view that a further distinction can be made between (i) broadleaf weed herbicides, (ii) herbicides used for the control of grass weeds (graminicides), and (ii) broad spectrum herbicides that are effective against both types of weed. The Commission will also consider that that a distinction can be made between pre-emergence and post-emergence selective herbicides. The Commission considers that the distinction based on the time of application is also relevant for non-selective herbicides (for example pre-plant, post-harvest, etc.).

¹²⁵ Replies to question 22 of Questionnaire (Q3) to crop protection competitors.

¹²⁶ Replies to question 16 of Questionnaire (Q2) to crop protection distributors.

¹²⁷ Replies to question 19 of Questionnaire (Q2) to crop protection distributors.

¹²⁸ Replies to question 16 of Questionnaire (Q2) to crop protection distributors.

¹²⁹ Replies to question 16 of Questionnaire (Q2) to crop protection distributors.

¹³⁰ Replies to question 22 of Questionnaire (Q3) to crop protection competitors.

¹³¹ Replies to question 22 of Questionnaire (Q3) to crop protection competitors.

¹³² Replies to question 16 of Questionnaire (Q2) to crop protection distributors.

¹³³ Replies to question 22 of Questionnaire (Q3) to crop protection competitors.

(117) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the relevant product markets to retain for the competitive analysis are: selective herbicides segmented by specific crop, by specific weed targeted and by timing of their application; non-selective herbicides segmented by time of application.

8.1.4. *Insecticides*

8.1.4.1. Past decisional practice

(118) Insecticides are crop protection products aimed at killing or suppressing insects so as to promote plant growth and improve crop yields.

(119) In *Bayer/Aventis*¹³⁴, the Commission found that the relevant product market for insecticides is defined by crop and subdivided into foliar and soil insecticides. In the competitive assessment special attention was given to the distinction between chewing and sucking insecticides and also to two new (at the time) chemical classes (neonicotinoids and pyrazoles).

8.1.4.2. The Parties' views

(120) For the purpose of the Transaction, the Parties have followed the segmentation defined by the Commission in its previous cases and provide market shares at the crop and segment level (foliar/soil insecticides) and distinguishing between chewing and sucking insects.

8.1.4.3. The Commission's assessment

(121) In line with what explained in recitals (108)-(117), the Commission considers that farmers choose their insecticide products on the basis of their ability to control the targeted pest, on a particular crop. As explained with respect to insecticides, from a practical point of view, in order to conduct a meaningful assessment, the Commission will consider groupings of crop/pest combinations on the basis of criteria which are commonly used in the industry and were confirmed as relevant during the market investigation.

(122) A large majority of distributors and competitors in the market investigation indicated that it was relevant to segment insecticides by crop and by type of soil or foliar insect.^{135,136} Furthermore, a majority of distributors also considered that it was relevant to distinguish insecticides according to the type of pest, namely whether it was a chewing or a sucking pest.¹³⁷ The reasons included the need to ensure effectiveness of the product: “*Fundamentally different groups of active substances of insecticides have different activity against plant pests. Some are for chewing pests and others against sucking pests*”¹³⁸ and the need to protect beneficial insects (insecticides are targeted according to type of pest) “*because non-targeted insecticide may have negative effect on beneficial insects. We try to protect them.*”¹³⁹

¹³⁴ See Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraph 61.

¹³⁵ Replies to question 20 of Questionnaire (Q2) to crop protection distributors.

¹³⁶ Replies to question 24 of Questionnaire (Q3) to crop protection competitors.

¹³⁷ Replies to question 21 of Questionnaire (Q3) to crop protection competitors.

¹³⁸ Replies to question 21 of Questionnaire (Q3) to crop protection competitors.

¹³⁹ Replies to question 21 of Questionnaire (Q3) to crop protection competitors.

- (123) A majority of distributors also considered that it was relevant to distinguish a broad-spectrum insecticide and one targeted at a specific pest.¹⁴⁰ Some respondents also indicated that consideration of the mode of action and chemical class of an insecticide was a relevant factor when purchasing or developing an insecticide.¹⁴¹ For example, a distributor noted "*different species of insects need different mode of actions (contact, stomach etc.)*".¹⁴²
- (124) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the relevant product markets to retain for the competitive analysis are: insecticides segmented per crop, per soil or foliar application and per pest. Due to the multitude of markets that would result as a consequence of this approach, in its competitive analysis the Commission will examine groupings of crops and to groupings of types of pest (chewing" and "sucking" pests).

8.1.5. Fungicides

8.1.5.1. Past decisional practice

- (125) Fungicides prevent deterioration of plants and plant products from fungi and moulds before and after harvesting.
- (126) First, in some previous cases, the Commission assessed the fungicide market by crop (cereals, sugar beets, oilseed rape, forage crops, potatoes, tobacco, fruit and nuts, vegetables and ornamentals).¹⁴³ Moreover, the Commission proposed a further split for instance for cereals,¹⁴⁴ into notably wheat, barley, oats, rye and triticale.
- (127) Secondly, previous decisions of the Commission found further possible distinctions by reference to particular disease relevant for each crop. For instance, for wheat, the Commission noted that distinctions could be made between fungicides for instance for powdery mildew, rusts, eyespot and septoria.¹⁴⁵
- (128) Finally, the Commission found a distinction between strobilurin-based and non-strobilurin-based fungicides for cereals in a past case.¹⁴⁶ Strobilurins refer to formulated products containing an active substance of the strobilurin chemical class.

8.1.5.2. The Parties' views

- (129) The Parties agree with the segmentation used by the Commission in its previous cases and provided their shares at the crop and disease level.

¹⁴⁰ Replies to question 22 of Questionnaire (Q3) to crop protection competitors.

¹⁴¹ Replies to question 22 of Questionnaire (Q3) to crop protection competitors.

¹⁴² Replies to question 22 of Questionnaire (Q2) to crop protection distributors.

¹⁴³ See Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 23; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraph 655; Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 25; Commission Decision in Case M.1378 – Hoechst/Rhône-Poulenc, OJ C42/15, 18.02.2004, paragraph 34.

¹⁴⁴ See Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 26.

¹⁴⁵ See Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 26.

¹⁴⁶ See Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 31.

8.1.5.3. The Commission's assessment

- (130) First, most customers and competitors who responded to the Commission's market investigation support the approach of dividing fungicides by crop and by disease.^{147,148} Regarding a further segmentation for cereal fungicides (for example wheat, barley, and other cereal fungicides), some competitors noted that "take-all products" existed in wheat and winter barley.
- (131) Second, a majority of distributors and competitors are of the view that fungicides based on the same AIs are equivalent from the customers' point of view because they satisfy the same needs.¹⁴⁹
- (132) However, it appears that modes of action (MoAs) and chemical classes of products are nonetheless seen as a factor to be taken into account. A competitor for instance highlights that MoAs will be considered by farmers because "*formulation of the active ingredient, [] can provide a difference in performance level*".¹⁵⁰
- (133) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the relevant product markets to retain for the competitive analysis are: fungicides per crop, per foliar and soil application and per type of disease.

8.1.6. Plant growth regulators

8.1.6.1. Past decisional practice

- (134) Plant growth regulators are agrochemical products that inhibit, stimulate or modify plant growth and development.
- (135) In its past decisions, the Commission has found that plant growth regulators for individual crops form separate relevant product markets.¹⁵¹

8.1.6.2. The Parties' views

- (136) For the purpose of the Transaction, the Parties submit that they will follow the segmentation identified by the Commission in its decisional practice.

8.1.6.3. The Commission's assessment

- (137) A majority of competitors and distributors have confirmed that plant growth regulators for individual crops form separate relevant product markets.^{152,153}
- (138) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the relevant product markets to retain for the competitive analysis are PGRs per individual crops.

¹⁴⁷ Replies to question 22 of Questionnaire (Q2a) to crop protection distributors.

¹⁴⁸ Replies to question 24 of Questionnaire (Q3) to crop protection competitors.

¹⁴⁹ Replies to question 26 of Questionnaire (Q3) to crop protection competitors; Replies to question 26 of Questionnaire (Q2) to crop protection distributors.

¹⁵⁰ Replies to question 26 of Questionnaire (Q3) to crop protection competitors.

¹⁵¹ See Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 27; Commission Decision in Case M.1932 – BASF/American Cyanamid (AHP), OJ C354/08, 09.12.2000, paragraph 28; Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 78; Commission Decision in Case M.737 – Ciba-Geigy/Sandoz, OJ L201/01, 17.07.1996, paragraph 123.

¹⁵² Replies to question 30 of Questionnaire (Q3) to crop protection competitors.

¹⁵³ Replies to question 30 of Questionnaire (Q2) to crop protection distributors.

8.1.7. *Seed treatment*

8.1.7.1. Past decisional practice

- (139) Seed treatment is the so-called dressing of seeds with specific crop protection formulations to protect them at early stages of their development. Seed treatment formulations consist of either fungicides or insecticides or a combination of both, and additional chemical substances such as additives, polymers, anti-freezing agents, dyes or pigments.
- (140) In its past decisions, the Commission found that seed treatment constitutes a separate product market, rather than a particular application of insecticides and fungicides.¹⁵⁴ It has also found that the seed treatment product market may be further segmented into insecticides and fungicides and that these two segments may be sub-segmented by crop.¹⁵⁵

8.1.7.2. The Parties' views

- (141) For the purpose of the Transaction, the Parties followed the segmentation identified by the Commission in its decisional practice and provided their shares by segment (fungicide seed treatments and insecticide seed treatments) and by crop.

8.1.7.3. The Commission's assessment

- (142) A majority of competitors and distributors confirmed that seed treatment products for individual crop types and pests form relevant separate markets.^{156,157}
- (143) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the relevant product markets to retain for the competitive analysis are seed treatment products per crops and pests combination.

8.1.8. *Post-harvest treatment products*

- (144) Post-harvest handling is the crop production stage that takes place immediately after harvest. Once a crop is removed from the ground or separated from its parent plant, it begins to deteriorate. Post-harvest products are applied to protect stored crop products (for example, stored grain) to address pest and disease problems that may arise during the transport and storage of a crop (moisture loss, undesirable chemical changes, bruising of products).
- (145) Post-harvest treatment products use different formulations and are designed for their application after the harvest and therefore the Commission considers that they belong to a distinct product market from other crop protection products.

¹⁵⁴ See Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 25; Commission Decision in Case M.3465 – Syngenta/CP/Advanta, OJ C263/5, 26.10.2004, paragraph 28; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraph 810; Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 77.

¹⁵⁵ See Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 25; Commission Decision in Case M.3465 – Syngenta/CP/Advanta, OJ C263/5, 26.10.2004, paragraph 28; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraphs 810-823.

¹⁵⁶ Replies to question 29 of Questionnaire (Q3) to crop protection competitors.

¹⁵⁷ Replies to question 29 of Questionnaire (Q2) to crop protection distributors.

8.1.8.1. The Parties' views

(146) The Parties submit that the exact scope of the product market definition of post-harvest treatments can be left open since the Transaction does not raise competition concerns irrespective of the product market definition. Indeed, while Syngenta sells post-harvest treatments that can be applied to different crops (cereals, citrus, corn, other specialty, pome fruit, etc.), Adama sells post-harvest treatment only for citrus fruit, and in Spain.

8.1.8.2. The Commission's assessment

(147) On the basis of the available evidence and the results of the market investigation, the Commission considers for the purpose of the assessment of this Transaction that the relevant product markets to retain for the competitive analysis are: post-harvest treatment products for different crops.

8.1.9. *Nutrients*

(148) Nutrients (or trace elements) are used to treat deficiency symptoms such as iron deficiency. In its past decisions, the Commission has considered that the market for nutrients may be further split by type of crop as a given type of plant suffers predominantly from the same nutrient deficiency.

8.1.9.1. The Parties' views

(149) The Parties consider that the relevant product market definition for nutrients can be left open because the Transaction does not give rise to competitive concerns regardless of how the product market is defined.

8.1.9.2. The Commission's assessment

(150) On the basis of the available evidence and the results of the market investigation, the Commission considers for the purpose of the assessment of this Transaction that the relevant product markets to retain for the competitive analysis are nutrients for different crops.

8.1.10. *Lawn and Garden products*

8.1.10.1. Past decisional practice

(151) Lawn and Garden products comprise two main categories of products, namely professional pest control products ("professional products") and non-agricultural crop protection agents for home and garden ("household products").

(152) Professional products are insecticides especially designed for use by professional pest control operators, industrial customers and local authorities and municipalities. Household products are basically crop protection products used for domestic purposes.

(153) In its past decisions, the Commission has considered the distinction between professional and household products. Within professional products, the Commission

assessed the effect of a Transaction on the relevant markets for (i) multipurpose insecticides, (ii) cockroaches, (iii) flies, ticks and fleas, and (iv) rodenticides.¹⁵⁸

- (154) The Commission also found that household products constitute a separate market from agricultural crop protection products as these products are sold in different formulations and to different users. The Commission further segmented household products by herbicides, insecticides and fungicides.^{159,160}

8.1.10.2. The Parties' views

- (155) The Parties submit that the market definition for Lawn and Garden products does not need to be decided as this would have no impact on the assessment of the Transaction.

8.1.10.3. The Commission's assessment

- (156) For the purpose of the Transaction, the Commission will leave the exact scope of the product market definition for Lawn and Garden products open and consider the following potential segments: household versus professional products, as well as herbicides, insecticides and fungicides for household products.

8.2. Relevant Geographic Markets

- (157) According to paragraph 28 of the Market Definition Notice, in order to delineate the geographic dimension of a relevant market, "*the Commission will identify possible obstacles and barriers isolating companies located in a given area from the competitive pressure of companies located outside that area, so as to determine the precise degree of market interpenetration at national, Geographic dimension European or global level.*"

8.2.1. Raw materials

8.2.1.1. Past decisional practice

- (158) In past precedents, the Commission has analysed the geographic market for raw materials for chemical applications as worldwide, but ultimately left the precise definition of the geographic market open.¹⁶¹

8.2.1.2. The Parties' views

- (159) The Parties submit that the potential relevant geographic scope of the product markets for the raw materials is worldwide, since they are traded on a global basis.

- (160) The Parties submit that the precise definition of the geographic market with regard to raw materials can be left open for the purpose of the Transaction as the competitive

¹⁵⁸ Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 28; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraphs 954-997.

¹⁵⁹ Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraphs 998-999. See also Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 29.

¹⁶⁰ Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraph 1055.

¹⁶¹ See Commission Decision in Case M.2231 – Huntsman International/Albright & Wilson Surfactants Europe, OJ C 165/08, 08.06.2001; Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 44.

assessment would not change under any of the possible geographic market definitions.

8.2.1.3. The Commission's assessment

(161) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the relevant geographic market in relation to raw materials is worldwide.

8.2.2. *Active Ingredients*

8.2.2.1. Past decisional practice

(162) In its past decisions, the Commission has considered that the relevant geographic market for AIs to be at least EEA-wide, if not worldwide.¹⁶²

(163) In *China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries*, the Commission found that since the Parties overlapped only in off-patent AIs, it could be left open whether the market for potential AIs is EEA-wide or worldwide. The Commission nevertheless observed that “*The market investigation in this case showed that the markets for off-patent active ingredients are worldwide in scope. Producers of formulated products frequently source off-patent active ingredients from outside the EEA, while off-patent active ingredients produced in the EEA are occasionally exported outside the EEA. According to the majority of respondents suppliers of off-patent active ingredients act globally, supply conditions are negotiated irrespective of the origin of the supplier, and for most respondents services such as warehousing, engineering and after sales support do not necessarily have to be provided within the EEA.*”¹⁶³

8.2.2.2. The Parties' views

(164) For the purpose of the Transaction, while the Parties submit that the market is global in scope given the existence of various Chinese and Indian suppliers well as others all over the world) which supply these products worldwide, they have analysed the geographic markets concerned on both an EEA and worldwide basis.

8.2.2.3. The Commission's assessment

(165) The Commission understands that AIs need to be authorized for use in the EEA at the EEA level. However, these AIs can be produced anywhere in the world and are sourced in relation to the production plants of the various crop protection products manufacturers. These might be located both within and outside the EEA. Therefore, the EEA regulatory framework for the authorization of the AI does not seem to be an appropriate measure of the geographic scope of the market.

(166) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the scope of the geographic market for AIs can be left open as the outcome of its assessment

¹⁶² Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 33; Commission Decision in Case M.4972 – Permira/Arysta, OJ C84/03, 03.04.2008, paragraph 23; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraph 919 and Commission Decision in Case M.737 – Ciba-Geigy/Sandoz, OJ L201/1, 17.07.1996, paragraph 129.

¹⁶³ Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 36.

would not change regardless of whether the market is considered as EEA-wide or worldwide in scope.

8.2.3. *Herbicides, Insecticides, Fungicides, Seed Treatment, PGRs, Post-harvest treatment, nutrients and Lawn and Garden Products*

8.2.3.1. Past decisional practice

- (167) In its past decisions, the Commission stated that the relevant geographic markets for crop protection products (herbicides, fungicides, insecticides, seed treatment, PGRs, Lawn and Garden products) are national in scope.¹⁶⁴ This is partly because, (as discussed in Section 6.1) although AIs are approved at EU level under Regulation 1107/2009, formulated crop protection products need to be authorised by each Member State. Moreover, these products are labelled and branded differently on the basis of the national market in which they are being commercialized. Therefore, crop protection products are regulated at national level.¹⁶⁵
- (168) In AstraZeneca/Novartis, the Commission also took into account the fact that parallel imported products are seen as difficult to commercialize, among other reasons because brand names and formulations may vary between Member States, because registration fees may be high, and because it may take a long time to register the products. Furthermore, the Commission took into account (i) the fact that distribution is organized on a national basis, with suppliers having in most cases national sales organizations or distributing via the sales organization of another manufacturer operating in the relevant Member State; (ii) difference in market shares; price differences between Member States.¹⁶⁶

8.2.3.2. The Parties' views

- (169) The Parties submit that from the principle set out in Regulation (EC) No. 1107/2009 it results that formulated products are no longer regulated at national level only and that a mutual recognition procedure aiming at facilitating trade between Member States of formulated products is in place.
- (170) The Parties submit that (EC) Regulation No. 1107/2009, including the zonal system (see Section 6), has made the market for formulated crop protection products more homogenous because once a product is registered across the EEA, there is the automatic ability for a distributor to make a parallel import application where there is a price differential, and significant influence on more uniform pricing comes from the parallel import (free trade) more than pesticide regulation.

¹⁶⁴ See Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 37; Commission Decision in Case M.4972 – Permira/Arysta, OJ C84/03, 03.04.2008, paragraph 24; Commission Decision in Case M.2547 – Bayer/Aventis Crop Science, OJ L 107/1, 17.04.2002, paragraphs 23-27; Commission Decision in Case M.1932 – BASF/American Cynamid (AHP), OJ C354/08, 09.12.2000, paragraphs 29-31; Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraphs 79-99.

¹⁶⁵ See Commission Decision in Case M.6141 – China National Agrochemical Corporation/Koor Industries/Makhteshim Agan Industries, OJ C 309/01, 21.10.2011, paragraph 39; Commission Decision in Case M.4972 – Permira/Arysta, OJ C84/03, 03.04.2008, paragraph 24.

¹⁶⁶ Commission Decision in Case M.1806 – AstraZeneca/Novartis, OJ L 110/1, 26.07.2000, paragraph 82, paragraphs 91-98.

(171) Therefore, the Parties submit that the markets for formulated products are wider than national in scope and, at a minimum, should be segmented according to the three zones defined in Regulation (EC) No. 1107/2009 (namely zone A - North, Zone B - Centre and Zone C - South)¹⁶⁷ but should be considered also at an EEA-wide level. Nevertheless, the Parties will analyse the geographic markets concerned on a national basis and at the EEA-level.

8.2.3.3. The Commission's investigation

(172) During the market investigation, a large majority of distributors indicated that they operate their business on a national level.¹⁶⁸ The majority of respondent distributors indicated that they purchase crop protection products at the national level, while a considerable number stated that they purchase locally. Only very few indicated to purchase on a 'higher' level.¹⁶⁹ A distributor explained that, since the company has clients at national level, they purchase seed treatment products at national level.¹⁷⁰ In the same vein, a large majority of respondent distributors maintained that they do not purchase crop protection products in another Member State to sell these on to their customers.¹⁷¹ In addition, a large majority of respondent distributors claimed not to commercialise products obtained from another Member State via parallel imports.¹⁷²

(173) This is because regulatory barriers exist across different countries because of different labelling and national registration requirements. As explained by one distributor, they buy at national level because the products need a national crop protection registration, with a label in the national language.¹⁷³

8.2.3.4. The Commission's assessment

(174) On the basis of the available evidence and the results of the market investigation, the Commission considers that, for the purpose of assessing the Transaction, the markets for herbicides, insecticides, fungicides, seed treatment, PGRs, post-harvest treatment and Lawn and Garden products are national in scope.

9. COMPETITIVE ASSESSMENT - HORIZONTAL OVERLAPS IN THE MARKETS FOR ACTIVE INGREDIENTS

(175) The Parties are active in the supply of AIs, which are the key input necessary for the production of crop protection products. These AIs are thus sold to companies active in the downstream market for the supply of crop protection products.

¹⁶⁷ The zones are defined in Regulation (EC) No.1107/2009 (Annex I) as follows. Zone A – North: Denmark, Estonia, Latvia, Lithuania, Finland, Sweden; Zone B – Centre: Belgium, Czech Republic, Germany, Ireland, Luxembourg, Hungary, Netherlands, Austria, Poland, Romania, Slovenia, Slovakia, United Kingdom; Zone C – South: Bulgaria, Greece, Spain, France, Italy, Cyprus, Malta, Portugal.

¹⁶⁸ Replies to question 34 of Questionnaire (Q2) to crop protection distributors.

¹⁶⁹ Replies to question 33 of Questionnaire (Q2) to crop protection distributors.

¹⁷⁰ Reply to question 33.1 of Questionnaire (Q2) to crop protection distributors.

¹⁷¹ Replies to question 35 of Questionnaire (Q2) to crop protection distributors.

¹⁷² Replies to question 36 of Questionnaire (Q2) to crop protection distributors.

¹⁷³ Replies to question 33 of Questionnaire (Q2) to crop protection distributors.

9.1. Analytical framework for the competitive assessment

(176) This section sets out the analytical framework which the Commission will apply in assessing horizontal overlaps in this Decision.¹⁷⁴

9.1.1. Legal test

(177) Under Article 2(2) and (3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular through the creation or strengthening of a dominant position.

(178) The Merger Regulation recognises that in oligopolistic markets, it is all the more necessary to maintain effective competition.¹⁷⁵ This is in view of the more significant consequences that mergers may have on those markets. For this reason, the Merger Regulation provides that under certain circumstances, concentrations involving, first, the elimination of important constraints that the Parties had exerted on each other, and, second, a reduction of competitive pressure on the remaining competitors may result in a significant impediment to effective competition, even in the absence of a likelihood of coordination between the members of an oligopoly.¹⁷⁶

(179) Under the substantive test of the Merger Regulation, the Commission is not required to show the creation or strengthening of a dominant position in order to declare a merger incompatible with the internal market on the grounds that it would significantly impede effective competition: according to recital 25 of the Regulation, the notion of "*significant impediment to effective competition*" in Article 2(2) and (3) of that Regulation should be interpreted, as extending, beyond the concept of dominance, to the anti-competitive effects of a concentration that result from the non-coordinated behaviour of undertakings which do not have a dominant position on the market concerned.¹⁷⁷

(180) The Commission guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (the "Horizontal Merger Guidelines") distinguish between two main ways in which mergers between actual or potential competitors on the same relevant market may significantly impede effective competition, namely non-coordinated and coordinated effects.¹⁷⁸ Non-coordinated effects may significantly impede effective competition by eliminating important competitive constraints on one or more firms, which consequently would have increased market power, without resorting to coordinated behaviour. In that regard, the Horizontal Merger Guidelines consider not only the direct loss of competition between the merging firms, but also the reduction in

¹⁷⁴ The framework stated in this section 8.1 is therefore relevant not only for the assessment of the horizontal overlaps in the markets for active ingredients, but also for all other assessments of horizontal overlaps and namely those described in sections 11 and 12.

¹⁷⁵ Recital 25 of the Merger Regulation.

¹⁷⁶ Recital 25 of the Merger Regulation.

¹⁷⁷ Recital 25 of the Merger Regulation refers to the fact that concentrations involving the elimination of important competitive constraints that the merging parties had exerted upon each other, as well as a reduction of competitive pressure on the remaining competitors may under certain circumstances result in a significant impediment to effective competition even in the absence of a likelihood of coordination between the members of the oligopoly.

¹⁷⁸ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, (OJ C 31, 5.2.2004, p. 5).

competitive pressure on non-merging firms in the same market that could be brought about by the merger.¹⁷⁹

- (181) The Horizontal Merger Guidelines list a number of factors which may influence whether or not significant non-coordinated effects are likely to result from a merger, such as the large market shares of the merging firms, the fact that the merging firms are close competitors, the limited possibilities for customers to switch suppliers, or the fact that the merger would eliminate an important competitive force. That list of factors applies equally if a merger would create or strengthen a dominant position, or would otherwise significantly impede effective competition due to non-coordinated effects. Furthermore, not all of these factors need to be present to make significant non-coordinated effects likely and it is not an exhaustive list.¹⁸⁰

9.1.2. *The concept of closeness between the merging parties' products*

- (182) Contrary to what is implied by the Parties throughout their analysis, the Commission is not required, for the purposes of finding non-coordinated effects in the absence of dominance, to show that the merging parties are each other's closest competitors on the relevant markets.¹⁸¹ The Horizontal Merger Guidelines refer to merging firms being "close competitors" as opposed to being each other's closest competitors, as submitted by the Notifying Party.¹⁸²

- (183) Moreover, closeness of competition is only one of the factors listed in the Horizontal Merger Guidelines as potentially influencing whether or not significant non-coordinated effects are likely to result from a merger. This has already been recognised in previous Commission decisions.¹⁸³

9.1.3. *Standard of Proof*

- (184) The Commission applies the general legal standard to show that a significant impediment to effective competition arises. This standard requires the Commission to assess the economic outcome attributable to the concentration which is most likely to ensue.¹⁸⁴

- (185) As regards the evidence used in this Decision, the Commission notes that its assessment of a concentration must be supported by a sufficiently cogent and consistent body of evidence that must be factually accurate, reliable and consistent. The body of evidence must contain all the information required to be taken into account in order to assess a complex situation and it must be capable of substantiating the conclusions drawn from it. Against this background, the Commission has assessed all available sources of evidence in this Case, including: (i) the data gathered throughout the Market Investigation; (ii) the reports and

¹⁷⁹ Horizontal Merger Guidelines, paragraph 24.

¹⁸⁰ Horizontal Merger Guidelines, paragraph 25.

¹⁸¹ See for instance, Form CO, paragraph 2457. "*This crop/segment raises no competition concerns because the Parties' main products are not close substitutes and compete more closely with products from competitors than with each other*".

¹⁸² Horizontal Merger Guidelines, heading for paragraphs 28 to 30.

¹⁸³ See, for instance, Commission Decision in Case No COMP/M.5529 – Oracle/Sun Microsystems, OJ C91/ 05, 21.01.2010, paragraph 164.

¹⁸⁴ C-413/06 P, *Bertelsmann v. Impala*, [2008] ECR I-4951, paragraph 52.

contributions produced by sectorial experts;¹⁸⁵ (iii) the analysis of internal documents submitted by each of the Parties.

- (186) Section 9.3 to Section 9.6 analyse the likelihood of non-coordinated effects of the Transaction (namely whether it may significantly impede effective competition by eliminating important competitive constraints on one or more firms, which consequently would have increased market power, without resorting to coordinated behaviour).

9.2. Drivers and trends in the supply and sourcing of AIs

- (187) Both R&D and generic players source AIs on the merchant market.
- (188) R&D players typically source AIs on the merchant market in order to get access to specific AIs for use in their mixtures. Basically they outsource in order *"to fill gaps in [the] product offering and to make new combinations."*¹⁸⁶ One market participant explains: *"Because R&D companies are usually focusing on their own synthesis, they don't synthesize AI from other R&D companies. If they need an access for such generic AI in view of a mixture with their own compound, they'd rather go and ask the access either from the original R&D company or directly to a generic player in order to save time."*¹⁸⁷ In the course of the market investigation, R&D players indicated that they can source both from R&D and generic players. Nonetheless, overall R&D players usually appeared to control the production of the majority of their AI requirements, unlike other crop protection players which more heavily outsource their AI requirements.¹⁸⁸
- (189) The business model of generic players has traditionally been driven by scale economies that allowed them to offer cheaper versions of the R&D companies' products. Typically, therefore, generic players used to internalize their AI production. However, as many of them gradually expanded their product portfolio from mere "me-too" products to more diversified mixtures, they also have been increasingly relying on the merchant market to source specific AIs from other generic players. Moreover, market participants agreed that over the last 15 years generic players have come to rely more and more on the licencing and supply of AIs from R&D companies.¹⁸⁹ One of the R&D players added that: *"Sourcing of a.i.'s by generic companies is done both from the originator (prior to patent expiry) as well as from generic producers (w/o distribution). But the majority of off-patent actives is produced by generics themselves. Since a few years, collaboration between R&D companies and generic companies of the tier-2-level for patented actives has significantly increased in order to be cost-efficient and obtain full market access."*¹⁹⁰
- (190) According to some market participants, the ongoing consolidation in the industry could make it more difficult for generic players to source AIs from R&D players in the future.¹⁹¹ *"Due to the current consolidation wave the number of R&D companies reduces. It can be assumed that those companies will have a stronger market*

¹⁸⁵ For instance, Phillips McDougall – AgriService, Industry Overview, 2014 Market.

¹⁸⁶ Replies to question 77 of Questionnaire (Q3) to crop protection competitors.

¹⁸⁷ Replies to question 54 of Questionnaire (Q3) to crop protection competitors.

¹⁸⁸ Replies to question 17 of Questionnaire (Q3) to crop protection competitors.

¹⁸⁹ Replies to question 78 of Questionnaire (Q3) to crop protection competitors.

¹⁹⁰ Reply to question 78.1 of Questionnaire (Q3) to crop protection competitors.

¹⁹¹ Replies to question 78 of Questionnaire (Q3) to crop protection competitors.

position against generic players and can act more independently, i.e. will be less open/forced to give generics access to their portfolio. Besides, industry consolidation will lead to a further decline in the number of new actives introduced to the market. Investors demand to increase shareholder value has led companies to look for merger synergies across the board and including research and development. Thus, the competition among the generic players to get access to novel actives from the remaining R&D companies will increase."¹⁹²

- (191) Moreover, a few companies feared that in the future it might become harder for them to get access to R&D AIs as the consolidation and capacity optimization ongoing in China might imply that in the future competition among generic players to get access to merchant AIs in China might increase. One respondent indicates that it is possible to "always go to a Chinese manufacturer and develop a generic package. However this is not as cheap as it used to be".¹⁹³ Another market participant points out that whether the conditions to access merchant AIs will change, "It depends largely on the availability of alternative technical suppliers of the active ingredients. This is becoming fewer with consolidation of the active ingredient manufacturers, particularly in China. Consolidation is occurring due to competition, increasing regulation covering production, and marketing authorisations".¹⁹⁴
- (192) However, a majority of market participants indicated that despite the ongoing consolidation process in the industry, generic players will continue to have access to R&D companies AIs as they have today.¹⁹⁵ The majority of respondents considered that even if access to AIs from R&D companies were to be reduced, they would continue to be able to find alternative suppliers, mainly in Asia.¹⁹⁶
- (193) In conclusion, irrespective of the fact that it is difficult to predict the direction of changes in the Chinese industry/economy and their effect on the overall availability of AIs in the merchant market, it appears clear that Chinese and Asian producers play an important role in the market for both R&D players and other crop protection producers.

9.3. Overview Horizontal overlaps

- (194) The Transaction brings about horizontal overlaps between the Parties' activities in the markets for merchant AIs.
- (195) At EEA level, in 2015 the Parties' sales of merchant AIs overlapped in only two AIs: propiconazole (Adama and Syngenta's combined market share of [10-20]%) and terbuthylazine (Adama and Syngenta's combined market share of 5-10%). This is explained by the fact that ChemChina/CNAC, whose core business is mainly the production of AIs (rather than crop protection products), has limited activities in the merchant market of AIs in the EEA. In 2015 ChemChina only sold 2 active ingredients¹⁹⁷ in the EEA.

¹⁹² Reply to question 79.1 of Questionnaire (Q3) to crop protection competitors.

¹⁹³ Reply to question 80.1 of Questionnaire (Q3) to crop protection competitors.

¹⁹⁴ Reply to question 80.1 of Questionnaire (Q3) to crop protection competitors.

¹⁹⁵ Replies to question 79 of Questionnaire (Q3) to crop protection competitors.

¹⁹⁶ Replies to question 80 of Questionnaire (Q3) to crop protection competitors.

¹⁹⁷ Ethephon and oxadiazon.

- (196) The Commission notes however that not all the crop protection products sold in the EEA are actually produced in the EEA. Therefore, in order to be able to assess the potential impact of the Transaction on the internal market, the Commission needs to analyse the impact of the Transaction on the worldwide market of AIs (see Section 8.2.2 on the geographic market definition of the market for AIs). However, the Commission will limit the analysis to the specific AIs which are allowed to be used for the production of crop protection products authorized in the EEA. The Commission understands that the European market for crop protection products is a highly sophisticated market governed by some of the highest safety and health standards in the world, where competition on new AIs is very intense. Moreover, the Commission notes that the merchant markets for AIs, especially the ones where ChemChina and other Chinese SOEs are active, mainly concerns off-patent AIs, which are therefore normally old molecules, which have been on the market for a long time. Therefore, it considers that the limitation of the analysis to EEA approved AIs is a reasonable approach as it captures not only existing competition but also forward looking competition on AIs which are still on-patent but will be traded on the merchant market as soon as they become off-patent in the next few years.
- (197) At global level, however, the activities of the Parties in the market for merchant AIs overlapped in relation to the supply of 14 AIs authorized for use in the EEA.¹⁹⁸ The Parties maintain that for all those 14 AIs that they sell, one or both of the Parties outsources at least some volumes from other (non-SOE) companies.¹⁹⁹ More importantly, none of those overlaps give rise to affected markets.²⁰⁰
- (198) When also taking into account the activities of the other Chinese SOEs (other than CNAC), the Transaction gives rise to affected markets in relation to the supply of the following seven AIs: dicamba (25-36% combined market share), glyphosate (15-30%), lambda-cyhalothrin (25-40%), mesotrione (65-85%), propiconazole (15-30%); pymetrozine (50-70%), trinexapac-ethyl (30-40%).

Table 12: Merchant AIs: Global market shares (2015)²⁰¹

AI	Market share Syngenta	Market share CNAC/Adama	Market share other Chinese SOEs	Number of other companies selling AI ²⁰²
Dicamba	<5%	[0-5]%	<30%	8
Glyphosate	<5%	<5%	<20%	15
Lamba-cyhalothrin	<5%	<5%	<30%	7
Mesotrione	<5%	N/A	70-80%	7
Propiconazole	<10%	<5%	<15%	7
Pymetrozine	<5%	[10-20]%	40-50%	6
Trinexapac-ethyl	<5%	<5%	<30%	4

¹⁹⁸ Additional 3 AIs supplied by both CNAC and Syngenta are only authorized for use outside the EEA.

¹⁹⁹ Notifying Party's response to Commission's request for information RFI 7, question 15, Table 2.

²⁰⁰ Notifying Party's response to Commission's request for information RFI 7, question 15, Table 2.

²⁰¹ Form CO, annex 6.7.2.

²⁰² Notifying Party's response to Commission's request for information RFI 10, question 53k.

9.4. The Parties' views

- (199) As a general remark, the Parties stress that they are not in a position to raise prices, restrict output or foreclose competition with respect to any of the 14 overlap AIs, including the seven AIs where the Transaction potentially gives rise to affected markets, since they do not control the entire production of those AIs. Indeed, for any of the seven AIs, one of the Parties currently outsources some volumes on the merchant market.
- (200) The Parties also contend that their combined share is clearly too small to raise competition concerns in five of the seven AIs identified (namely dicamba, glyphosate, lambda-cyhalothrin, propiconazole, trinexapac-ethyl) where their share falls below, and in some cases significantly below, 40%.²⁰³
- (201) Furthermore, the Parties argue that Syngenta's merchant share in the seven AIs is simply too small to give rise to any competition concerns in view of the increment brought about by the Transaction. As shown in Table 15, Syngenta's global share falls below 5% in six of the seven AIs and below 10% in the remaining one. According to the Parties, the increment added by Syngenta is too minor to change the competitive dynamics for these AIs and to significantly change the Parties' position in the merchant AI market.²⁰⁴
- (202) The Parties also submit that for any of the seven AIs where the Parties' activities overlap, there will continue to be post-Transaction plenty of alternative suppliers. Specifically, the Parties contend that there are many alternative non-SOE suppliers for each one of the seven AIs:²⁰⁵
- (a) Dicamba: eight alternative non-SOE suppliers;
 - (b) Glyphosate: 15 alternative non-SOE suppliers;
 - (c) Lambda-cyhalothrin: seven alternative non-SOE suppliers;
 - (d) Mesotrione: seven alternative non-SOE suppliers;
 - (e) Propiconazole: seven alternative non-SOE suppliers;
 - (f) Pymetrozine: seven alternative non-SOE suppliers; and
 - (g) Trinexapac-ethyl: four alternative non-SOE suppliers.
- (203) In view of the above, the Parties submit that the Transaction will not raise competition concerns in the merchant market for AIs.

9.5. The Commission's assessment

- (204) The Commission appreciates that the Parties' market shares for the AIs listed in Table 12 are not very high, with an increment below 5% for 6 out of 7 of the listed AIs. The Commission notes however that the Parties still reach significant combined market shares in certain AIs when also other Chinese SOEs are taken into account. The Parties' ability to raise prices or restrict output with respect to any of the seven AIs needs to be assessed in light of the competitive constraint exerted by other AI

²⁰³ Notifying Party's response to the Article 6(1)(c) Decision, paragraphs 150-153.

²⁰⁴ Notifying Party's response to the Article 6(1)(c) Decision, paragraphs 150-153.

²⁰⁵ Notifying Party's response to the Article 6(1)(c) Decision, paragraph 152.

suppliers on the Parties, the existence of barriers to expansion/entry for other merchant AI suppliers and customers' ability to switch/find alternative suppliers.

9.5.1. *Alternative suppliers*

- (205) During the Phase II investigation and in line with what the Parties submitted, a number of crop protection manufacturers confirmed that many alternative suppliers exist for each of those AIs.²⁰⁶ Moreover, on the basis of the information collected during the market investigation, the Commission notes that crop protection players active rely on both Europe-based and global alternative suppliers.²⁰⁷
- (206) In particular, AIs such as dicamba, glyphosate, lambda-cyhalothrin and propiconazole appear to be commoditized products for which many suppliers are available in particular in Asia and China. A generic competitor indicated for instance that there are *"AIs which are more or less commoditized and for which it is easy to find supplier. For AIs such as glyphosate, tebuconazole, lambda-cyhalothrin and propiconazole, azoxystrobin, Fluazinam, for instance, there are more than 10 alternative valid producers based in China and elsewhere"*.²⁰⁸
- (207) As regards trinexapac-ethyl, market participants identified potential alternative suppliers such as *"United Phosphorous, Helm, Globachem, Sharda, FMC, Arysta"*.²⁰⁹
- (208) In relation to pymetrozine, most of the market participants were not even aware of the current status of this AI. This is an AI originated by Syngenta and launched in 1994. Adama still has large control on this AI. One competitor explained that this AI *"[...]is regarded as of low importance in the EU market."*²¹⁰ In Syngenta's internal documents analysing the [...] strategy for pymetrozine, Syngenta identifies at least 6 viable suppliers for this AI.²¹¹
- (209) Concerning mesotrione, another respondent indicates that although it is not yet a commoditized AI, as it only recently went off-patent, it offers a good example of how dynamic the merchant AI market can be. *"When, for example, mesotrione came off-patent a few years ago, [our company] discussed production with only 3 possible sources in China and eventually opted for the producer who could supply at a competitive cost and in a sustainable manner. However, since then, more and more producers have been trying to establish themselves in the mesotrione market, opening up new possibilities in the market."*²¹² As regards mesotrione, one market participant states that *"other suppliers of mesotrione active in the European markets are Globachem, SumiAgro, Albaugh."*²¹³
- (210) Therefore, based on the evidence collected in the market investigation, the Commission considers that post-Transaction there will continue to be many alternative suppliers for each of the seven AIs identified in Table 12.

²⁰⁶ Minutes of the conference call with competitors held during Phase II investigation.

²⁰⁷ Replies to question 77.3 of Questionnaire (Q3) to crop protection competitors.

²⁰⁸ Minutes of the conference call with a competitor of 2 December 2016.

²⁰⁹ Minutes of the conference call with a competitor of 1 December 2016.

²¹⁰ Minutes of the conference call with a competitor of 2 December 2016.

²¹¹ Notifying Party's response to Commission's request for information RFI 27 - [...].

²¹² Minutes of the conference call with a competitor of 2 December 2016.

²¹³ Minutes of the conference call with a competitor of 1 December 2016.

9.5.2. Spare capacity and barriers to expansion/entry

- (211) Expanding the production capacity of a plant and/or adapting an existing plant in order to produce a different AI appears costly. Nearly all respondent competitors that produce AIs state that they would have to face significant investments to switch their production to another AI. They refer to several factors that may affect the cost related to the switch, such as the specification of the AI, the underlying chemical class and the availability of raw materials. In particular, switches between chemical families require high investments and are "unlikely to happen".²¹⁴ One market participant also explains that "Expanding the production capacity of existing AI plants can also be an option. However it is not always feasible because of regulatory/environmental constraints and it requires an investment in the range of few millions euro."²¹⁵
- (212) This was further confirmed by another player when he explained that sometimes it makes more economic sense to build a new production facility from scratch rather than trying to expand an existing one. "For AIs belonging to the same chemical class it is quite easy to adapt a production plant and change production, while this is very costly for an AI belonging to another chemical class. In the latter case one needs to reset the plant to enable production of the other AI."²¹⁶
- (213) According to competitors, setting up a new AI plant can cost from 2-20 million EUR and can take between 1-2 years.^{217,218} A majority of respondents stressed that the overall duration and investments depend among other things on the type of AI being synthesized.²¹⁹
- (214) During the investigation, all responding competitors indicated that, based on their experience, suppliers of AIs currently have spare production capacity.²²⁰ The merchant market for AIs appears thus to be characterized by a certain degree of spare capacity.
- (215) Overall, although capacity expansion and switching of production seem costly, barriers to expansion and entry do not appear insurmountable. In addition, the market investigation confirmed the availability of spare capacity on the market. Therefore, the Commission considers that both existing player and potential entrants, especially from China and other Asian countries, will continue to exert a significant competitive constraint on the Parties.

9.5.3. Switching costs for AI customers

- (216) From a demand perspective, it is not easy for crop protection companies to switch suppliers of AIs, as confirmed by a vast majority of respondents to the market investigation.²²¹ The competitors in question refer to regulatory issues, as well as

²¹⁴ Reply to question 86 of Questionnaire (Q3) to crop protection competitors.

²¹⁵ Minutes of the conference call with a competitor of 1 December 2016.

²¹⁶ Minutes of the conference call with a competitor of 2 December 2016.

²¹⁷ Minutes of the conference call with a competitor of 2 December 2016.

²¹⁸ Minutes of the conference call with a competitor of 1 December 2016.

²¹⁹ Replies to question 82.1 Questionnaire (Q3) to crop protection competitors.

²²⁰ Replies to question 84 of Questionnaire (Q3) to crop protection competitors.

²²¹ Replies to question 82 of Questionnaire (Q3) to crop protection competitors.

requirements regarding the appropriate quality of the source, and the time and costs related to such a switch.²²²

- (217) During a call with the Commission, a generic competitor explained that the main issue for switching AI supplier is "*showing that the alternative source can provide AIs that are equivalent to the already registered product. If the source is already equivalent to the already registered product, it will take less than 12 months. If the source is not yet declared as equivalent it is necessary to carry out some studies and the process is expected to take 2 years.*"²²³
- (218) The Parties argue that one should not overstate the impact of high switching costs for AI customers. Most of these customers purchase a portfolio of AIs from merchant AI suppliers and often multi-source to limit the market power that regulatory or other barriers to switching (for example, securing sources of supply, quality) could give their suppliers. This was indeed confirmed by the market investigation, where it emerged that as a normal business practice, companies typically validate at least two suppliers for the AIs they are outsourcing in order to reduce risks of disruption.

9.6. Conclusion

- (219) On the basis of the findings of its investigation, the Commission considers that the concentration will not significantly strengthen the Parties' market position in the merchant AIs markets and/or substantially alter the existing market structure. The merchant market for AIs is characterised by a certain degree of spare capacity and alternative suppliers exist in addition to the Parties, in particular in China and other Asian countries. There are some barriers to expansion and entry; they do not, however, seem to be insurmountable. Switching costs for AI customers are also not negligible in light of the associated regulatory process required to validate new suppliers. However, multisourcing appear to be a widespread practice as crop protection manufacturers typically validate more than one AI supplier in order to limit switching costs and supply disruption risks.
- (220) For the reasons set out above, the Commission considers that the Transaction would not significantly impede effective competition on the market for merchant AIs.

10. COMPETITIVE ASSESSMENT - VERTICAL RELATIONSHIP MERCHANT ACTIVE INGREDIENTS AND CROP PROTECTION PRODUCTS

10.1. Overview vertical links

- (221) The Parties are active both in the supply of merchant AIs (see Section 9) and in the supply of crop protection products (see Section 13). In light of the Parties' activities in these markets, the Transaction gives rise to a vertical relationship between the upstream market for merchant AIs and the markets for crop protection products. The Parties clarify that CNAC and other Chinese SOEs are not active in the supply of crop protection products in the EEA.

²²² Replies to question 82.1 of Questionnaire (Q3) to crop protection competitors.

²²³ Minutes of the conference call with a competitor of 1 December 2016.

10.2. Input foreclosure

- (222) The Commission examines whether, further to the Transaction, the merged entity would have the ability and the incentives to restrict access to raw materials/intermediates to the detriment of Syngenta's downstream competitors in the crop protection markets.
- (223) According to the Non-horizontal Merger Guidelines: "*Input foreclosure arises where, post-merger, the new entity would be likely to restrict access to the products or services that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger.*"²²⁴
- (224) For input foreclosure to be a concern, the merged entity should have a significant degree of market power in the upstream market. Only when the merged entity has such a significant degree of market power, can it be expected that it will significantly influence the conditions of competition in the upstream market and thus, possibly, the prices and supply conditions in the downstream market.²²⁵

10.2.1. The Parties' arguments

- (225) The Parties state that they will not have the ability to engage in input foreclosure. They indicate that there are several alternative third party manufacturers for all of the upstream AIs used in the formulated products sold by Adama or Syngenta in the EEA.²²⁶ The Parties argue that they will consequently not be able to restrict access to any of those AIs to the disadvantage of downstream competitors.
- (226) In relation to the AIs where the Parties' activities overlap, they state that the small incremental shares held by Syngenta will not change the Parties' incentives with respect to the sale of merchant AIs. Even today, Syngenta and Adama sell merchant AIs to downstream formulated product manufacturers that compete against them in the downstream formulated product markets; Adama continued to do so even after being acquired by ChemChina.
- (227) The Parties provide two additional arguments on why they would not be able to use their position in the upstream merchant AI market to foreclose the Parties' competitors in the downstream markets post-Transaction. First, they argue that few Chinese SOEs sell formulated products outside of China and that most of them rely on the sale of AIs to formulated product companies as the principal channel to the market. If their customers begin to suspect that their SOE suppliers are manipulating prices for the benefit of Syngenta, these SOEs would damage their reputation as reliable suppliers and their customers would presumably turn to non-SOE AI suppliers for new products. Second, it would only make economic sense for the Parties and other Chinese SOEs (other than CNAC) to raise merchant AI prices to disadvantage Syngenta's downstream competitors if the competitors had sufficient share in the downstream markets to ensure enough switching to the Parties' formulated products to compensate for the Parties' and the other SOEs' lost AI sales. Given that most of AI sales for the products in question are made by SOEs other than

²²⁴ Non-horizontal merger guidelines, para 31.

²²⁵ Non-horizontal merger guidelines, para 35.

²²⁶ The only exception to this is fenpropidin, however the Transaction does not change the existing market structure with regard to this AI, [...]. See Form CO, paragraphs 6676-6677.

CNAC rather than by the Parties, there would have to be some form of reconciliation between ChemChina and the other SOEs, presumably mediated by Central SASAC, to ensure that there is a net benefit to SOEs as a whole. Otherwise, the strategy would make the Chinese Government, as the SOEs' shareholder, poorer.

- (228) Furthermore, the Parties maintain that because of its lack of ability, the merged entity will also lack the incentive to foreclose downstream competitors from access to their merchant AIs.²²⁷

10.2.2. *The Commission's assessment*

- (229) First, the Commission agrees with the methodology adopted by the Parties to identify existing or potential vertical relationships. Given the high regulatory barriers and long time required to register and enter with a new AI, it seems reasonable to analyse the vertical relationship in relation to the AIs used by the Parties in their registered products in the EEA. The analysis to assess whether the Parties would have the ability and incentives to engage in an input foreclosure strategy will be structured by merchant AIs, distinguishing the AIs which both Parties supply, the ones which only ChemChina/Adama supply, and those supplied only by Syngenta.

10.2.2.1. AIs supplied by both Parties

- (230) As discussed in Section 9 of this Decision, the Commission does not consider that the Transaction will significantly impede effective competition on the market for merchant AIs. Consequently, the merged entity is unlikely to have significant market power in relation to the AIs where the Parties' activities overlap. As a result, the merged entity will not have the ability to engage in input foreclosure in relation to the overlap merchant AIs.
- (231) When taking into account merchant AIs where both Parties are active and that are used by one of the Parties or both Parties in the downstream market, the Transaction gives rise to additional vertical links.

Table 13: Overview vertical links in relation to AIs supplied by both Parties²²⁸

Syngenta's AIs	2015 Syngenta's share on merchant market	Adama's purchase share at worldwide level	Adama's purchase share relative to Syngenta's sales at worldwide level	Existing supply relationship Adama/Syngenta	Adama's purchase share of Syngenta
Cyproconazole	[20-30]%	<15%	[0-5]%	[...]	[0-5]%
Cyprodinil	[40-50]%	<15%	[100-110]%	[...]	[100-110]%
Fenpropidin	<30%	<15%	[100-110]%	[...]	[100-110]%

²²⁷ Form CO, paragraph 6678.

²²⁸ Form CO, Section 6.7.

10.2.2.2.AIs supplied by Syngenta

- (232) When considering Syngenta's sales of AIs, the Parties identify 17 AIs which are entirely or partly outsourced by Adama for use in products sold in the EEA. However, 13 of those are AIs where the Parties' activities overlap, and hence are already dealt with in the section assessing the horizontal effects in the merchant AI markets. One of them, prometryn, is not authorised for use in the EEA. The three remaining AIs are: cyproconazole, cyprodinil and fenpropidin.
- (233) Whereas the Transaction does not change the existing market structure in relation to cyproconazole and fenpropidin [...], Syngenta currently sells cyprodinil [...], which buys similar quantities to the ones currently purchased by Adama on the market.
- (234) Nonetheless, in light of the commitments submitted by the Notifying Party (see Section 16), Adama will divest its position in cyprodinil and thus there would not be any risk of Syngenta's diverting its entire sales of the AI to Adama to the detriment of other potential customers.

10.2.2.3.AIs supplied by ChemChina /Adama

- (235) When considering ChemChina's sales of AIs in the merchant market, the Parties identify 19 AIs which are entirely or partly outsourced by Syngenta for use in products sold in the EEA. However, 11 of those are AIs where the Parties' activities overlap, hence already dealt with in the Section 9 assessing the horizontal effects in the merchant market for AIs. The eight remaining AIs are listed in Table 14.

Table 14: Overview vertical links in relation to AIs supplied by ChemChina/Adama²²⁹

AIs	2015 CNAC's share on merchant market	2015 Adama's share on merchant market	2015 other SOEs active
Bromoxynil	not active	<5%	not active
Buprofezin	<5%	only internal production	not active
Chlorotholuron	not active	<5%	1 SOE
Chlorpyrifos	not active (outsourced from private Chinese company)	<5%	2 SOEs (only one sells to EEA)
Copper hydroxide	not active	<5%	not active
Copper oxychloride	not active	<5%	not active
Cymoxanil	not active	<5%	not active
Fluometuron	not active	<5%	1 SOE

- (236) In light of ChemChina's limited market shares in the majority of these AIs, the Commission notes that the merged entity is unlikely to have the ability to implement an input foreclosure strategy.
- (237) The Commission notes that the Parties are unable to estimate the market share of other Chinese SOEs active in three AIs, namely chlorotholuron, chlorpyrifos and

²²⁹ Form CO, Section 6.7.

fluometuron. Nonetheless, even assuming that the Parties' combined share including other Chinese SOEs would be very significant, the Commission considers that the merged entity will not have the ability and incentive to engage in an input foreclosure strategy.

Table 15: Overview vertical links in relation to AIs supplied by both Parties

AI	Syngenta's current suppliers	Adama's current non-SOE suppliers	Additional non-SOEs suppliers available
Chlorotholuron	[...]	[...]	Lanxess, UPL
Chlorpyrifos	[...]	[...]	Nanjing Red Sun Co.; Yancheng Hengsheng; Bhagirada; Zhejiang Xinnong; Hubei Benxing Chemical Co.; Jiangsu Fengshan Group Co., Jiangsu Baoling Chemical Co.; FMC
Fluometuron	[...]	[...]	Nutrichem, Lanxess

(238) First, the Commission notes that for each of those AIs a number of alternative suppliers which will continue to be available on the market post-Transaction (see Table 15). Therefore, the merged entity would unlikely have the ability to restrict access to those AIs in the downstream market.

(239) Second, based on the Parties' submission, since Syngenta currently sources those AIs from other suppliers, if the merged entity were to constrain access to those three AIs in the downstream crop protection markets, Syngenta's current suppliers will be able to continue selling on the market. Syngenta has an [...] supply agreement with [...] for chlorpyrifos. Although Syngenta only sources the equivalent of about [5-10]% of Adama's sales of chlorpyrifos in the merchant market, in case of input foreclosure scenario [...] will remain an active supplier on the market. As regards chlorotholuron, Syngenta sources [...] from [...], which in case of input foreclosure, would be able to continue supply chlorotholuron in the market. In relation to fluometuron, Syngenta sources [...] from [...], which sources also from Adama. The Parties indicate that Adama sources fluometuron [...] from [...] suppliers, [...], which will continue to be present in the fluometuron merchant market.

10.2.2.4. Feedback from market participants

(240) In the course of the market investigation, the vast majority of respondents did not consider that the Parties are the only available suppliers in relation to specific AIs.²³⁰ Clearly Syngenta is indicated as the sole supplier of its on-patent AIs. On the contrary Adama and the Chinese SOEs are not considered as essential suppliers of AIs. One R&D player explains that "*Syngenta as R&D Company has patent protected AIs which are exclusively available at Syngenta. [...] As a generic supplier, Adama is generally not the only available supplier for AIs, which are registered in the EEA. [...] As generic suppliers, ChemChina and other SOEs are generally not the only available suppliers for AIs, which are registered in the EEA.*"²³¹

(241) Nonetheless, during the initial investigation, several competitors considered that the Transaction might have a negative impact on the future availability of specific AIs²³² and possibly lead to an increase of AI prices.²³³

²³⁰ Replies to question 18 Questionnaire (Q3) to crop protection competitors.

²³¹ Replies to question 18.1 of Questionnaire (Q3) to crop protection competitors.

²³² Replies to question 115 of Questionnaire (Q3) to crop protection competitors.

- (242) A large generic player explains that it fears the Transaction will reduce the availability of certain AIs because *"Post-merger, the parties would have power to restrict supply of certain AIs and intermediates, as the combined front-end marketing operations of Syngenta and Adama would be able to serve all of ChemChina's manufactured and outsourced products (and those of its related Chinese SOEs). This would enable the merged entity, with ChemChina, to restrict supplies to third parties, thereby creating a shortage for such third parties."*²³⁴ The same company indicated that finding alternative AI suppliers *"It depends largely on the availability of alternative technical suppliers of the active ingredients. This is becoming fewer with consolidation of the active ingredient manufacturers, particularly in China. Consolidation is occurring due to competition, increasing regulation covering production, and marketing authorisations."*²³⁵ The concern appears to relate to the overall availability of AIs for generic manufacturers, which traditionally have been heavily relying on Asian and particularly Chinese manufacturers. Indeed, the same player explained during the Phase II investigation that *"There are two main manufacturing bases in the world for AIs: Europe and China. In particular the smaller companies use the 'Chinese route' to access supplies of AIs (and also intermediates), whereas the bigger R&D companies represent the manufacturing base in Europe. If ChemChina, which is both a manufacturer and distributor, were to control Syngenta, which is also a manufacturer and distributor, the two main manufacturing bases will come together. As a result, the supply access route to China that smaller companies currently use will be severely restricted. Consequently, a lot of medium-sized companies in Europe will no longer have a supplier base to create fair competition."*²³⁶ The company identified some AIs which the merged entity could control post-Transaction, in light of an already sizeable position of ChemChina in the related merchant market.²³⁷ Those AIs however are traded outside of Europe due to the fact that they cannot be used in crop protection products in the EEA.
- (243) Similarly, another generic player indicates that: *"ChemChina is a large generic producer in China. This could make access to low cost AIs more difficult for [the company]. Indian and Chinese companies have very competitive production costs."*²³⁸ However, in the course of subsequent submission, it clarified that the concern is not specifically related to any AI. In fact, the company *"expresses its concern over the fact that ChemChina, a State-owned enterprise ("SoE"), would acquire Syngenta, one of the biggest R&D companies. It is mainly concerned about the degree of unpredictability related to the supply from China, seeing that the production conditions in China can quickly change due to the political environment."*²³⁹ At confirmation of the non-merger specificity of the concern, the same player clarifies that at this moment it *"does not buy significantly from Syngenta, Adama and ChemChina."*²⁴⁰

²³³ Replies to question 116 of Questionnaire (Q3) to crop protection competitors.

²³⁴ Reply to question 115.1 of Questionnaire (Q3) to crop protection competitors.

²³⁵ Reply to question 80.1 of Questionnaire (Q3) to crop protection competitors

²³⁶ Minutes of the conference call with a competitor of 23 November 2016.

²³⁷ Reply to questions 115 and 116 of Questionnaire (Q3) to crop protection competitors.

²³⁸ Minutes of the conference call with a competitor of 28 April 2016.

²³⁹ Minutes of the conference call with a competitor of 2 December 2016.

²⁴⁰ Minutes of the conference call with a competitor of 2 December 2016.

- (244) Another generic player expressed an *"Overall concern on the fact that Chemchina control directly or indirectly the source of many active ingredients that could be alternatives. For this reason it could create difficulties to find alternatives."*²⁴¹ During Phase II investigation, this initial concern was not further substantiated in relation to any of the AIs where the Parties' activities in the merchant market overlap. The same player in fact explained that this concern is more linked to the overall industry set-up in China and the ongoing consolidation process, rather than to the merger. In fact, in the course of an interview, the same competitor clarified that *"ChemChina is currently taking more and more companies under its umbrella. If this will ultimately result in a giant AI producer in China, there might be a problem for getting access to the AI production in China post-Transaction. This would in particular be a problem for areas where there is not much spare production capacity or where the spare production capacity is exclusively situated in China. This is a general concern which does not refer to any specific AI, but rather relates to the overall industry set-up."*²⁴²
- (245) Therefore, on balance, the Commission considers that the feedback received from the market participants does not point to any specific evidence showing that the Parties will likely have the ability to engage in an input foreclosure strategy.

10.2.2.5. Conclusion

- (246) In light of the foregoing, the Commission considers that post-Transaction the Parties would not likely have the ability to engage in an input foreclosure strategy to the detriment of competing crop protection products suppliers.
- (247) The Commission therefore concludes that the Transaction would not lead to a significant impediment to effective competition due to the vertical relationship between the Parties' activities in the market for merchant AIs and in the markets for crop protection products.

10.3. Customer foreclosure

- (248) The Commission examines whether, further to the Transaction, the merged entity would have the ability to restrict access to the downstream market of crop protection products by reducing its purchases of AIs from its upstream rivals.
- (249) According to paragraph 58 of the Non-Horizontal Guidelines, customer foreclosure may occur *"when a supplier integrates with an important customer in the downstream market"* and because of this downstream presence, *"the merged entity may foreclose access to a sufficient customer base to its actual or potential rivals in the upstream market (the input market) and reduce their ability or incentive to compete"* which in turn, *"may raise downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger. This may allow the merged entity profitably to establish higher prices on the downstream market."*²⁴³
- (250) For customer foreclosure to be a concern, a vertical merger must involve *"a company which is an important customer with a significant degree of market power in the*

²⁴¹ Reply to question 80.1 of Questionnaire (Q3) to crop protection competitors.

²⁴² Minutes of the conference call with a competitor of 1 December 2016.

²⁴³ Non-horizontal merger guidelines, para 58.

*downstream market. If, on the contrary, there is a sufficiently large customer base, at present or in the future, that is likely to turn to independent suppliers, the Commission is unlikely to raise competition concerns on that ground".*²⁴⁴

10.3.1. *The Parties' arguments*

- (251) The Parties maintain that neither Adama nor Syngenta will have the ability to engage in customer foreclosure. They put forth three main arguments to support this assertion.²⁴⁵
- (252) First, the Parties state that a distinction should be made between AIs that are patented and AIs that are not. A potential customer foreclosure scenario could only take place in relation to off-patent merchant AIs, given that for patented AIs the patent holder has a legal monopoly on the AI and the legal discretion to supply that AI on a merchant basis or not. According to the Parties, the merchant sales of AIs exist primarily for off-patent AIs. The Parties claim that neither the off-patent nor the patented AIs of the Parties bring about issues with regard to possible customer foreclosure. With respect to off-patent AIs, the Parties argue that they cannot foreclose any AI supplier from producing an off-patent AI, considering that these AIs are not proprietary to the Parties. With respect to patented AIs, the Parties indicate that there are a number of alternative AIs for all of Syngenta's patented AIs, while both of Adama's AIs are not approved.²⁴⁶
- (253) Second, the Parties state that they do not have market power in the formulated product markets in the EEA where they are active. The Parties further indicate that within each crop protection sector there are multiple AIs that compete with the AIs they use in their formulated products, and that off-patent AIs are also in competition with patented AIs. The Parties argue that upstream competitors will therefore be able to find other customers for their output, even if the Parties were to only purchase AIs from each other. In addition, the Parties submit that there is no off-patent active ingredient where their combined purchases represent such a substantial share of demand on a worldwide basis that a foreclosed supplier could risk exiting the merchant AI market in relation to any specific off-patent active ingredient supplied to the Parties.²⁴⁷
- (254) Third, the Parties state that they will have no incentive to engage in customer foreclosure. They argue that, considering their small share of demand of AIs per sector worldwide, restricting their purchases of AIs to one another would not provide any competitively significant advantage or impose any significant disadvantage to their competitors in the upstream market for the supply of AIs.²⁴⁸

10.3.2. *The Commission's assessment*

- (255) Firstly, the Commission notes that post-Transaction the Parties would not have market power in the downstream markets for formulated crop protection products in the EEA. As illustrated in Section 13 and Section 16, the remedies submitted by the

²⁴⁴ Non-horizontal merger guidelines, para 61.

²⁴⁵ Form CO, paragraphs 6660-6674.

²⁴⁶ Form CO, paragraphs 6661-6669.

²⁴⁷ Form CO, page 2127, paragraph 6673.

²⁴⁸ Form CO, page 2127, paragraph 6674.

Notifying Party have addressed the competition problems brought about by the Transaction in the crop protection products markets in the EEA.

- (256) Second, the Commission has investigated whether any of the Parties individually represented a large important buyer of any AI, which could thus enable them to engage in a customer foreclosure strategy.
- (257) The Parties submit that ChemChina and other Chinese SOEs are not active in the crop protection markets in the EEA.
- (258) As regards Adama, the Parties have indicated that it does not account for more than 15% purchase share for any of the outsourced AIs at worldwide level.²⁴⁹ Given that Adama is a much smaller player than Syngenta in the crop protection markets, that its link with ChemChina pre-existed the Transaction and that Syngenta is not an important supplier in the merchant market for off-patent AIs, the Commission concludes that the Parties are unlikely to engage in customer foreclosure strategy by leveraging Adama's position as a buyer of AIs.
- (259) As regards Syngenta, the Commission investigated whether pre-Transaction Syngenta represented an important/essential buyer for any of the off-patent AIs currently outsourced. As explained in relation to the assessment of the input foreclosure scenario (Section 10.2), the analysis focuses on off-patent AIs, since on-patent AIs are legal monopoly of the originators, the Transaction would not change the conditions of sourcing/supply of those AIs.
- (260) The Commission notes that, in line with the strategy of other R&D players, Syngenta controls the production of its patented AIs and to a minor extent outsources AIs either directly from other R&D players (for use in its mixtures) or from generic players (when the off-patent AI has become commoditized to the point that generic producers are more cost efficient than the AI originators). As explained by an R&D player: "*Generic manufacturers typically have significant cost advantages compared to primary registrants, in particular because they can benefit from lower costs of AIs they source from Chinese or Indian manufacturers. These manufacturers are often able to produce at lower costs than the crop protection manufacturers with their large, integrated manufacturing facilities. Hence, they can compete on significant cost-advantages.*"²⁵⁰ Therefore, R&D players like Syngenta typically do not depend heavily on generic suppliers of AIs.
- (261) When looking at the global purchase shares of Syngenta in relation to the AIs supplied by CNAC/Adama, Syngenta has a share higher than 30% at global level only in relation to the AIs listed in Table 16.

²⁴⁹ Notifying Party's response to Commission's request for information RFI 7, question 21-24, Table 4.

²⁵⁰ Reply to question 39 of Questionnaire (Q3) to crop protection competitors.

Table 16: Syngenta's share of Demand and CNAC/Adama' share of merchant AIs in 2015²⁵¹

AI	Syngenta's estimated worldwide share of Demand	Share of Syngenta's demand over CNAC/Adama's sales in merchant market
Chlorothalonil	30-40%	[650-700]%
Difenoconazole	40-50%	[2,750-3,000]%
Lambda-cyhalothrin	30-40%	[2,500-2,750]%
Propiconazole	40-50%	[1,000-1,250]%
Pymetrozine	30-40%	[200-250]%

(262) However, as shown in Table 16, ChemChina would not be able to satisfy Syngenta's full requirements for those AIs and thus the merged entity would not be able to implement customer foreclosure in relation to those AIs.

(263) When looking at the global purchase share of Syngenta in relation to the AIs supplied by Chinese SOEs other than CNAC, Syngenta could appear to be an important global purchaser only in relation to gibberellic-acid, fluazinam and phosmet.²⁵²

Table 17: Syngenta's share of Demand and other SOEs' share of merchant AIs in 2015²⁵³

AI	Syngenta's estimated worldwide share of Demand	Share of Syngenta's demand over SOEs' sales in merchant market
Gibberellic-acid	40-50%	[90-100]%
Fluazinam	30-40%	[90-100]%
Phosmet	20-30%	[1,750-2,000]%

(264) In relation to gibberellic-acid, the large position of Syngenta is explained by the fact that Syngenta is the originator of this PGR-related AI, which however is long gone off-patent in Europe as it was launched back in 1959.

(265) The Parties submit that their EEA-wide purchase share is much smaller and corresponded to [10-20]% in 2015.²⁵⁴ This figure suggests that the relevance of this product might be higher outside of Europe, where instead Syngenta is just one of the many active players. This finding is in line with the outcome of the Commission's competitive assessment in the PGR markets (see Section 13), where the Commission has not identified any competition concern in relation to gibberellic-acid-based products.

(266) The Parties explain that Syngenta is currently sourcing gibberellic-acid [...] basis from [...], which among others has gibberellic-acid based products registered in

²⁵¹ Notifying Party's response to Commission's request for information RFI 7, question 21-24, Table 4.

²⁵² Form CO, table 6.9.6.

²⁵³ Form CO, table 6.9.6.

²⁵⁴ Form CO, table 6.9.6.

the EEA. The fact that [...] too is active in the supply of gibberellic-acid based crop protection products suggests that the activity in the merchant market is secondary to the activity in the downstream crop protection market. In fact, [...] itself explained that the scope of its activities is quite broad and covers also the AI discovery. "[...] is active in the discovery of new active ingredients ("AI"), development of new AIs, registration (Annex I) of new AIs within the EEA, development of mixtures, production of formulated products and distribution of formulated products."²⁵⁵ Moreover, since [...] is already active in the downstream market with its own products, the merged entity would not be able to foreclose access to the downstream markets vis-à-vis [...]. In addition, the Commission notes that 50-60% of the gibberellic-acid purchase basis will likely continue to be accessible to [...] after the Transaction. Finally, no specific concern was raised in relation to this AI in the course of the market investigation.

- (267) As regards fluazinam, the Parties explain that Syngenta sources [...] of its requirement on [...] basis from [...]. In view of the merged entity's ability to satisfy Syngenta's entire requirement of fluazinam, the Parties could decide post-Transaction to source internally fluazinam and displace [...] as a supplier.
- (268) [...] however mainly feared the risk of remaining locked-in because of the [...] agreement with Syngenta. [...] considered that if the merged entity were to decide to support Adama's fluazinam business rather than Syngenta's fluazinam business, Syngenta would gradually reduce its purchases from [...]. Nonetheless, in light of the [...] agreement, [...] would not be able to find alternative customers in the market. [...] "would like to create some competition on the market by also being able to nominate other distributors than Syngenta. [...] has accordingly proposed a change from exclusive to non-exclusive distribution for [...] products".²⁵⁶ [...] also expressed concerns that post-Transaction Adama will be able to have access to confidential information from Syngenta concerning fluazinam products.
- (269) Even assuming that the existence of [...] distribution agreement between this competitor and Syngenta may raise a competition problem as a result of the merger, Syngenta has decided as a remedy to relinquish its [...] distribution rights back to [...], as this remedy contributes to eliminate competition problems linked to horizontal overlaps between Adama and Syngenta. This remedy also eliminates the risk of customer foreclosure in relation to fluazinam.
- (270) As regards phosmet, the Commission notes that although Syngenta only represents between 20-30% of the phosmet demand at global level, the Chinese SOEs could not meet Syngenta's entire requirements for this AI, given their considerable smaller size. Therefore, the merged entity would not be able to implement customer foreclosure in relation to phosmet.

10.3.3. Conclusion

- (271) In view of the foregoing, the Commission considers that post-Transaction the Parties would not likely have the ability to engage in a customer foreclosure strategy to the detriment of competing merchant AI suppliers.

²⁵⁵ Reply to question 4 of Questionnaire (Q3) to crop protection competitors.

²⁵⁶ Minutes of the conference call with a competitor of 21 November 2016.

10.4. Conclusion

(272) The Commission concludes that the Transaction would not lead to a significant impediment to effective competition due to the vertical relationship between the Parties' activities in the market for merchant AIs and in the markets for crop protection products.

11. COMPETITIVE ASSESSMENT - VERTICAL RELATIONSHIP RAW MATERIAL/ADJUVANTS AND MERCHANT ACTIVE INGREDIENTS

11.1. Overview vertical links

(273) ChemChina/CNAC and other SoEs (altogether referred to as "all the Chinese SOEs") produce certain raw materials and intermediate chemicals and sell them to third parties in the agrochemical, pharmaceutical, specialty chemical, petroleum and other industries on a global basis (though mostly outside of the EEA). These raw materials/intermediates are, among other things, used as input for the production of AIs. In light of Syngenta's activities in the merchant market for AIs, the Transaction gives rise to a vertical relationship between the upstream market for raw materials and the markets for merchant AIs.

11.2. Input foreclosure

(274) The Commission examine whether, further to the Transaction, the merged entity would have the ability to restrict access to raw materials/intermediates to the detriment of Syngenta's downstream competitors in the merchant AI markets.

11.2.1. The Parties' views

(275) The Parties maintain that they will not have the ability or incentive to engage in input foreclosure.

(276) First, they argue that there are several alternative sources available for most raw materials and intermediate chemicals, pointing to numerous suppliers of raw materials and intermediate chemicals both inside and outside of the EEA.²⁵⁷ According to the Parties, most of the producers in question have over-capacity, while producers without sufficient capacity can easily introduce additional capacity within 1-2 years. The Parties further maintain that this applies in particular to the few raw materials and intermediate chemicals that Syngenta sources from all the Chinese SOEs. The Parties state that these can be sourced at comparable prices from other Chinese (non-SOE) suppliers or from India or elsewhere.²⁵⁸

(277) Second, the Parties maintain that it is less burdensome to switch supplier for raw materials or intermediate chemicals than for AIs. They point in particular to the regulatory burden being considerably less, seeing that in most countries or jurisdictions, including the EEA, the regulatory authority does not need to approve a source change for raw materials or intermediate chemicals. They consequently argue that the regulatory process in general does not pose a real barrier and that switching normally takes one year or less.²⁵⁹

²⁵⁷ Form CO, paragraphs 6837.

²⁵⁸ Form CO, paragraphs 6836-6839.

²⁵⁹ Form CO, paragraphs 6840-6841.

- (278) Therefore, because of the large availability of alternative suppliers and low barriers to switching, the Parties submit that the merged entity will not have the ability to implement an input foreclosure strategy.
- (279) Third, the Parties state that it would not be commercially reasonable for all the Chinese SOEs to supply raw materials and intermediate chemicals only to Syngenta post-Transaction, given that their capacity is higher than the demand generated by Syngenta and by Syngenta/Adama taken together. According to the Parties, Chinese SOEs consequently have no incentive to restrict their supply to Syngenta.²⁶⁰

11.2.2. *The Commission's assessment*

- (280) The Transaction creates a link between ChemChina/CNAC and other Chinese SOEs, which are active as suppliers of raw materials/adjuvants, and Syngenta, which in light of its activities in the market for AIs is also a buyer of raw materials/adjuvants.
- (281) As regards the general arguments made by the Parties on the structure of the industry, first, the Commission observes that Syngenta's supply base is broad. Indeed, in connection to its crop protection products, Syngenta sources more than [300-350] different raw materials/intermediates and these come from more than [250-300] suppliers. This element confirms the existence of a very large number of suppliers in these markets. Second, CNAC and other Chinese SOEs appear to be secondary suppliers for Syngenta. The overall purchases from CNAC/other SOEs only represent [5-10]% of Syngenta's total purchases in 2015 for raw materials and intermediates. CNAC and the other Chinese SOEs do not belong to the group of Syngenta's top [20-30] global suppliers of raw/materials and intermediate. Third, the Commission also observes that multisourcing is a widespread practice in the industry and therefore a potential input foreclosure strategy is likely to have limited effects. The analysis of Syngenta's internal documents, as well as Syngenta's own general practice to buy from more than one supplier, confirm the importance of multisourcing strategy.²⁶¹
- (282) Out of the more than [300-350] raw materials/intermediates outsourced, Syngenta currently sources only one raw material from ChemChina, namely [...]. Syngenta sources only [5-10]% of its overall spend on this chemical from ChemChina. The remaining [90-100]% is sourced from other suppliers. This provides evidence of the availability of alternative suppliers also in relation to this specific raw material.
- (283) When considering all the Chinese SOEs, Syngenta has existing supply relationships with [10-20] of them. However, Syngenta explains that they mainly supply non-critical raw material/intermediates and for small values. Out of Syngenta's top 20 raw materials/intermediates by value, which altogether accounted for [50-60]% of Syngenta's total spend in 2015, only two of them, TMOF and MEA, are currently sourced from Chinese SOEs. Additional four chemicals²⁶² would give rise to potential vertical links with the Chinese SOEs' activities.²⁶³

²⁶⁰ Form CO, paragraph 6842.

²⁶¹ Form CO, annex 6.10.5.

²⁶² Additional two raw materials could give rise to potential vertical relationship between the Parties, namely ethylamine and isopropylamine. However, since these are inputs for an active ingredient which is not authorized for use in the EEA, they will not be further analyzed.

²⁶³ Form CO, annex 6.10.4.

- (284) As regards TMOF, in 2015 Syngenta sourced from a Regional and a Central Chinese SOEs and about [20-30]% of its requirements from a Chinese non-SOEs company ([...]). Based on Syngenta's own intelligence, at least two additional Chinese companies are offering the same intermediate. Based on the Parties estimate, all the Chinese SOEs account for about 57% of the global capacity available for the production of TMOF. In 2015, Syngenta's overall demand of TMOF accounted for about [40-50]% of the estimated TMOF production capacity of all the Chinese SOEs.
- (285) Therefore, the Commission observes that Syngenta already sources the majority of its TMOF requirements (about [80-90]%) from Chinese SOEs and therefore the Transaction does not significantly change the supply patterns. Moreover, post-Transaction there will continue to be many alternative suppliers available.
- (286) As regards MEA, in 2015 Syngenta sourced [90-100]% of its requirements from [...] and the remaining from a Central SOE ([...]). Syngenta indicates that the latter is only active as a trader since it does not produce MEA but outsources it from another Chinese company. Based on Syngenta's own intelligence, at least four additional private companies are offering the same intermediate. In 2015, Syngenta's overall demand of MEA accounted for about [100-150]% of the estimated MEA production capacity of all the Chinese SOEs. Based on the Parties estimate, Chinese SOEs appear to have a limited position in this market as they account for about 17% of the global capacity available for the production of MEA.²⁶⁴
- (287) As regards the four chemicals (namely chlorine, NaOH, KOH and pyridine) giving rise to the potential vertical link with CNAC/other SOEs, Syngenta currently purchases all of them from non-SOEs companies. Syngenta multisources all of them from at least [0-5] suppliers. In addition, many alternative suppliers are available.
- (288) Therefore, the Commission considers that the Parties are unlikely to have the ability to engage in input foreclosure strategy in relation to TMOF, MEA, chlorine, NaOH, KOH and pyridine.
- (289) In the course of the market investigation, one generic competitor expressed concerns about potential input foreclosure in relation to raw materials/adjuvants used for the production of certain active ingredients. In particular, the concern relates to PHT, which is the major raw material used for the production of triazophos, as well as DMPAT, the raw material used for the production of acephate.²⁶⁵ According to their submission, ChemChina currently largely controls the supply of a number of these substances. Nonetheless, The Commission notes that none of those AIs are authorized for use in the EEA. Therefore, even if foreclosure were to be possible, it would not have any impact on competition in the EEA.²⁶⁶
- (290) Therefore, on balance, the Commission considers that the feedback received from the market participants does not point to any specific evidence showing that the Parties will likely have the ability to engage in an input foreclosure strategy in relation to raw materials/intermediates.

²⁶⁴ Form CO, annex 6.10.4.

²⁶⁵ Reply to question 18 of Questionnaire (Q3) to crop protection competitors.

²⁶⁶ Minutes of the conference call with a competitor of 23 November 2016.

(291) The Commission therefore considers that the Parties' position in the upstream market for raw materials/intermediate chemicals following the Transaction, will not enable them to foreclose input to competitors on the downstream market for merchant AIs.

11.3. Customer foreclosure

(292) The Commission examines whether, further to the Transaction, the merged entity would have the ability to restrict access to the downstream market of AIs by reducing its purchases of raw materials/intermediates from its upstream rivals.

11.3.1. The Parties' views

(293) The Parties maintain that they will not have the ability or incentive to engage in customer foreclosure.

(294) First, the Parties argue that there are more than sufficient potential customers available for all other companies selling raw materials and intermediate chemicals.²⁶⁷

(295) Second, the Parties maintain that it would not be commercially reasonable or technically feasible for Syngenta to decide to source all its raw materials and intermediate chemicals from ChemChina/CNAC or other SOEs in the short to midterm. Such a decision would make Syngenta dependent on a handful of suppliers in only one region, meaning that any difficulties with regard to the supply in China would hurt Syngenta. According to the Parties, diversifying its supply risks is part of Syngenta's internal strategy. The Parties further argue that Syngenta constantly aims to optimize its supplier landscape, with cost competitiveness being a [...] in Syngenta's decision-making process. In addition, the Parties point out that Syngenta still relies on European manufacturers to differentiate and to lessen risks.²⁶⁸

(296) Third, the Parties maintain that Syngenta is not expected to alter its decision-making process post Transaction. Criteria such as [...] will keep playing a vital role in Syngenta's decisions to choose a supplier.²⁶⁹

11.3.2. The Commission's assessment

(297) The Commission notes that for none of the 6 raw materials/intermediates giving rise to actual/potential vertical relationships Syngenta in an important buyer at worldwide level.

Table 18: Global purchase shares (2015)²⁷⁰

	Chlorine	NaOH	KOH	Pyridine	MEA	TMOF
Syngenta's global purchase share	<1%	<1%	<1%	[20-30]%	[20-30]%	[20-30]%

(298) As regards chlorine, NaOH and KOH, Syngenta is a negligible customer at global level as Syngenta represents less than 1% of the global purchases of each of those raw materials.

²⁶⁷ Form CO, paragraphs 6844-6845.

²⁶⁸ Form CO, paragraphs 6846-6848.

²⁶⁹ Form CO, paragraphs 6849-6851.

²⁷⁰ Form CO, annex 6.10.4.

- (299) Pyridine, MEA and TMOF are intermediates used by Syngenta to produce respectively Diquat, s-metolachlor and Azoxystrobin, which are AIs originated by Syngenta.²⁷¹ This explains why Syngenta has a slightly higher purchase share for these intermediates. Consequently, the Commission considers that Syngenta is not an important customer with a significant degree of market power in the downstream markets for Diquat, s-metolachlor and Azoxystrobin.
- (300) In view of the foregoing, the Commission considers that post-Transaction the Parties would not likely have the ability to engage in a customer foreclosure strategy to the detriment of competing raw material/intermediate suppliers.

11.4. Conclusion

- (301) The Commission concludes that the Transaction would not lead to a significant impediment to effective competition due to the vertical relationship between the Parties' activities in the markets for raw material/intermediates and the markets for merchant AIs.

12. COMPETITIVE ASSESSMENT - HORIZONTAL OVERLAPS IN LAWN AND GARDEN MARKETS

- (302) The Parties' activities overlap also in 20 Member States in Lawn and Garden products. On an EEA-wide Lawn and Garden market, in 2015 the Parties' combined share would be [0-5]%, Syngenta accounting for [0-5]% and Adama for [0-5]%.
- (303) The Transaction gives rise only to one affected market in Italy. In the hypothetical market for Lawn and Garden products - fungicides for household applications, the Parties' combined market share reached [20-30]% in 2014, although in 2015 it was down to [10-20]% (Adama, [10-20]%; Syngenta, less than [0-5]%).

Table 19: Market shares in Lawn and Garden products - Fungicide - household (2014)²⁷²

ITALY	Syngenta	Adama	Combined market share	Bayer	Compo Hobby Italia	Cifo SPA	Vebi Istituto biochimico	Others
Fungicide - Household (2014) ²⁷³	[10-20]%	[5-10]%	[20-30]%	[20-30]%	[20-30]%	[10-20]%	[5-10]%	[20-30]%

- (304) As illustrated in Table 19, Bayer and Compo Hobby will remain the main competitors of the Parties post-Transaction.
- (305) One customer in Italy raised concerns that the Transaction may adversely affect competition and prices in the Lawn and Garden segment.²⁷⁴ However, in the course of the Commission' investigation, it was clarified that the concern did not relate to the acquisition of Syngenta by ChemChina but rather to possible future changes in the regulatory framework in Italy. In fact, the customer indicates that in the future Lawn and Garden products in Italy may no longer be allowed to rely on the product

²⁷¹ MEA is also used to produce Paraquat, which is however an AI not authorized for use in the EEA.

²⁷² Form CO, paragraphs 6637-6643.

²⁷³ In 2015, the Parties' combined share went down to [10-20]%, with Syngenta accounting for [0-5]% (equivalent to about [...] USD sales).

²⁷⁴ Reply to question 17.2 of Questionnaire (Q5) to customers of lawn and garden products.

registration for crop protection products. This might increase the registration costs for Lawn and Garden products and have potential repercussions on the final price of the products. The customer confirmed that post-Transaction there will continue to be several alternative suppliers of Lawn and Garden products, such as Compo Hobby, Isagro and BASF.²⁷⁵

- (306) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would be unlikely to significantly impede effective competition in the market for Lawn and Garden products.

13. COMPETITIVE ASSESSMENT - HORIZONTAL OVERLAPS IN CROP PROTECTION MARKETS

- (307) Within the analytical framework used for the competitive assessment of the horizontal overlaps presented in Section 9.1, this Section is structured as follows.

- (308) First, the Section starts with a methodological introduction. As a first point, the Commission presents the methodology for the calculation of market shares, including the description of the data and data sources. As a second point, the Commission presents the methodology used to assess the horizontally affected markets in crop protection and in particular the distinction between the markets unlikely to raise horizontal competition concerns on the basis of the "safe harbour" criteria defined in the Horizontal Merger Guidelines and the markets requiring a more detailed assessment.

- (309) Second, after the methodological introduction, the Commission accordingly reviews, within each crop each of the relevant crop protection markets (namely insecticides, fungicides, selective herbicides, PGRs, seed treatment) where affected markets arise, using the structure explained below. In this Decision, the Transaction leads to horizontal overlaps as regards fungicides, selective and non-selective herbicides, insecticides, PGR and seed treatment in a number of national markets as regards cereals (Section 13.2), Oilseed Rape (Section 13.3), Sugar beet (Section 13.4), Corn (Section 13.5), Fruit (Section 13.6), Vegetables (Section 13.7), Sunflower (Section 13.8) and other crops (Cotton and Soybean, Section 13.9).

13.1. Methodology introduction

13.1.1. Methodology for market shares calculation

- (310) The market shares provided in this section are based on data provided by the Parties and further checked by the Commission.²⁷⁶
- (311) The Parties have submitted market share data²⁷⁷ (based on sales revenues²⁷⁸) for formulated crop protection products for the years 2013-2015. Market shares have been provided only for those EEA markets where both Parties are active.²⁷⁹

²⁷⁵ Minutes of a conference call with a customer of 17 November 2016.

²⁷⁶ Notifying Party's submission of 1 December 2016, "Updated market shares".

²⁷⁷ The data used in this Decision correspond to the Parties' later submission of market share information, on 1 December 2016.

²⁷⁸ The Parties claimed that market shares based on volumes are not comparable, as active ingredients vary by dosage. Therefore, only market shares based on sales revenues have been provided.

- (312) Market share data have been provided both at the EEA level and for each Member State. The levels of aggregation for which market share data has been provided are the following:
- Sector (for example Selective Herbicides);
 - Sector/Crop (for example Selective Herbicides / Corn);
 - Sector/Crop/Segment²⁸⁰ (for example Selective Herbicides / Corn / Graminicides);
 - Sector/Crop/Segment/Subsegment²⁸¹ (for example Selective Herbicides / Corn / Graminicides / Post-emergence);
- (313) Where available, the Parties based their market share estimates on data from Kynetec's SigmaTM CP ("Sigma") database, a database dedicated to crop protection products. The Sigma data is based on surveys and interviews conducted with experts and farmers in order to estimate total market size and market shares. The Parties have manually re-mapped Sigma's classification of crops and pests to the classification categories agreed with the Commission based upon their own expertise.
- (314) For Member States and years for which Sigma data was not available, the Parties based their market size and market share estimates on their own internal data and market intelligence. The Parties have also manually adjusted the Sigma data in cases where the Sigma data was at odds with the Parties' intelligence (for example. instances in which the Parties' combined sales exceeded the total market size stated by Sigma).
- (315) The Commission has closely scrutinised the methodology and manual adjustments adopted by the Parties in the preparation of the market share data. In addition, whenever possible, the Commission has scrutinised the market share data submitted by comparing it with alternative sources such as sales data submitted by Phillips McDougall, a market research company with a focus on the agrochemical industry.
- (316) The Commission also notes that the market share data submitted by the Parties contained a category called "Others". In any given market, the sales attributed to "Others" consisted of a combination of (i) sales made by crop protection companies that the data provider (Sigma) failed to identify (for example specialised generic players active only in a particular country and segment); and/or (ii) sales by the identified players which the data provider failed to attribute to the corresponding seller. Therefore, when the number of competitors in a particular market is mentioned in this Decision, this may constitute a lower bound, as further competitors may be present amongst the category "Others". For a significant number of markets, whenever the number of competitors appeared to be limited and the size of "Others"

²⁷⁹ See Notifying Party's submission of 14 October 2016, "Methodology for Market Share Calculations for Formulated Protection Products", paragraphs 1-5.

²⁸⁰ Depending on the sector, the segment in this context can represent different pest groups or types of application.

²⁸¹ Depending on the sector, the sub-segment in this context can represent different pest groups or types of application.

was significant, the Commission used the Homologa database²⁸² to check whether further competitors had products registered for that market.

- (317) Given the significant number of Member States for which direct measures of market sizes are not available for 2015 (and hence the need for the Parties to perform adjustments and assumptions), for certain markets the competitive assessment has been carried out jointly on the basis of market share data for 2014 and 2015.
- (318) The Commission also notes that the Parties were not able to provide separate market shares for Germany and Austria because these two markets are aggregated on their own internal data set.²⁸³ As a result, although the two markets constitute separate national markets, for practical reasons, and bearing in mind the specific limitation of available dataset, the Commission assessed Germany/Austria jointly. The Commission considers this approach would not significantly alter the outcome of the separate assessment of the two markets. First of all, the fact that at least one Party does not make the distinction for its business suggests that it perceives a certain degree of homogeneity between the conditions prevailing in the two national markets. Second, the size of the Austrian market is limited and therefore does not distort significantly the figures that a separate assessment would have produced for Germany.

13.1.2. Methodology of assessment

- (319) The Commission's competitive assessment has been focused on the narrowest segmentation for which data is available, that is, the Crop/Sector/Segment/Sub-segment level.
- (320) Overall, for 2015 and at the level of Crop/Sector/Segment/Sub-segment, the Commission has identified a total of 712 markets where both Parties are present, of which 464 are affected markets in that the Parties' combined market share is 20% or higher.
- (321) For the purposes of this case, the Commission has defined two sets of criteria to identify affected markets where the Transaction is unlikely to raise competition concerns.
- (322) The first set of criteria identifies markets where the level of concentration and the increase in concentration brought about by the Transaction are unlikely to be problematic. These unproblematic markets include the following:
- (a) Markets in which the HHI²⁸⁴ post-merger is below 1000²⁸⁵; According to the Horizontal merger Guidelines, such markets normally do not require extensive analysis.²⁸⁶

²⁸² The Homologa database has been submitted by the parties and is a comprehensive dataset listing all formulated products (and corresponding company owning that product) registered in the EEA for a particular crop and segment. The data presented in this Decision is based on the version of the Homologa database submitted by the Parties on 1 December 2016.

²⁸³ Form CO, annex 6.A: "*Syngenta is unable to separate its sales in Germany and Austria. The parties therefore provide separate shares for Germany based on Sigma only. Sigma for Germany is only available for 2013 and 2014.*"

²⁸⁴ As set out in paragraph 16 of the Commission's Horizontal Merger Guidelines, the Commission often considers the Herfindahl-Hirschmann Index (HHI) to measure the level of concentration in the market.

- (b) Markets in which the HHI post-merger between 1000 and 2000 and delta below 250, provided that the Parties' combined share is below 50%²⁸⁷; or
 - (c) Markets in which the HHI post-merger is above 2000 and delta is below 150, again provided that the Parties' combined share is below 50%.²⁸⁸
- (323) The Horizontal Merger Guidelines provides that, under special circumstances, a Transaction may raise competition concerns despite fulfilling the above criteria listed in b) and c). The markets for which the Commission has not found any special circumstance, and for which it has therefore concluded that the Transaction would not significantly impede effective competition, have been gathered together in each Crop section.
- (324) The second set of criteria identifies markets which are unlikely to be problematic in view of the Parties' modest combined market shares (below 30%) and the presence of at least 3 significant alternative competitors. As for the first set of criteria, the markets satisfying this set of criteria, and for which the Commission has concluded that the Transaction would not significantly impede effective competition, have been gathered together in each Crop section.

13.2. Cereals

13.2.1. Overview of the crop

- (325) Cereals include wheat, barley and other less common crops (notably rye, oats, durum wheat, millet, sorghum and triticale). These crops are broadly cultivated in most temperate areas of the world. However the main markets in agrochemicals markets for cereals are North America and Europe.
- (326) The global cereal agrochemical market had a value of USD 9 245 million in 2014. Almost half of this market is concentrated in Europe. Germany and France are the two largest markets in Europe (France: 12.6% of the global market, Germany: 11.9%, UK: 6%, rest of Europe: 14.9%).²⁸⁹ Contrary to other regions of the world, in Europe cereal crops are generally cultivated in an intensive manner with the use of high levels of inputs allowing yields averaging 6 tonnes per hectare.
- (327) In terms of crop protection product categories, half of the global cereal agrochemical market is made up of herbicides (50.1% in 2014). Fungicides represent more than a third of the global markets (36.7%) whereas insecticides (9.0%) and others crop protection products (4.2%) play a lesser role.²⁹⁰ EEA-wide, fungicides represent the largest market (USD [...] in 2015) but only slightly ahead of herbicides (USD [...])

The HHI is calculated by summing the squares of the individual market shares of all firms in the market.

²⁸⁵ For the purposes of calculating the HHIs, the Commission has assumed for each market that the category "Others" is made up of companies as large as the smallest identified competitor. As an example, in a market where the smallest identified competitor is 5% and Others is 22%, it has been assumed that Others is made up of four companies with a 5% share and one company with a 2% share.

²⁸⁶ Commission's Horizontal Merger Guidelines, paragraph 19.

²⁸⁷ Commission's Horizontal Merger Guidelines, paragraph 20.

²⁸⁸ Commission's Horizontal Merger Guidelines, paragraph 20.

²⁸⁹ Phillips McDougall – AgriService, Crops Section, 2014 Market, page 55.

²⁹⁰ Phillips McDougall – AgriService, Crops Section, 2014 Market, page 56.

in 2015). Seed treatment (USD [...]), plant growth regulators (USD [...]) and insecticides (USD [...]) are significantly smaller.²⁹¹

13.2.2. *Fungicides for cereals*

13.2.2.1. General overview

- (328) The value of cereal fungicides sold in the EEA amounted to approximately USD [...] in 2015. In terms of crop, cereals is the main crop for which fungicides are used (USD [...] or [40-50]% of EEA-wide sales) before grapes (USD [...] or [10-20]%), oilseed rape/rapeseed (USD [...] or [5-10]%), potatoes (USD [...] or [5-10]%), pome fruit (USD [...] or [5-10]%) and vegetables (USD [...] or [5-10]%).²⁹²
- (329) As regards the Parties' key products, for T1,²⁹³ Syngenta is present in this market with the Seguris brand family, Cherokee, Amistar, Opti, Bravo, and Taspas. Syngenta has also launched Isopyrazam (Bontima), Adama is present with Kanti and Manitoba.
- (330) For T2, Syngenta is present with Gladio, Amistar Opti and Amistar Xtra.
- (331) For T3, Syngenta is present with Taspas and Magnello. Adama is present with Zamir (also sold under the names Agate, OriusP, Epopee).
- (332) As regards pipeline products, Syngenta has the [...] under development. [...] ²⁹⁴ [...] providing protection against a wide range of diseases across multiple crops including cereals. Syngenta expects an EU-28 registration in or after [...], with a first registration in [...].²⁹⁵ Adama has no innovative active ingredients for use in fungicides currently under development.²⁹⁶

²⁹¹ Form CO, paragraphs 138, 479, 1872, 1352, 1872, 1992.

²⁹² Form CO, paragraph 4350.

²⁹³ T1, T2 and T3 refer to the three different phases for the use of cereal fungicide, depending on the period of application. T1 treatments target diseases before and during stem elongation: mainly rusts, powdery mildew and *Septoria tritici*. T2 treatments focus on protecting the flag leaf and extend the green leaf area for yield building. Most carboxamide products used at this stage are mixed with triazoles. T3 treatments are intended to protect the ear.

²⁹⁴ [...].

²⁹⁵ Form CO, paragraph 4403.

²⁹⁶ Form CO, paragraph 4410.

Table 20: Top ten cereal fungicide products of Syngenta in 2015²⁹⁷

Product name	Segment(s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
CHEROKEE N	Leaves - Leafspots, Leaves - Rust	Barley, Wheat	Foliar	Yes	CYPROCONAZOLE	[...]	2006	BELGIUM, FRANCE, HUNGARY, LUXEMBOURG, UK
AMISTAR XTRA	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	AMISTAR TECHNOLOGY	[...]	2003	BULGARIA, CROATIA, CZECH REPUBLIC, ESTONIA, FRANCE, HUNGARY, ITALY, LATVIA, LITHUANIA, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, UK
BRAVO 500 FW	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust, Mildew - Oomycetes	Barley, Other Cereals, Wheat	Foliar	No	CHLOROTHALONIL	[...]	Before 2002	BELGIUM, FRANCE, GERMANY_AUSTRIA, IRELAND, LUXEMBOURG, NETHERLANDS, ROMANIA, SPAIN, UK
ORTIVA 250 SC	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	No	AMISTAR TECHNOLOGY	[...]	Before 2002	BELGIUM, DENMARK, ESTONIA, FINLAND, FRANCE, GREECE, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, NETHERLANDS, NORWAY, POLAND, PORTUGAL, SLOVAKIA, SPAIN, SWEDEN, UK,
ARTEA 330 EC	Leaves - Leafspots, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	CYPROCONAZOLE	[...]	Before 2002	BULGARIA, HUNGARY, LITHUANIA, POLAND, ROMANIA
ZENIT 575 EC	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	PROPICONAZOLE	[...]	Before 2002	CZECH REPUBLIC, ESTONIA, FINLAND, GERMANY_AUSTRIA, IRELAND, LATVIA, LITHUANIA, POLAND, SLOVENIA
BONTIMA	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	ISOPYRAZAM	[...]	2010	BELGIUM, CZECH REPUBLIC, GERMANY_AUSTRIA, IRELAND, LUXEMBOURG, NETHERLANDS, POLAND, ROMANIA, UK

²⁹⁷

Notifying Party's response to Commission's request for information RFI 26, annex 1, question 1.

Product name	Segment(s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
SEGURIS OPTI PACK	Leaves - Leafspots, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	ISOPYRAZAM	[...]	2013	GERMANY_AUSTRIA
TASPA 500 EC	Leaves - Leafspots, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	DIFENOCONAZOLE	[...]	Before 2002	GERMANY_AUSTRIA, LATVIA, LITHUANIA
GLADIO 625 EC	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust	Barley, Other Cereals, Wheat	Foliar	Yes	PROPICONAZOLE	[...]	Before 2002	FRANCE, GERMANY_AUSTRIA

Table 21: Top ten cereal fungicide products of Adama in 2015²⁹⁸

Product name	Segment(s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
PROPICONAZOLE 90 + PROCHLORAZ 400 EC	Leaves - Leafspots, Other - Fusarium	Barley, Other Cereals, Wheat	Eye-spot	Yes	PROPICONAZOLE (BUMPER)	[...]	Before 2006	BELGIUM, BULGARIA, CZECH REPUBLIC, FINLAND, FRANCE, GERMANY_AUSTRIA, HUNGARY, ITALY, LATVIA, LITHUANIA, POLAND, ROMANIA, SLOVAKIA, SPAIN, UK
TEBUCONAZOLE 133 + PROCHLORAZ 267 EW	Leaves - Leafspots, Leaves - Rust, Other - Fusarium	Barley, Other Cereals, Wheat	Septoria, fusarium	Yes	TEBUCONAZOLE	[...]	Before 2006	BELGIUM, CROATIA, CZECH REPUBLIC, GERMANY_AUSTRIA, HUNGARY, IRELAND, NETHERLANDS, POLAND, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, UK
EPOXICONAZOLE 125 SC	Leaves - Leafspots, Leaves - Rust	Barley, Other Cereals, Wheat	Septoria	No	EPOXICONAZOLE	[...]	Before 2006	BULGARIA, CZECH REPUBLIC, DENMARK, FRANCE, GERMANY_AUSTRIA, IRELAND, LITHUANIA, POLAND, ROMANIA, SLOVENIA, SPAIN, UK
TEBUCONAZOLE 133 + PROCHLORAZ 267 EC (EPOPEE)	Other - Fusarium	Other Cereals, Wheat	Septoria, fusarium	Yes	TEBUCONAZOLE	[...]	2014	FRANCE, UK

²⁹⁸

Notifying Party's response to Commission's request for information RFI 26, question 1, annex 2.

Product name	Segment(s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
PROPICON AZOLE 250 EC	Leaves - Leafspots, Leaves - Rust	Barley, Other Cereals, Wheat	Powdery mildew	No	PROPICONAZOLE (BUMPER)	[...]	Before 2006	BELGIUM, BULGARIA, CROATIA, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, GERMANY_AUSTRIA, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, NORWAY, POLAND, ROMANIA, SLOVAKIA, SWEDEN, UK
PROCHLORAZ 150+CYPROCONZOL 40+CHLOROTHALONIL 250 E	Leaves - Leafspots	Barley, Wheat	Septoria, rust	Yes	PROCHLORAZ(MIRAGE)	[...]	2011	FRANCE
TEBUCONAZOLE 250 EW	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust, Other - Fusarium	Barley, Other Cereals, Wheat	Rust, powdery mildew	No	TEBUCONAZOLE	[...]	Before 2006	CZECH REPUBLIC, ESTONIA, LATVIA, LITHUANIA, POLAND, ROMANIA, SLOVAKIA, SPAIN
PROCHLORAZ 450 ECNA	Leaves - Leafspots, Other - Fusarium	Barley, Other Cereals, Wheat	Eye-spot, septoria	No	PROCHLORAZ(MIRAGE)	[...]	Before 2006	BULGARIA, CZECH REPUBLIC, ESTONIA, GERMANY_AUSTRIA, LATVIA, LITHUANIA, POLAND, SLOVAKIA
TEBUCONAZOLE 200 EW	Leaves - Leafspots, Leaves - Rust, Other - Fusarium	Barley, Other Cereals, Wheat	Rust, powdery mildew	No	TEBUCONAZOLE	[...]	Before 2006	DENMARK, FRANCE, GERMANY_AUSTRIA, HUNGARY, ITALY, UK
FENPROPIDIN 100 + EPOXICONAZOLE 40 EC	Leaves - Leafspots, Leaves - Powdery Mildew, Leaves - Rust	Barley, Other Cereals, Wheat	Powdery mildew, septoria	Yes	FENPROPIDIN	[...]	2011	BELGIUM, ESTONIA, GERMANY_AUSTRIA, HUNGARY, LATVIA, LITHUANIA

(333) Both Parties expect regulatory barriers to threaten the continuation of existing products. According to the Parties, the 1107/09 Regulation is likely to translate into short term restrictions and long term elimination of some triazole based fungicide solutions. Syngenta considers that "[...]"²⁹⁹ It considers that the "[...]"³⁰⁰

²⁹⁹ Notifying Party's response to Commission's request for information RFI 2, annex 4, p. 24.

³⁰⁰ Notifying Party's response to Commission's request for information RFI 14 - [...].

- (334) In its [...], Adama considers that for "[...]"³⁰¹ and that "[...]"³⁰² According to Adama, the following active ingredients used by the Parties could be impacted by regulatory threats:
- (a) Epoxiconazole - The epoxiconazole authorization will expire in April 2019. Adama believes that the possibility that epoxiconazole receives a 5 year prolongation in the event BASF is successful with its derogation application is remote.
 - (b) Other triazoles - The other triazoles in Adama's portfolio, including tebuconazole (expiration date August 2019), prochloraz (expiration date December 2023), propiconazole (expiration date January 2018), and difenocanazole (expiration date December 2018), will be affected by the ED decision in the EU. Adama anticipates that this decision will either limit the number of application of these triazoles or ban these active ingredients entirely in the EU.
- (335) **The Parties are close competitors as regards cereals fungicides.** In general, Syngenta tends to closely monitor generic players such as Adama. As regards propiconazole, it notes about competitors that "[...]"³⁰³ Moreover, Syngenta describes the impact of generic players [...].³⁰⁴
- (336) Syngenta mentions Adama as one of its main [0-5] competitors for cereal fungicides. When analysing the European wheat fungicide market, it identifies Adama among the main competitors in Poland and Germany³⁰⁵ and sees it as a [...].³⁰⁶ Furthermore, as regards its product Amistar technology, Syngenta monitors the strategy of Adama and forecasts "[...]"³⁰⁷
- (337) Adama also considers Syngenta as the "[...]" and closely monitors the strategy of Syngenta on winter wheat fungicides: "[...]"³⁰⁸ Moreover, Adama monitors the pipeline products of Syngenta along with BASF and Bayer whereas it groups other competitors such as Dow and other generic players in a residual ("other") category.^{309,310} When analysing the cereal fungicide market as a whole, Adama lists Cherokee, Amistar Xtra and Artea as main competitors in different segments and different times ([...] product names mentioned).³¹¹
- (338) As regards T1, Adama offers Kantik broad spectrum T1 cereal fungicide. Adama considers that Kantik is positioned in the medium range segment ([...]) and comparable with [...] which also contains tebuconazole and fenpropidin, although the products have [...].³¹²

³⁰¹ Notifying Party's response to Commission's request for information RFI 15, Q2, annex 1.1 [...].

³⁰² Notifying Party's response to Commission's request for information RFI 15, Q2, annex 1.2, [...].

³⁰³ Notifying Party's response to Commission's request for information RFI 15, Annex 4.1 [...].

³⁰⁴ Notifying Party's response to Commission's request for information RFI 1, question 9 - Brand plan for bontima: RFI 1 Syngenta, slide 17: "[...]"

³⁰⁵ Notifying Party's response to Commission's request for information RFI 15, annex 1.1 - [...].

³⁰⁶ Notifying Party's response to Commission's request for information RFI 15, annex 4.4 - [...].

³⁰⁷ Notifying Party's response to Commission's request for information RFI 14 - [...].

³⁰⁸ Notifying Party's response to Commission's request for information RFI 17, annex 2, page 78.

³⁰⁹ Notifying Party's response to Commission's request for information RFI 17, annex 2, page 64.

³¹⁰ Notifying Party's response to Commission's request for information RFI 11, annex 10 - [...].

³¹¹ Notifying Party's response to Commission's request for information, RFI 11, annex 11 - [...].

³¹² Notifying Party's response to Commission's request for information, RFI 11, annex 9 - [...].

(339) Adama also compares the broad spectrum fungicide Manitoba containing folpet and epoxiconazole with [...]. Both products are perceived as having [...].³¹³

(A) Result of market investigation

(340) Some farmers have indicated that the Parties compete closely in fungicides.³¹⁴ One farmer considers that the Parties compete closely against each other in particular in cereals fungicides with Adama's Tilt 250 based on propiconazole and Syngenta's Amistar.³¹⁵

(341) As regards distributors, a large majority of distributors consider that the Parties are competing head-to-head in cereal fungicides.³¹⁶ When asked in which areas the Parties compete head to head, several distributors mention fungicide for cereals.³¹⁷ When asked to identify areas where the Parties have strong positions, they identify cereal fungicides for instance in Germany ("*Cirkon vs. Seguris/ Amistar Opti*") according to one German distributor.³¹⁸ When asked to identify crops markets in which Adama is a particularly strong generic challenger to Syngenta, a large number of distributors in Germany and United Kingdom mention fungicides for cereals.³¹⁹

13.2.2.2. Markets where the Transaction would not significantly impede effective competition

(A) Cereals - Barley - Fungicides - Leafspots - Croatia

(342) In the market for barley leafspots fungicides in Croatia, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).

(343) The increment resulting from the Transaction is [5-10]%.

(344) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(345) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market. Other identified competitors currently present in the market are BASF with a larger market share ([40-50]%) and Bayer ([20-30]%).

(346) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for barley leafspots fungicides in Croatia.

(B) Cereals - Other cereals - Leafspots - Fungicides - Czech Republic

(347) In the market for other cereals leafspots fungicides in Czech Republic, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [10-20]%).

(348) The increment resulting from the Transaction is [10-20]%.

³¹³ Notifying Party's response to Commission's request for information, RFI 11, annex 9 - [...].

³¹⁴ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

³¹⁵ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

³¹⁶ Replies to question 47 of Questionnaire (Q2) to crop protection distributors.

³¹⁷ Replies to question 47 of Questionnaire (Q2) to crop protection distributors.

³¹⁸ Replies to question 47 of Questionnaire (Q2) to crop protection distributors.

³¹⁹ Replies to question 52 of Questionnaire (Q2) to crop protection distributors.

- (349) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (350) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market. Other competitors currently present in the market are Bayer ([30-40]%) and BASF ([20-30]%).
- (351) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for other cereals in Czech Republic and therefore are active or potentially active in this market including large generic players such as FMC, Globachem and Sumitomo.
- (352) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals leafspots fungicides in Czech Republic.

(C) Cereals - Other cereals -Fungicides - Leafspots - Finland

- (353) In the market for other cereals leafspots fungicides in Finland, the Parties have a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%).
- (354) The increment resulting from the Transaction is [5-10]%.
- (355) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (356) As a result of the Transaction, the Parties will be market leader closely followed by Bayer with [20-50]% market share, BASF ([20-30]%) and Dow/DuPont ([10-20]%).
- (357) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 5 companies that hold fungicides product registrations for other cereals in Finland and therefore are active or potentially active in this market including large generic players such as Chemfield and Nippon Soda.
- (358) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals leafspots fungicides in Finland.

(D) Cereals - Wheat - Fungicides - Leafspots - Greece

- (359) In the market for wheat leafspots fungicides in Greece, the Parties have a combined market share of [50-60]% (Syngenta: [20-30]%, Adama: [30-40]%).
- (360) The increment resulting from the Transaction is [20-30]%.
- (361) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (362) As a result of the Transaction, the Parties will be market leader but closely followed by BASF with a large market share of [30-40]%. The other competitor currently present in the market is Bayer ([0-5]%).
- (363) The elements provided by the Parties show that there are at least 5 companies that hold fungicides product registrations for wheat in Greece and therefore are active or

potentially active in this market including large generic players such as FMC, Oxon-Sipcam-Vischim and Nippon Soda.

- (364) The Parties share no active ingredients. [90-100]% of Adama's current sales are based on propiconazole. Syngenta's only product, Ortiva 250 SC is based on a different AI, Azoxystrobin.³²⁰
- (365) Therefore, although the market is concentrated and the combined market share is high, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Greece.
- (E) Cereals - Wheat - Fungicides - Leafspots - Hungary
- (366) In the market for wheat leafspots fungicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (367) The increment resulting from the Transaction is [5-10]%.
- (368) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (369) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market, behind BASF ([40-50]%). Bayer is also present in this market with a share of [10-20]%.
- (370) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 15 companies that hold fungicides product registrations for wheat in Hungary and therefore are active or potentially active in this market including large generic players such as Nufarm, FMC and Sumitomo.
- (371) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Hungary.

(F) Cereals - Wheat - Fungicides - Leafspots - Italy

- (372) In the market for wheat leafspots fungicides in Italy, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%).
- (373) The increment resulting from the Transaction is [10-20]%.
- (374) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (375) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market behind Bayer ([30-40]%). A high number of other competitors are currently present in the market, namely BASF ([10-20]%), Isagro ([5-10]%), Dow/DuPont ([0-5]%), FMC/Cheminova ([0-5]%) and Nufarm ([0-5]%). Among these competitors, three rivals are generic players (Isagro, FMC/Cheminova, and Nufarm).

³²⁰ Form CO, paragraph 4974.

(376) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 15 companies that hold fungicides product registrations for wheat in Italy and therefore are active or potentially active in this market including large generic players such as Oxon-Sipcam-Vischim, PSP and Sumitomo.

(377) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Italy.

(G) Cereals - Wheat - Fungicides - Leafspots - Poland

(378) In the market for wheat leafspots fungicides in Poland, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).

(379) The increment resulting from the Transaction is [10-20]%.

(380) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(381) As a result of the Transaction, the Parties will be market leader but followed closely by BASF with [20-30]% market share. A high number of other competitors are currently present in the market, namely Bayer ([10-20]%), Dow/DuPont ([10-20]%), FMC/Cheminova ([0-5]%), Agropak ([0-5]%), Barclay ([0-5]%) and Sumitomocorp ([0-5]%). Among these competitors, four rivals are generic players (FMC/Cheminova, Agropak, Sumitomocorp and Barclay).

(382) According to the Parties' submission, [0-5]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for wheat in Poland and therefore are active or potentially active in this market including large generic players such as Nufarm, PSP and Sharda.

(383) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Poland.

(H) Cereals - Wheat - Fungicides - Leafspots - Romania

(384) In the market for wheat leafspots fungicides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).

(385) The increment resulting from the Transaction is [10-20]%.

(386) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(387) As a result of the Transaction, the Parties will be market leader closely followed by BASF with [20-30]% market share. A high number of other competitors are currently present in the market, namely Bayer ([10-20]%), Dow/DuPont ([10-20]%), Nufarm ([5-10]%), FMC/Cheminova ([0-5]%) and Nippon Soda ([0-5]%). Among these competitors, three rivals are generic players (Nufarm, FMC/Cheminova, and Nippon Soda).

(388) According to the Parties' submission, [0-5]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least

15 companies that hold fungicides product registrations for wheat in Romania and therefore are active or potentially active in this market including large generic players such as Isagro, PSP and Sharda.

(389) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Romania.

(I) Cereals - Wheat - Fungicides - Leafspots - Slovenia

(390) In the market for wheat leafspots fungicides in Slovenia, the Parties have a combined market share of [40-50]% (Syngenta: [30-40]%, Adama: [5-10]%).

(391) The increment resulting from the Transaction is [5-10]%.

(392) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(393) As a result of the Transaction, the Parties will be market leader followed by BASF with [10-20]% market share and Bayer ([10-20]%).

(394) According to the Parties' submission, [30-40]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold fungicides product registrations for wheat in Slovenia and therefore are active or potentially active in this market including large generic players such as Isagro, PSP and FMC.

(395) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Slovenia.

(J) Cereals - Wheat - Fungicides - Leafspots - Spain

(396) In the market for wheat leafspots fungicides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).

(397) The increment resulting from the Transaction is [10-20]%.

(398) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(399) As a result of the Transaction, the Parties will be market leader but followed closely by BASF with [30-40]% market share. The other competitor currently present in the market is Bayer ([20-30]%).

(400) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for wheat in Spain and therefore are active or potentially active in this market including large generic players such as Isagro, Nufarm and FMC.

(401) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat leafspots fungicides in Spain.

(K) Cereals - Wheat - Fungicides - Rust- Estonia

- (402) In the market for wheat rust fungicides in Estonia, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (403) The increment resulting from the Transaction is [10-20]%.
- (404) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (405) As a result of the Transaction, the Parties will be market leader but followed closely by BASF with [30-40]% market share. Other competitors currently present in the market are Bayer ([20-30]%) and Dow/DuPont ([5-10]%).
- (406) According to the Parties' submission, [5-10]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 5 companies that hold fungicides product registrations for wheat in Estonia and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and Sharda.
- (407) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat rust fungicides in Estonia.

(L) Cereals - Wheat - Fungicides - Rust - Portugal

- (408) In the market for wheat rust fungicides in Portugal, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [5-10]%).
- (409) The increment resulting from the Transaction is [5-10]%.
- (410) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (411) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market.
- (412) The other identified competitor currently present in the market is Bayer ([70-80]%).
- (413) The elements provided by the Parties show that there are at least 10 companies that hold fungicides product registrations for wheat in Portugal and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and Oxon-Sipcam-Vischim.
- (414) Bayer therefore holds a particularly high market share in this market and the Transaction does not significantly modify the competitive dynamics of the market where a very strong player is challenged by alternative competitors.
- (415) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat rust fungicides in Portugal.

(M) Cereals - Wheat - Fungicides - Rust - Romania

- (416) In the market for wheat rust fungicides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [30-40]%, Adama: [5-10]%).
- (417) The increment resulting from the Transaction is [5-10]%.

- (418) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (419) As a result of the Transaction, the Parties will be market leader closely followed by BASF with [20-30]% market share. A high number of other competitors are currently present in the market, namely Bayer ([10-20]%), Dow/DuPont ([10-20]%), Nufarm ([5-10]%), Nippon Soda ([0-5]%) and FMC/Cheminova ([0-5]%). Among these competitors, three rivals are generic players (Nufarm, Nippon Soda, and FMC/Cheminova).
- (420) According to the Parties' submission, [0-5]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 15 companies that hold fungicides product registrations for wheat in Romania and therefore are active or potentially active in this market including large generic players such as Isagro, PSP and Sharda.
- (421) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat rust fungicides in Romania.
- (N) Cereals - Wheat - Fungicides - Rust - Spain
- (422) In the market for wheat rust fungicides in Spain, the Parties have a combined market share of [20-30]% (Syngenta: [20-30]%, Adama: [0-5]%).
- (423) The increment resulting from the Transaction is [0-5]%.
- (424) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (425) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market behind BASF ([30-40]%).
- (426) The other competitor currently present in the market is Bayer ([20-30]%).
- (427) According to the Parties' submission, [20-30]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for wheat in Spain and therefore are active or potentially active in this market including large generic players such as Isagro, Nufarm and FMC.
- (428) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat rust fungicides in Spain.
- (O) Non-problematic markets with low concentration level/increase
- (429) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals fungicides markets listed in Table 22 based on 2015 market shares.

Table 22: Non-problematic markets with low concentration level/increase³²¹

Market	Adama	Syngenta	CMS ³²²	HHI	HHI Delta
Fungicides - Barley - powdery mildew - Lithuania	[40-50]%	[0-5]%	[40-50]%	[...]	[...]
Fungicides - Barley - rust - Hungary	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Fungicides - Other cereals - powdery mildew - Estonia	[30-40]%	[0-5]%	[30-40]%	[...]	[...]
Fungicides - Other cereals - rust - Estonia	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Fungicides - Other cereals - fusarium - France	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Fungicides - Wheat - leafspots - Croatia	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Fungicides - Wheat - leafspots - France	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Fungicides - Wheat - powdery mildew - Italy	[0-5]%	[20-30]%	[30-40]%	[...]	[...]
Fungicides - Wheat - powdery mildew - Lithuania	[40-50]%	[0-5]%	[40-50]%	[...]	[...]
Fungicides - Wheat - powdery mildew - Poland	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Fungicides - Wheat - rust - Belgium	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Fungicides - Wheat - rust - Bulgaria	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Fungicides - Wheat - rust - Croatia	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Fungicides - Wheat - rust - France	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Fungicides - Wheat - rust - Italy	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Fungicides - Wheat - rust - Lithuania	[10-20]%	[0-5]%	[20-30]%	[...]	[...]

(P) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(430) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals fungicides markets listed in Table 23 based on 2015 market shares.

Table 23: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Fungicides - Barley - leafspots - Finland	[10-20]%	[10-20]%	[20-30]%	Bayer	[30-40]%	BASF	[20-30]%	Dow/DuPont	[10-20]%
Fungicides - Barley - leafspots - Hungary	[5-10]%	[10-20]%	[20-30]%	BASF	[30-40]%	Bayer	[20-30]%	Dow/DuPont	[5-10]%
Fungicides - Barley - leafspots - Poland	[10-20]%	[10-20]%	[20-30]%	Bayer	[20-30]%	BASF	[20-30]%	Dow/DuPont	[10-20]%
Fungicides - Barley - leafspots - Romania	[10-20]%	[5-10]%	[20-30]%	BASF	[20-30]%	Bayer	[20-30]%	Dow/DuPont	[10-20]%
Fungicides - Barley - leafspots - Sweden	[5-10]%	[20-30]%	[20-30]%	BASF	[30-40]	Dow/DuPont	[20-30]%	Bayer	[10-20]%
Fungicides - Barley - rust - Czech Republic	[5-10]%	[10-20]%	[20-30]%	Dow/DuPont	[30-40]%	BASF	[20-30]%	Bayer	[20-30]%

³²¹ As explained in Section 13.1.2, the source of the market share data provided in this section is the Notifying Party's submission of 01 December 2016, "Updated market shares", unless otherwise indicated.

³²² Combined market share.

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Fungicides - Barley - rust - Finland	[10-20]%	[10-20]%	[30-40]%	Bayer	[30-40]%	BASF	[20-30]%	Dow/DuPont	[10-20]%
Fungicides - Barley - rust - Sweden	[10-20]%	[10-20]%	[20-30]%	BASF	[30-40]%	Dow/DuPont	[20-30]%	Bayer	[10-20]%
Fungicides - Wheat - leafspots - Bulgaria	[20-30]%	[5-10]%	[20-30]%	BASF	[30-40]%	Bayer	[20-30]%	Dow/DuPont	[5-10]%
Fungicides - Wheat - leafspots - Estonia	[10-20]%	[10-20]%	[20-30]%	BASF	[30-40]%	Bayer	[20-30]%	Dow/DuPont	[5-10]%
Fungicides - Wheat - leafspots - Finland	[10-20]%	[10-20]%	[20-30]%	Bayer	[30-40]%	BASF	[20-30]%	Dow/DuPont	[10-20]%
Fungicides - Wheat - leafspots - Sweden	[5-10]%	[10-20]%	[20-30]%	Bayer	[50-60]%	BASF	[10-20]%	Dow/DuPont	[5-10]%
Fungicides - Wheat - powdery mildew - Estonia	[10-20]%	[5-10]%	[20-30]%	BASF	[30-40]%	Bayer	[20-30]%	Dow/DuPont	[5-10]%
Fungicides - Wheat - rust - Czech Republic	[5-10]%	[10-20]%	[20-30]%	BASF	[30-40]%	Bayer	[10-20]%	Dow/DuPont	[10-20]%
Fungicides - Wheat - rust - Finland	[5-10]%	[10-20]%	[20-30]%	Bayer	[30-40]%	BASF	[20-30]%	Dow/DuPont	[10-20]%
Fungicides - Wheat - rust - Hungary	[0-5]%	[20-30]%	[20-30]%	BASF	[30-40]%	Dow/DuPont	[20-30]%	Bayer	[5-10]%

13.2.2.3. Markets where the Transaction would significantly impede effective competition

Table 24: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Fungicides	Barley - Fungicides- Leafspots - Slovakia	2015	[40-50]%	[10-20]%	[20-30]%
		2014	[40-50]%	[20-30]%	[20-30]%
		2013	[40-50]%	[20-30]%	[10-20]%
	Barley - Fungicides - Leafspots - Slovenia	2015	[40-50]%	[30-40]%	[10-20]%
		2014	N/A	N/A	N/A
		2013	N/A	N/A	N/A
	Barley - Fungicides - Rust - Slovakia	2015	[40-50]%	[30-40]%	[5-10]%
		2014	[40-50]%	[30-40]%	[5-10]%
		2013	[40-50]%	[40-50]%	[0-5]%
	Wheat - Fungicides - Fusarium - Czech Republic	2015	[40-50]%	[0-5]%	[40-50]%
		2014	[40-50]%	[0-5]%	[30-40]%
		2013	[30-40]%	[0-5]%	[30-40]%
	Wheat - Fungicides - Fusarium - Italy	2015	[40-50]%	[0-5]%	[40-50]%
		2014	[40-50]%	[0-5]%	[40-50]%
		2013	[40-50]%	[0-5]%	[40-50]%
Wheat - Fungicides - Rust - Slovakia	2015	[30-40]%	[30-40]%	[5-10]%	
	2014	[50-60]%	[40-50]%	[5-10]%	
	2013	[30-40]%	[30-40]%	[0-5]%	

(A) Cereals - Barley - Fungicides- Leafspots - Slovakia

- (431) First, in the market for fungicides for cereals/barley for leaves/ leafspots in Slovakia, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [10-20]%), followed by BASF ([20-30]%), Bayer ([10-20]%) and Dow/DuPont ([10-20]%) in 2015. The merged entity will therefore hold a share about 50% larger than its nearest competitor.
- (432) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (433) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (434) Fourth, only three other competitors are currently present in the market Dow, Bayer, BASF, and no generic players.
- (435) Fifth, the Parties are close competitors. Syngenta is mainly present on the market with Tebuconazole 133+ Prochloraz 267 EW and Propiconazole. Syngenta is present with Amistar technology and Menara 410 EC. Both Parties share a common AI (Propiconazole) used for Menara 410 EC and Propiconazole 250 EC.³²³
- (436) Moreover, the Parties argue that they cannot price discriminate in this market as [70-80]% of their 2015 sales in Slovakia were made in other markets than barley.³²⁴ They put forward that most of their sales in Slovakia are generated in non-problematic markets. Since the Parties explain that they cannot price discriminate based on how growers use their products, they will have no ability to exercise market power and raise prices in this particular crop/segment.
- (437) However, in this market, Adama sells mainly two products (accounting for respectively [50-60]% and [40-50]% of the sales) and Syngenta also sells mainly two products (accounting for respectively [70-80]% and [20-30]% of the sales). The Commission is not in a position to assess whether all four products are primarily sold in other non-problematic markets or if one of these products is primarily sold for barley. In the latter case, the merged entity would still have incentives to raise prices for this particular product.
- (438) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for fungicides for cereals/barley for leaves/ leafspots in Slovakia.

(B) Cereals - Barley - Fungicides - Leafspots - Slovenia

- (439) First, in the market for fungicides for cereals/barley for leaves/leafspots in Slovenia, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [10-20]%, Syngenta [30-40]%), followed by BASF ([10-20]%) and Bayer ([10-20]%) in 2015. The merged entity will therefore hold a share more than three times larger than its nearest competitor.
- (440) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.

³²³ Form CO, paragraph 4844.

³²⁴ Form CO, paragraph 4844.

- (441) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (442) Fourth, only three other competitors are currently present in the market including Bayer and BASF, and no generic players
- (443) Fifth, the Parties are close competitors. Adama is present on the market with Epoxiconazole 125 SC New and Azoxystrobin 60 + Tebuconazole 100. Syngenta is present with Amistar Xtra, Menara 410 EC Amistar Opti 480 SC, Zenit 575 EC and Magnello 350 EC.³²⁵The Parties share two AIs for a large part of their sales: tebuconazole (in Adama's tebuconazole and azoxystrobin mixture and Syngenta's Magnello 350 EC) and azoxystrobin (in Adama's tebuconazole and azoxystrobin mixture and Syngenta's Amistar Xtra and Amistar Opti 480 SC).
- (444) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for fungicides for cereals/barley for leaves/ leafspots in Slovenia.

(C) Cereals - Barley - Fungicides – Rust - Slovakia

- (445) First, in the market for fungicides for cereals/barley for rust in Slovakia, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [5-10]%, Syngenta [30-40]%), followed by BASF ([20-30]%), Bayer ([20-30]%), Dow-DuPont ([10-20]%) in 2015.
- (446) Second, albeit the increment resulting from the Transaction ([5-10]%) is comparatively small, the Transaction eliminates a significant player in a concentrated market. The HHI level post-Transaction would be [...] with a delta of [...].
- (447) Third, only three identified other competitors are currently present in the market Dow, Bayer, BASF, and no generic players.
- (448) Fourth, the Parties are close competitors. Adama is mainly present on the market with Tebuconazole 250 EW and Azoxystrobin 60 + Tebuconazole 100. Syngenta is present with Amistar technology (based on Azoxystrobin) and Menara 410 EC.³²⁶
- (449) Moreover, the Parties argue that they cannot price discriminate in this market as [80-90]% of their 2015 sales in Slovakia were made in other markets than barley.³²⁷ They put forward that most of their sales in Slovakia are generated in non-problematic markets. Since the Parties explain that they cannot price discriminate based on how growers use their products, they will have no ability to exercise market power and raise prices in this particular crop/segment.
- (450) However, in this market, Adama sells mainly two products (accounting for respectively [40-50]% and [50-60]% of the sales) and Syngenta also sells mainly two products (accounting for respectively [40-50]% and [50-60]% of the sales). The Commission is not in a position to assess whether all four products are primarily sold in other non-problematic markets or if one of these products is primarily sold for barley. In the latter case, the merged entity would still have incentives to raise prices for this particular product.

³²⁵ Form CO, paragraph 5651.

³²⁶ Form CO, paragraph 4844.

³²⁷ Form CO, paragraph 4844.

(451) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for fungicides for cereals/barley for rust in Slovakia.

(D) Cereals - Wheat - Fungicides - Fusarium - Czech Republic

(452) First, in the market for fungicides for cereals/wheat for fusarium in the Czech Republic, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [40-50]%, Syngenta [0-5]%), followed by BASF ([20-30]%), Bayer ([20-30]%) Dow ([10-20]%) PSP ([0-5]%) in 2015. The merged entity will therefore hold a share about twice as large as its nearest competitor.

(453) Second, albeit the increment resulting from the Transaction ([0-5]%) is comparatively small, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

(454) Third, only four identified other competitors are currently present in the market Bayer, BASF, Dow and PSP. Among these competitors, only PSP is a generic player.

(455) Fifth, the Parties are close competitors. Adama is present on the market with Tebuconazole 133+ Prochloraz 267 EW. Syngenta is present with Magnello 350 EC.³²⁸The Parties share the same AI (tebuconazole) for the whole of their sales (in Adama's tebuconazole and prochloraz mixture and Syngenta's Magnello 350 EC). Only one other competitor offers products based on tebuconazole, Bayer.³²⁹

(456) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for fusarium in the Czech Republic.

(E) Cereals - Wheat – Fungicides - Fusarium - Italy

(457) First, in the market for fungicides for cereals/wheat for fusarium in Italy, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [40-50]%, Syngenta [0-5]%), followed by BASF ([10-20]%) and Nufarm ([0-5]%) in 2015. The merged entity will therefore hold a share about four times larger than its nearest competitor.

(458) Second, albeit the increment resulting from the Transaction ([0-5]%) is comparatively small, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

(459) Third, only two competitors are currently present in the market BASF and Nufarm³³⁰. Nufarm is a generic player but it is significantly smaller than Adama.

(460) Fourth, the Parties are close competitors. Syngenta is present on the market with Tebuconazole 200 EW and Propiconazole 90. Syngenta is present with Magnello 350 EC.³³¹The Parties share one same AI: tebuconazole (in Adama's Tebuconazole;

³²⁸ Form CO, paragraph 5161.

³²⁹ Form CO, paragraph 5162, Bayer's Falcon 460 EC (a mixture of spiroxamine, tebuconazole and triadimenol) and Horizon 250 EW based on tebuconazole.

³³⁰ The Parties have also identified Oxon as a player and attributed a market share of [30-40]% but is not identified in the reworked results used a basis of this Decision.

³³¹ Form CO, paragraph 1800.

200 EW and Syngenta's Magnello 350 EC). Only one other competitor offers products based on tebuconazole, namely Nufarm.³³²

(461) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for fusarium in Italy.

(F) Cereals - Wheat – Fungicides - Rust - Slovakia

(462) First, in the market for fungicides for cereals wheat for rust in Slovakia, the Parties would be post-Transaction the market leader with a combined share of [30-40]% (Adama [5-10]%, Syngenta [30-40]%), followed by BASF ([20-30]%), Bayer ([20-30]%), Dow ([10-20]%) in 2015.

(463) Second, albeit the increment resulting from the Transaction ([5-10]%) is comparatively small, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

(464) Third, only four other competitors are currently present in the market including Dow, Bayer, BASF, and no generic players

(465) Fourth, the Parties are close competitors. Syngenta is mainly present on the market with Tebuconazole 250 EW and a mixture of Azoxystrobin 60 + Tebuconazole 100. Syngenta is present with Amistar technology (which is also based on Azoxystrobin) and Menara 410 EC.³³³

(466) Moreover, the Parties argue that they cannot price discriminate in this market as [70-80]% of their 2015 sales in Slovakia are made in other markets than wheat in 2015.³³⁴ They put forward that most of their sales in Slovakia are generated in non-problematic markets. Since the Parties explain that they cannot price discriminate based on how growers use their products, they will have no ability to exercise market power and raise prices in this particular crop/segment.

(467) However, in this market, Adama sells mainly two products (accounting for respectively [40-50]% and [50-60]% of the sales) and Syngenta sells mainly three products (accounting for respectively [10-20]%, [30-40]% and [40-50]% of the sales). The Commission is not in a position to assess whether all five products are primarily sold in other non-problematic markets or if one of these products is primarily sold for wheat. In the latter case, the merged entity would still have incentives to raise prices for this particular product.

(468) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for fungicides for cereals/wheat for rust in Slovakia.

13.2.3. *Insecticides for cereals*

13.2.3.1. Wheat

(469) At EEA level, the market for broad spectrum foliar insecticides for wheat is estimated to have valued USD [...] in 2015. Other than the Parties, there are three R&D players in the market (BASF, Bayer and to a lesser extent, Dow/DuPont) and

³³² Form CO, paragraph 5068, Nufarm sells sakura 274 EC.

³³³ Form CO, paragraph 4844.

³³⁴ Form CO, paragraph 4824.

five generic players. The Transaction would place the Parties number one in the market.

- (470) France is the most important markets for broad spectrum foliar insecticides for wheat for which there is an overlap in the Parties' activities, with a market size of USD [...].
- (471) Some farmers have indicated that the Parties compete closely in insecticides for cereals.³³⁵ Some farmers are also of the view that Syngenta's Karate K³³⁶ and Adama's Mavrik are close competitors.^{337,338}
- (A) Markets where the Transaction would not significantly impede effective competition
- (A.i) *Cereals - Wheat - Insecticides - Foliar - Broad Spectrum - Romania*
- (472) In the market for wheat foliar broad spectrum insecticides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%).
- (473) The increment resulting from the Transaction is [10-20]%.
- (474) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (475) As a result of the Transaction, the Parties will be market leader but followed closely by Bayer with [30-40]% market share, Sumitomo Chemical ([5-10]%) and BASF ([5-10]%).
- (476) According to the Parties' submission, [20-30]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for wheat in Romania and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and PSP.
- (477) Syngenta is present in this market with Karate Zeon 5 CS FP and Karate 2.5 WG, both based on lambda-cyhalothrin. Adama also has a product based on lambda-cyhalothrin (Lamdex), but it also has as Mavrik (Tau-Fluvalinate 240 EW) and three products based on chlorpyrifos equating to [10-20]% of Adama's sales in the segment (Chlorpyrifos 250+Deltamethrin 6 ZC, Chlorpyrifos 250 CS and Chlorpyrifos 480 EC).
- (478) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat foliar broad spectrum insecticides in Romania.
- (479) In any case, the Parties' share in this market will be reduced by the EEA-wide sale of Adama's Chlorpyrifos 250+Deltamethrin 6 ZC, Chlorpyrifos 250 CS and Chlorpyrifos 480 EC as part of the divestment package that has been committed by the Parties to alleviate competition concerns in other markets (see section 15).

³³⁵ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

³³⁶ See <https://www.syngenta.fr/produits/protection-des-cultures/insecticides/karate-k>.

³³⁷ See <http://www.adama.com/new-zealand/en/crop-protection/insecticide/mavrik.html>.

³³⁸ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

(A.ii) Cereals - Wheat - Insecticides - Foliar - Broad Spectrum - Spain

- (480) In the market for wheat foliar broad spectrum insecticides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (481) The increment resulting from the Transaction is [10-20]%.
- (482) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (483) As a result of the Transaction, the Parties will be market leader followed by BASF and Bayer, with each [10-20]% market share and FMC/Cheminova ([5-10]%). Among these competitors, at least one rival is a generic player (FMC/Cheminova).
- (484) According to the Parties' submission, [30-40]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for wheat in Spain and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and PSP.
- (485) The Parties' shares declined substantially between 2014 and 2015 - they held a joint share of [50-60]% in 2014 (and [40-50]% in 2013) down to [30-40]% in 2015. This was due to a decline in Adama's position.
- (486) There are overlaps in AIs. Syngenta has Karate Zeon 10 CS FP, Karate Zeon 1.5 CS and Karate 2.5 WG, all based on Lambda-Cyhalothrin. Adama also has a product based on Lambda-Cyhalothrin (Lamdex). However [70-80]% of its sales in this segment come from a product based on a different AI, Chlorpyrifos 480 EC.
- (487) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat foliar broad spectrum insecticides in Spain.
- (488) In any case, the Parties' share in this market will be reduced by the EEA-wide sale of Adama's Chlorpyrifos 480 EC as part of the divestment package that has been committed by the Parties to alleviate competition concerns in other markets.

(A.iii) Cereals - Wheat - Insecticides - Foliar - Broad Spectrum - United Kingdom

- (489) In the market for wheat foliar broad spectrum insecticides in the UK, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).
- (490) The increment resulting from the Transaction is [10-20]%.
- (491) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (492) As a result of the Transaction, the Parties will be market leader followed by generic player Sumitomo Chemical with [10-20]% market share. Other competitors currently present in the market are BASF ([10-20]%) and Nufarm ([5-10]%). Among these rivals, two are generic players and one (Sumitomo) is larger than Adama.
- (493) According to the Parties' submission, [30-40]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for wheat in the UK and therefore are active or potentially active in this market including large generic players such as Belchim, PSP and UPL.

- (494) The Parties' shares declined substantially between 2013 and 2015 - they held a joint share of [40-50]% in 2013, down to [30-40]% in 2015. This was due to a decline in Adama's position from [20-30]% to [10-20]% over the same period.
- (495) The Parties have no overlapping AIs in this segment. Syngenta has Karate Zeon 10 CS FP, based on Lambda-Cyhalothrin. Adama has Chlorpyrifos 480 EC and Tau-Fluvalinate 240 EW (Mavrik), which are not based on Lambda-Cyhalothrin.
- (496) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat foliar broad spectrum insecticides in the UK.
- (497) In any case, the Parties' share in this market will be reduced by the EEA-wide sale of Adama's Chlorpyrifos 480 EC as part of the divestment package that has been committed by the Parties to alleviate competition concerns in other markets.
- (B) Markets where the Transaction would significantly impede effective competition
- (498) The Commission considers that the Transaction would significantly impede effective competition for Wheat - Insecticides - Foliar - Broad Spectrum crop protection products in 4 markets, detailed in Table 25.

Table 25: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Insecticides	Wheat - Insecticides - Foliar - Broad Spectrum - Germany/Austria	2015	[50-60]%	[30-40]%	[10-20]%
		2014	[50-60]%	[40-50]%	[10-20]%
		2013	[50-60]%	[40-50]%	[10-20]%
	Wheat - Insecticides - Foliar - Broad Spectrum - Italy	2015	[30-40]%	[10-20]%	[20-30]%
		2014	[40-50]%	[20-30]%	[20-30]%
		2013	[30-40]%	[10-20]%	[10-20]%
	Wheat - Insecticides - Foliar - Broad Spectrum - Slovenia	2015	[50-60]%	[40-50]%	[10-20]%
		2014	[80-90]%	[60-70]%	[10-20]%
		2013	[80-90]%	[50-60]%	[20-30]%
	Wheat - Insecticides - Foliar - Broad Spectrum - Sweden	2015	[60-70]%	[5-10]%	[60-70]%
		2014	[60-70]%	[10-20]%	[50-60]%
		2013	[60-70]%	[10-20]%	[50-60]%

(B.i) Cereals - Wheat - Insecticides - Foliar - Broad Spectrum - Germany/Austria³³⁹

- (499) First, in the market for Wheat/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Germany/Austria with a combined share of [50-60]% (Adama [10-20]%, Syngenta [30-40]%) in 2015, followed by

³³⁹ As explained in Section 13.1.1, Germany and Austria are jointly analysed because of the structure of the market share dataset.

BASF ([10-20]%) and Bayer ([5-10]%). The merged entity will therefore hold a share almost three times larger than its nearest competitor.

- (500) Second, the increment resulting from the Transaction is [10-20]%, which is significant
- (501) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (502) Fourth, only three competitors are currently present in the market. Among these competitors, none are generic players.
- (503) Fifth, the Transaction eliminates a dynamic player as Adama has been increasing its sales between 2013 and 2015 in this market (2013: [10-20]%; 2014: [10-20]%; 2015: [10-20]%).
- (504) Sixth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 10 CS FP and Karate 5 WG and Adama with Beta-Cyfluthrin 25 (Bulldock) EC and Tau-Fluvalinate 9.2 EW+Citro Acid Kit. Adama's Bulldock competes directly with Syngenta's Karate Zeon (based on lambda-cyhalothrin) as proven in a value map for Cereal insecticides in Germany, in which Adama compares the two products.³⁴⁰ According to the Form CO, lambda-cyhalothrin and beta-cyfluthrin are both in the chemical class of Pyrethroids, indicating they have a similar mode of action and therefore are likely to be close competitors.³⁴¹
- (505) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term because they expect that [...] of its Beta-Cyfluthrin products will be required [...], further reducing their shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching a new formulation aimed at maintaining, if not increasing, its market position. Adama has a pipeline product based on [...] for a number of crops including cereals which it expects to launch in [...]. Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (506) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Wheat/Insecticides/Foliar/Broad Spectrum in Germany/Austria.

(B.ii) Cereals - Wheat - Insecticides - Foliar - Broad Spectrum - Italy

- (507) First, in the market for Wheat/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the market leader in Italy with a combined share of [30-40]% (Adama [20-30]%, Syngenta [10-20]%) in 2015, followed by Bayer ([10-20]%) and BASF ([5-10]%). The merged entity will therefore hold a share almost twice the size as its nearest competitor.

³⁴⁰ Notifying Party's response to Commission's request for information RFI 14 - Q1 – Q2, [...].

³⁴¹ Form CO, page 47, table 6.0.2. Also see paragraph 519: "In AstraZeneca/Novartis third parties argued that pyrethroids constitute a separate sub-market within the insecticides because of their very broad spectrum of activity, high speed of action and advantages for environmental stewardship, since the compound is a synthesised natural product."

- (508) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (509) Third, the HHI level post-Transaction would be [...] with a delta of [...]. Although the level of HHI is not very high in this market, the increase brought about by the Transaction is substantial.
- (510) Fourth, only four other competitors are currently present in the market, jointly accounting for [60-70]%. Among these competitors, only one is a generic player (Oxon Sipcam).
- (511) Fifth, the Transaction eliminates a dynamic player as Adama had a strong and growing position in terms of sales between 2013 and 2015 in the market for Wheat/Insecticides/Foliar/Broad Spectrum (2013: [10-20]%; 2014: [20-30]%; 2015: [20-30]%).
- (512) Sixth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 10 CS FP and Karate Zeon 1.5 CS and Adama with Tau-Fluvalinate 240 EW (Mavrik) and Beta-Cyfluthrin 25 EC (Bulldock). According to the Form CO, lambda-cyhalothrin and beta-cyfluthrin are both in the chemical class of pyrethroids, indicating they have a similar mode of action and therefore are likely to be close competitors.³⁴² Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in an internal document from Adama which lists key competitors for tau-fluvalinate as including "[...]" (amongst others).³⁴³
- (513) Finally, the Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in Italy for use in a number of crops including cereals in 2015. Adama also has a pipeline product based on [...] for a number of crops including cereals which it expects to launch in [...]. Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (514) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Wheat/Insecticides/Foliar/Broad Spectrum in Italy.

³⁴² Form CO, page 47, table 6.0.2. Also see paragraph 519: "*In AstraZeneca/Novartis third parties argued that pyrethroids constitute a separate sub-market within the insecticides because of their very broad spectrum of activity, high speed of action and advantages for environmental stewardship, since the compound is a synthesised natural product.*"

³⁴³ Notifying Party's response to Commission's request for information RFI 11, annex 13 - [...].

(B.iii) Cereals – Wheat - Insecticides - Foliar - Broad Spectrum - Slovenia

- (515) First, in the market for Wheat/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Slovenia with a combined share of [50-60]% (Adama [10-20]%, Syngenta [40-50]%) in 2015.³⁴⁴
- (516) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (517) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (518) Fourth the Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP and Adama with Beta-Cyfluthrin 25 EC (Bulldock). According to the Form CO, lambda-cyhalothrin and beta-cyfluthrin are both in the chemical class of Pyrethroids, indicating they have a similar mode of action and therefore are likely to be close competitors.³⁴⁵
- (519) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta exerted by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in Slovenia for use in a number of crops including cereals in 2015. Adama also has a pipeline product based on [...] for a number of crops including cereals which it expects to launch in [...]. Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (520) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Wheat/Insecticides/Foliar/Broad Spectrum in Slovenia, notably with the creation of a dominant position.

(B.iv) Cereals - Wheat - Insecticides - Foliar - Broad Spectrum - Sweden

- (521) First, in the market for Wheat/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Sweden with a combined share of [60-70]% (Adama [60-70]%, Syngenta [5-10]%) in 2015, followed by Dow ([30-40]%) and Belchim ([0-5]%). The merged entity will therefore hold a share more than 2 times larger than its nearest competitor.
- (522) Second, albeit the increment resulting from the Transaction ([5-10]%) is comparatively small, the Transaction eliminates a player in a concentrated market. The HHI level post-Transaction would be [...] with a delta of [...].

³⁴⁴ A large proportion of this market ([40-50]%) is not identified in the market shares data provided by the Parties. The market share data provided by the Parties for 2013 and 2014 recorded a joint share of [80-90]% for the Parties.

³⁴⁵ Form CO, page 47, table 6.0.2. Also see paragraph 519: "In AstraZeneca/Novartis third parties argued that pyrethroids constitute a separate sub-market within the insecticides because of their very broad spectrum of activity, high speed of action and advantages for environmental stewardship, since the compound is a synthesised natural product."

- (523) Three, only two other competitors are currently present in the market, jointly accounting for [30-40]%. Among these competitors, only one is a generic player (Belchim).
- (524) Fifth, the Transaction eliminates a dynamic player as Adama has been increasing its sales between 2013 and 2015 in this market (2013: [50-60]%; 2014: [50-60]%; 2015: [60-70]%) while Syngenta has lost shares.
- (525) Sixth, the Parties are close competitors. Syngenta is present on the market with Karate 2.5 WG and Adama with Tau-Fluvalinate 240 EW (Mavrik) and Beta-Cyfluthrin 25 SC (Bulldock). According to the Form CO, lambda-cyhalothrin and beta-cyfluthrin are both in the chemical class of pyrethroids, indicating they have a similar mode of action and therefore are likely to be close competitors.³⁴⁶ Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in an internal document from Adama which lists key competitors for tau-fluvalinate as including "[...]" (amongst others).³⁴⁷
- (526) Finally, the Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching a new formulation aimed at maintaining, if not increasing, its market position. Adama has a pipeline product based on [...] for a number of crops including cereals which it expects to launch in [...]. Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (527) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Wheat/Insecticides/Foliar/Broad Spectrum in Sweden, notably through the strengthening of a dominant position.

13.2.3.2. Barley

- (528) At EEA level, the market for broad spectrum foliar insecticides for barley is estimated to have valued USD [...] in 2015. Other than the Parties, there are three R&D players in the market (BASF, Bayer and to a lesser extent, Dow/DuPont) and four generic players. The Transaction would place the Parties number one in the market.
- (529) Germany/Austria is the most important market for broad spectrum foliar insecticides for barley, with a market size of USD [...].

³⁴⁶ Form CO, page 47, table 6.0.2. Also see paragraph 519: "*In AstraZeneca/Novartis third parties argued that pyrethroids constitute a separate sub-market within the insecticides because of their very broad spectrum of activity, high speed of action and advantages for environmental stewardship, since the compound is a synthesised natural product.*"

³⁴⁷ Notifying Party's response to Commission's request for information RFI 11, annex 13 - [...].

- (530) Some farmers have indicated that the Parties compete closely in insecticides for cereals.³⁴⁸ Some farmers are also of the view that Syngenta's Karate K³⁴⁹ and Adama's Mavrik are close competitors.^{350,351}
- (A) Markets where the Transaction would not significantly impede effective competition
- (A.i) *Cereals - Barley - Insecticides - Foliar - Broad Spectrum - Sweden*
- (531) In the market for barley foliar broad spectrum insecticides in Sweden, the Parties have a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [30-40]%).
- (532) The increment resulting from the Transaction is [5-10]%.
- (533) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (534) As a result of the Transaction, the Parties will be the second largest competitor on the market. The other competitor currently present in the market is Dow/DuPont ([40-50]%), which is larger than the merged entity.
- (535) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for barley in Sweden and therefore are active or potentially active in this market including large generic players such as Belchim, Nufarm and Sumitomo.
- (536) The Parties have declining shares in this market - they held a joint share of [50-60]% in 2013 and [40-50]% in 2014, which has further declined in 2015.
- (537) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for barley foliar broad spectrum insecticides in Sweden.
- (A.ii) *Non-problematic markets with low concentration level/increase*
- (538) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals insecticides markets listed in Table 26 based on 2015 market shares.

Table 26: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Barley - foliar - broad spectrum - UK	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Other cereals - foliar - broad spectrum - Belgium	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

³⁴⁸ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

³⁴⁹ See <https://www.syngenta.fr/produits/protection-des-cultures/insecticides/karate-k>.

³⁵⁰ See <http://www.adama.com/new-zealand/en/crop-protection/insecticide/mavrik.html>.

³⁵¹ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

(A.iii) *Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors*

(539) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals insecticides markets listed in Table 27 based on 2015 market shares.

Table 27: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Barley - foliar - broad spectrum - France	[10-20]%	[5-10]%	[20-30]%	Belchim	[10-20]%	BASF	[10-20]%	Sumitomo	[5-10]%
Barley - foliar - broad spectrum - Hungary	[0-5]%	[20-30]%	[20-30]%	Bayer	[50-60]%	Dow/DuPont	[10-20]%	FMC/Chemnova	[5-10]%
Barley - foliar - broad spectrum - Slovakia	[10-20]%	[10-20]%	[20-30]%	Dow/DuPont	[10-20]%	BASF	[10-20]%	Finagro	[5-10]%

(B) Markets where the Transaction would significantly impede effective competition

(540) The Commission considers that the Transaction would significantly impede effective competition for Barley - Insecticides - Foliar - Broad Spectrum crop protection products in 2 markets, detailed in Table 28.

Table 28: Markets segments where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Insecticides	Barley - Insecticides - Foliar - Broad Spectrum - Germany/Austria	2015	[40-50]%	[40-50]%	[0-5]%
		2014	[40-50]%	[40-50]%	[0-5]%
		2013	[40-50]%	[40-50]%	[0-5]%
	Barley - Insecticides - Foliar - Broad Spectrum - Slovenia	2015	[40-50]%	[30-40]%	[10-20]%
		2014	[80-90]%	[70-80]%	[10-20]%
		2013	[80-90]%	[70-80]%	[10-20]%

(B.i) *Cereals - Barley - Insecticides - Foliar - Broad Spectrum - Germany/Austria*³⁵²

(541) First, in the market for Barley/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Germany/Austria with a combined share of [40-50]% (Adama [0-5]%, Syngenta [40-50]%) in 2015, followed by

³⁵² As explained in Section 13.1.1, Germany and Austria are jointly analysed because of the structure of the market share dataset.

Bayer ([20-30]%) and BASF ([10-20]%). The merged entity will therefore hold a share almost twice as large as its nearest competitor.

- (542) Second, albeit the increment resulting from the Transaction ([0-5]%) is comparatively small, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (543) Third, the Transaction eliminates a dynamic player as Adama has been increasing its sales between 2013 and 2015 in this market (2013: [0-5]%; 2014: [0-5]%; 2015: [0-5]%).
- (544) Fourth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 10 CS FP and Karate 5 WG (based on lambda-cyhalothrin) and Adama with Beta-Cyfluthrin 25 EC (Bulldock). According to the Form CO, lambda-cyhalothrin and beta-cyfluthrin are both in the chemical class of pyrethroids, indicating they have a similar mode of action and therefore are likely to be close competitors.³⁵³
- (545) The Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching a new formulation aimed at maintaining, if not increasing, its market position. Adama has a pipeline product based on [...] for a number of crops including cereals which it expects to launch in [...]. Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (546) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Barley/Insecticides/Foliar/Broad Spectrum in Germany/Austria.
- (B.ii) Cereals - Barley - Insecticides - Foliar - Broad Spectrum - Slovenia*
- (547) First, in the market for Barley/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Slovenia with a combined share of [40-50]% (Adama [10-20]%, Syngenta [30-40]%) in 2015.
- (548) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (549) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (550) Fourth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP (based on lambda-cyhalothrin) and Adama with Beta-Cyfluthrin 25 EC (Bulldock). According to the Form CO, lambda-cyhalothrin and

³⁵³ Form CO, page 47, table 6.0.2. Also see paragraph 519: "In AstraZeneca/Novartis third parties argued that pyrethroids constitute a separate sub-market within the insecticides because of their very broad spectrum of activity, high speed of action and advantages for environmental stewardship, since the compound is a synthesised natural product."

beta-cyfluthrin are both in the chemical class of pyrethroids, indicating they have a similar mode of action and therefore are likely to be close competitors.³⁵⁴

- (551) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in Slovenia for use in a number of crops including cereals in 2015. Adama also has a pipeline product based on [...] for a number of crops including cereals which it expects to launch in [...]. Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (552) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Barley/Insecticides/Foliar/Broad Spectrum in Slovenia.

13.2.3.3. Other cereals

- (553) At EEA level, the market for broad spectrum foliar insecticides for other cereals is estimated to have valued USD [...] in 2015. Other than the Parties, there are three R&D players in the market (Bayer, BASF and to a lesser extent, Dow/DuPont) and four generic players. The Transaction would place the Parties number two in the market.
- (554) The UK is the most important market for broad spectrum foliar insecticides for other cereals for which there is an overlap in the Parties' activities, with a market size of USD [...].
- (555) Some farmers have indicated that the Parties compete closely in insecticides for cereals.³⁵⁵ Some farmers are also of the view that Syngenta's Karate K³⁵⁶ and Adama's Mavrik are close competitors.^{357,358}
- (A) Markets where the Transaction would not significantly impede effective competition
- (A.i) *Cereals – Other Cereals- Insecticides - Foliar - Broad Spectrum - Hungary*
- (556) In the market for other cereals foliar broad spectrum insecticides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).
- (557) The increment resulting from the Transaction is [10-20]%.

³⁵⁴ Form CO, page 47, table 6.0.2. Also see paragraph 519: "In AstraZeneca/Novartis third parties argued that pyrethroids constitute a separate sub-market within the insecticides because of their very broad spectrum of activity, high speed of action and advantages for environmental stewardship, since the compound is a synthesised natural product."

³⁵⁵ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

³⁵⁶ See <https://www.syngenta.fr/produits/protection-des-cultures/insecticides/karate-k>.

³⁵⁷ See <http://www.adama.com/new-zealand/en/crop-protection/insecticide/mavrik.html>.

³⁵⁸ Replies to question 17 of Questionnaire (Q1) to crop protection customers (Farmers).

- (558) The HHI level post-Transaction would be [...] with a delta of [...]. Although the level of HHI is not very high in this market, the increase brought about by the Transaction is substantial.
- (559) As a result of the Transaction, the Parties will be market leader followed by Bayer with [20-30]% market share.
- (560) According to the Parties' submission, [40-50]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for other cereals in Hungary and therefore are active or potentially active in this market including large generic players such as PSP, Nufarm and Sumitomo.
- (561) The Parties have no overlapping AIs in this segment. Syngenta has Karate Zeon 5 CS FP (based on Lambda-Cyhalothrin) while Adama has Beta-Cyfluthrin 12+Chlorpyrifos 250 ZW, Beta-Cyfluthrin 25 EC and Chlorpyrifos 480 EC, none of these products being based on Lambda-Cyhalothrin. Although beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, the majority of its sales is achieved with chlorpyrifos.
- (562) Therefore, although the increase in HHI brought by the Transaction is substantial, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals foliar broad spectrum insecticides in Hungary.
- (563) In any case, the overlap in the Parties' shares in this market will be eliminated by the EEA-wide sale of Adama's Beta-Cyfluthrin 12+Chlorpyrifos 250 ZW, Beta-Cyfluthrin 25 EC and Chlorpyrifos 480 EC as part of the divestment package that has been committed by the Parties to alleviate competition concerns in other markets.

(A.ii) Non-problematic markets with low concentration level/increase

- (564) As explained in Section 12.1.3, the Commission considers that the following cereals insecticide markets listed in Table 29 are not likely to significantly impede effective competition based on 2015 market shares.

Table 29: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Other cereals - foliar - broad spectrum - Belgium	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

13.2.4. PGR for cereals

13.2.4.1. Overview of PGR for cereals

- (565) EEA-wide sales of PGRs for cereals amounted to approximately USD [...] in 2015. Within cereals, the main crop requiring PGRs is wheat (USD [...]), followed by barley (USD [...]).
- (566) As regards PGR for cereals, Syngenta offers two key products Moddus ME 250 and Moddus 250 EC which are both based on trinexapac-ethyl as an AI and have effect on all types of cereals crops. Moddus ME 250 is sold exclusively in France, Germany and Austria whereas Moddus 250 EC is sold in most other countries of the EEA. Other products represent variations of these products and account for much less volume.

- (567) The Moddus 250 formulated products are PGRs for crop height reduction, lodging prevention and yield protection and are Syngenta's main PGR products. Moddus 250 EC is the oldest and simplest of the Moddus formulation.
- (568) Moddus ME 250 is a further development to the formulation to avoid phytotoxicity under certain weather conditions.
- (569) Moddus 250 DC, also known as Moddus Evo or Moddus Start, is the latest Syngenta formulation development for PGRs. Syngenta started selling Moddus 250 DC in 2015 in Denmark, Finland, Germany/Austria and Sweden and in 2016 in Belgium, Estonia, Hungary, Latvia, Lithuania and Poland.³⁵⁹

Table 30: Top cereal PGR products of Syngenta in 2015³⁶⁰

Product name	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
MODDUS ME 250	Barley, Other Cereals, Wheat	Foliar	No	TRINEXAPAC-ETHYL	[...]	Before 2002	FRANCE, GERMANY_AUSTRIA
MODDUS 250 EC	Barley, Other Cereals, Wheat	Foliar	No	TRINEXAPAC-ETHYL	[...]	Before 2002	BELGIUM, CROATIA, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, NETHERLANDS, NORWAY, POLAND, SLOVAKIA, SLOVENIA, SWEDEN, UK,
MODDUS 250 DC	Barley, Other Cereals, Wheat	Foliar	No	TRINEXAPAC-ETHYL	[...]	2014	DENMARK, FINLAND, GERMANY_AUSTRIA, SWEDEN
MODDUS ARCHER TURBO PACK	Barley, Wheat	Foliar	Yes	TRINEXAPAC-ETHYL	[...]	Packs please refer to Moddus above.	CZECH REPUBLIC
MODDUS STEREO PACK	Barley, Wheat	Foliar	Yes	TRINEXAPAC-ETHYL	[...]	Packs please refer to Moddus above.	SLOVAKIA
SONIS (APE FREE)	Barley, Other Cereals, Wheat	Foliar	Yes	TRINEXAPAC-ETHYL	[...]	2005	FRANCE

- (570) As regards Adama, it is entirely present on the cereals PGR market through its straight product trinexapac-ethyl 175 ED sold in most of the EEA and to a much

³⁵⁹ Form CO, paragraph 5946.

³⁶⁰ Notifying Party's response to Commission's request for information RFI 26, annex 1, question 1.

lesser extent through chlormequat chloride.³⁶¹ Adama has entered most markets in the EEA in the last five years for PGR products based on trinexapac-ethyl for cereals under the name Optimus.³⁶²

Table 31: Top cereal PGR products of Adama in 2015³⁶³

Product name	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
TRINEX APAC ETHYL 175 EC	Barley, Other Cereals, Wheat	Reduced height to prevent lodging	No	TRINEXAPAC ETHYL	[...]	2011	BELGIUM, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY_AUSTRIA, HUNGARY, IRELAND, LATVIA, LITHUANIA, NETHERLANDS, POLAND, ROMANIA, SLOVAKIA, SWEDEN, UK
CHLORMEQUAT CHLORIDE 675 SL	Barley, Other Cereals, Wheat	Reduced height to prevent lodging	No	CHLORMEQUAT CHLORIDE	[...]	2010	POLAND
CHLORMEQUAT CHLORIDE 64 SL	Wheat	Reduced height to prevent lodging	No	CHLORMEQUAT CHLORIDE	[...]	2012	BELGIUM
CHLORMEQUAT CHLORIDE 725 SL	Barley, Other Cereals, Wheat	Reduced height to prevent lodging	No	CHLORMEQUAT CHLORIDE	[...]	2009	POLAND
CHLORMEQUAT CHLORIDE 400 LSC	Wheat	Reduced height to prevent lodging	No	CHLORMEQUAT CHLORIDE	[...]	2010	ROMANIA

(571) **Syngenta has no pipeline products** as regards PGR for cereals.³⁶⁴ Adama currently has [...], which Adama expects to launch in [...].³⁶⁵

³⁶¹ Form CO, paragraph 5953-5: Trinexapac-ethyl 175 EC (also known as Optimus) contains an adjuvant system which enables a more efficient and faster uptake of trinexapac-ethyl than previous generations of this PGR. Given the more efficient uptake, the formulation contains only 175 grams of active ingredient per litre and so Optimus results in less trinexapac-ethyl ultimately being sprayed per hectare compared to other products. Chlormequat chloride inhibits the action of the gibberellic acid, resulting in height reduction, strengthening of stems and lodging prevention in cereals and improved fruit trees setting.

³⁶² Form CO, paragraph 5949: 2011: UK, 2012: Germany, Lithuania, Denmark, Poland, Netherlands, Estonia, Austria, 2013: CZ, Belgium, Latvia, Ireland, Switzerland, Sweden, 2014: France (also sold for use on horse bean), Finland, Hungary, 2015: Romania, Slovakia, Bulgaria, 2016: [...].

³⁶³ Notifying Party's response to Commission's request for information RFI 26, question 1 annex 2.

³⁶⁴ Form CO, paragraph 5947.

³⁶⁵ Form CO, paragraph 5956.

- (572) **The two main products of the Parties are each other's closest competitors.** In its internal documents, Adama only compares its products to those of Syngenta.³⁶⁶ For instance, it compares exclusively Optimus products against Moddus product line for several performance parameters such as [...] ³⁶⁷, [...] ³⁶⁸, [...] ³⁶⁹ [...] ³⁷⁰ [...] ³⁷¹. Adama also defines its overall product positioning in opposition to Syngenta's Moddus and recommends "[...]." Furthermore, Adama also describes itself as challenge to Syngenta's leading position in the market: "[...]" ³⁷².
- (573) Moreover, trinexapac-based products have the unique peculiarity of being effective against for almost all potential application for cereal PGR (lodging, ripening, sugar development, and reducing vegetative growth) contrary to other PGR products.³⁷³ The only other competitors to offer trinexapac-ethyl based cereal PGR products are generic players Cheminova, Globachem and Helm.³⁷⁴ However, except for Cheminova which entered the market in 2014 ([5-10]% in 2015 in the EEA for all cereals), none of the other competitors have a market share above [0-5]%. The combined market share of the Parties on a hypothetical market for trinexapac-ethyl-based cereal PGR in the EEA would therefore reach [80-90]% in 2015 (Syngenta [70-80]%, Adama: [10-20]%) and [90-100]% in 2014.³⁷⁵
- (574) Moreover, Syngenta present trinexapac-ethyl175 EC as relatively close to Moddus 250 EC in its value maps assessment.^{376 377}
- (A) Result of market investigation
- (575) From the market investigation, the Commission has also identified several indicators of closeness of competition between the Parties.
- (576) As regards plant growth regulators for cereals, many distributors have indicated that the Parties' products are close competitors (especially Adama's Trimax³⁷⁸ and Syngenta's Moddus^{379,380}) and a large majority consider that the Parties are competing head-to-head.³⁸¹ When asked in which crops, the Parties have a strong position, several distributors in different EEA countries mention PGR for cereals. One Belgian distributor and one German distributor consider that the Parties have a strong position in cereal PGRs.³⁸² One German distributor explains that "*on the market for PGR, the Parties are on equal footing as regards trinexapac products*".³⁸³ When

³⁶⁶ Notifying Party's response to Commission's request for information RFI 25, annex 2.2: "[...]".

³⁶⁷ Notifying Party's response to Commission's request for information RFI 25, annex 2.2, slide 32.

³⁶⁸ Notifying Party's response to Commission's request for information RFI 25, annex 2.2, slide 35 [...].

³⁶⁹ Notifying Party's response to Commission's request for information RFI 25, annex 2.2 slide 36.

³⁷⁰ Notifying Party's response to Commission's request for information RFI 25, annex 2.2 slide 37.

³⁷¹ Notifying Party's response to Commission's request for information RFI 25, annex 2.2 slide 38.

³⁷² Notifying Party's response to Commission's request for information RFI 17, annex 2, slide 59.

³⁷³ From CO, paragraph 5981.

³⁷⁴ Form CO, paragraphs 5966 and 5971.

³⁷⁵ Form CO, paragraph 5991.

³⁷⁶ Notifying Party's response to Commission's request for information RFI 22, annex 43, [...], slide 12.

³⁷⁷ Syngenta's value map is a tool Syngenta uses to set the prices of the products [...].

³⁷⁸ See <http://www.adama.com/france/fr/protection-plantes/gestion-de-la-croissance/trimaxx.html>.

³⁷⁹ See <https://www.syngenta.fr/produits/protection-des-cultures/regulateurs-de-croissance/moddus>.

³⁸⁰ Replies to question 49 of Questionnaire (Q2) to crop protection distributors.

³⁸¹ Replies to question 47 of Questionnaire (Q2) to crop protection distributors.

³⁸² Replies to question 48 of Questionnaire (Q2) to crop protection distributors.

³⁸³ *Ibidem*.

asked to identify crops markets in which Adama is a particularly strong generic challenger to Syngenta, a large number of distributors in Belgium, France, Finland and Germany mention PGR for cereals.³⁸⁴

- (577) Some competitors also note that both Parties are active in cereals PGR products and that Syngenta's leading market share in the EEA for cereals PGR could further increase.³⁸⁵ One explains for instance that "*Syngenta and Adama have a particularly strong position in growth regulators in cereals*".³⁸⁶

13.2.4.2. Markets where the Transaction would not significantly impede effective competition

(A) Cereals - Barley - PGR - Germany/Austria

- (578) In the market for barley PGR in Germany/Austria, the Parties have a combined market share of [40-50]% (Syngenta: [30-40]%, Adama: [10-20]%).
- (579) As a result of the Transaction, the Parties will be market leader followed by BASF with [20-30]% market share.
- (580) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (581) Other competitors currently present in the market are CBW Chemie ([20-30]%) and FMC/Cheminova ([5-10]%). Among these competitors, two rivals are generic players (CBW Chemie, FMC/Cheminova).
- (582) The Parties are not particularly close competitors. Whereas the Parties share the same common active ingredient, it is also used exclusively by three other competitors (Cheminova, Globachem and Helm).³⁸⁷
- (583) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for barley PGR in Germany/Austria.

(B) Cereals - Barley - PGR - Hungary

- (584) In the market for barley PGR in Hungary, the Parties have a combined market share of [50-60]% (Syngenta: [50-60]%, Adama: [0-5]%).
- (585) The increment resulting from the Transaction is [0-5]%.
- (586) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (587) As a result of the Transaction, the Parties will remain market leader but it will still be closely followed by BASF with [30-40]% market share. The other competitor currently present in the market is Bayer ([10-20]%).
- (588) The Transaction will not materially change the competitive dynamics as Adama had a very low share compared to the main R&D competitors remaining in this market. After the merger, Syngenta will continue to be challenged by BASF and Bayer and the elimination of Adama would not substantially change the market structure.

³⁸⁴ Replies to question 52 of Questionnaire (Q2) to crop protection distributors.

³⁸⁵ Reply to question 110.1 of Questionnaire (Q3) to crop protection competitors.

³⁸⁶ Reply to question 110.1 of Questionnaire (Q3) to crop protection competitors.

³⁸⁷ Form CO, paragraph 6017.

(589) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for barley PGR in Hungary.

(C) Cereals - Barley - PGR - Lithuania

(590) In the market for cereals/barley for PGR in Lithuania, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [10-20]%), but it will be closely followed by BASF ([30-40]%). Nufarm ([5-10]%) and Bayer ([5-10]%) are also present in this market

(591) The increment of resulting from the Transaction is [10-20]%.

(592) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(593) Three players are present in the market BASF, Nufarm and Bayer. Among these competitors, Nufarm is a generic player. Bayer has a strong position and will continue to challenge the Parties.

(594) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cereals/barley for PGR in Lithuania.

(D) Cereals - Barley - PGR - Slovakia

(595) In the market for cereals/barley for PGR in Slovakia, the Parties would remain market leader with a combined share of [30-40]% (Adama [5-10]%, Syngenta [30-40]%), followed by Bayer ([20-30]%), and Nufarm ([10-20]%) in 2015.

(596) The increment of resulting from the Transaction is [5-10]%.

(597) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(598) There are two other competitors that are currently present in the market Bayer and Nufarm.³⁸⁸ Bayer has a significant share ([20-30]%) and will continue to challenge the Parties post-Transaction.

(599) Nufarm is a generic player with a market share of [10-20]%, which is significantly larger than Adama. Nufarm is therefore in a position to provide strong generic competition post-merger.

(600) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cereals/barley for PGR in Slovakia.

(E) Cereals - Other cereals - PGR - Belgium

(601) In the market for other cereals PGR in Belgium, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [10-20]%).

³⁸⁸ Form CO, paragraph 6118 also mentions Kolin with a market share of [5-10]% but is not identified in the reworked results used a basis of this Decision.

- (602) The increment resulting from the Transaction is [10-20]%.
- (603) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (604) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor in the market. The other competitor currently present in the market is BASF ([40-50]%), which is significantly larger than the merged entity. According to the Parties' submission, [30-40]% of the market is represented by Other Competitors.
- (605) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals PGR in Belgium.
- (F) Cereals - Other cereals - PGR - Denmark
- (606) In the market for other cereals PGR in Denmark, the Parties have a combined market share of [70-80]% (Syngenta: [70-80]%, Adama: [0-5]%).
- (607) The increment brought by Adama is [0-5]% and represent a turnover of only [...].
- (608) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (609) As a result of the Transaction, the Parties will remain market leader followed by BASF with [20-30]% market share. The other competitor currently present in the market is Bayer ([0-5]%).
- (610) The Transaction will not materially change the competitive dynamics as Adama had a very low share compared to the main R&D competitors remaining in this market. After the merger, Syngenta will continue to be challenged by BASF and Bayer and the elimination of Adama does not substantially change the market structure.
- (611) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals PGR in Denmark.
- (G) Cereals - Other cereals - PGR - Latvia
- (612) In the market for other cereals PGR in Latvia, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).
- (613) The increment resulting from the Transaction is [10-20]%.
- (614) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (615) As a result of the Transaction, the Parties will be market leader but followed closely by BASF with [30-40]% market share.
- (616) Other identified competitors currently present in the market are Nufarm ([10-20]%) and Bayer ([5-10]%). Among these competitors, at least one rival is a generic player (Nufarm).
- (617) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold PGR product registrations for other cereals in Latvia and

therefore are active or potentially active in this market including large generic players such as FMC and UPL.

(618) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals PGR in Latvia.

(H) Cereals - Other cereals - PGR - Netherlands

(619) In the market for other cereals PGR in the Netherlands, the Parties have a combined market share of [20-30]% (Syngenta: [20-30]%, Adama: [5-10]%).

(620) The increment resulting from the Transaction is [5-10]%.

(621) Although the level of HHI is not very high in this market, the increase brought about by the Transaction is substantial: the HHI level post-Transaction would be [...] with a delta of [...].

(622) As a result of the Transaction, the Parties will be market leader closely followed by BASF with [20-30]% market share.

(623) According to the Parties' submission, [50-60]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold PGR product registrations for other cereals in the Netherlands and therefore are active or potentially active in this market including large generic players such as FMC and Globachem.

(624) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals PGR in the Netherlands.

(I) Cereals - Other cereals - PGR - Poland

(625) In the market for other cereals PGR in Poland, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).

(626) The increment resulting from the Transaction is [10-20]%.

(627) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(628) As a result of the Transaction, the Parties will be market leader but followed closely by Bayer with [20-30]% market share.

(629) A high number of other competitors are currently present in the market, namely BASF ([10-20]%), Nufarm ([5-10]%), FMC/Cheminova ([5-10]%), Agropharm ([5-10]%), Eastman Chemical Company ([5-10]%) and Kelp Products ([0-5]%). Among these competitors, five rivals are generic players (Nufarm, FMC/Cheminova, Agropharm, Eastman Chemical Company, Kelp Products).

(630) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals PGR in Poland.

(J) Cereals - Wheat - PGR - Czech Republic

- (631) In the market for wheat PGR in Czech Republic, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).
- (632) The increment resulting from the Transaction is [10-20]%.
- (633) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (634) As a result of the Transaction, the Parties will be market leader followed by Agrovista with [10-20]% market share.
- (635) A high number of other competitors are currently present in the market, namely BASF ([10-20]%), Bayer ([10-20]%), Agro Alliance ([0-5]%), Nufarm ([0-5]%) and Eastman Chemical Company ([0-5]%). Among these competitors, four rivals are generic players (Agrovista, Agro Alliance, Nufarm, Eastman Chemical Company) and one (Agrovista) is larger than Adama.
- (636) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat PGR in Czech Republic.

(K) Cereals - Wheat - PGR - Denmark

- (637) In the market for wheat PGR in Denmark, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (638) The increment resulting from the Transaction is [5-10]%.
- (639) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (640) As a result of the Transaction, the Parties will only be the second largest competitor on the market, behind BASF ([40-50]%) and ahead of Globachem ([5-10]%), Agros ([0-5]%) and Bayer ([0-5]%). Among these competitors, two rivals are generic players (Globachem, Agros). According to the Parties' submission, [5-10]% of the market is represented by Other Competitors.
- (641) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat PGR in Denmark.

(L) Cereals - Wheat - PGR - Latvia

- (642) In the market for wheat PGR in Latvia, the Parties have a combined market share of [50-60]% (Syngenta: [50-60]%, Adama: [0-5]%).
- (643) The increment resulting from the Transaction is [0-5]% and amounts to only [...].³⁸⁹
- (644) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (645) As a result of the Transaction, the Parties will remain market leader but followed by BASF with a large market share of [30-40]%.

³⁸⁹ Form CO, paragraph 6190.

- (646) Other identified competitors currently present in the market are BASF ([30-40]%), Bayer ([5-10]%) and Nufarm ([5-10]%). Among these competitors, at least one competitor is a generic player (Nufarm), which is larger than Adama.
- (647) The Transaction will not materially change the competitive dynamics as Adama had a very low share compared to the main R&D competitors remaining in this market. After the merger, Syngenta will continue to be challenged by BASF (and to some extent Nufarm and Bayer) and the elimination of Adama does not substantially change the market structure
- (648) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat PGR in Latvia.

(M) Cereals - Wheat – PGR- Hungary

- (649) First, in the market for cereals/wheat for PGR in Hungary, the Parties would be post-Transaction the second largest competitor with a combined share of [30-40]% (Adama [0-5]%, Syngenta [30-40]%), with BASF as market leader ([40-50]%) and Nufarm ([10-20]%) as a challenger.
- (650) The increment of resulting from the Transaction is [0-5]%.
- (651) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (652) There are two other competitors are currently present in the market Nufarm and BASF. BASF is the leader with a very significant share ([40-50]%) and will continue to challenge the Parties post-Transaction.
- (653) Nufarm is a generic player with a market share of [10-20]%, which is significantly larger than Adama. Nufarm is therefore in a position to provide strong generic competition post-merger.
- (654) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cereals/wheat for PGR in Hungary.

(N) Non-problematic markets with low concentration level/increase

- (655) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals PGRs markets listed in Table 32 based on 2015 market shares.

Table 32: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Barley - PGR - France	[5-10]%	[20-30]%	[20-30]%	[...]	[...]
Barley - PGR - Latvia	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Wheat - PGR - UK	[5-10]%	[10-20]%	[20-30]%	[...]	[...]

(O) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

- (656) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals fungicides markets listed in Table 33 based on 2015 market shares.

Table 33: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Wheat – PGR -France	[5-10]%	[10-20]%	[20-30]%	BASF	[40-50]%	Desangosse	[5-10]%	FMC/Che-minova	[0-5]%

13.2.4.3. Markets where the Transaction would significantly impede effective competition

Table 34: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
PGR	Barley - PGR - Czech Republic	2015	[30-40]%	[30-40]%	[5-10]%
		2014	[30-40]%	[30-40]%	[5-10]%
		2013	[30-40]%	[30-40]%	[5-10]%
	Barley - PGR - Estonia	2015	[40-50]%	[20-30]%	[10-20]%
		2014	[40-50]%	[10-20]%	[20-30]%
		2013	[20-30]%	[5-10]%	[20-30]%
	Barley - PGR - Finland	2015	[80-90]%	[70-80]%	[5-10]%
		2014	[80-90]%	[70-80]%	[0-5]%
		2013	N/A	N/A	N/A
	Barley - PGR - Netherlands	2015	[80-90]%	[60-70]%	[20-30]%
		2014	[60-70]%	[50-60]%	[10-20]%
		2013	[60-70]%	[50-60]%	[10-20]%
	Barley - PGR - Poland	2015	[60-70]%	[40-50]%	[10-20]%
		2014	[60-70]%	[40-50]%	[10-20]%
		2013	[50-60]%	[40-50]%	[10-20]%
	Other Cereals - PGR - Estonia	2015	[50-60]%	[5-10]%	[40-50]%
		2014	[50-60]%	[0-5]%	[50-60]%
		2013	[40-50]%	[0-5]%	[30-40]%
	Other Cereals - PGR - Finland	2015	[80-90]%	[70-80]%	[10-20]%
		2014	[80-90]%	[70-80]%	[5-10]%
		2013	N/A	N/A	N/A
	Other Cereals – PGR – Germany/Austria	2015	[30-40]%	[20-30]%	[10-20]%
		2014	[30-40]%	[20-30]%	[5-10]%
		2013	[30-40]%	[20-30]%	[5-10]%
	Other Cereals - PGR- Lithuania	2015	[60-70]%	[0-5]%	[50-60]%
		2014	[60-70]%	[5-10]%	[60-70]%
		2013	[60-70]%	[0-5]%	[60-70]%
	Other Cereals – PGR - Sweden	2015	[40-50]%	[40-50]%	[5-10]%
		2014	[30-40]%	[30-40]%	[5-10]%
		2013	[30-40]%	[30-40]%	[0-5]%

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
	Wheat – PGR - Belgium	2015	[40-50]%	[10-20]%	[20-30]%
		2014	[30-40]%	[30-40]%	[5-10]%
		2013	[30-40]%	[30-40]%	[5-10]%
	Wheat – PGR - Estonia	2015	[40-50]%	[30-40]%	[10-20]%
		2014	[30-40]%	[20-30]%	[10-20]%
		2013	N/A	N/A	N/A
	Wheat – PGR - Finland	2015	[40-50]%	[30-40]%	[5-10]%
		2014	[50-60]%	[40-50]%	[0-5]%
		2013	N/A	N/A	N/A
	Wheat – PGR – Germany/Austria	2015	[50-60]%	[40-50]%	[5-10]%
		2014	[60-70]%	[50-60]%	[5-10]%
		2013	[50-60]%	[50-60]%	[5-10]%
	Wheat – PGR- Lithuania	2015	[40-50]%	[20-30]%	[20-30]%
		2014	[40-50]%	[20-30]%	[20-30]%
		2013	[40-50]%	[20-30]%	[20-30]%
	Wheat - PGR - Netherlands	2015	[50-60]%	[30-40]%	[20-30]%
		2014	[50-60]%	[30-40]%	[10-20]%
		2013	[50-60]%	[40-50]%	[10-20]%
	Wheat – PGR - Poland	2015	[70-80]%	[60-70]%	[10-20]%
		2014	[70-80]%	[60-70]%	[10-20]%
		2013	[70-80]%	[50-60]%	[10-20]%
	Wheat - PGR - Slovakia	2015	[40-50]%	[30-40]%	[10-20]%
		2014	N/A	N/A	N/A
		2013	N/A	N/A	N/A
	Wheat - PGR - Sweden	2015	[40-50]%	[20-30]%	[20-30]%
		2014	[50-60]%	[30-40]%	[20-30]%
		2013	[30-40]%	[30-40]%	[0-5]%

(A) Cereals - Barley - PGR - Czech Republic

- (657) First, in the market for cereals/barley for PGR, the Parties would be post-Transaction the market leader in the Czech Republic with a combined market share of [30-40]% (Adama [5-10]%, Syngenta [30-40]%), followed by Bayer ([30-40]%) and BASF ([20-30]%) in 2015.
- (658) Second, albeit the increment resulting from the Transaction ([5-10]%) is comparatively small, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (659) Third, only three significant competitors other than the Parties are currently present in the market (Bayer, BASF) and a generic player Taminco ([5-10]%).
- (660) Fifth, the Transaction eliminates a dynamic alternative as Adama has entered the market in 2013 and has since then been increasing its sales between 2013 and 2015

in the market for cereals/barley for PGR in the Czech Republic (2013: [0-5]%; 2015: [5-10]%).³⁹⁰

- (661) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus Archer Turbo pack and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.
- (662) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new entrants, mainly generic players to enter this market due to low regulatory barriers. However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (663) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for PGR in the Czech Republic.

(B) Cereals - Barley - PGR - Estonia

- (664) First, in the market for cereals/barley for PGR in Estonia, the Parties would be post-Transaction the clear market leader with a combined share of [40-50]% (Adama [10-20]%, Syngenta [20-30]%), followed by BASF ([30-40]%) and Bayer ([10-20]%). The merged entity will therefore hold a share [50-60]% larger than its nearest competitor.
- (665) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (666) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (667) Fourth, only two other competitors are currently present in the market BASF and Bayer. None are generic players.
- (668) Fifth, the Transaction eliminates a dynamic player as Syngenta has been increasing its sales between 2014 and 2015 in the market for PGR for Cereals/Barley in Estonia (2014: [10-20]%; 2015: [20-30]%) as well as Adama.
- (669) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.³⁹¹
- (670) Furthermore, the Parties argue that that their shares in this segment are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new entrants, mainly generic players to enter this market due

³⁹⁰ Form CO, paragraph 5949.

³⁹¹ Form CO, paragraph 6210. BASF and Bayer use chlormequat-chloride, ethephon and mepiquat-chloride.

to low regulatory barriers.³⁹² However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(671) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for PGR in Estonia.

(C) Cereals - Barley - PGR - Finland

(672) First, in the market for cereals/barley for PGR in Finland, the Parties would be post-Transaction the clear market leader with a combined share of [80-90]% (Adama [5-10]%, Syngenta [70-80]%), followed by BASF ([10-20]%) and Bayer ([5-10]%) in 2015. The merged entity will therefore hold a share more 7 times larger than its nearest competitor.

(673) Second, the increment resulting from the Transaction is [5-10]%, which is significant in a very concentrated market.

(674) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(675) Fourth, only three other competitors are currently present in the market including BASF and Bayer.

(676) Fifth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.³⁹³

(677) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new generic entrants such as Helm, Globachem and Nufarm, to enter this market due to low regulatory barriers.³⁹⁴ However, the Commission has found no indication that there will be any new entrants in the short term and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(678) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for PGR in Finland, notably through creation or strengthening of a dominant position.

³⁹² Form CO, paragraphs 6214-6216.

³⁹³ Form CO, paragraph 6158. BASF and Bayer use the following AI: chlormequat-chloride, ethephon and mepiquat-chloride.

³⁹⁴ Form CO, paragraphs 6162-6164.

(D) Cereals - Barley - PGR - Netherlands

- (679) First, in the market for cereals/barley for PGR in the Netherlands, the Parties would be post-Transaction the market leader with a combined share of [80-90]% (Adama [20-30]%, Syngenta [60-70]%), followed by BASF ([10-20]%) in 2015.
- (680) Second, the increment resulting from the Transaction is [20-30]%, which is significant.
- (681) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (682) Fourth, only one other competitor is currently present in the market (BASF).³⁹⁵ There are no generic players among competitors.
- (683) Fifth, the Transaction eliminates a player that has been growing recently and animated competition as Adama has entered the market in 2012 and been increasing its sales between 2013 and 2015 in the market for PGR for cereals/barley in the Netherlands (2013: [10-20]% 2014: [10-20]%; 2015: [20-30]%).³⁹⁶
- (684) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.³⁹⁷
- (685) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and expect new entrants, mainly generic players, to enter this market due to low regulatory barriers.³⁹⁸ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (686) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for PGR in the Netherlands, notably through creation or strengthening of a dominant position.

(E) Cereals - Barley - PGR - Poland

- (687) First, in the market for cereals/barley for PGR in Poland, the Parties would be post-Transaction the market leader with a combined share of [60-70]% (Adama [10-20]%, Syngenta [40-50]%), followed by Bayer ([20-30]%), Cheminova/FMC ([0-5]%) and BASF ([0-5]%) in 2015.
- (688) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

³⁹⁵ Form CO, paragraph 6118 also mentions Kolin with a market share of [5-10]% but is not identified in the reworked results used a basis of this Decision.

³⁹⁶ Form CO, paragraph 5949.

³⁹⁷ Form CO, paragraph 6120. BASF uses mepiquat-chloride and prohexadione-Ca as AIs.

³⁹⁸ Form CO, paragraphs 6223-6225.

- (689) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (690) Fourth, only three other competitors are currently present in the market Bayer, Cheminova/FMC and BASF.³⁹⁹ Among these competitors, only one, Cheminova/FMC, is a generic player and it is much smaller than Adama.
- (691) Fifth, the Transaction eliminates a dynamic player as Adama is a new entrant in the market for PGR for cereals/barley in Poland (2012).⁴⁰⁰
- (692) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to most products of competitors.⁴⁰¹ Whereas the Parties submit that Cheminova, Globachem and Helm sell trinexapac-ethyl based PGRs for barley, they only attribute a market share to Cheminova/FMC and this market share is minimal ([0-5]%).⁴⁰²
- (693) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF, Cheminova/FMC, and Nufarm and expect new entrants, mainly generic players, to enter this market due to low regulatory barriers.⁴⁰³ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (694) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for PGR in Poland, notably through the creation of a dominant position.

(F) Cereals - Other Cereals - PGR - Estonia

- (695) First, in the market for cereals/other cereals for PGR in Estonia, the Parties would be post-Transaction the clear market leader with a combined share of [50-60]% (Adama [40-50]%, Syngenta [5-10]%), followed by BASF ([30-40]%) and Bayer ([10-20]%) in 2015. The merged entity will therefore hold a share [50-60]% larger than its nearest competitor.
- (696) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a dynamic player which has grown its share recently.
- (697) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

³⁹⁹ Form CO, paragraph 6042 also mentions Agropak with a market share of [0-5]% and Kelps products with a market share of [0-5]% in 2015 but they are not identified in the reworked results used a basis of this Decision.

⁴⁰⁰ Form CO, paragraph 5949.

⁴⁰¹ Form CO, paragraph 6208. Competitors use the following AIs: chlormequat-chloride, ethephon, sodium-compounds, mepiquat-chloride.

⁴⁰² Form CO, paragraph 6043.

⁴⁰³ Form CO, paragraphs 6214-6216.

- (698) Fourth, only three other competitors are currently present in the market. None are generic players.
- (699) Fifth, the Transaction eliminates a dynamic player as Syngenta has been increasing its sales between 2013 and 2015 in the market for PGR for cereals/other cereals in Estonia (2013: [0-5]%; 2014: [0-5]%; 2015: [5-10]%).
- (700) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴⁰⁴
- (701) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new entrants, mainly generic players to enter this market due to low regulatory barriers.⁴⁰⁵ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (702) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other cereals for PGR in Estonia, notably through the creation or strengthening of a dominant position.

(G) Cereals - Other Cereals - PGR - Finland

- (703) First, in the market for cereals/other cereals for PGR in Finland, the Parties would be post-Transaction the clear market leader with a combined share of [80-90]% (Adama [10-20]%, Syngenta [70-80]%), followed by BASF ([10-20]%), Nufarm ([5-10]%) and Bayer ([5-10]%) in 2015. The merged entity will therefore hold a share almost eight times larger than its nearest competitor.
- (704) Second, the increment resulting from the Transaction is [10-20]%, which is significant in an already concentrated market.
- (705) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (706) Fourth, only three other competitors are currently present in the market. None is a generic player.
- (707) Fifth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴⁰⁶

⁴⁰⁴ Form CO, paragraph 6212. BASF and Bayer use chlormequat-chloride, ethephon and mepiquat-chloride.

⁴⁰⁵ Form CO, paragraphs 6214-6216.

⁴⁰⁶ Form CO, paragraph 6160. BASF and Bayer use the following AI: chlormequat-chloride, ethephon and mepiquat-chloride.

- (708) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new generic entrants such as Helm, Globachem and Nufarm, to enter this market due to low regulatory barriers.⁴⁰⁷ However, the Commission has found no indications of any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (709) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other cereals for PGR in Finland, notably through creation or strengthening of a dominant position.
- (H) Cereals - Other Cereals – PGR – Germany/Austria
- (710) First, in the market for cereals/other cereals for PGR in Germany/Austria, the Parties would be post-Transaction the market leader with a combined share of [30-40]% (Adama [10-20]%, Syngenta [20-30]%), followed by BASF ([10-20]%) and Cheminova/FMC ([10-20]%) in 2015. The merged entity will therefore hold a share twice as large as its nearest competitor.
- (711) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.
- (712) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (713) Fourth, only two identified other competitors are currently present in the market.⁴⁰⁸
- (714) Fifth, the Transaction eliminates a dynamic player as Adama is a new entrant in the market for PGR for cereals/other cereals in Germany/Austria (2012).⁴⁰⁹
- (715) Sixth, the Parties' are close competitors. Syngenta is present on the market with Moddus ME 250 and Moddus 250 DC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's products compete directly with Syngenta's products as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to most products of competitors except that of Cheminova/FMC.⁴¹⁰
- (716) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF, Cheminova/FMC, and Nufarm and expect new entrants, mainly generic players, to enter this market due to low regulatory barriers.⁴¹¹ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore,

⁴⁰⁷ Form CO, paragraphs 6162-6164.

⁴⁰⁸ Form CO, paragraph 6018 also mentions Taminco with a market share of [5-10]% in 2014 and CBW-Chemie products with a market share of [10-20]% in 2014 but they are not identified in the reworked results used a basis of this Decision for 2015.

⁴⁰⁹ Form CO, paragraph 5949.

⁴¹⁰ Form CO, paragraph 6217. Competitors use the following AIs: chlormequat-chloride, ethephon, sodium-compounds, mepiquat-chloride, prohexadiona-Ca.

⁴¹¹ Form CO, paragraphs 6214-6216.

contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(717) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other cereals for PGR in Germany/Austria.

(I) Cereals - Other Cereals - PGR- Lithuania

(718) First, in the market for cereals/other cereals for PGR in Lithuania, the Parties would be post-Transaction the clear market leader with a combined share of [60-70]% (Adama [0-5]%, Syngenta [50-60]%), followed by BASF ([30-40]%) and Bayer ([5-10]%) in 2015. The merged entity will therefore hold a share twice as large as its nearest competitor.

(719) Second, the increment of resulting from the Transaction is [0-5]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

(720) Third, only two other competitors are currently present in the market. None are generic players.

(721) Fourth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴¹²

(722) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new entrants such as Helm, mainly generic players to enter this market due to low regulatory barriers.⁴¹³ However, the Commission has found no indications that there will be any new entrants in the near future. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(723) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other cereals for PGR in Lithuania, notably through creation or strengthening of a dominant position.

(J) Cereals - Other Cereals – PGR - Sweden

(724) First, in the market for cereals/other cereals for PGR in Sweden, the Parties would be post-Transaction clear market leader with a combined share of [40-50]% (Adama [5-10]%, Syngenta [40-50]%), followed by BASF ([40-50]%) and Bayer ([10-20]%) in 2015.

(725) Second, the increment of resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a dynamic player in a

⁴¹² Form CO, paragraph 6226. BASF and Bayer use chlormequat-chloride, ethephon and mepiquat-chloride.

⁴¹³ Form CO, paragraphs 6228-6230.

concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

- (726) Fourth, only two other competitors are currently present in the market BASF, and Bayer. Among the significant identifiable competitors, none is a generic player.
- (727) Fifth, the Transaction eliminates a new entrant as Adama has entered the market in 2014.⁴¹⁴
- (728) Fifth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴¹⁵
- (729) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new generic entrants to enter this market due to low regulatory barriers.⁴¹⁶ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (730) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other cereals wheat for PGR in Sweden.

(K) Cereals - Wheat – PGR - Belgium

- (731) First, in the market for cereals/wheat for PGR in Belgium, the Parties would be post-Transaction the clear market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [10-20]%), followed by BASF ([40-50]%) and Cheminova/FMC ([5-10]%) Nufarm ([0-5]%) and Bayer ([0-5]%) in 2015.
- (732) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.
- (733) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (734) Fourth, among significant competitors, only two, Nufarm and Cheminova/FMC are generic players and they are much smaller than Adama.
- (735) Fifth, the Transaction eliminates a player that has been growing recently as Adama has entered the market in 2013 and has been increasing its sales between 2013 and 2015 in this market (2013: [5-10]% 2014: [5-10]%; 2015: [20-30]%).^{417,418}
- (736) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's

⁴¹⁴ Form CO, paragraph 5949.

⁴¹⁵ Form CO, paragraph 6146. BASF and Bayer use the following AI: chlormequat-chloride, ethephon and mepiquat-chloride.

⁴¹⁶ Form CO, paragraphs 6148-6150.

⁴¹⁷ Form CO, paragraph 6087.

⁴¹⁸ Form CO, paragraph 5949.

product competes directly with Syngenta's product as explained in para Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴¹⁹

(737) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Cheminova/FMC and expect new entrants, mainly generic players to enter this market due to low regulatory barriers.⁴²⁰ However, the Commission has found no indication that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(738) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in Belgium.

(L) Cereals - Wheat – PGR - Estonia

(739) First, in the market for cereals/wheat for PGR in Estonia, the Parties would be post-Transaction the clear market leader with a combined share of [40-50]% (Adama [10-20]%, Syngenta [30-40]%), followed by BASF ([30-40]%) and Bayer ([10-20]%) in 2015. The merged entity will therefore hold a share [50-60]% larger than its nearest competitor.

(740) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.

(741) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(742) Fourth, only two other competitors are currently present in the market. None are generic players

(743) Fifth, the Transaction eliminates a dynamic player as Syngenta has been increasing its sales between 2013 and 2015 in the market for PGR for cereals/other cereals in Estonia (2013: [5-10]%, 2014: [20-30]%; 2015: [30-40]%).⁴²¹

(744) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's products as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴²²

(745) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new entrants, mainly generic players to come in this market

⁴¹⁹ Form CO, paragraph 6088. BASF and others use the following IAS: chlormequat-chloride and mepiquat-chloride.

⁴²⁰ Form CO, paragraphs 6095-6099.

⁴²¹ Form CO, paragraph 6207.

⁴²² Form CO, paragraph 6208. BASF and Bayer use chlormequat-chloride, ethephon and mepiquat-chloride.

due to low regulatory barriers.⁴²³ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(746) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in Estonia.

(M) Cereals - Wheat – PGR - Finland

(747) First, in the market for cereals/wheat for PGR in Finland, the Parties would be post-Transaction the second biggest competitor with a combined share of [40-50]% (Adama [5-10]%, Syngenta [30-40]%), followed by BASF ([40-50]%) and Bayer ([5-10]%) in 2015.

(748) Second, the increment of resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

(749) Fourth, only three other competitors are currently present in the market BASF, and Bayer. None are generic players.

(750) Fifth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's products as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴²⁴

(751) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new generic entrants such as Helm, Globachem and Nufarm, to enter this market due to low regulatory barriers.⁴²⁵ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(752) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other wheat for PGR in Finland.

(N) Cereals - Wheat – PGR – Germany/Austria

(753) First, in the market for cereals/wheat for PGR in Germany/Austria, the Parties would be post-Transaction the market leader with a combined share of [50-60]% (Adama [5-10]%, Syngenta [40-50]%), followed by BASF ([20-30]%), and Cheminova/FMC ([5-10]%) in 2015.

⁴²³ Form CO, paragraphs 6214-6216.

⁴²⁴ Form CO, paragraph 6156. BASF and Bayer use the following AI: chlormequat-chloride, ethephon and mepiquat-chloride.

⁴²⁵ Form CO, paragraphs 6162-6164.

- (754) Second, the increment of resulting from the Transaction is [5-10]%, which is significant in an already concentrated market.
- (755) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (756) Fourth, only two other competitors are currently present in the market Cheminova/FMC and BASF.⁴²⁶
- (757) Fifth, the Transaction eliminates a dynamic player as Adama is a new entrant in the market for PGR for cereals/wheat in Germany/Austria (2012).⁴²⁷
- (758) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus ME 250 and Moddus 250 DC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's products compete directly with Syngenta's as explained in Section 12.2.4. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to most products of competitors except that of Cheminova/FMC.⁴²⁸
- (759) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF, Cheminova/FMC, and Nufarm and expect new entrants, mainly generic players, to enter this market due to low regulatory barriers.⁴²⁹ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (760) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in Germany/Austria, notably through creation or strengthening of a dominant position.
- (O) Cereals - Wheat – PGR- Lithuania
- (761) First, in the market for cereals/wheat for PGR in Lithuania, the Parties would be post-Transaction the clear market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [20-30]%), followed by BASF ([30-40]%), and Bayer ([5-10]%) in 2015.
- (762) Second, the increment of resulting from the Transaction is [20-30]%, which is significant.
- (763) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (764) Fourth, only four other competitors are currently present in the market. Among those competitors, only Nufarm and Rogita-Agro are generic players.

⁴²⁶ Form CO, paragraph 6018 also mentions Taminco with a market share of [5-10]% in 2014 and CBW-Chemie products with a market share of [0-5]% in 2014 but they are not identified in the reworked results used a basis of this Decision for 2015.

⁴²⁷ Form CO, paragraph 5949.

⁴²⁸ Form CO, paragraph 6217. Competitors use the following AIs: chlormequat-chloride, ethephon, sodium-compounds, mepiquat-chloride, prohexadiona-Ca.

⁴²⁹ Form CO, paragraphs 6214-6216.

- (765) Fifth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴³⁰
- (766) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new entrants such as Helm, mainly generic players to enter this market due to low regulatory barriers.⁴³¹ However, the Commission has found no indications that there will be any new entrants in the near future and that they would significantly change competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (767) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in Lithuania.
- (P) Cereals - Wheat - PGR - Netherlands
- (768) First, in the market for cereals/wheat for PGR in the Netherlands, the Parties would be post-Transaction the market leader with a combined share of [50-60]% (Adama [20-30]%, Syngenta [30-40]%), followed by BASF ([20-30]%) and UPL ([5-10]%) in 2015.
- (769) Second, the increment of resulting from the Transaction is [20-30]%, which is significant.
- (770) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (771) Fourth, there are only two other competitors currently present in the market.⁴³² One is a generic player (UPL).
- (772) Fifth, the Transaction eliminates a dynamic player as Adama has entered the market in 2012 and been increasing its sales between 2013 and 2015 in the market for PGR for cereals/wheat in the Netherlands (2013: [10-20]% 2014: [10-20]%; 2015: [20-30]%).⁴³³
- (773) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴³⁴

⁴³⁰ Form CO, paragraph 6222. BASF and Bayer use chlormequat-chloride, ethephon and mepiquat-chloride.

⁴³¹ Form CO, paragraphs 6228-6230.

⁴³² Form CO, paragraph 6117 also mentions Nufarm with a market share of [10-20]% but is not identified in the reworked results used a basis of this Decision.

⁴³³ Form CO, paragraph 6117.

⁴³⁴ Form CO, paragraph 6120. BASF uses mepiquat-chloride and prohexadione-Ca as AIs.

- (774) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and expect new entrants, mainly generic players, to enter this market due to low regulatory barriers.⁴³⁵ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (775) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in the Netherlands, notably through creation or strengthening of a dominant position.
- (Q) Cereals - Wheat – PGR - Poland
- (776) First, in the market for cereals/wheat for PGR in Poland, the Parties would be post-Transaction the market leader with a combined share of [70-80]% (Adama [60-70]%, Syngenta [10-20]%), followed by BASF ([10-20]%), Nufarm ([5-10]%), Bayer ([0-5]%), FMC/Cheminova ([0-5]%) in 2015.
- (777) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.
- (778) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (779) Fourth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to most products of competitors.⁴³⁶ Whereas the Parties submit that Cheminova, Globachem and Helm sell trinexapac-ethyl based PGRs for wheat, they only attribute a market share to Cheminova and this market share is minimal ([0-5]%).⁴³⁷
- (780) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF, Nufarm, Bayer, FMC/Cheminova and expect new entrants, mainly generic players, to enter this market due to low regulatory barriers.⁴³⁸ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (781) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in Poland, notably through creation or strengthening of a dominant position.

⁴³⁵ Form CO, paragraphs 6223-6225.

⁴³⁶ Form CO, paragraph 6241. Competitors use the following AIs: chlormequat-chloride, ethephon, sodium-compounds, mepiquat-chloride, prohexadione-Ca.

⁴³⁷ Form CO, paragraph 6043.

⁴³⁸ Form CO, paragraphs 6214-6216.

(R) Cereals - Wheat - PGR - Slovakia

- (782) First, in the market for cereals/wheat for PGR in Slovakia, the Parties would be post-Transaction the second biggest competitor with a combined share of [40-50]% (Adama [10-20]%, Syngenta [30-40]%), after Nufarm ([50-60]%) and ahead of Bayer ([0-5]%) in 2015.
- (783) Second, the increment resulting from the Transaction is [10-20]%.
- (784) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (785) Fourth, only two other competitors are currently present in the market Nufarm and Bayer.⁴³⁹
- (786) Fifth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's product as explained in Section 12.2.4.1. Moreover, both products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴⁴⁰
- (787) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Nufarm and Bayer and expect new entrants, mainly generic players, to come in this market due to low regulatory barriers.⁴⁴¹ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (788) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for PGR in Slovakia.

(S) Cereals - Wheat - PGR - Sweden

- (789) First, in the market for cereals/wheat for PGR in Sweden, the Parties would be post-Transaction clear market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [20-30]%), followed by BASF ([30-40]%) and Bayer ([5-10]%) in 2015.
- (790) Second, the increment of resulting from the Transaction is [20-30]%, which is significant.
- (791) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (792) Fourth, only two competitors are currently present in the market BASF, and Bayer. None are generic players.

⁴³⁹ Form CO, paragraph 6118 also mentions Kolin with a market share of [5-10]% but is not identified in the reworked results used a basis of this Decision.

⁴⁴⁰ Form CO, paragraph 6208. BASF, Kolin and Bayer use chlormequat-chloride, ethephon and mepiquat-chloride.

⁴⁴¹ Form CO, paragraphs 6214-6216.

- (793) Fifth, the Transaction eliminates a dynamic player as Adama has entered the market in 2013 and has been increasing significantly its sales between 2013 and 2015 in the market for PGR for cereals/wheat in Sweden (2013: [0-5]% 2014: [20-30]%; 2015: [20-30]%).⁴⁴²
- (794) Sixth, the Parties are close competitors. Syngenta is present on the market with Moddus 250 EC and Adama with Optimus (Trinexapac-ethyl 175 EC). Adama's product competes directly with Syngenta's products as explained in Section 12.2.4.1. Moreover, both products/some of their products are based on the same AI, trinexapac-ethyl contrary to the products of competitors.⁴⁴³
- (795) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from BASF and Bayer and expect new generic entrants to enter this market due to low regulatory barriers.⁴⁴⁴ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (796) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other wheat for PGR in Sweden.

13.2.5. *Seed treatment for cereals*

13.2.5.1. Overview of seed treatment for cereals

- (797) The value of seed treatment products sold in the EEA amounted to approximately USD [...] in 2015.⁴⁴⁵ In the EEA, seed treatment products are applied on cereals, diverse field crops, corn, and specialty crops.
- (798) By crop, cereals represent half of (USD [...]) the EEA-wide sales of seed treatment products followed by diverse field crops, namely, oilseed rape, sunflowers, sugar beets (USD [...] or [10-20]%), corn (USD [...] or [10-20]%), and vegetables (USD [...] or [5-10]%).⁴⁴⁶
- (799) As regards seed treatment fungicide for cereals, Syngenta's key products are i) Landor ct 050 fs (formula m), ii) variation on the Celest brand (Celest 025 FS (formulam), Celest trio 060 FS and Celest extra 050 FS iii) Vibrance Gold 100 FS iv) Arena C 030 FS. All these products are based on Fludioxonil as an active ingredient except for Vibrance Gold which is based on sedaxane.
- (800) Adama's key products are variations on tebuconazole either straight (tebuconazole 20 WS or tebuconazole 60 FR) or in mixtures (tebuconazole 15 + prochloraz 60 or tebuconazole 20 + imazalil 30 FS).
- (801) As regards seed treatment insecticide for cereals, Syngenta's key products are Austral plus 050 FS, Protection Orge Premium, Celest top 313 fs, Attack 1000 I. Some of

⁴⁴² Form CO, paragraph 5949.

⁴⁴³ Form CO, paragraph 6144. BASF and Bayer use the following AI: chlormequat-chloride, ethephon and mepiquat-chloride.

⁴⁴⁴ Form CO, paragraphs 6148-6150.

⁴⁴⁵ Form CO, paragraph 6263.

⁴⁴⁶ Form CO, paragraph 6263.

these products rely on the same active ingredient as seed treatment fungicide such Austral plus 50 FS based on Fludioxonil and Protection Orge Premium based on Sedaxane whereas Celest top 313 fs, Attack 1000 are based on different active ingredients, respectively thiamethoxam and tefluthrin.

(802) Adama's key product is Imidacloprid 600 FS which is sold either uncoloured or red in some countries (France, Hungary, and Romania).

Table 35: Top cereal seed treatment products of Syngenta in 2015⁴⁴⁷

Product name	Segment (s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
LAND OR CT 050 FS (FORMULAM)	Fungicides	Barley, Other Cereals, Wheat	Seed treatment fungicide for control of snow mold, bunt, dwarf bunt, loose smut, leaf stripe, seedling blight (Septoria and Fusarium) at a use rate of 150 - 200 ml/100 kg	Yes	FLUDIOXONIL	[...]	2002	GERMANY_AUSTRIA
CELEST 025 FS (FORMULAM)	Fungicides	Barley, Other Cereals, Wheat	Seed treatment fungicide for control of snow mold, bunt, seedling blight (Septoria and Fusarium) at a use rate of 150 - 200 ml/100 kg	Yes	FLUDIOXONIL	[...]	2002	BELGIUM, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY_AUSTRIA, ITALY, LATVIA, LITHUANIA, NETHERLANDS, NORWAY, POLAND, SWEDEN, UK
VIBRANCE GOLD 100 FS	Fungicides	Barley, Wheat	Seed treatment fungicide for control of snow mold, bunt, dwarf bunt, loose smut, leaf stripe, seedling blight (Septoria and Fusarium) and Rhizoctonia cereals at a use rate of 150 - 200 ml/100 kg	Yes	SEDAXANE	[...]	2012	CZECH REPUBLIC, FRANCE, GERMANY_AUSTRIA, ITALY, POLAND
CELEST TRIO 060 FS	Fungicides	Barley, Other Cereals, Wheat	Seed treatment fungicide for control of snow mold, bunt, dwarf bunt, loose smut, leaf stripe seedling blight (Septoria and Fusarium) at a use rate of 150 - 200 ml/100 kg	Yes	FLUDIOXONIL	[...]	2012	ESTONIA, FINLAND, GERMANY_AUSTRIA, HUNGARY, ITALY, LATVIA, LITHUANIA, POLAND, SLOVAKIA, UK
CELEST EXTRA 050 FS	Fungicides	Barley, Other Cereals, Wheat	Seed treatment fungicide for control of snow mold, bunt, seedling blight (Septoria and Fusarium) at a use rate of 150 - 200 ml/100 kg	Yes	FLUDIOXONIL	[...]	2004	CROATIA, CZECH REPUBLIC, DENMARK, FRANCE, GERMANY_AUSTRIA, LATVIA, LITHUANIA, POLAND, SLOVENIA, SWEDEN, UK

⁴⁴⁷

Notifying Party's response to Commission's request for information RFI 26, annex 1, question 1.

Product name	Segment (s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
AUSTRAL PLUS 050 FS	Insecticides	Barley, Wheat	Seed treatment fungicide for control of snow mold, bunt, seedling blight (Septoria and Fusarium), wheat bulb fly and wireworms at a use rate of 500 ml/100 kg	Yes	FLUDIOXONIL	[...]	2007	FRANCE, UK
PROTECTION ORGE PREMIUM	Insecticides	Wheat	Seed treatment fungicide for control of snow mold, bunt, seedling blight (Septoria and Fusarium), aphids and wireworms at a use rate of 500 ml/100 kg	Yes	SEDAXANE	[...]	2015	FRANCE
CELEST Top 313 FS	Insecticides	Barley, Wheat	Seed treatment fungicide for control of snow mold, bunt, seedling blight (Septoria and Fusarium), loose smut, leaf stripe, aphids and wireworms at a use rate of 100 - 150 ml/100 kg	Yes	THIAMETHOXAM	[...]	2009	BULGARIA, HUNGARY, ROMANIA
ATTACK 1000 L	Insecticides	Wheat	Insecticide Seed Treatment against Wheat bulb fly and wireworm at 500 ml/100 kg	Yes	TEFLUTHRIN	[...]	2015	FRANCE
ARENA C 030 FS	Fungicides	Wheat	Seed Treatment Fungicide against snow mold, bunt and seedling blight (Fusarium and Septoria) at 200 ml/100 kg	Yes	FLUDIOXONIL	[...]	Before 2002	GERMANY_AUSTRIA

Table 36: Top cereal seed treatment products of Adama in 2015⁴⁴⁸

Product name	Segment(s)	Cereals crop	Use, description	Mixture (yes/no)	Lead AI	EEA Turnover 2015 ('000 USD)	Year of launch in EEA	EEA countries where product used
TEBUCONAZOLE 15 + PROCHLORAZ 60 ES	Fungicides	Barley, Other Cereals, Wheat	Fusarium	Yes	TEBUCONAZOLE	[...]	2013	GERMANY_AUSTRIA
IMIDACLOPRID 600 FS RED	Insecticides	Barley, Other Cereals, Wheat	Aphids	No	IMIDACLOPRID	[...]	2007	FRANCE, HUNGARY, ROMANIA
TEBUCONAZOLE 20 WS	Fungicides	Barley, Other Cereals, Wheat	Fusarium, Ustilago, Tilletia	No	TEBUCONAZOLE	[...]	Before 2006	POLAND, ROMANIA
TEBUCONAZOLE 60 FS	Fungicides	Barley, Other Cereals, Wheat	Fusarium, Ustilago, Tilletia	No	TEBUCONAZOLE	[...]	Before 2006	BULGARIA, CZECH REPUBLIC, HUNGARY, LITHUANIA, ROMANIA
IMIDACLOPRID 600 FS (uncoloured)	Insecticides	Other Cereals	Aphids	No	IMIDACLOPRID	[...]	Before 2006	BELGIUM, NETHERLANDS
TEBUCONAZOLE 20 + IMAZALIL 30 FS	Fungicides	Barley, Other Cereals, Wheat	Fusarium, Ustilago, Microdochium	Yes	TEBUCONAZOLE	[...]	Before 2006	BULGARIA, CZECH REPUBLIC, HUNGARY, ROMANIA

(803) Adama does not have any innovative active ingredients or formulated products currently in development for seed treatment.⁴⁴⁹ [...] ⁴⁵⁰ [...].

(804) As regards potential regulatory threat to the continuation of existing products, Syngenta's CELEST Top 313 FS is based on thiametoxan and Adama's tebuconazole based seed treatment products are at risk. [...]. Tebuconazole faces concerns over purported endocrine disruption, which is a cut-off criterion in the EU. [...].⁴⁵¹

(805) The Parties submit that Syngenta's main competitors for each product are the following.

Figure 13 - Syngenta's main competitors by key seed treatment active ingredients in Europe.⁴⁵²

[...]

(A) Result of market investigation

(806) The market investigation suggests that the Parties are close competitors in seed treatment for cereals.

⁴⁴⁸ Notifying Party's response to Commission's request for information RFI 26, question 1, annex 2.

⁴⁴⁹ Form CO, paragraph 6293.

⁴⁵⁰ Form CO, paragraph 6287.

⁴⁵¹ Notifying Party's response to Commission's request for information RFI 26, annex 1.2, page 10.

⁴⁵² Form CO, paragraph 6317.

- (807) As regards distributors, Adama is described as a particularly strong generic challenger to Syngenta for seed treatment insecticides in cereals with Seedoprid (600 g/l Imidacloprid)⁴⁵³ in some EEA countries (against Syngenta with Cruiser 350 (350 g/l Thiamethoxam)).⁴⁵⁴ When asked in which areas the Parties compete head to head, several distributors mention seed treatment for cereals.⁴⁵⁵
- (808) Some farmers have indicated that the Parties compete closely in seed treatment in general⁴⁵⁶ and most of them refer to cereals. One German farmer for instance considers that "*Orius of Adama und Arena C of Syngenta target the same spectrum for winter wheat [...] they are competing products*". Another explains that "*they are competing in cereal seed treatments with Celestop/Seedoprid+Orius 6FS in the Hungarian market*". A third farmer explains that "*in cereals, a low cost single fungicide is Orius 6FS (tebuconazole 60 g/l) competing with Dividend M030 (difenoconazole 30 g/l). They have almost the same market target.*"

13.2.5.2. Markets where the Transaction would not significantly impede effective competition

(A) Cereals - Wheat - Seed treatment- Fungicides – Lithuania

- (809) In the market for cereal wheat seed treatment in Lithuania, the Parties have a combined market share of [60-70]% (Syngenta: [60-70]%, Adama: [0-5]%).
- (810) The increment resulting from the Transaction is [0-5]% and amount to [...].
- (811) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (812) As a result of the Transaction, the Parties will remain market leader followed by Bayer ([20-30]%) and BASF ([5-10]%). Given the very limited increment brought by Adama, the Transaction will not substantially modify Syngenta's market position in this market
- (813) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cereal wheat seed treatment in Lithuania.

(B) Cereals - Wheat - Seed treatment- Fungicides – Poland

- (814) In the market for cereal wheat seed treatment in Poland, the Parties have a combined market share of [30-40]% (Syngenta: [30-40]%, Adama: [0-5]%).
- (815) The increment resulting from the Transaction is [0-5]%.
- (816) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

⁴⁵³ See <https://www.google.be/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjEgqH9uPPPAhWlJMAKHWAZAywQFggeMAA&url=http%3A%2F%2Fwww.adama.com%2Fromania%2Fro%2Fproduse-pentru-protectia-plantelor%2Ftratament-samanta%2Fseedoprid600fs.html&usg=AFQjCNHduqO40xPlcWwNDqM2IYIznkHgnQ&sig2=i9Rrm euJbNWAHguUq9n6ew.>

⁴⁵⁴ <http://www.syngenta-us.com/seed-treatment/cruiser-5fs.>

⁴⁵⁵ Replies to question 48 of Questionnaire (Q2) to crop protection distributors.

⁴⁵⁶ Replies to question 26 of Questionnaire (Q4) to seed companies and specialized seed treatment distributors.

- (817) As a result of the Transaction, the Parties will be market leader but will be followed by a larger number of competitors.
- (818) Other identified competitors currently present in the market are PSP ([20-30]%), Bayer ([10-20]%), Dow ([5-10]%), and BASF ([0-5]%). Generics competitors including PSP will represent [40-50]% of the markets
- (819) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cereal wheat seed treatment in Poland.

(C) Cereals - Wheat - Seed treatment- Insecticides – Hungary

- (820) In the market for cereal wheat seed treatment insecticides in Hungary, the Parties have a combined market share of [20-30]% (Syngenta: [20-30]%, Adama: [0-5]%).
- (821) The increment resulting from the Transaction is [0-5]%.
- (822) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (823) As a result of the Transaction, the Parties will not be market leader and will face a very large player, BASF with [70-80]% market share. The Transaction will not substantially modify the market dynamics as BASF will remain the undisputed leader challenged by Syngenta.
- (824) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cereal wheat seed treatment insecticides in Hungary.

(D) Non-problematic markets with low concentration level/increase

- (825) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals seed treatment markets listed in Table 37 based on 2015 market shares.

Table 37: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Barley - fungicides - Lithuania	[0-5]%	[20-30]%	[30-40]%	[...]	[...]
Barley - insecticides - Hungary	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Other cereals - fungicides - Czech Republic	[30-40]%	[0-5]%	[30-40]%	[...]	[...]
Other cereals - fungicides - Lithuania	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Wheat - insecticides - France	[0-5]%	[30-40]%	[30-40]%	[...]	[...]

(E) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

- (826) Based on this analysis, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals seed treatment markets listed in Table 38 based on 2015 market shares.

Table 38: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Barley - fungicides - Bulgaria	[5-10]%	[20-30]%	[20-30]%	FMC/Chemnova	[30-40]%	PSP	[30-40]%	BASF	[10-20]%
Other cereals - fungicides - Poland	[5-10]%	[10-20]%	[20-30]%	Organika Sarzyna	[30-40]%	BASF	[20-30]%	Bayer	[10-20]%
Wheat - insecticides - Romania	[10-20]%	[10-20]%	[20-30]%	Bayer	[40-50]%	Nufarm	[10-20]%	Sharda	[0-5]%

13.2.5.3. Markets where the Transaction would significantly impede effective competition

Table 39: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Seed Treatment	Barley - Seed treatment- Fungicides - Germany/Austria	2015	[60-70]%	[50-60]%	[5-10]%
		2014	[60-70]%	[60-70]%	[5-10]%
		2013	[60-70]%	[60-70]%	[0-5]%
	Barley - Seed treatment- Fungicides - Romania	2015	[50-60]%	[10-20]%	[40-50]%
		2014	[50-60]%	[10-20]%	[30-40]%
		2013	[50-60]%	[10-20]%	[30-40]%
	Other Cereals – Seed Treatment- Fungicides - Germany/Austria	2015	[40-50]%	[40-50]%	[0-5]%
		2014	[50-60]%	[40-50]%	[0-5]%
		2013	[40-50]%	[40-50]%	[0-5]%
	Wheat – Seed Treatment - Fungicides – Germany/Austria	2015	[60-70]%	[50-60]%	[5-10]%
		2014	[60-70]%	[50-60]%	[5-10]%
		2013	[60-70]%	[60-70]%	[0-5]%
	Wheat - Seed treatment –Fungicides - Romania	2015	[40-50]%	[10-20]%	[20-30]%
		2014	[40-50]%	[20-30]%	[20-30]%
		2013	[40-50]%	[30-40]%	[10-20]%

(A) Cereals - Barley - Seed treatment- Fungicides - Germany/Austria

- (827) First, in the market for cereals/barley for seed treatment fungicide in Germany/Austria, the Parties would be post-Transaction the market leader with a combined share of [60-70]% (Adama [5-10]%, Syngenta [50-60]%), followed by Bayer ([20-30]%) BASF ([10-20]%) and Cheminova/FMC ([0-5]%) in 2015. The merged entity will therefore hold a share almost three times larger than its nearest competitor.
- (828) Second, the increment of resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a dynamic player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

- (829) Third, only three other competitors are currently present in the market Bayer, BASF and Cheminova/FMC. Only one, Cheminova/FMC, is a generic player and it is significantly smaller than Adama.
- (830) Fourth, the Transaction eliminates a player that has been growing in the market as Adama is a new entrant in the market for PGR cereals/barley for seed treatment fungicides in Germany/Austria and had a market share of only [0-5]% in 2013.
- (831) Sixth, the Parties are close competitors as explained in Section 12.2.5.1. Syngenta is mainly present on the market with Landor CT 050 FS (Formula M), Celest 025 FS (Formulam) and Arena C 030 FS. Adama is present with one product Tebuconazole 15+ Prochloraz 60 ES.
- (832) [70-80]% of Syngenta sales in seed treatment fungicides in Germany/Austria are tebuconazole-based in 2015.⁴⁵⁷ Adama's only product is based on the same active ingredient, tebuconazole contrary to all products of competitors except that of Bayer which has two products including one mixture with tebuconazole (EFA 076 FS).⁴⁵⁸
- (833) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF as well as potential new entrants.⁴⁵⁹ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (834) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for seed treatment fungicides in Germany/Austria, notably through creation or strengthening of a dominant position.

(B) Cereals – Barley - Seed treatment- Fungicides - Romania

- (835) First, in the market for cereals/barley for seed treatment fungicides in Romania, the Parties would be post-Transaction the clear market leader with a combined share of [50-60]% (Adama [40-50]%, Syngenta [10-20]%), followed by Nufarm ([10-20]%), Bayer ([5-10]%), BASF, ([5-10]%), PSP ([5-10]%) and Sumitomo ([0-5]%) in 2015. The merged entity will therefore hold a share almost four times larger than its nearest competitor.
- (836) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.
- (837) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (838) Fourth, the Transaction eliminates a player that has been growing recently as Adama has been increasing its sales between 2013 and 2015 in the market for cereals/barley for seed treatment fungicides in Romania (2013: [30-40]%; 2015; [40-50]%).

⁴⁵⁷ Form CO, paragraph 6355. Landor CT 050 FS (Formula M) ([60-70]% of Syngenta's sales), Arena C 030 FS ([5-10]%), Landor CT 050 FS (Formula M, Act toll) ([0-5]%), Celest Trio 060 FS ([0-5]%).

⁴⁵⁸ Form CO, paragraph 6373.

⁴⁵⁹ Form CO, paragraphs 6372-6374.

- (839) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF as well as potential new entrants.⁴⁶⁰ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.
- (840) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/barley for seed treatment fungicide in Romania, notably through the creation or strengthening of a dominant position.
- (C) Cereals - Other Cereals –Fungicides - Germany/Austria
- (841) First, in the market for cereals/other cereals for seed treatment fungicides in Germany/Austria, the Parties would be post-Transaction the market leader with a combined share of [40-50]% (Adama [0-5]%, Syngenta [40-50]%), followed by Bayer ([20-30]%) BASF ([20-30]%) and Cheminova/FMC ([0-5]%) and Monsanto ([0-5]%) in 2015. The merged entity will therefore hold a share more than [50-60]% larger than its nearest competitor.
- (842) Second, the increment of resulting from the Transaction is [0-5]%. Although the increment is comparatively low, the Transaction eliminates a dynamic player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (843) Third, only four identified other competitors are currently present in the market. Only Cheminova/FMC is a generic player.
- (844) Fourth, the Transaction eliminates a player that has been growing recently as Adama is a new entrant in the market for PGR cereals/other cereals for seed treatment fungicides in Germany/Austria and had a market share of [0-5]% in 2013.
- (845) Fifth, the Parties are close competitors as explained in Section 12.2.5.1. Syngenta is mainly present on the market with Landor CT 050 FS (Formula M), Celest 025 FS (Formulam) and Arena C 030 FS. Adama is present with one product Tebuconazole 15+ Prochloraz 60 ES.
- (846) [70-80]% of Syngenta sales in seed treatment fungicides in Germany/Austria are tebuconazole-based in 2015.⁴⁶¹ Adama's only product is based on the same active ingredient, tebuconazole 15 contrary to all products of competitors except that of Bayer which has two products including one mixture with tebuconazole (EFA 076 FS).⁴⁶²
- (847) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF or possible new entrants.⁴⁶³ However, the Commission has found no

⁴⁶⁰ Form CO, paragraphs 6365-6369.

⁴⁶¹ Form CO, paragraph 6355. Landor CT 050 FS (Formula M) ([60-70]% of Syngenta's sales), Arena C 030 FS ([5-10]%), Landor CT 050 FS (Formula M, Act toll) ([0-5]%), Celest Trio 060 FS ([0-5]%).

⁴⁶² Form CO, paragraph 6373.

⁴⁶³ Form CO, paragraphs 6375-6378.

indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(848) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/other cereals for seed treatment fungicides in Germany/Austria.

(D) Cereals – Wheat – Fungicides – Germany/Austria

(849) First, in the market for cereals/wheat for seed treatment fungicide in Germany/Austria, the Parties would be post-Transaction the clear market leader with a combined share of [60-70]% (Adama [5-10]%, Syngenta [50-60]%), followed by Bayer ([20-30]%) BASF ([10-20]%) and Monsanto ([0-5]%) in 2015. The merged entity will therefore hold a share almost three times larger than its nearest competitor.

(850) Second, the increment of resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a dynamic player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

(851) Third, only three competitors are currently present in the market. None of them are generic players.

(852) Fifth, the Transaction eliminates a player that has been growing recently as Adama is a new entrant in the market for PGR cereals/wheat for seed treatment fungicides in Germany/Austria and had a market share of [0-5]% in 2013.

(853) Sixth, the Parties are close competitors as explained in Section 12.2.5.1. Syngenta is mainly present on the market with Landor CT 050 FS (Formula M), Celest 025 FS (Formulam) and Arena C 030 FS. Adama is present with one product Tebuconazole 15+ Prochloraz 60 ES.

(854) [70-80]% of Syngenta sales in seed treatment fungicides in Germany/Austria are tebuconazole-based in 2015.⁴⁶⁴ Adama's only product is based on the same active ingredient, tebuconazole 15 contrary to all products of competitors except that of Bayer which has two products including one mixture with tebuconazole (EFA 076 FS).⁴⁶⁵

(855) Furthermore, the Parties argue that that their shares in this segment are likely to decrease in the short term because they will continue to face competition from Bayer, BASF and potential new entrants.⁴⁶⁶ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

⁴⁶⁴ Form CO, paragraph 6365. Landor CT 050 FS (Formula M) ([60-70]% of Syngenta's sales), Arena C 030 FS ([5-10]%), Landor CT 050 FS (Formula M, Act toll) ([0-5]%), Celest Trio 060 FS ([0-5]%).

⁴⁶⁵ Form CO, paragraph 6373.

⁴⁶⁶ Form CO, paragraphs 6365-6369.

(856) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for seed treatment fungicide in Germany/Austria, notably through creation or strengthening of a dominant position.

(E) Cereals - Wheat - Seed treatment –Fungicides -Romania

(857) First, in the market for cereals/wheat for seed treatment fungicide in Romania, the Parties would be post-Transaction the clear market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [10-20]%), followed by Bayer ([20-30]%), Nufarm ([5-10]%), PSP ([5-10]%), and Sumitomo ([0-5]%) in 2015. The merged entity will therefore hold a share twice as large as its nearest competitor.

(858) Second, the increment of resulting from the Transaction is [10-20]%, which is significant.

(859) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(860) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because they will continue to face competition from Bayer, BASF and potential new entrants.⁴⁶⁷ However, the Commission has found no indications that there will be any new entrants in the near future and that they could significantly affect competition on the market. Therefore, contrary to what the Parties argue it does not appear likely that the shares of the Parties will decrease in the short term.

(861) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for cereals/wheat for seed treatment fungicide in Romania.

13.2.6. Selective Herbicides

13.2.6.1. General overview

(862) Selective herbicides for cereals represent about 40%⁴⁶⁸ of the overall EEA selective herbicides market and 37.4% of the overall cereal EEA crop protection market. At EEA level, the Parties have [20-30]% combined market share in selective herbicides for cereals (Adama [5-10]%, Syngenta [10-20]%).

(863) Based on the Parties' own intelligence, the markets for selective herbicides for cereals appear to be dominated by the graminicides post-emergence segment. According to Syngenta, this segment accounts for more than half of the overall cereal herbicide market (see figure 14).⁴⁶⁹

Figure 14 - Value drivers in cereal herbicides markets⁴⁷⁰

[...]

(864) Syngenta's internal documents show that graminicides are the cereal selective herbicides market with [...].⁴⁷¹ In its analysis, Syngenta also observes that [...] (see Figure 15).⁴⁷²

⁴⁶⁷ Form CO, paragraphs 6365-6369.

⁴⁶⁸ Form CO, paragraph 1333.

⁴⁶⁹ Notifying Party' response to Commission's request for information RFI 27, [...].

⁴⁷⁰ Notifying Party's response to Commission's request for information RFI 27, [...].

Figure 15 - Growth drivers in cereal herbicides markets⁴⁷³

[...]

- (865) This suggests that the presence of generic players in the markets for cereals graminicides is expected to be an important driver of competition.
- (866) In its cereal strategy plan, Adama expresses the ambition to grow its sales of cereal herbicides in the EU from [5-10]% in 2015 to [5-10]% in 2020 and [10-20]% in 2025.⁴⁷⁴ Adama considers that its strong position in cereal herbicides mainly hinges upon its leadership in the autumn cereal grass herbicides segment. "[...]"⁴⁷⁵ Adama expects to achieve its growth targets by further expanding in graminicides, specifically in "[...]". This strategy relies on a long-term plan to "[...]".⁴⁷⁶
- (867) Syngenta's top products by sales in cereal selective herbicides in the EEA are the pinoxaden-based Axial product family (including Axial 50 EC, Axial One), followed by the clodinafop-based Traxos product family (including Traxos 50 EC, Traxos 60 EC and Traxos One).⁴⁷⁷ The [...] largest product family is linked to the triasulfuron-based products Logran 20 WG and SO Lintur 70 WG. Axial is proposed both as a post-emergence graminicides, as well as post-emergence broad spectrum herbicides for all cereals. Traxos products are mainly post-emergence graminicides for wheat. The last group of products serves both as post- and pre-emergence broadleaf herbicides.
- (868) Adama's top products by sales in cereal selective herbicides in the EEA are the diflufenican-based mixtures products, followed by its flufenacet product. Both product families are mainly offered as post-emergence broad spectrum herbicides for all type of cereals.⁴⁷⁸
- (869) Moreover, Adama has also clodinafop products in its portfolio, such as Clodinafop-propargyl 240 ec + Cloquintocet mainly used for post-emergence graminicides. Syngenta is the originator of clodinafop, which was launched in 1991 and nowadays is off-patent. Syngenta notes in its [...] that [...].⁴⁷⁹ Specifically, in relation to the generic activities targeting its clodinafop straight product Topik, Syngenta acknowledges that "[...]"⁴⁸⁰. Syngenta aims at maintaining its clodinafop product (Topik) in its portfolio as [...].⁴⁸¹

⁴⁷¹ Notifying Party's response to Commission's request for information RFI 20, question 7, [...].
⁴⁷² Notifying Party's response to Commission's request for information RFI 20, question 7, [...].
⁴⁷³ Notifying Party's response to Commission's request for information RFI 20, question 7 – [...].
⁴⁷⁴ Notifying party's response to Commission's request for information RFI 25, annex 20 – [...].
⁴⁷⁵ Notifying party's response to Commission's request for information RFI 25, annex 20 – [...].
⁴⁷⁶ Notifying party's response to Commission's request for information RFI 25, annex 20 – [...].
⁴⁷⁷ Notifying Party's response to Commission's request for information RFI 26, annex 1.
⁴⁷⁸ Notifying party's response to Commission's request for information RFI 26, annex 2.
⁴⁷⁹ Notifying party's response to Commission's request for information RFI 27, annex 6, Syngenta, [...].
⁴⁸⁰ Notifying party's response to Commission's request for information RFI 27, annex 6, Syngenta, [...].
⁴⁸¹ Notifying party's response to Commission's request for information RFI 27, annex 6, Syngenta, [...].

13.2.6.2. Markets where the Transaction would not significantly impede effective competition

(A) Cereals - Other cereals - Selective Herbicides - Broadleaf - Post-emergence - Latvia

- (870) First, in the market for other cereals - selective herbicides - broadleaf post-emergence in Latvia, in 2015 the Parties had a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (871) Second, the increment resulting from the Transaction is [10-20]%.
- (872) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (873) Fourth, as a result of the Transaction, the Parties will be market leader followed by Dow/DuPont with [20-30]% market share.⁴⁸² Other competitors currently present in the market are Dow/DuPont ([20-30]%), BASF ([10-20]%) and Bayer ([10-20]%).⁴⁸³
- (874) Fifth, Syngenta sells Banvel and Logran, whereas Adama offers several products including Diflufenican 500, Florasulam, Fluroxypyr and Tribenuron methyl.⁴⁸⁴ The market investigation did not reveal any specific evidence about closeness between the Parties' products.
- (875) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other cereals broadleaf post-emergence selective herbicides in Latvia.

(B) Cereals- Wheat - Selective Herbicides - Broadleaf - Post-emergence - Estonia

- (876) First, in the market for wheat selective herbicides broadleaf post-emergence in Estonia, in 2015 the Parties had a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%).
- (877) Second, the increment resulting from the Transaction is [5-10]%.
- (878) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (879) Fourth, as a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market.
- (880) Fifth, other competitors currently present in the market are the market leader Bayer ([30-40]%), Dow/DuPont ([20-30]%)⁴⁸⁵ and BASF ([5-10]%).⁴⁸⁶
- (881) Sixth, in this market Adama sells diflufenican 500, fluroxypyr and tribenuron methyl 500. Syngenta sells Banvel, Logran and Lintur. The market investigation did not reveal any specific evidence about closeness between the Parties' products.⁴⁸⁷

⁴⁸² Respectively Dow ([10-20]%) and DuPont ([10-20]%).

⁴⁸³ According to the Parties' submission, [10-20]% of the market is represented by Other Competitors.

⁴⁸⁴ Notifying Party's response to Commission's request for information RFI 28, question 14.

⁴⁸⁵ Respectively Dow ([10-20]%) and DuPont ([0-5]%).

⁴⁸⁶ According to the Parties' submission, [0-5]% of the market is represented by Other Competitors.

⁴⁸⁷ Notifying Party's response to Commission's request for information RFI 28, question 14.

(882) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat broadleaf post-emergence selective herbicides in Estonia.

(C) Cereals -Wheat - Selective Herbicides - Broad spectrum - Post-emergence - Hungary

(883) First, in the market for wheat broad spectrum post-emergence selective herbicides in Hungary, in 2015 the Parties had a combined market share of [20-30]% (Syngenta: [5-10]%, Adama: [10-20]%).

(884) Second, the increment resulting from the Transaction is [5-10]%.

(885) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(886) Fourth, as a result of the Transaction, the Parties will not be market leader and only the second biggest competitor on the market. Other competitors currently present in the market are Dow/DuPont ([60-70]%) and PSP ([10-20]%). Among these competitors, one competitor is a generic player (PSP). The Transaction will not materially change the market structure where a strong player is challenged by alternative competitors.

(887) Fifth, in this market Syngenta sells Axial One, whereas Adama sells Diflufenican-based products, including a diflufenican+isoproturon mixture, and Isoproturon 500. Two of the three products currently offered by Adama in this market will be affected by regulatory withdrawal of Isoproturon.⁴⁸⁸ The market investigation did not reveal any specific evidence about Adama's plans to replace such products or about closeness between the Parties' products.

(888) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat broad spectrum post-emergence selective herbicides in Hungary.

(D) Cereals- Wheat - Selective Herbicides - Broad spectrum - Post-emergence - Romania

(889) First, in the market for wheat broad spectrum post-emergence selective herbicides in Romania, in 2015 the Parties had a combined market share of [20-30]% (Syngenta: [5-10]%, Adama: [10-20]%).

(890) Second, the increment resulting from the Transaction is [5-10]%.

(891) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(892) Fourth, as a result of the Transaction, the Parties will not be market leader and only the second biggest competitor on the market. Other competitors currently present in the market are Dow/DuPont ([40-50]%)⁴⁸⁹ and Bayer ([20-30]%).⁴⁹⁰

⁴⁸⁸ Notifying Party's response to Commission's request for information RFI 28, question 14.

⁴⁸⁹ Respectively Dow ([20-30]%) and DuPont([20-30]%).

⁴⁹⁰ According to the Parties' submission, [10-20]% of the market is represented by Other Competitors.

- (893) Fifth, in this market Syngenta sells Axial One, whereas Adama sells a diflufenican+isoproturon mixture and a chlorotoluron-based product. One of the two products currently offered by Adama in this market will be affected by the regulatory withdrawal of isoproturon.⁴⁹¹ The market investigation did not reveal any specific evidence about Adama's plans to replace its expiring product or about closeness between the Parties' products.
- (894) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat broad spectrum post-emergence selective herbicides in Romania.
- (E) Cereals- Wheat - Selective Herbicides - Broad spectrum - Post-emergence - Spain
- (895) First, in the market for wheat broad spectrum post-emergence selective herbicides in Spain, in 2015 the Parties had a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (896) Second, the increment resulting from the Transaction is [5-10]%.
- (897) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (898) Fourth, as a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market.
- (899) Fifth, other identified competitors currently present in the market are Bayer ([40-50]%), Dow/DuPont ([10-20]%)⁴⁹², FMC/Cheminova ([0-5]%) and BASF ([0-5]%). Among these competitors, at least one competitor is a generic player (FMC/Cheminova).
- (900) Sixth, in this market Syngenta sells a mixture between thifensulfuron and tribenuron, whereas Adama sells a mixture of metribuzin and pendimethalin 330.⁴⁹³ The market investigation did not reveal any specific evidence about closeness between the Parties' products.
- (901) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for wheat broad spectrum post-emergence selective herbicides in Spain.
- (F) Non-problematic markets with low concentration level/increase
- (902) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cereals selective herbicides markets listed in Table 40 based on 2015 market shares.

⁴⁹¹ Notifying Party's response to Commission's request for information RFI 28, info about 2015 sales per markets

⁴⁹² Respectively Dow ([5-10]%) and DuPont ([0-5]%).

⁴⁹³ Notifying Party's response to Commission's request for information RFI 28, info about 2015 sales per markets.

Table 40: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Barley - Selective herbicides - broad spectrum - post-emergence - Czech Republic	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Barley - Selective herbicides - broadleaf post-emergence - Czech Republic	[10-20]%	[0-5]%	[20-30]%	[...]	[...]
Other cereals - Selective herbicides - broad spectrum - post-emergence – Lithuania	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Other cereals - Selective herbicides - broad spectrum - post-emergence – Slovakia	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Other cereals - Selective herbicides - broadleaf - pre-emergence – Slovakia	[20-30]%	[0-5]%	[30-40]%	[...]	[...]
Other cereals - Selective herbicides - graminicides - post-emergence – France	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Wheat - Selective herbicides - broad spectrum - post-emergence - Czech Republic	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Wheat - Selective herbicides - broad spectrum - post-emergence – France	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Wheat - Selective herbicides - broad spectrum - post-emergence - Germany/Austria	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Wheat - Selective herbicides - broad spectrum - post-emergence – Lithuania	[20-30]%	[0-5]%	[30-40]%	[...]	[...]
Wheat - Selective herbicides - graminicides - post-emergence – France	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Wheat - Selective herbicides - graminicides - post-emergence – Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Wheat - Selective herbicides - graminicides - post-emergence – Spain	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Wheat - Selective herbicides - graminicides - post-emergence – UK	[0-5]%	[10-20]%	[20-30]%	[...]	[...]

(G) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(903) As explained in Section 12.1.3, the Commission considers that the following cereals selective herbicides markets listed in Table 41 are not likely to significantly impede effective competition based on 2015 market shares.

Table 41: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Barley - Selective herbicides - broad spectrum - post-emergence - France	[20-30]%	[0-5]%	[20-30]%	Nufarm	[20-30]%	Bayer	[20-30]%	BASF	[5-10]%
Barley - Selective herbicides - broad spectrum - post-emergence - Hungary	[10-20]%	[10-20]%	[20-30]%	Nufarm	[30-40]%	Bayer	[20-30]%	Dow/DuPont	[10-20]%
Barley - Selective herbicides - broadleaf - post-emergence - Estonia	[10-20]%	[5-10]%	[20-30]%	Bayer	[30-40]%	Dow/DuPont	[20-30]%	BASF	[5-10]%
Wheat - Selective herbicides - broadleaf - post-emergence - Lithuania	[20-30]%	[5-10]%	[20-30]%	Dow/DuPont	[30-40]%	Bayer	[20-30]%	BASF	[10-20]%

13.2.6.3. Markets where the Transaction would significantly impede effective competition

Table 42: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Selective Herbicides	Other Cereals - Selective Herbicides - Broadleaf - Post-emergence - Estonia	2015	[50-60]%	[5-10]%	[40-50]%
		2014	[40-50]%	[5-10]%	[30-40]%
		2013	[30-40]%	[5-10]%	[40-50]%
	Other Cereals - Selective Herbicides - Broadleaf - Post-emergence - Lithuania	2015	[30-40]%	[5-10]%	[30-40]%
		2014	[30-40]%	[5-10]%	[20-30]%
		2013	[20-30]%	[5-10]%	[20-30]%
	Wheat - Selective Herbicides - Graminicides - Post-emergence - Bulgaria	2015	[30-40]%	[30-40]%	[5-10]%
		2014	[40-50]%	[30-40]%	[5-10]%
		2013			
	Wheat - Selective Herbicides - Graminicides - Post-emergence - Italy	2015	[60-70]%	[60-70]%	[5-10]%
		2014	[60-70]%	[60-70]%	[5-10]%
		2013	[60-70]%	[50-60]%	[5-10]%

(A) Cereals - Other Cereals - Selective Herbicides - Broadleaf - Post-emergence - Estonia

- (904) First, in the market for Other Cereals - Selective Herbicides - Broadleaf - Post-emergence, the Parties would be post-Transaction the clear market leader in Estonia with a combined share of [50-60]% (Adama [40-50]%, Syngenta [5-10]%) in 2015, followed by Bayer ([20-30]%). The merged entity will therefore hold a share more than 2 times larger than its nearest competitor.
- (905) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (906) Third, other competitors currently present in the market are Bayer ([20-30]%), Dow/DuPont ([10-20]%)⁴⁹⁴ and BASF ([0-5]%). Among these competitors, none are generic players.
- (907) Fourth, in this market, Syngenta is present with products mainly based on off-patent AIs. Syngenta, which in other markets compete with other more premium pinoxaden-based products (such as Axial, which represents about [70-80]% of Syngenta's sales in selective herbicides for cereals)⁴⁹⁵ is present on this market with three relatively old products. Syngenta offers Banvel 4 S (about [60-70]% of its sales in the market), Logran 20 WG ([20-30]% of its sales) and SO Lintur 70 WG ([5-10]%). Syngenta

⁴⁹⁴ Respectively Dow ([10-20]%) and DuPont ([0-5]%).

⁴⁹⁵ Notifying Party's crop submission of 16 December 2016, "Selective herbicides – Cereals", Table 4.

explains that beyond 2017, Logran and Lintur products will be withdrawn because they contain triasulfuron which is an AI that has lost its EEA registration.⁴⁹⁶

- (908) Adama is mainly present with Tomigan 180 (based on fluroxypyr and accounting for [60-70]% of its sales), Trimmer (based on tribenuron methyl and accounting for [30-40]% of the sales) and Legacy (based on diflufenican and accounting for [5-10]% of the sales).
- (909) In the majority of selective herbicides broadleaf markets for other cereals, Syngenta focuses its offer on [...], such as Axial, which are positioned at very [...] than Adama's products. Although the products offered by the Parties in this market are based on different AIs, they are based on off-patent AIs and the Parties' products, [...].⁴⁹⁷ In fact, the majority of the Parties' turnover in this market is achieved with products [...]. Tomigan 180 and Lintur are [...]. Logran, Banvel, Trimmer are priced between [...]. Syngenta's entire offer is therefore priced [...] as the majority of the generics supplied by Adama.
- (910) The Parties argue that Syngenta's share in this market is likely to decrease in the short term because two of its products will be discontinued in 2017. [...].⁴⁹⁸ However, Syngenta's best-selling product will not be discontinued and will continue to exert pricing pressure on Adama's products.
- (911) Moreover, the Parties themselves list Lintur, Logran and Banvel product families as the products directly competing with Adama's Tomigan and Legacy products.⁴⁹⁹
- (912) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Other Cereals - Selective Herbicides - Broadleaf - Post-emergence in Estonia, notably through the creation or strengthening of a dominant position.
- (B) Cereals - Other Cereals - Selective Herbicides - Broadleaf - Post-emergence - Lithuania
- (913) First, in the market for Other Cereals - Selective Herbicides - Broadleaf - Post-emergence, the Parties would be post-Transaction the clear market leader in Lithuania with a combined share of [30-40]% (Adama [30-40]%, Syngenta [5-10]%) in 2015.
- (914) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (915) Third, other competitors currently present in the market are Dow/DuPont ([20-30]%)⁵⁰⁰, Bayer ([20-30]%) and BASF ([10-20]%).⁵⁰¹ Among these competitors, none are generic players.
- (916) Fourth, the Parties are close competitors. Similarly to Estonia, in this market, Syngenta is present with products mainly based on off-patent AIs. Syngenta, which

⁴⁹⁶ Notifying Party's response to Commission's request for information RFI 38, question 1.

⁴⁹⁷ Notifying Party's response to Commission's request for information RFI 28.

⁴⁹⁸ Notifying Party's response to Commission's request for information RFI 35, annex 3.1 and 3.2.

⁴⁹⁹ Notifying Party's response to Commission's request for information RFI 26, annex 2.

⁵⁰⁰ Respectively Dow ([10-20]%) and DuPont ([10-20]%).

⁵⁰¹ The residual share, [5-10]%, is represented by "other players".

in other markets compete with other more premium pinoxaden-based products (such as Axial, which represents about [70-80]% of Syngenta's sales in selective herbicides for cereals)⁵⁰² is present on this market with three relatively old products. Indeed, Syngenta offers Banvel 4 S (about [50-60]% of its sales in the market), Logran 20 WG ([30-40]% of its sales) and SO Lintur 70 WG ([5-10]%). Syngenta explains that beyond 2017, Logran and Lintur products will be withdrawn because they contain triasulfuron which is an AI that has lost its registration.

- (917) Adama is mainly present with Tomigan (based on fluroxypyr and accounting for [40-50]% of its sales), Trimmer (based on tribenuron methyl and accounting for [30-40]% of its sales), Diflufenican 500 (based on diflufenican and accounting for [10-20]% of the sales) and 2,4-D ([5-10]%).
- (918) In the majority of selective herbicides broadleaf markets for other cereals, Syngenta focuses its offer on [...], such as Axial, which are positioned at [...] price points than Adama's products. Although the products offered by the Parties in this market are based on different AIs, they are based on off-patent AIs and the Parties' products, namely Diflufenican 500 and Logran, as well as Banvel and 2,4-D, appear to compete [...] as they are offered at the [...].⁵⁰³
- (919) The Parties argue that Syngenta's share in this market is likely to decrease in the short term because two of its products will be discontinued in 2017. [...]. The discontinued products would represent about [40-50]% of Syngenta's position ([5-10]%) in the market.⁵⁰⁴ However, Syngenta's best-selling product, Banvel 4 S, which is based on dicamba, will not be discontinued and will continue to exert pricing pressure on Adama's products.
- (920) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Other Cereals - Selective Herbicides - Broadleaf - Post-emergence in Lithuania.
- (C) Cereals -Wheat - Selective Herbicides - Graminicides - Post-emergence - Bulgaria
- (921) First, in the market for Wheat - Selective Herbicides - Graminicides - Post-emergence, the Parties would be post-Transaction the clear market leader in Bulgaria with a combined share of [30-40]% (Adama [5-10]%, Syngenta [30-40]%) in 2015.
- (922) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (923) Third, other competitors currently present in the market are Zenith Crop Science ([20-30]%), Bayer ([20-30]%) and FMC ([5-10]%). Among these competitors, FMC and Zenith Crop science are generic players.
- (924) Fourth, in this market, Syngenta is present with its pinoxaden-based Axial 50 EC. Adama instead offers a mixture based on clodinafop (namely Clodinafop-Propargyl 240 EC+Cloquintocet). The Parties submit that their products are based on different

⁵⁰² Notifying Party's crop submission of 16 December 2016, "Selective herbicides – Cereals", Table 4.

⁵⁰³ Notifying Party's response to RFI 28.

⁵⁰⁴ Notifying Party's response to RFI 35, annex 3.1 and 3.2.

AIs and that although they compete in the same market offer different degrees of effectiveness. In particular, according to the Parties, Syngenta's product is much more effective against a wide range of grass weeds, which clodinafop cannot control. This is in turn also reflected in differences between the prices of the two products.

- (925) Nonetheless, the elimination of an alternative supplier, with the ambition to further expand and grow in an already highly concentrated market, is likely to have a detrimental effect on competition. In fact, Adama represents a dynamic player in the market also in light of its ambition to further expand in the future its position in the cereal herbicides and specifically to enter the market with [...].
- (926) Adama appears to have plans to develop [...] products in the future.⁵⁰⁵ [...]. According to this document, Adama is considering developing [...], as illustrated in Figure 16.⁵⁰⁶

Figure 16: Adama's pipeline products [...]⁵⁰⁷

[...]

- (927) Based on Adama analysis, the most "realistic" scenario is that the new products will be launched in the EU as of [...].⁵⁰⁸ Indeed, the [...].
- (928) In its internal documents, Adama remarks that [...]. Along the same line, in its [...],⁵⁰⁹ Syngenta sees this AI as "[...]". Consequently, Adama is likely to continue to represent a significant constraint on Syngenta in the future in relation to one of the key cereal herbicides AIs.
- (929) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Wheat- Selective Herbicides - Graminicides - Post-emergence in Bulgaria.
- (D) Cereals - Wheat - Selective Herbicides - Graminicides - Post-emergence - Italy
- (930) First, in the market for Wheat - Selective Herbicides - Graminicides - Post-emergence, the Parties would be post-Transaction the clear market leader in Italy with a combined share of [60-70]% (Adama [5-10]%, Syngenta [60-70]%) in 2015, followed by Bayer ([20-30]%). The merged entity will therefore hold a share more than three times larger than its nearest competitor.
- (931) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (932) Third, other competitors currently present in the market are Bayer ([20-30]%), FMC ([5-10]%), Dow/DuPont ([0-5]%)⁵¹⁰, and Scam ([0-5]%). Among these competitors, FMC and Scam are generic players.

⁵⁰⁵ Form CO, table 6.3.6.

⁵⁰⁶ Notifying Party's response to Commission's request for information RFI 25, annex 8.1 - [...].

⁵⁰⁷ Notifying Party's response to Commission's request for information RFI 25, annex 8.1 - [...].

⁵⁰⁸ Notifying Party's response to Commission's request for information RFI 25, annex 8.1 - [...].

⁵⁰⁹ Notifying Party's response to Commission's request for information RFI 20, question 7 - [...].

⁵¹⁰ Respectively Dow ([0-5]%) and DuPont ([0-5]%).

- (933) Fourth, in this market, Adama offers 3 mixtures containing clodinafop and propargyl. Syngenta is present with its pinoxaden-based product Axial 60 EC, representing [30-40]% of its sales in the market. In addition, Syngenta also offers three clodinafop based mixtures, such as Traxos One, Traxos 060 EC and Traxos 050 EC, accounting for [40-50]% of its sales, and two clodinafop straight products, namely VIP 080 EC and Topik 240 EC.
- (934) The Parties maintain that they do not compete closely in this market since Syngenta's Axial and Traxos products are much more expensive than Adama's products.
- (935) Nonetheless, as illustrated in recital (869), [...].
- (936) Moreover, the elimination of an alternative supplier, with the ambition to further expand and grow in an already highly concentrated market, would have a detrimental effect on competition. In fact, as illustrated in recitals (926) - (928), Adama represents a dynamic player in the market also in light of its ambition to further expand in the future its position in the cereal herbicides and specifically to enter the market with [...]. Consequently, Adama will continue to represent a significant constraint on Syngenta in the future in relation to one of the key cereal herbicides AIs.
- (937) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Wheat- Selective Herbicides - Graminicides - Post-emergence in Italy, notably through the creation or strengthening of a dominant position.

13.2.7. Conclusion

- (938) Therefore, the Commission considers that the Transaction would significantly impede effective competition with respect to the crop protection markets for cereals listed in Sections 13.2.2.3, 13.2.4.3, 13.2.5.3 and 13.2.6.3.

13.3. OSR

13.3.1. Overview of the crop

- (939) Oilseed rape is characterised as a "young" crop, the production of which has grown rapidly over the past three decades, in response to rising demand for its use in animal feeds and biodiesel. Production is dominated by Canada and the EU. Within the EU, Germany, France, the UK, Poland and the Czech Republic are the major producers.⁵¹¹
- (940) The global market for crop protection products for OSR is estimated to have valued USD 2.1 billion in 2014, 60% of which is accounted for by the EU.⁵¹² The global market for OSR crop protection products is expected to grow by [40-50]% by 2020.⁵¹³ From all crop protection products used for OSR globally (excluding genetically modified crops), herbicides account for the vast majority of sales (54%), followed by fungicides (28%) and insecticides (17%).
- (941) At the EEA level, Syngenta holds a market share of approximately [10-20]% for fungicides for OSR, [10-20]% for insecticides and [10-20]% for selective herbicides

⁵¹¹ Phillips McDougall – AgriService, Crops Section, 2014 Market, page 213.

⁵¹² Phillips McDougall – AgriService, Crops Section, 2014 Market, page 213.

⁵¹³ Notifying Party's response to Commission's request for information RHI 25, annex 20, [...].

in 2015. In the same year, Adama holds a market share of approximately [5-10]% for fungicides, [10-20]% for insecticides and [10-20]% for selective herbicides.

- (942) During the market investigation, two respondents indicated that Syngenta has a particularly strong position in OSR crop protection products⁵¹⁴, while one noted that the Parties have similar products.⁵¹⁵ Adama notes in an internal document that it has "[...]", indicating that it is playing an important role in providing low-priced alternatives to R&D products.⁵¹⁶ According to its internal documents, Adama considers that Syngenta is under "[...]" for OSR which further suggests that Adama could play an important constraining role on Syngenta's pricing.⁵¹⁷ According to another internal document, Syngenta has identified "[...]"⁵¹⁸.
- (943) The Transaction gives rise to affected markets in fungicides, insecticides and selective herbicides for use on OSR.

13.3.2. Fungicides

- (944) At EEA level, the market for leafspots fungicides for OSR is estimated to have valued USD [...] in 2015. Other than the Parties, there are three R&D players in the market (BASF, Bayer and, to a lesser extent, Dow/DuPont) and eight generic players. The Transaction would place the Parties together as a number 2 in the market alongside Bayer.
- (945) Germany/Austria and Poland are the most important markets for leafspots fungicides for OSR for which there is an overlap in the Parties' activities, with market sizes of USD [...] and USD [...], respectively, followed by the United Kingdom with a market size of USD [...].
- (946) During the market investigation, one respondent noted that generic products are relatively widespread for OSR fungicides.⁵¹⁹ The same respondent indicated that Adama is a particularly strong generic challenger to Syngenta in fungicides for OSR.⁵²⁰ Another (Slovakian) respondent indicated that Adama and Syngenta are competing head-to-head in this segment.⁵²¹

13.3.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

- (947) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following OSR fungicides markets listed in Table 43 based on 2015 market shares.

⁵¹⁴ Reply to question 47.1 of Questionnaire (Q2) to crop protection distributors; reply to question 51.1 of Questionnaire (Q2) to crop protection distributor.

⁵¹⁵ Reply to question 49.1 of Questionnaire (Q2) to crop protection distributors.

⁵¹⁶ Notifying Party's response to Commission's request for information RHI 25, annex 20, [...].

⁵¹⁷ Notifying Party's response to Commission's request for information RFI 15, annex 6.5 - [...].

⁵¹⁸ Notifying Party's response to Commission's request for information RHI 22, annex 3, slide 4 - Syngenta, [...].

⁵¹⁹ Reply to question 63.1 of Questionnaire (Q2) to crop protection distributors.

⁵²⁰ Reply to question 53.1 of Questionnaire (Q2) to crop protection distributors.

⁵²¹ Reply to question 48.1 of Questionnaire (Q2) to crop protection distributors.

Table 43: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Fungicides -Leafspots – Latvia	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Fungicides - Leafspots - Romania	[10-20]%	[0-5]%	[20-30]%	[...]	[...]
Fungicides- Leafspots - Slovenia	[0-5]%	[30-40]%	[30-40]%	[...]	[...]

13.3.2.2. Markets where the Transaction would significantly impede effective competition

(948) The Commission considers that the Transaction would significantly impede effective competition for Oilseed Rape - Fungicides - Leaves/Leafspots crop protection products in 8 markets, detailed in Table 44.

Table 44: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined Share	Share Syngenta	Share Adama
Fungicides	Fungicides - Leaves/Leafspots - Czech Republic	2015	[30-40]%	[10-20]%	[10-20]%
		2014	[30-40]%	[20-30]%	[10-20]%
		2013	[30-40]%	[20-30]%	[10-20]%
	Fungicides - Leaves/Leafspots - Denmark	2015	[50-60]%	[10-20]%	[40-50]%
		2014	[40-50]%	[10-20]%	[30-40]%
		2013	[50-60]%	[5-10]%	[40-50]%
	Fungicides - Leaves/Leafspots - Estonia	2015	[20-30]%	[10-20]%	[10-20]%
		2014	[20-30]%	[10-20]%	[10-20]%
		2013			
	Fungicides - Leaves/Leafspots - Germany/Austria	2015	[20-30]%	[10-20]%	[10-20]%
		2014	[30-40]%	[10-20]%	[10-20]%
		2013	[30-40]%	[20-30]%	[5-10]%
	Fungicides - Leaves/Leafspots -- Hungary	2015	[40-50]%	[20-30]%	[10-20]%
		2014	[50-60]%	[30-40]%	[20-30]%
		2013	[40-50]%	[20-30]%	[10-20]%
	Fungicides - Leaves/Leafspots -- Lithuania	2015	[40-50]%	[10-20]%	[20-30]%
		2014	[40-50]%	[10-20]%	[20-30]%
		2013	[30-40]%	[10-20]%	[20-30]%
	Fungicides - Leaves/Leafspots - Poland	2015	[20-30]%	[20-30]%	[5-10]%
		2014	[30-40]%	[20-30]%	[5-10]%
		2013	[20-30]%	[20-30]%	[5-10]%
	Fungicides - Leaves/Leafspots - Slovakia	2015	N/A	N/A	N/A
		2014	[20-30]%	[20-30]%	[5-10]%
		2013	[30-40]%	[30-40]%	[0-5]%

(A) OSR - Fungicides - Leaves/Leafspots - Czech Republic

(949) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the second largest competitor in the Czech Republic with a combined share of [30-40]% (Adama [10-20]%, Syngenta [10-20]%) in 2015, after Bayer ([40-50]%) and followed by BASF ([20-30]%).

- (950) Second, the increment resulting from the Transaction is [10-20]%, which is significant in an already concentrated market
- (951) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (952) Fourth, only two other competitors are currently present in the market, jointly accounting for [60-70]%. Among these competitors, none are generic players. The Transaction would therefore reduce the number of alternatives in this market from four to three.
- (953) Fifth, the Transaction eliminates a dynamic player as Adama has been increasing its sales between 2013 and 2015 in the market for Oilseed Rape/Fungicides/Leaves - Leafspots (2013: [10-20]%; 2014: [10-20]%; 2015: [10-20]%).
- (954) Sixth, the Parties are close competitors. Syngenta is present on the market with Toprex 375 SC, Reflect Xtra and Amistar Xtra and Adama with Propiconazole 90+Prochloraz 400 EC, Tebuconazole 250 EW (Orius), Azoxystrobin 120+Tebuconazole 200 SC (Custodia) and Azoxystrobin 250 SC (Mirador). Adama's products Tebuconazole and Custodia compete directly with Syngenta's products Amistar Xtra (azoxystrobin+cyproconazole) and Reflect Xtra (isopyram+azoxystrobin) during the flowering stage of the product life cycle, as proven in an internal document from Adama which shows [...] (see Figure 17).⁵²² In addition, in an internal document from Syngenta, Syngenta notes that "[...]"⁵²³

Figure 17 - Adama internal document illustrating product positioning against competitors⁵²⁴

[...]

- (955) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]"⁵²⁵
- (956) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in the Czech Republic.
- (B) OSR - Fungicides - Leaves/Leafspots - Denmark
- (957) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the clear market leader in Denmark with a combined share of [50-60]% (Adama [40-50]%, Syngenta [10-20]%) in 2015, followed by Bayer ([30-40]%) and BASF ([10-20]%). The merged entity will therefore hold a share more than 1.5 times larger than its nearest competitor.
- (958) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (959) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

⁵²² Notifying Party's response to Commission's request for information RHI 15, annex 6.5, [...].

⁵²³ Notifying Party's response to Commission's request for information RHI 22, annex 3, [...].

⁵²⁴ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵²⁵ Notifying Party's response to Commission's request for information RFI 15 - [...].

- (960) Fourth, only two other competitors are currently present in the market, jointly accounting for [40-50]%. Among these competitors, none are generic players.
- (961) Fifth, the Transaction eliminates a dynamic player as Syngenta has increased its share between 2013 and 2015 in the market for Oilseed Rape/Fungicides/Leaves - Leafspots 2013: [5-10]%; 2014: [10-20]%; 2015: [10-20]%).
- (962) Sixth, the Parties are close competitors. Syngenta is present on the market with Ortiva 250 SC and Adama with Tebuconazole 200 EW (Orius) and Azoxystrobin 250 SC (Mirador). Adama's Mirador and Syngenta's Ortiva are based on the same AI (azoxystrobin). In the Form CO, the Parties explain that Triazoles (the chemical class to which tebuconazole belongs) compete with Strobilurines (the chemical class to which azoxystrobin belongs),⁵²⁶ which indicates that Adama's Orius is also a competitor of Syngenta's Ortiva. In addition, in an internal document from Syngenta, Syngenta notes that "[...]"⁵²⁷.
- (963) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]"⁵²⁸.
- (964) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in Denmark, notably with the creation of a dominant position.

(C) OSR - Fungicides - Leaves/Leafspots - Estonia

- (965) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the third largest competitor in Estonia with a combined share of [20-30]% (Adama [10-20]%, Syngenta [10-20]%) in 2014, after Bayer ([40-50]%) and BASF ([30-40]%).
- (966) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (967) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (968) Fourth, only three other competitors are currently present in the market, jointly accounting for [70-80]%. Among these competitors, none are generic players.
- (969) Fifth, the Transaction eliminates a recent entrant in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All. Between 2013 and 2015, Adama attained a strong foothold in the market (2013: [0-5]%; 2014: [10-20]%; 2015: [10-20]%).
- (970) Sixth, the Parties are close competitors. Syngenta is present on the market with Toprex 375 SC, Ortiva 250 SC and Amistar Xtra and Adama with Tebuconazole 250 EW (Orius). In the Form CO, the Parties explain that Triazoles (the chemical class to which tebuconazole and difenoconazole belongs) compete with Strobilurines (the

⁵²⁶ Form CO, paragraph 4379.

⁵²⁷ Notifying Party's response to Commission's request for information RFI 22, annex 3, [...].

⁵²⁸ Notifying Party's response to Commission's request for information RFI 15 - [...].

chemical class to which azoxystrobin belongs),⁵²⁹ which indicates that Adama's Tebuconazole product is also a competitor of Syngenta's Ortiva and Toprex 375. In addition, Adama's Tebuconazole product competes directly with Syngenta's Amistar Xtra (azoxystrobin+cyproconazole) during the flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 17).⁵³⁰ Finally, in an internal document from Syngenta, Syngenta notes that "[...]".⁵³¹

- (971) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]".⁵³²
- (972) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (973) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in Estonia.

(D) OSR - Fungicides - Leaves/Leafspots - Germany/Austria

- (974) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the second largest competitor in Germany/Austria with a combined share of [20-30]% (Adama [10-20]%, Syngenta [10-20]%) in 2015, after BASF ([60-70]%) and followed by Bayer ([5-10]%). The merged entity will therefore hold a share more than 5 times larger than its next largest competitor.
- (975) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (976) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (977) Fourth, only two other competitors are currently present in the market, jointly accounting for [70-80]%. Among these competitors, none are generic players.
- (978) Fifth, the Transaction eliminates a dynamic player as Adama has been increasing in terms of sales between 2013 and 2015 in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All (2013: [5-10]%; 2014: [10-20]%; 2015: [10-20]%).
- (979) Sixth, the Parties are close competitors. Syngenta is present on the market with Rapsherbstest, Toprex 375 SC and Toprex Karate Zeon Pack and Adama with Tebuconazole 200 EW (Orius) and Azoxystrobin 120+Tebuconazole 200 SC (Custodia). Syngenta's products are all based on difenoconazole as the lead AI,

⁵²⁹ Form CO, paragraph 4379.

⁵³⁰ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵³¹ Notifying Party's response to Commission's request for information RFI 15, annex 3, slide 4 - [...].

⁵³² Notifying Party's response to Commission's request for information RFI 15 - [...].

which is in the same chemical class as tebuconazole. Finally, in an internal document from Syngenta, Syngenta notes that "[...]".⁵³³

- (980) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]".⁵³⁴
- (981) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (982) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in Germany/Austria.
- (E) OSR - Fungicides - Leaves/Leafspots - Hungary
- (983) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the clear market leader in Hungary with a combined share of [40-50]% (Adama [10-20]%, Syngenta [20-30]%) in 2015, followed by BASF ([30-40]%) and Bayer ([20-30]%).
- (984) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (985) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (986) Fourth, only two other competitors are currently present in the market, jointly accounting for [50-60]%. Among these competitors, none are generic players.
- (987) Sixth, the Parties are close competitors. Syngenta is present on the market with Toprex 375 SC, Amistar Xtra and Mini AXC Virtual Pack and Adama with Tebuconazole 200 EW (Orius), Tebuconazole 133+Prochloraz 267 EW (Zamir) and Azoxystrobin 60+Tebuconazole 100 EC (Mirador Forte). Adama's Mirador and Syngenta's Amistar Xtra and Mini AXC Virtual Pack are based on the same lead AI (azoxystrobin). In addition, Adama's Orius and Zamir compete directly with Syngenta's Amistar Xtra (azoxystrobin+cyproconazole) during the flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 17).⁵³⁵ Finally, in an internal document from Syngenta, Syngenta notes that "[...]".⁵³⁶
- (988) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market

⁵³³ Notifying Party's response to Commission's request for information RFI 22, annex 3, [...].

⁵³⁴ Notifying Party's response to Commission's request for information RFI 15 - [...].

⁵³⁵ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵³⁶ Notifying Party's response to Commission's request for information RFI 22, annex 3, [...].

position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]"⁵³⁷

(989) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in Hungary.

(F) OSR - Fungicides - Leaves/Leafspots - Lithuania

(990) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the clear market leader in Lithuania with a combined share of [40-50]% (Adama [20-30]%, Syngenta [10-20]%) in 2015, followed by BASF ([30-40]%) and Bayer ([20-30]%). The merged entity will therefore hold a share of almost 1.5 times larger than its nearest competitor.

(991) Second, the increment resulting from the Transaction is [10-20]%, which is significant

(992) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(993) Fourth, only three other competitors are currently present in the market, jointly accounting for [50-60]%. Among these competitors, none are generic players.

(994) Fifth, the Parties are close competitors. Syngenta is present on the market with Toprex 375 SC, Amistar Xtra and Ortiva 250 SC and Adama with Tebuconazole 250 EW (Orius) and Tebuconazole 133+Prochloraz 267 EW (Zamir). In the Form CO the Parties explain that Triazoles (the chemical class to which tebuconazole belongs) compete with Strobilurines (the chemical class to which azoxystrobin belongs),⁵³⁸ which indicates that Adama's Orius is also a competitor of Syngenta's Ortiva. In addition, Adama's Orius and Zamir compete directly with Syngenta's Amistar Xtra (cyproconazole+azoxystrobin) during the flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 17).⁵³⁹ Finally, in an internal document from Syngenta, Syngenta notes that "[...]"⁵⁴⁰

(995) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]"⁵⁴¹

(996) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in Lithuania.

(G) OSR - Fungicides - Leaves/Leafspots - Poland

(997) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots, the Parties would be post-Transaction the market leader in Poland with a combined share of [20-30]% (Adama [5-10]%, Syngenta [20-30]%) in 2015, followed by

⁵³⁷ Notifying Party's response to Commission's request for information RFI 15 - [...].

⁵³⁸ Form CO, paragraph 4379.

⁵³⁹ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁴⁰ Notifying Party's response to Commission's request for information RFI 22, annex 3, [...].

⁵⁴¹ Notifying Party's response to Commission's request for information RFI 15 - [...].

BASF ([20-30]%), Bayer ([10-20]%) and several others (including generic players) with less than 5% each (FMC, Agropak, Sharda, Sumitomo).

- (998) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a market where concentration is significantly increased.
- (999) Third, the Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1000) Fourth, the Parties are close competitors. Syngenta is present on the market with Toprex 375 SC, Amistar Xtra, Reflect Xtra, Magnello 350 EC and Ortiva 250 SC and Adama with Tebuconazole 250 EW, Tebuconazole 133+Prochloraz 267 EW (Zamir) and Azoxystrobin 60+Tebuconazole 100 EC (Mirador Forte). Adama's Mirador and Syngenta's Ortiva are based on the same AI (azoxystrobin). Similarly, Syngenta's Magnello is based on Triazoles (including tebuconazole) which are in the same chemical class and use the same AI as Adama's Tebuconazole products. In Addition, Adama's Zamir and Tebuconazole products compete directly with Syngenta's Amistar Xtra (azoxystrobin+cyproconazole) and Reflect Xtra (axoystrobin+isopyrazam) during the flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 17).⁵⁴² Finally, in an internal document from Syngenta, Syngenta notes that "[...]".⁵⁴³
- (1001) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Syngenta is [...]. Adama's internal documents state that "[...]".⁵⁴⁴
- (1002) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1003) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves – Leafspots in Poland.
- (H) OSR - Fungicides - Leaves/Leafspots - Slovakia
- (1004) First, in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All, the Parties would be post-Transaction the second largest competitor in Slovakia with a combined share of [20-30]% (Adama [5-10]%, Syngenta [20-30]%) in 2014, after BASF ([50-60]%) and followed by Bayer ([20-30]%).
- (1005) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

⁵⁴² Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁴³ Notifying Party's response to Commission's request for information RFI 22, annex 3, [...].

⁵⁴⁴ Notifying Party's response to Commission's request for information RFI 15 - [...].

- (1006) Third, only two other competitors are currently present in the market, jointly accounting for [70-80]%. Among these competitors, none are generic players.
- (1007) Fifth, the Transaction eliminates a dynamic player as Adama has been increasing its between 2013 and 2015 in the market for Oilseed Rape/Fungicides/Leaves - Leafspots/All (2013: [0-5]%; 2014: [5-10]%; 2015: [5-10]%).
- (1008) Sixth, the Parties are close competitors. Syngenta is present on the market with Toprex 375 SC and Amistar Xtra and Adama with Tebuconazole 250 EW and Azoxystrobin 60+Tebuconazole 100 EC (Mirador Forte). Adama's Mirador and Syngenta's Amistar are based on the same lead AI (azoxystrobin). In addition, Adama's Tebuconazole products (including Mirador) compete directly with Syngenta's Amistar Xtra (azoxystrobin,cyproconazole) during the flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 17).⁵⁴⁵ Finally, in an internal document from Syngenta, Syngenta notes that "[...]"⁵⁴⁶.
- (1009) Furthermore, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Adama is considering the development of [...] in this segment. Adama's internal documents state that "[...]"⁵⁴⁷.
- (1010) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1011) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Fungicides/Leaves - Leafspots in Slovakia.

13.3.3. *Selective Herbicides*

- (1012) There are two different types of selective herbicide for OSR for which the Transaction gives rise to overlaps: Graminicide herbicides (post-emergence) and Broad Spectrum herbicides (pre-emergence).
- (A) Graminicides - post-emergence
- (1013) At EEA level, the market for post-emergence graminicide selective herbicides for OSR is estimated to have valued USD [...] in 2015. Other than the Parties, there are two R&D players in the market (BASF and Dow/DuPont) and seven generic players. The Transaction would place the Parties number one in the market.
- (1014) Germany/Austria is the most important market for post-emergence graminicide selective herbicides for OSR for which there is an overlap in the Parties' activities, with a market size of USD [...].

⁵⁴⁵ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁴⁶ Notifying Party's response to Commission's request for information RFI 15, annex 3, [...].

⁵⁴⁷ Notifying Party's response to Commission's request for information RFI 15 - [...].

(B) Broad Spectrum - pre-emergence

- (1015) At EEA level, the market for pre-emergence broad spectrum selective herbicides for OSR is estimated to have valued USD [...] in 2015. Other than the Parties, there are two R&D players in the market (BASF and Dow/DuPont) and seven generic players. The Transaction would place the Parties number two in the market.
- (1016) France is the most important market for pre-emergence broad spectrum selective herbicides for OSR for which there is an overlap in the Parties' activities, with a market size of USD [...].

13.3.3.1. Markets where the Transaction would not significantly impede effective competition

(A) OSR - Selective Herbicides - Broad Spectrum - Pre-Emergence - Bulgaria

- (1017) In the market for OSR broad spectrum pre-emergence selective herbicides in Bulgaria, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%).
- (1018) The increment resulting from the Transaction is [10-20]%.
- (1019) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1020) Other identified competitors currently present in the market are BASF ([50-60]%) and Agrotrade ([0-5]%). Among these competitors, at least one competitor is a generic player (Agrotrade).
- (1021) The Parties have no overlapping AIs in this market. Syngenta has Teridox 500 EC, a product based on Dimethachlor, while Adama has Pendimethalin 330 EC, Clomazone 480 EC and Metazachlor 250+Clomazone 33 ZC. The Parties' internal documents do not suggest particular closeness of competition between their products in Bulgaria, and rather it appears that [...].⁵⁴⁸
- (1022) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for OSR broad spectrum pre-emergence selective herbicides in Bulgaria.
- (1023) In any case, the Parties' share in this market will be reduced by the sale of Adama's Pendimethalin 330 EC in Bulgaria as part of the divestment package that has been committed by the Parties to alleviate competition concerns in other markets.

(B) OSR - Selective Herbicides - Broad Spectrum - Pre-Emergence - Romania

- (1024) In the market for OSR broad spectrum pre-emergence selective herbicides in Romania, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1025) The increment resulting from the Transaction is [10-20]%.
- (1026) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1027) The other competitor currently present in the market is BASF ([70-80]%). According to the Parties' submission, [0-5]% of the market is represented by Other Competitors.

⁵⁴⁸ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

(1028) The Parties have no overlapping lead AIs in this market and just some minor overlaps in secondary AIs. Syngenta has Teridox 500 EC (based on Dimethachlor), and Brasan EC 540 (based on Dimethachlor and Clomazone) Adama has Clomazone 480 EC and Metazachlor 441+Clomazone 56.5 SC. The Parties' internal documents do not suggest particular closeness of competition between their products in Bulgaria, and rather it appears that [...].⁵⁴⁹

(1029) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for OSR broad spectrum pre-emergence selective herbicides in Romania.

(C) Non-problematic markets with low concentration level/increase

(1030) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following OSR selective herbicides markets listed in Table 49 based on 2015 market shares.

Table 45: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Selective herbicides - broad spectrum - pre-emergence – France	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Selective herbicides - graminicides - post-emergence – Bulgaria	[10-20]%	[10-20]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence – Romania	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence – UK	[10-20]%	[0-5]%	[20-30]%	[...]	[...]

(D) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1031) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following OSR fungicides markets listed in Table 46 based on 2015 market shares.

Table 46: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors (based on 2015 market shares)

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Selective herbicides - broad spectrum - pre-emergence - Czech Republic	[5-10]%	[20-30]%	[20-30]%	FMC/Chemnova	[40-50]%	BASF	[30-40]%	Dow/DuPont	[0-5]%
Selective herbicides - broad spectrum - pre-emergence - Poland	[5-10]%	[20-30]%	[20-30]%	BASF	[50-60]%	FMC/Chemnova	[10-20]%	Globachem	[5-10]%
Selective herbicides - graminicides - post-emergence - Czech Republic	[20-30]%	[5-10]%	[20-30]%	Nissan Chemicals	[30-40]%	Dow/DuPont	[20-30]%	PSP	[10-20]%
Selective herbicides - graminicides - post-emergence - Poland	[10-20]%	[10-20]%	[20-30]%	Sharda	[30-40]%	PSP	[20-30]%	Nissan Chemicals	[10-20]%

⁵⁴⁹ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

13.3.4. Insecticides

(1032) At EEA level, the market for broad spectrum foliar insecticides for OSR is estimated to have valued USD [...] in 2015. Key problems include pollen beetle, stem weevil and seed weevil.⁵⁵⁰ Other than the Parties, there are three R&D players in the market (BASF, Bayer and to a lesser extent, Dow/DuPont) and 7 generic players. The Transaction would place the Parties joint number 2 in the market.

(1033) Germany/Austria and France are the most important markets for broad spectrum foliar insecticides for OSR for which there is an overlap in the Parties' activities, with market sizes of USD [...] and USD [...], respectively, followed by Poland and the UK with market sizes of USD [...] and USD [...], respectively.

13.3.4.1. Markets where the Transaction would not significantly impede effective competition

(A) OSR - Insecticides -Foliar - Broad Spectrum - Finland

(1034) In the market for OSR foliar broad spectrum insecticides in Finland, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [5-10]%).

(1035) The increment resulting from the Transaction is [5-10]%.

(1036) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1037) Other competitors currently present in the market are Bayer ([30-40]%) and BASF ([20-30]%). According to the Parties' submission, [20-30]% of the market is represented by Other Competitors.

(1038) In previous years, the Parties' shares were significantly smaller - they held a joint share of [20-30]% in 2013 and just [10-20]% in 2014. The Parties have no overlapping AIs in this segment. Syngenta has Karate Zeon 10 CS FP (based on Lambda-Cyhalothrin) while Adama has Mavrik (Tau-Fluvalinate 240 EW). Although there may be some competition between these products, Bayer and BASF (and others) also have a significant presence in this market.

(1039) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for OSR foliar broad spectrum insecticides in Finland.

(B) Non-problematic markets with low concentration level/increase

(1040) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following OSR insecticides markets listed in Table 47 based on 2015 market shares.

Table 47: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Insecticides - Foliar - broad spectrum - Bulgaria	[10-20]%	[0-5]%	[20-30]%	[...]	[...]
Insecticides - Foliar - sucking - Croatia	[0-5]%	[10-20]%	[20-30]%	[...]	[...]

⁵⁵⁰ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

13.3.4.2. Markets where the Transaction would significantly impede effective competition

(1041) The Commission considers that the Transaction would significantly impede effective competition for Oilseed Rape - Insecticides - Foliar - Broad Spectrum crop protection products in 9 markets, detailed in Table 48.

Table 48: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Insecticides	Insecticides - Foliar - Broad Spectrum - Czech Republic	2015	N/A	N/A	N/A
		2014	[20-30]%	[10-20]%	[10-20]%
		2013	[30-40]%	[10-20]%	[10-20]%
	Insecticides - Foliar - Broad Spectrum - France	2015	[30-40]%	[20-30]%	[10-20]%
		2014	[30-40]%	[10-20]%	[20-30]%
		2013	[40-50]%	[20-30]%	[20-30]%
	Insecticides - Foliar - Broad Spectrum - Germany/Austria	2015	[20-30]%	[10-20]%	[5-10]%
		2014	[30-40]%	[10-20]%	[10-20]%
		2013	N/A	N/A	N/A
	Insecticides - Foliar - Broad Spectrum - Hungary	2015	[50-60]%	[10-20]%	[40-50]%
		2014	[60-70]%	[10-20]%	[50-60]%
		2013	[50-60]%	[20-30]%	[20-30]%
	Insecticides - Foliar - Broad Spectrum - Poland	2015	[30-40]%	[5-10]%	[20-30]%
		2014	[40-50]%	[5-10]%	[40-50]%
		2013	[50-60]%	[10-20]%	[40-50]%
	Insecticides - Foliar - Broad Spectrum - Romania	2015	[30-40]%	[5-10]%	[20-30]%
		2014	[30-40]%	[5-10]%	[20-30]%
		2013	[30-40]%	[10-20]%	[20-30]%
	Insecticides - Foliar - Broad Spectrum - Slovakia	2015	[20-30]%	[10-20]%	[10-20]%
		2014	[20-30]%	[10-20]%	[10-20]%
		2013	[20-30]%	[10-20]%	[10-20]%
	Insecticides - Foliar - Broad Spectrum - Sweden	2015	[50-60]%	[5-10]%	[50-60]%
		2014	[50-60]%	[5-10]%	[40-50]%
		2013	[40-50]%	[10-20]%	[30-40]%
	Insecticides - Foliar - Broad Spectrum - United Kingdom	2015	[20-30]%	[5-10]%	[10-20]%
		2014	[20-30]%	[10-20]%	[10-20]%
		2013	N/A	N/A	N/A

(A) OSR - Insecticides -Foliar - Broad Spectrum - Czech Republic

(1042) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the second largest competitor in the Czech Republic with a combined share of [20-30]% (Adama [10-20]%, Syngenta [10-20]%) in 2014, after FMC ([30-40]%) and followed by Bayer ([20-30]%).

(1043) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

- (1044) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1045) Fourth, only three other competitors are currently present in the market, jointly accounting for [70-80]%. Among these competitors, of which only one is a generic player (FMC).
- (1046) Fifth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP and Adama with Tau-Fluvalinate 240 EW (Mavrik) and Beta-Cyfluthrin 25 EC (Bulldock). Adama's Bulldock competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the Autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama which [...] (see Figure 18).⁵⁵¹ Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for tau-fluvalinate as including "[...]" (amongst others).⁵⁵²

Figure 18 - Adama internal document illustrating product positioning against competitors⁵⁵³

[...]

- (1047) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...]. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in the Czech Republic for use in a number of crops including OSR in 2015. Adama also has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]"⁵⁵⁴ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1048) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1049) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in the Czech Republic.

(B) OSR - Insecticides -Foliar - Broad Spectrum - France

- (1050) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the market leader in France with a combined share

⁵⁵¹ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁵² Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁵³ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁵⁴ Notifying Party's response to Commission's request for information RFI 15 – [...].

of [30-40]% (Adama [10-20]%, Syngenta [20-30]%) in 2015, followed by Bayer ([10-20]%), BASF ([5-10]%) and Belchim ([5-10]%). According to the Parties' submission, [30-40]% of the market is represented by Other Competitors. Additional elements provided by the Parties suggest that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for OSR in France and therefore may be active or potentially active in this market, including generic players such as FMC, Nufarm and PSP.

- (1051) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1052) Third, the Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1053) Fourth, only four other competitors are currently present in the market, jointly accounting for [60-70]%. Among these competitors, only one is a generic player (Belchim).
- (1054) Fifth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 10 CS FP and Karate K/Pirim K and Adama with Beta-Cyfluthrin 25 EC (Bulldock) and Chlorpyrifos 250 CS Tech Agro. Adama's beta-cyfluthrin product competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁵⁵ The same document shows that [...].⁵⁵⁶
- (1055) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term [...]. Adama also expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in France for use in a number of crops including OSR in 2015. Adama also has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁵⁷ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1056) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in France.

(C) OSR - Insecticides -Foliar - Broad Spectrum - Germany/Austria

- (1057) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the market leader in Germany/Austria with a combined share of [30-40]% (Adama [10-20]%, Syngenta [10-20]%) in 2014, followed by BASF ([20-30]%) and Bayer ([5-10]%).

⁵⁵⁵ Notifying Party's response to Commission's request for information RFI 15, annex 6.5., [...].

⁵⁵⁶ Notifying Party's response to Commission's request for information RFI 15, annex 6.5., [...].

⁵⁵⁷ Notifying Party's response to Commission's request for information RFI 15, [...].

- (1058) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1059) Third, the HHI level post-Transaction would be [...] with a delta of [...]. Although the level of HHI is not very high in this market, the increase brought about by the Transaction is substantial.
- (1060) Fourth, only four other competitors are currently present in the market, jointly accounting for [70-80]%. Among these competitors, none are generic players.
- (1061) Fifth, the Transaction eliminates a dynamic player as Adama had a strong position in terms of sales between 2013 and 2015 in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum (2013: [5-10]%; 2014: [10-20]%; 2015: [5-10]%).
- (1062) Sixth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 10 CS FP and Karate 5 WG and Adama with Beta-Cyfluthrin 25 EC (Bulldock) and Tau-Fluvalinate 9.2 EW+Citro Acid Kit (Mavrik Citro Pack). Adama's Bulldock competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁵⁸ Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁵⁹
- (1063) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...]. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁶⁰ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1064) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in Germany/Austria.

(D) OSR - Insecticides -Foliar - Broad Spectrum - Hungary

- (1065) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Hungary with a combined share of [50-60]% (Adama [40-50]%, Syngenta [10-20]%) in 2015, followed by Dow ([20-30]%) and FMC ([10-20]%). The merged entity will therefore hold a share more than 2 times larger than its nearest competitor.

⁵⁵⁸ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁵⁹ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁶⁰ Notifying Party's response to Commission's request for information RFI 15 - [...].

- (1066) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1067) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1068) Fourth, only four other competitors are currently present in the market, jointly accounting for [40-50]%. Among these competitors, only one is a generic player (FMC).
- (1069) Fifth, the Transaction eliminates a dynamic player as Adama has been increasing in terms of sales between 2013 and 2015 in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum (2013: [20-30]%; 2014: [50-60]%; 2015: [40-50]%).
- (1070) Sixth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP and Adama with Tau-Fluvalinate 240 EW (Mavrik), Beta-Cyfluthrin 12+Chlorpyrifos 250 ZW (Pyrinex Supreme), Beta-Cyfluthrin 25 (Bulldock), Chlorpyrifos 250 CS Tech Agro and Chlorpyrifos 480 EC (Pyrinex) Adama's beta-cyfluthrin product competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the Autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁶¹ The same document shows that [...].⁵⁶² Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁶³
- (1071) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because [...]. Adama also expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in Hungary for use in a number of crops including OSR in 2015. Adama also has a pipeline based on a [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁶⁴ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1072) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in Hungary, notably through the creation of a dominant position.
- (E) OSR - Insecticides -Foliar - Broad Spectrum - Poland
- (1073) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the market leader in Poland with a combined share

⁵⁶¹ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁶² Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁶³ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁶⁴ Notifying Party's response to Commission's request for information RFI 15 - [...].

of [30-40]% (Adama [20-30]%, Syngenta [5-10]%) in 2015, followed by Bayer ([30-40]%) and Sumitomo Chemical ([20-30]%).

- (1074) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1075) Fourth, only four other competitors are currently present in the market, jointly accounting for [60-70]%. Among these competitors, none are generic players.
- (1076) Fifth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP and Adama with Chlorpyrifos 480 EC (Pyrinex), Tau-Fluvalinate 240 EW (Mavrik), Chlorpyrifos 250 CS Tech Agro, Beta-Cyfluthrin 25 EV and Beta-Cyfluthrin 12+Chlorpyrifos 250 ZW (Pyrinex Supreme). Adama's Beta-Cyfluthrin product competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the Autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁶⁵ The same document shows that [...].⁵⁶⁶ Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁶⁷
- (1077) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term [...]. Adama also expects that [...] of its beta-cyfluthrin products will be required [...], further reducing its shares in the market. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in Poland for use in a number of crops including OSR in 2015. Adama also has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁶⁸ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1078) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in Poland.

(F) OSR - Insecticides -Foliar - Broad Spectrum - Romania

- (1079) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the second largest competitor in Romania with a combined share of [30-40]% (Adama [20-30]%, Syngenta [5-10]%) in 2015, after Bayer ([40-50]%) and followed by Sumitomo Chemical ([10-20]%).
- (1080) Second, the increment resulting from the Transaction is [5-10]%, which is significant in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].

⁵⁶⁵ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁶⁶ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁶⁷ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁶⁸ Notifying Party's response to Commission's request for information RFI 15, [...].

(1081) The Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP and Adama with Lambda Cyhalothrin 50 EC (Lamdex), Tau-Fluvalinate 240 EW (Mavrik), Chlorpyrifos 250+Deltamethrin 6 ZC and Chlorpyrifos 250 CS (Pyrinex). Syngenta's Karate Zeon and Adama's Lamdex are both based on the same AI (lambda-cyhalothrin). An internal document from Adama shows that [...] (see Figure 18).⁵⁶⁹ Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁷⁰

(1082) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term [...]. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching a new formulation aimed at maintaining, if not increasing, its market position. Indeed, Adama has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁷¹ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.

(1083) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in Romania.

(G) OSR - Insecticides -Foliar - Broad Spectrum - Slovakia

(1084) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the third largest competitor in Slovakia with a combined share of [20-30]% (Adama [10-20]%, Syngenta [10-20]%) in 2015, after Dow/DuPont ([30-40]%) and Bayer ([30-40]%).

(1085) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

(1086) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1087) Fourth, only four other competitors are currently present in the market, jointly accounting for [70-80]%. Among these competitors, none are generic players.

(1088) Fifth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 5 CS FP and Adama with Beta-Cyfluthrin 12+Chlorpyrifos 250 ZW (Pyrinex Supreme), Tau-Fluvalinate 240 EW (Mavrik) and Beta-Cyfluthrin 25 EC (Bulldock). Adama's beta-cyfluthrin product competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the Autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁷² The same document shows that [...].⁵⁷³ Furthermore, Adama's Mavrik

⁵⁶⁹ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁷⁰ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁷¹ Notifying Party's response to Commission's request for information RFI 15, [...].

⁵⁷² Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁷³ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁷⁴

- (1089) Furthermore, the Parties argue that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...]. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching new formulations aimed at maintaining, if not increasing, its market position. Indeed, Adama launched a formulation of chlorpyrifos-methyl in Slovakia for use in a number of crops including OSR in 2015. Adama also has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁷⁵ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1090) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1091) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in Slovakia.
- (H) OSR - Insecticides -Foliar - Broad Spectrum - Sweden
- (1092) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the clear market leader in Sweden with a combined share of [50-60]% (Adama [50-60]%, Syngenta [5-10]%) in 2015, followed by Bayer ([20-30]%) and BASF ([10-20]%). The merged entity will therefore hold a share more than 2 times larger than its nearest competitor
- (1093) Second, the increment resulting from the Transaction is [5-10]%. Although the increment is comparatively low, the Transaction eliminates a player in a concentrated market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1094) Third, only two other competitors are currently present in the market, jointly accounting for [40-50]%. Among these competitors, none are generic players.
- (1095) Fourth, the Transaction eliminates a dynamic player as Adama has been increasing in terms of sales between 2013 and 2015 in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum (2013: [30-40]%; 2014: [40-50]%; 2015: [50-60]%).
- (1096) Fifth, the Parties are close competitors. Syngenta is present on the market with Karate 2.5 WG and Adama with Tau-Fluvalinate 240 EW (Mavrik) and Beta-Cyfluthrin 25 SC. Adama's beta-cyfluthrin product competes directly with Syngenta's

⁵⁷⁴ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁷⁵ Notifying Party's response to Commission's request for information RFI 15, [...].

Karate range (lambda-cyhalothrin) during the autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁷⁶ Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁷⁷

- (1097) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...]. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching a new formulation aimed at maintaining, if not increasing, its market position. Adama has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁷⁸ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1098) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in Sweden, notably with the creation or strengthening of a dominant position.
- (I) OSR - Insecticides -Foliar - Broad Spectrum - United Kingdom
- (1099) First, in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum, the Parties would be post-Transaction the market leader in United Kingdom with a combined share of [20-30]% (Adama [10-20]%, Syngenta [10-20]%) in 2014, followed by BASF ([5-10]%), PSP ([0-5]%) and Belchim ([0-5]%). According to the Parties' submission, [60-70]% of the market is represented by Other Competitors. Additional elements provided by the Parties suggest that there are at least 10 companies that hold insecticides foliar broad spectrum product registrations for OSR in the UK and therefore may be active or potentially active in this market, including generic players such as FMC and Nufarm.
- (1100) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1101) Third, the HHI level post-Transaction would be [...] with a delta of [...]. Although the level of HHI is not high in this market, the increase brought about by the Transaction is quite substantial.
- (1102) Fourth, the Transaction eliminates a dynamic player as Adama has been increasing in terms of sales between 2013 and 2015 in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum (2013: [10-20]%; 2014: [10-20]%; 2015: [10-20]%).
- (1103) Fifth, the Parties are close competitors. Syngenta is present on the market with Karate Zeon 10 CS FP, Karate Zeon 5 CS FP and Karate 2.5 WG and Adama with

⁵⁷⁶ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁷⁷ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁷⁸ Notifying Party's response to Commission's request for information RFI 15, [...].

Tau-Fluvalinate 240 EW (Mavrik) and Beta-Cyfluthrin 25 EC (Bulldock). Adama's beta-cyfluthrin product competes directly with Syngenta's Karate range (lambda-cyhalothrin) during the Autumn and post-flowering stage of the product life cycle, as proven in an internal document from Adama (see Figure 18).⁵⁷⁹ Furthermore, Adama's Mavrik also competes directly with Syngenta's Karate range, as proven in a further internal document from Adama which lists key competitors for Tau-Fluvalinate as including "[...]" (amongst others).⁵⁸⁰

- (1104) Furthermore, the Parties argue that that their shares in this market are likely to decrease in the short term because Adama expects that [...] of its beta-cyfluthrin products will be required [...]. In addition, the Parties have noted the increasing competitive constraint on Syngenta posed by generic players entering with formulations of lambda-cyhalothrin (the lead AI of Syngenta's Karate range). However, Adama is in the process of launching a new formulation aimed at maintaining, if not increasing, its market position. Adama has a pipeline product based on [...] for a number of crops including OSR which it expects to launch in [...]. In addition, Adama's internal documents state that "[...]."⁵⁸¹ Therefore, contrary to what the Parties argue it appears unlikely that their shares will decrease in the short term.
- (1105) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1106) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Oilseed Rape/Insecticides/Foliar/Broad Spectrum in the United Kingdom.

13.3.5. Conclusion

- (1107) To conclude, the Commission considers that the Transaction would significantly impede effective competition in the crop protection markets for OSR listed in Section 13.3.2.2 and Section 13.3.4.2.

13.4. Sugar beet

13.4.1. Overview of the crop

- (1108) Europe is the main world region for the cultivation of sugar beet. Germany is the main producer in the EEA, followed by Poland, the UK and the Netherlands. Europe is also the main market worldwide for the sale of agrochemical products for sugar beet which, at the worldwide level, amounted to USD [...] in 2014.
- (1109) The Transaction gives rise to affected markets in each of fungicides, seed treatment insecticides, and selective herbicides for use on sugar beets.

⁵⁷⁹ Notifying Party's response to Commission's request for information RFI 15, annex 6.5, [...].

⁵⁸⁰ Notifying Party's response to Commission's request for information RFI 11, annex 13, [...].

⁵⁸¹ Notifying Party's response to Commission's request for information RFI 15, [...].

13.4.2. Fungicides

13.4.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Sugar beet - Fungicides - Leafspots - Finland

- (1110) In the market for sugar beet leafspots fungicides in Finland, the Parties have a combined market share of [70-80]% (Syngenta: [20-30]%, Adama: [40-50]%).
- (1111) The increment resulting from the Transaction is [20-30]%.
- (1112) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1113) However, the size of this already small market has strongly decreased due to low disease pressure in sugar beets (down to [...] in 2015 from [...] at its peak). As a consequence, variations of turnover which are minor in absolute terms translate into strong changes in market shares. For instance, the market share of Syngenta went from [40-50]% in 2013 down to [20-30]% in 2014.
- (1114) BASF is also a strong challenger in the market with a share of [20-30]%. According to the Parties' submission, [5-10]% of the market is also represented by other competitors.
- (1115) Based on data available in Homologa, other players active in fungicides in Finland are Chemfield, Sumitomo Corporation and Dow/DuPont.
- (1116) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for sugar beet leafspots fungicides in Finland.

(B) Non-problematic markets with low concentration level/increase

- (1117) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sugar beet fungicides markets listed in Table 49 based on 2015 market shares.

Table 49: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Fungicide - Leafspots - Belgium	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Fungicide - Leafspots – Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

13.4.3. Seed treatment

- (1118) At the European level, the segment for seed treatment insecticides for use on sugar beets is rather concentrated with only five sizeable suppliers present. The largest supplier, Bayer, makes over [60-70]% of total sales. Moreover, in this segment there are only two sizeable generic players active of which Adama is the largest.

13.4.3.1. Markets where the Transaction would significantly impede effective competition

Table 50: Market segments where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Seed Treatment	Seed treatment - Insecticides - Germany and Austria	2015	[50-60]%	[40-50]%	[0-5]%
		2014	[40-50]%	[40-50]%	[0-5]%
		2013	[30-40]%	[30-40]%	[0-5]%

(A) Sugar beet - Seed treatment - Insecticides - Germany and Austria

- (1119) First, post-Transaction the Parties would be the market leader with a combined share of [50-60]% ([40-50]% Syngenta, [0-5]% Adama) followed by Bayer with a share of [40-50]%.
- (1120) Second, the market is concentrated; post-Transaction there would be only two sizeable suppliers of seed treatment insecticides active in Germany and Austria. Moreover, the HHI level post-Transaction would be [...] with a delta of [...].
- (1121) Third, Adama is the only generic supplier of seed treatment insecticides active in Germany and Austria. The Transaction would therefore reduce the number of players from three to two and eliminate the only generic alternative.
- (1122) Fourth, Syngenta offers two seed treatment insecticides in Germany and Austria "Cruiser", a Thiamethoxam formulation, and "Force", a tefluthrin formulation. Adama's product is an imidacloprid formulation. Thiamethoxam and imidacloprid belong to the same chemical class, the neonicotinoids.
- (1123) Fifth, as it can be seen in Figure 19, [...].

Figure 19 - Value Map⁵⁸²

[...]

- (1124) Sixth, the Parties submit that Syngenta and Adama target different sales channels since Syngenta mainly sells to seeds companies while Adama mainly sells to local distributors and growers. However, since all sugar beet seeds sold in Germany and Austria are coated with an insecticide, it appear likely that seed companies make arbitrage between coating the seeds themselves and leaving this task to their distributors and growers. It follows that competitive conditions in the distributors and growers channel likely influence those for the direct sale to seed companies and *vice-versa*.
- (1125) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for sugar beet seed treatment insecticides in Germany and Austria notably through the creation of a dominant position.

⁵⁸² Notifying Party's response to Commission's request for information RFI 22, annex 42.

13.4.4. Selective herbicides

13.4.4.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

(1126) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sugar beet selective herbicides markets listed in Table 51 based on 2015 market shares.

Table 51: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Selective herbicides - graminicides - post-emergence - Czech Republic	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - Italy	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - Romania	[20-30]%	[0-5]%	[20-30]%	[...]	[...]

(B) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1127) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sugar beet selective herbicides markets listed in Table 52 based on 2015 market shares.

Table 52: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Selective herbicides - graminicides - post-emergence - Belgium	[5-10]%	[10-20]%	[20-30]%	PSP	[40-50]%	BASF	[30-40]%	Gowan	[5-10]%

13.4.5. Conclusion

(1128) To conclude, the Commission considers that the Transaction would significantly impede effective competition in the crop protection markets for Sugar Beet listed in Section 12.4.3.1.

13.5. Corn

13.5.1. Overview of the crop

(1129) Europe is one of the main world regions for the cultivation of corn. France is the main corn producer in the EEA, followed by Hungary, Italy, and Germany.⁵⁸³ Europe is the third market worldwide for the sale of agrochemical products for corn which, at the worldwide level, amounted to USD 6.3 billion in 2014.⁵⁸⁴

⁵⁸³ Phillips McDougall, AgriService, Crops Section, 2014 Market.

⁵⁸⁴ Phillips McDougall, AgriService, Crops Section, 2014 Market.

- (1130) The main agrochemical products for use on corn, excluding GM seeds, are herbicides (24.4%) followed by insecticides (7.3%), and fungicides (3.7%).⁵⁸⁵
- (1131) The Transaction gives rise to affected markets in insecticides and selective herbicides for use on corn, the Commission considers that the Transaction will significantly impede effective competition with respect to several national markets within each of these areas.
- (1132) At the EEA level, Syngenta held a 2015 share of approximately [30-40]% for insecticides and [30-40]% for selective herbicides for use on corn. Over the same period, Adama held an EEA share of approximately [5-10]% for insecticides and [0-5]% for selective herbicides for use on corn. The Parties' main competitor in the insecticides segment is Dow/DuPont ([10-20]%). In the selective herbicides segment the Parties face competition from Bayer ([20-30]%), BASF ([10-20]%) and Dow/DuPont ([5-10]%).

13.5.2. Insecticides

- (1133) At the European level, the segment for insecticides for use on corn is rather concentrated with only six sizeable suppliers present. Syngenta is the largest supplier in this segment and makes over [...]% of total sales. Moreover, in this segment Adama is the only sizeable generic player.

13.5.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

- (1134) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following corn insecticides markets listed in Table 53 based on 2015 market shares.

Table 53: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Insecticides - foliar - broad spectrum - France	[5-10]%	[20-30]%	[20-30]%	[...]	[...]

(B) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

- (1135) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following corn insecticides markets listed in Table 54 based on 2015 market shares.

Table 54: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Insecticides - Foliar - broad spectrum - Spain	[10-20]%	[10-20]%	[20-30]%	FMC/Che minova	[10-20]%	Dow/DuPont	[5-10]%	Bayer	[5-10]%
Insecticides - Soil - Italy	[10-20]%	[10-20]%	[20-30]%	Oxon Sipcarn Vischim	[20-30]%	SBM Development	[20-30]%	PSP	[0-5]%

⁵⁸⁵ Phillips McDougall, AgriService, Crops Section, 2014 Market.

13.5.2.2. Markets where the Transaction would significantly impede effective competition

Table 55: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Insecticides	Insecticides - Foliar - Broad spectrum - Bulgaria	2015	[80-90]%	[10-20]%	[70-80]%
		2014	N/A	N/A	N/A
		2013	N/A	N/A	N/A
	Insecticides - Foliar - Broad spectrum - Hungary	2015	[30-40]%	[20-30]%	[10-20]%
		2014	[30-40]%	[20-30]%	[10-20]%
		2013	[40-50]%	[0-5]%	[30-40]%
	Insecticides - Foliar - Broad spectrum - Romania	2015	[30-40]%	[30-40]%	[0-5]%
		2014	[40-50]%	[40-50]%	[5-10]%
		2013	[30-40]%	[30-40]%	[0-5]%
	Insecticides - Foliar - Broad spectrum - Italy	2015	[60-70]%	[50-60]%	[5-10]%
		2014	[60-70]%	[50-60]%	[5-10]%
		2013	[60-70]%	[50-60]%	[5-10]%
	Insecticides - Soil - Croatia	2015	[40-50]%	[40-50]%	[0-5]%
		2014	[50-60]%	[50-60]%	[0-5]%
		2013	[40-50]%	[40-50]%	[0-5]%
	Insecticides - Soil - Hungary	2015	[60-70]%	[50-60]%	[0-5]%
		2014	[80-90]%	[70-80]%	[5-10]%
		2013	[50-60]%	[40-50]%	[0-5]%

(A) Corn - Insecticides - Foliar - Broad spectrum - Bulgaria

- (1136) First, post-Transaction the Parties would be the clear market leader with a combined share of [80-90]% (Adama [70-80]%, Syngenta [10-20]%).
- (1137) Second, the Transaction would reduce the number of sizeable players active in this segment from 2 to 1. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1138) Third, Adama is the only sizable generic supplier in this segment.
- (1139) Fourth, Adama's corn insecticide in Bulgaria is a beta-cyfluthrin and Chlorpyrifos-ethyl mixture. Syngenta's product in this segment is "Ampligo", a chlorantraniliprole and lambda-cyhalothrin mixture. Beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, the pyrethroids.⁵⁸⁶
- (1140) Fifth, the Parties argue that Adama's share in this market is likely to decrease in the short term because chlorpyrifos-ethyl faces regulatory challenges in the EU. Adama expects that [...]. However, Adama launched in 2015 chlorpyrifos-methyl, an AI it licenses from Dow/DuPont. Chlorpyrifos-methyl has a similar profile as chlorpyrifos-ethyl but it is less toxic and somewhat less effective. In its internal documents, Adama indicates that it [...]. Therefore, contrary to what the Parties argue it is unlikely that their shares will significantly decrease in the short term.

⁵⁸⁶ Form CO, para 1003.

(1141) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Insecticides - Foliar - Broad spectrum in Bulgaria notably through the creation or strengthening of a dominant position.

(B) Corn - Insecticides - Foliar - Broad spectrum - Hungary

(1142) First, post-Transaction the Parties would be the clear market leader with a combined share of [30-40]% (Adama [10-20]% Syngenta [20-30]%), followed by PSP ([20-30]%), Nufarm ([10-20]%) and Dow/DuPont ([0-5]%).

(1143) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1144) Third, Adama is the second largest generic supplier in this segment.

(1145) Fourth, Adama's corn insecticides in Hungary include a beta-cyfluthrin and chlorpyrifos-ethyl mixture, a chlorpyrifos-ethyl formulation, and a beta-cyfluthrin formulation. Syngenta's products in this segment are "Ampligo", a chlorantraniliprole formulation, and "Karate", a lambda-cyhalothrin formulation. Beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, the pyrethroids.⁵⁸⁷

(1146) Fifth, the Parties argue that Adama's share in this segment is likely to decrease in the short term because [...]. However, Adama launched in 2015 chlorpyrifos-methyl, an AI it licenses from Dow/DuPont. Chlorpyrifos-methyl has a similar profile as Chlorpyrifos-ethyl but it is less toxic and somewhat less effective. In its internal documents, Adama indicates that it [...]. Therefore, contrary to what the Parties argue it is unlikely that their shares will significantly decrease in the short term.

(1147) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Insecticides - Foliar - Broad spectrum in Hungary.

(C) Corn - Insecticides - Foliar - Broad spectrum - Italy

(1148) First, post-Transaction the Parties would be the clear market leader with a combined share of [60-70]% (Adama [5-10]%, Syngenta [50-60]%), followed by Bayer ([20-30]%), Dow/DuPont ([5-10]%), and BASF ([0-5]%).

(1149) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1150) Third, Adama is the only sizable generic supplier in this segment.

(1151) Fourth, Adama's corn insecticides in Italy include a deltamethrin and chlorpyrifos-ethyl mixture, a chlorpyrifos-ethyl formulation, and a beta-cyfluthrin formulation. Syngenta's products in this segment are "Ampligo", a chlorantraniliprole formulation, and various "Karate" formulations, all based on lambda-cyhalothrin. Beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, the pyrethroids.⁵⁸⁸

(1152) Fifth, the Parties argue that Adama's share in this market is likely to decrease in the short term because [...]. However, Adama launched in 2015 chlorpyrifos-methyl, an AI it licenses from Dow/DuPont. Chlorpyrifos-methyl has a similar profile as

⁵⁸⁷ Form CO, para 1003.

⁵⁸⁸ Form CO, para 1003.

Chlorpyrifos-ethyl but it is less toxic and somewhat less effective. In its internal documents, Adama indicates that it expects [...]. Therefore, contrary to what the Parties argue it is unlikely that their shares will significantly decrease in the short term.

(1153) Sixth, Syngenta in its internal documents indicates that it expects [...].⁵⁸⁹

(1154) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Insecticides - Foliar - Broad spectrum in Italy, notably through the creation or strengthening of a dominant position.

(D) Corn - Insecticides - Foliar - Broad spectrum - Romania

(1155) First, post-Transaction the Parties would be the second largest supplier with a combined share of [30-40]% (Adama [0-5]%, Syngenta [30-40]%) preceded by Dow/DuPont ([40-50]%) and followed by Bayer ([10-20]%) and Nufarm ([5-10]%).

(1156) Second the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1157) Third, Adama is the second largest generic supplier in this segment.

(1158) Fourth, Adama's corn insecticide in Romania is a chlorpyrifos-ethyl formulation. Syngenta's product in this segment is "Karate", a lambda-cyhalothrin formulation.

(1159) Fifth, the Parties argue that Adama's share in this segment is likely to decrease in the short term because chlorpyrifos-ethyl faces regulatory challenges in the EU. Adama expects that [...]. However, Adama launched in 2015 chlorpyrifos-methyl, an AI it licenses from Dow. Chlorpyrifos-methyl has a similar profile as chlorpyrifos-ethyl but it is less toxic and somewhat less effective. In its internal documents, Adama indicates that it expects [...]. Therefore, contrary to what the Parties argue it is unlikely that their shares will significantly decrease in the short term.

(1160) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Insecticides - Foliar - Broad spectrum in Romania.

(E) Corn - Insecticides - Soil - Croatia

(1161) First, post-Transaction the Parties would be the market leader with a combined share of [40-50]% (Adama [0-5]%, Syngenta [40-50]%), followed by Dow/DuPont ([30-40]%).

(1162) Second, the Transaction would reduce the number of sizeable players active in this segment from 3 to 2. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1163) Third, Adama is the only sizable generic supplier in this segment.

(1164) Fourth, the Parties argue that Adama's share in this market is likely to decrease in the short term because chlorpyrifos-ethyl faces regulatory challenges in the EU. [...].

(1165) Fifth, Syngenta in its internal documents indicates that [...].⁵⁹⁰

⁵⁸⁹ Notifying Party's response to Commission's request for information RFI 37, [...].

⁵⁹⁰ Notifying Party's response to Commission's request for information RFI 37, [...].

(1166) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Insecticides – Soil in Croatia.

(F) Corn - Insecticides - Soil - Hungary

(1167) First, post-Transaction the Parties would be the clear market leader with a combined share of [60-70]% (Adama [0-5]%, Syngenta [50-60]%), followed by FMC/Cheminova ([20-30]%), Bayer ([0-5]%), Dow/DuPont ([0-5]%), Nippon-Soda ([0-5]%) and Sumitomo ([0-5]%).

(1168) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1169) Third, Adama is the second largest generic supplier in this segment.

(1170) Fourth, the Parties argue that Adama's share in this market is likely to decrease in the short term because chlorpyrifos-ethyl faces regulatory challenges in the EU. [...].

(1171) Fifth, Syngenta in its internal documents indicates that [...].⁵⁹¹

(1172) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Insecticides - Foliar - Soil in Hungary notably through the creation or strengthening of a dominant position.

13.5.3. Selective herbicides

(1173) At the European level, the segment for herbicides for use on corn is rather concentrated with only six sizeable suppliers present. The largest supplier, Bayer, makes over [...]% of total sales. Moreover, Adama is the only sizeable generic player active at the European level in this segment.

(1174) [...].⁵⁹² [...].

Figure 18 - [...]

[...]

(1175) [...].⁵⁹³

Figure 19 - Bromoxynil sales as viewed by Adama

[...]

Figure 20 - Adama's crop strategy for Corn

[...]

13.5.3.1. Markets where the Transaction would not significantly impede effective competition

(A) Corn - Selective herbicides - Broadleaf - Post-emergence - Belgium

(1176) In the market for corn broadleaf post-emergence selective herbicides in Belgium, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [0-5]%).

⁵⁹¹ Notifying Party's response to Commission's request for information RFI 37, [...].

⁵⁹² Form CO, annex 6.1.

⁵⁹³ Notifying Party's response to Commission's request for information RFI 25, annex 20.

- (1177) The increment resulting from the Transaction is [0-5]%.
- (1178) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1179) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market.
- (1180) Other competitors currently present in the market are Dow/DuPont ([30-40]%), BASF ([20-30]%) and Nufarm ([5-10]%). Among these competitors, at least one competitor is a generic player (Nufarm) and it is larger than Adama.
- (1181) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for corn broadleaf post-emergence selective herbicides in Belgium.

(B) Corn - Selective herbicides - Broadleaf - Post-emergence - Portugal

- (1182) In the market for corn broadleaf post-emergence selective herbicides in Portugal, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (1183) The increment resulting from the Transaction is [5-10]%.
- (1184) As a result of the Transaction, the Parties will be market leader but followed closely by Bayer with [30-40]% market share.
- (1185) The other competitors currently present in the market is Dow/DuPont ([10-20]%). According to the Parties' submission, [20-30]% of the market is represented by Other Competitors.
- (1186) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for corn broadleaf post-emergence selective herbicides in Portugal.

(C) Corn - Selective herbicides - Broadleaf - Post-emergence - Sweden

- (1187) In the market for corn broadleaf post-emergence selective herbicides in Sweden, the Parties have a combined market share of [30-40]% (Syngenta: [30-40]%, Adama: [0-5]%).
- (1188) The increment resulting from the Transaction is [0-5]%.
- (1189) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1190) As a result of the Transaction, the Parties will be market leader but followed closely by Dow/DuPont with [30-40]% market share. Other identified competitors currently present in the market are Bayer ([10-20]%) and BASF ([10-20]%).
- (1191) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for corn broadleaf post-emergence selective herbicides in Sweden.

(D) Corn - Selective herbicides - Broad spectrum - Pre-emergence - France

- (1192) In the market for corn broad spectrum pre-emergence selective herbicides in France, the Parties have a combined market share of [60-70]% (Syngenta: [60-70]%, Adama: [0-5]%).
- (1193) The increment resulting from the Transaction is [0-5]%.
- (1194) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1195) As a result of the Transaction, the Parties will remain market leader followed by Bayer with [20-30]% market share. Other identified competitors currently present in the market are Dow/DuPont ([5-10]%) and PSP ([0-5]%). Among these competitors, at least one competitor is a generic player (PSP). Adama has a very limited share and the Transaction does not modify the competitive structure of the market.
- (1196) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for corn broad spectrum pre-emergence selective herbicides in France.

(E) Non-problematic markets with low concentration level/increase

- (1197) As explained in Section 12.1.3, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following corn selective herbicides markets listed in Table 56 based on 2015 market shares.

Table 56: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Selective herbicides - broad spectrum - post-emergence - Germany/Austria	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Selective herbicides - broad spectrum - post-emergence - Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Selective herbicides - broad spectrum - post-emergence - Italy	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Selective herbicides - broad spectrum - pre-emergence - Hungary	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Selective herbicides - broad spectrum - pre-emergence - Poland	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Selective herbicides - broad spectrum - pre-emergence - Portugal	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Selective herbicides - broad spectrum - pre-emergence - Romania	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Selective herbicides - broad spectrum - pre-emergence - Slovakia	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Selective herbicides - broadleaf - post-emergence - Denmark	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Selective herbicides - broadleaf - post-emergence - Hungary	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Selective herbicides - broadleaf - post-emergence - Netherlands	[0-5]%	[20-30]%	[30-40]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - France	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - Italy	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - Romania	[10-20]%	[10-20]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - pre-emergence - Hungary	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Selective herbicides - graminicides - pre-emergence - Romania	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

(F) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1198) As explained in Section 12.1.3 the Commission considers that the Transaction is not likely to significantly impede effective competition on the following corn selective herbicides markets listed in Table 57 based on 2015 market shares.

Table 57: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Selective herbicides - broadleaf - post-emergence - Germany/Austria	[10-20]%	[10-20]%	[20-30]%	Bayer	[20-30]%	Dow/Du Pont	[20-30]%	Nufarm	[10-20]%
Selective herbicides - broadleaf - post-emergence - Romania	[5-10]%	[10-20]%	[20-30]%	Dow/Du Pont	[30-40]%	Nufarm	[20-30]%	Sumitomo Corp	[5-10]%
Selective herbicides - graminicides - pre-emergence - Italy	[20-30]%	[5-10]%	[20-30]%	BASF	[20-30]%	Bayer	[10-20]%	Dow/Du Pont	[5-10]%

13.5.3.2. Markets where the Transaction would significantly impede effective competition

Table 58: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Selective Herbicides	Selective herbicides - Broadleaf - Post-emergence - France	2015	[30-40]%	[30-40]%	[5-10]%
		2014	[40-50]%	[30-40]%	[10-20]%
		2013	[50-60]%	[40-50]%	[5-10]%
	Selective herbicides - Broadleaf - Post-emergence - Italy	2015	[40-50]%	[30-40]%	[10-20]%
		2014	[40-50]%	[30-40]%	[5-10]%
		2013	[40-50]%	[30-40]%	[5-10]%
	Selective herbicides - Broadleaf - Post-emergence - Spain	2015	[40-50]%	[20-30]%	[20-30]%
		2014	[50-60]%	[30-40]%	[10-20]%
		2013	[40-50]%	[20-30]%	[10-20]%
	Selective herbicides - Broad Spectrum - Pre-emergence - Italy	2015	[50-60]%	[50-60]%	[0-5]%
		2014	[60-70]%	[50-60]%	[0-5]%
		2013	[50-60]%	[50-60]%	[0-5]%
	Selective herbicides - Broad Spectrum - Pre-emergence - Spain	2015	[50-60]%	[40-50]%	[5-10]%
		2014	[50-60]%	[40-50]%	[5-10]%
		2013	[40-50]%	[30-40]%	[5-10]%
	Selective herbicides - Broad Spectrum - Post-emergence - France	2015	[70-80]%	[70-80]%	[0-5]%
		2014	[70-80]%	[60-70]%	[0-5]%
		2013	[70-80]%	[60-70]%	[5-10]%
	Selective herbicides - Broad Spectrum - Post-emergence - Spain	2015	[40-50]%	[40-50]%	[5-10]%
		2014	[30-40]%	[20-30]%	[10-20]%
		2013	N/A	N/A	N/A
Selective herbicides - Broad Spectrum - Post-emergence - UK	2015	[30-40]%	[20-30]%	[10-20]%	
	2014	[40-50]%	[30-40]%	[5-10]%	
	2013	[40-50]%	[30-40]%	[10-20]%	
Selective herbicides - Graminicides - Post-emergence - Spain	2015	N/A	N/A	N/A	
	2014	[30-40]%	[20-30]%	[10-20]%	
	2013	[30-40]%	[20-30]%	[10-20]%	

(A) Corn - Selective herbicides - Broadleaf - Post-emergence - France

(1199) First, post-Transaction the Parties would be the largest supplier with a combined share of [30-40]% (Adama [5-10]%, Syngenta [30-40]%), followed by Bayer ([30-40]%), BASF ([5-10]%), and Dow/DuPont ([5-10]%).

(1200) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1201) Third, Adama is the largest generic player in this segment.

- (1202) Fourth, Adama's main broadleaf post-emergence herbicide in France is a sulcotrione formulation whereas Syngenta's main product is a mesotrione formulation sold under the "Callisto" brand.⁵⁹⁴ [...] ⁵⁹⁵ [...] ⁵⁹⁶
- (1203) Fifth, the Parties argue that their shares in this market are likely to decrease in the short term because [...] and Syngenta will face increasing generic competition on its mesotrione formulation. However, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. Indeed, [...].
- (1204) Adama's internal documents show that it expects [...] ⁵⁹⁷ [...] ⁵⁹⁸ Syngenta's European strategy documents indicate that [...] ⁵⁹⁹ [...] ⁶⁰⁰ [...] ⁶⁰¹ Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.
- (1205) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides - Broadleaf - Post-emergence in France.
- (B) Corn - Selective herbicides - Broadleaf - Post-emergence - Italy
- (1206) First, post-Transaction the Parties would be the clear market leader with a combined share of [40-50]% (Adama [10-20]%, Syngenta [30-40]%), followed by Bayer ([10-20]%), BASF ([10-20]%), Dow/DuPont ([5-10]%), and Nufarm ([0-5]).
- (1207) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1208) Third, Adama is the largest generic player in this market.
- (1209) Fourth, Adama's broadleaf post-emergence herbicide in Italy is a sulcotrione formulation whereas Syngenta's main product is a mesotrione formulation sold under the "Callisto" brand.⁶⁰² [...] ⁶⁰³
- (1210) Fifth, the Parties argue that Syngenta's share in this market is likely to decrease in the short term because Syngenta will face increasing generic competition on its mesotrione formulation. However, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. [...].
- (1211) Adama's internal documents show that [...] ⁶⁰⁴ Moreover, Adama considers that [...] ⁶⁰⁵ Syngenta's European strategy documents indicate that [...] ⁶⁰⁶ [...] ⁶⁰⁷

⁵⁹⁴ Form CO, paragraph 3248.
⁵⁹⁵ Notifying Party's response to Commission's request for information RFI 30 - [...].
⁵⁹⁶ Form CO, annex 6.1.
⁵⁹⁷ Notifying Party's response to Commission's request for information RFI 25, annex 20.
⁵⁹⁸ Notifying Party's response to Commission's request for information RFI 30 - [...].
⁵⁹⁹ Notifying Party's response to Commission's request for information RFI 14 - [...].
⁶⁰⁰ Notifying Party's response to Commission's request for information RFI 37, [...].
⁶⁰¹ Notifying Party's response to Commission's request for information RFI 37, [...].
⁶⁰² Form CO, paragraph 2905.
⁶⁰³ Form CO, annex 6.1.
⁶⁰⁴ Notifying Party's response to Commission's request for information RFI 25, annex 20.
⁶⁰⁵ Notifying Party's response to Commission's request for information RFI 30 - [...].
⁶⁰⁶ Notifying Party's response to Commission's request for information RFI 14 - [...].

Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.

(1212) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides - Broadleaf - Post-emergence in Italy.

(C) Corn - Selective herbicides - Broadleaf - Post-emergence - Spain

(1213) First, post-Transaction the Parties would be the clear market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [20-30]%), followed by BASF ([20-30]%), FMC/Cheminova ([10-20]%), Nufarm ([10-20]%) and Dow/DuPont ([5-10]%)

(1214) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1215) Third, Adama is the largest generic player in this market.

(1216) Fourth, Adama's main broadleaf post-emergence herbicide in Spain is a sulcotrione formulation whereas Syngenta's main product is a mesotrione formulation sold under the "Callisto" brand.⁶⁰⁸ [...].⁶⁰⁹

(1217) Fifth, the Parties argue that their shares in this market are likely to decrease in the short term because [...] and Syngenta will face increasing generic competition on its mesotrione formulation. However, both Adama and Syngenta are in the process of launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. [...].

(1218) Adama's internal documents show that [...].⁶¹⁰ Moreover, Adama considers that [...].⁶¹¹ Syngenta's European strategy documents indicate that [...].⁶¹² [...].⁶¹³ Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.

(1219) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides - Broadleaf - Post-emergence in Spain.

(D) Corn - Selective herbicides - Broad Spectrum - Pre-emergence - Italy

(1220) First, post-Transaction the Parties would be the clear market leader in Italy with a combined share of [50-60]% (Adama [0-5]%, Syngenta [50-60]%), followed by Bayer ([30-40]%), BASF ([5-10]%), and Dow/DuPont ([0-5]%).

(1221) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1222) Third, Adama is the largest generic player in this market.

⁶⁰⁷ Notifying Party's response to Commission's request for information RFI 37, [...].

⁶⁰⁸ Form CO, paragraph 3248.

⁶⁰⁹ Form CO, annex 6.1.

⁶¹⁰ Notifying Party's response to Commission's request for information RFI 25, annex 20.

⁶¹¹ Notifying Party's response to Commission's request for information RFI 30 - [...].

⁶¹² Notifying Party's response to Commission's request for information RFI 14 - [...].

⁶¹³ Notifying Party's response to Commission's request for information RFI 37 - [...].

- (1223) Fourth, Adama's and Syngenta's main broad spectrum pre-emergence herbicides in Italy consist of terbuthylazine mixtures. In particular, Adama offers a terbuthylazine and pendimethalin mixture whereas Syngenta's main products consist of a mesotrione, terbuthylazine, and s-metolachlor mixture, sold under the "Lumax" brand, and s-metolachlor and terbuthylazine mixture, sold under the "Gardoprim" brand.⁶¹⁴ [...].⁶¹⁵
- (1224) Fifth, the Parties argue that their shares in this market are likely to decrease in the short term [...].
- (1225) However, Adama is in the process of developing and launching new formulations and mixtures aimed at maintaining, if not increasing, its market position. [...].
- (1226) Adama's internal documents show that Adama [...].⁶¹⁶ Syngenta's European strategy documents indicate that [...].⁶¹⁷ [...].⁶¹⁸ Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.
- (1227) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides – Broad spectrum- Pre-emergence in Italy notably through the creation or strengthening of a dominant position.
- (E) Corn - Selective herbicides - Broad Spectrum - Pre-emergence - Spain
- (1228) First, post-Transaction the Parties would be the clear market leader in Spain with a combined share of [50-60]% (Adama [5-10]%, Syngenta [40-50]%), followed by FMC/Cheminova ([10-20]%), Bayer ([10-20]%), and BASF ([10-20]%).
- (1229) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1230) Third, Adama is the second largest generic player in this market.
- (1231) Fourth, Adama's main broad spectrum pre-emergence herbicides in Spain are two s-metolachlor and terbuthylazine mixtures that it sources from Syngenta.⁶¹⁹ Syngenta main two products in this market are a mixture based on s-metolachlor, terbuthylazine, and sulcotrione, sold under the "Calaris" brand, and another s-metolachlor and mesotrione mixture, sold under the "Camix" brand. The Parties argue that their shares in this market are likely to decrease in the short term because generic entry in the s-metolachlor business will put pressure on Adama's and Syngenta's activities. Moreover, the Parties consider that s-metolachlor [...].
- (1232) However, Adama is considering [...]. Adama's internal documents show that it expects [...].⁶²⁰ Syngenta's European strategy documents indicate that [...].⁶²¹ [...].⁶²² Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.

⁶¹⁴ Form CO, paragraph 2908.

⁶¹⁵ Form CO, annex 6.1.

⁶¹⁶ Notifying Party's response to Commission's request for information RFI 25, annex 20.

⁶¹⁷ Notifying Party's response to Commission's request for information RFI 22, annex 3_ [...].

⁶¹⁸ Notifying Party's response to Commission's request for information RFI 37 - [...].

⁶¹⁹ Form CO, paragraph 3251.

⁶²⁰ Notifying Party's response to Commission's request for information RFI 25, annex 20.

⁶²¹ Notifying Party's response to Commission's request for information RFI 14 [...].

⁶²² Notifying Party's response to Commission's request for information RFI 37 - [...].

(1233) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides – Broad spectrum - Pre-emergence in Spain notably through the creation of a dominant position.

(F) Corn - Selective herbicides - Broad Spectrum - Post-emergence - France

(1234) First, post-Transaction the Parties would be the clear market leader in France with a combined share of [70-80]% (Adama [0-5]%, Syngenta [70-80]%), followed by Bayer ([20-30]%).

(1235) Second, the Transaction would reduce the number of players active in this market from 3 to 2. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1236) Third, Adama is the only generic player in this market. The Transaction would therefore eliminate the only generic alternative remaining in the market

(1237) Fourth, some Adama's and Syngenta's broad spectrum post-emergence herbicides in France are based, in part, on the same AI, such as Adama's nicosulfuron, bromoxynil, and sulcotrione mixture and several of Syngenta's "Alliance" mixtures, which also contain nicosulfuron.⁶²³ [...].⁶²⁴

(1238) Fifth, the Parties argue that their shares in this market are likely to decrease in the short term because [...] and Syngenta will face increasing generic competition as generic mesotrione formulations are expected to come to the French market. However, both Adama and Syngenta are in the process of developing and launching new formulations and mixtures aimed at maintaining, if not increasing, their market position. [...].

(1239) Adama's internal documents show that [...].⁶²⁵ Moreover, Adama considers that [...].⁶²⁶ Syngenta's European strategy documents indicate that [...].⁶²⁷ [...].⁶²⁸ [...].⁶²⁹ Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.

(1240) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides – Broad spectrum - Post-emergence in France notably through the creation or strengthening of a dominant position.

(G) Corn - Selective herbicides - Broad Spectrum - Post-emergence - Spain

(1241) First, post-Transaction the Parties would be the clear market leader in Spain with a combined share of [40-50]% (Adama [5-10]%, Syngenta [40-50]%), followed by ISK ([10-20]%), Dow/DuPont ([5-10]%), and FMC/Cheminova ([0-5]%).

(1242) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

⁶²³ Form CO, paragraph 2350.

⁶²⁴ Form CO, annex 6.1.

⁶²⁵ Notifying Party's response to Commission's request for information RFI 25, annex 20.

⁶²⁶ Notifying Party's response to Commission's request for information RFI 30 - [...].

⁶²⁷ Notifying Party's response to Commission's request for information RFI 14 - [...].

⁶²⁸ Notifying Party's response to Commission's request for information RFI 37 - [...].

⁶²⁹ Notifying Party's response to Commission's request for information RFI 37 - [...].

- (1243) Third, Adama is the second largest generic player in this market.
- (1244) Fourth, Adama's broad spectrum post-emergence herbicide in Spain is a bromoxynil and terbuthylazine mixture whereas Syngenta's main product is a mesotrione and nicosulfuron mixture.⁶³⁰ However, Adama is considering the development of new mixtures for use in this market. [...].⁶³¹
- (1245) Fifth, the Parties argue that their shares in this market are likely to decrease in the short term because [...]. However, Adama is in the process of developing and launching new formulations and mixtures aimed at maintaining, if not increasing, its market position. [...].
- (1246) Adama's internal documents show that [...].⁶³² Moreover, Adama considers that [...].⁶³³ Syngenta's European strategy documents indicate that [...].⁶³⁴ [...].⁶³⁵ Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.
- (1247) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides – Broad spectrum - Post-emergence in Spain.

(H) Corn - Selective herbicides - Broad Spectrum - Post-emergence - UK

- (1248) First, post-Transaction the Parties would be the clear market leader in the UK with a combined share of [30-40]% (Adama [10-20]%, Syngenta [20-30]%), followed by BASF ([10-20]%), FMC/Cheminova ([5-10]%), Bayer ([5-10]%), and Dow/DuPont ([0-5]%).
- (1249) Second, the Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1250) Third, Adama is the largest generic player in this market.
- (1251) Fourth, Adama's broad spectrum post-emergence herbicide in the UK is a bromoxynil and terbuthylazine mixture whereas Syngenta's main product is a mesotrione and nicosulfuron mixture.⁶³⁶ However, Adama is considering the development of new mixtures for use in this market. [...].⁶³⁷
- (1252) Fifth, the Parties argue that their shares in this market are likely to decrease in the short term [...]. However, Adama is in the process of developing and launching new formulations and mixtures aimed at maintaining, if not increasing, its market position. [...]. Adama's internal documents show that [...].⁶³⁸ Syngenta's European

⁶³⁰ Form CO, paragraph 3242.

⁶³¹ Form CO, annex 6.1.

⁶³² Notifying Party's response to Commission's request for information RFI 25, annex 20.

⁶³³ Notifying Party's response to Commission's request for information RFI 30 - [...].

⁶³⁴ Notifying Party's response to Commission's request for information RFI 14 - [...].

⁶³⁵ Notifying Party's response to Commission's request for information RFI 37 - [...].

⁶³⁶ Form CO, paragraph 3242.

⁶³⁷ Form CO, annex 6.1.

⁶³⁸ Notifying Party's response to Commission's request for information RFI 25, annex 20.

strategy documents indicate that [...] ⁶³⁹ [...]. ⁶⁴⁰ Therefore, contrary to what the Parties argue it is unlikely that their shares will decrease in the short term.

(1253) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides – Broad spectrum - Post-emergence in the UK.

(I) Corn - Selective herbicides - Graminicides - Post-emergence - Spain

(1254) First, based on 2014 market share data, post-Transaction the Parties would be the clear market leader in Spain with a combined share of [30-40]% (Adama [10-20]%, Syngenta [20-30]%), followed by Bayer ([10-20]%) and BASF ([5-10]).

(1255) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1256) Third, Adama is the only generic player in this market.

(1257) Fourth, the Parties share some active ingredients as Adama and Syngenta both offer nicosulfuron formulations for use in this market.

(1258) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Corn - Selective herbicides – Graminicides - Post-emergence in Spain.

13.5.4. Conclusion

(1259) To conclude, the Commission considers that the Transaction would significantly impede effective competition in the crop protection markets for Corn listed in Sections 12.5.2.2 and 12.5.3.2.

13.6. Fruits

13.6.1. Overview of the crops

(1260) The global vegetable and fruit agrochemical market generated USD 13 660 million of sales in 2014 almost a third of which were made in the EEA (30.9%). ⁶⁴¹

(1261) The main agrochemical market for fruits and vegetables consists of fungicides (40.1% in 2014), followed by insecticides (33.5%) and herbicides (23.2%). ⁶⁴²

(1262) The fruit and vegetable crop protection comprises several crops amongst which the most important are grapes (USD 1 767 million), potatoes (USD 1 711 million), citrus (USD 1 690 million), pome fruit (USD 1 473 million) followed by "other fruit and vegetable (including nuts and a broad range of small individual crop sectors that make up the remainder of the fruit and vegetables sector). ⁶⁴³

⁶³⁹ Notifying Party's response to Commission's request for information RFI 14 - [...].

⁶⁴⁰ Notifying Party's response to Commission's request for information RFI 22, annex 3 - [...].

⁶⁴¹ Phillips McDougall – AgriService, Crops Section, 2014 Market, page 11.

⁶⁴² Phillips McDougall – AgriService, Crops Section, 2014 Market, page 11.

⁶⁴³ Phillips McDougall – AgriService, Crops Section, 2014 Market, pages 13, 43, 25, 37, 52.

13.6.2. *Fungicides*

13.6.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Grapes - Fungicides - Oomycetes - Hungary

- (1263) In the market for grapes oomycetes fungicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (1264) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1265) As a result of the Transaction, the Parties will be market leader followed by Dow/DuPont with [10-20]% market share, Bayer ([10-20]%), BASF ([5-10]%), Nufarm ([5-10]%), Montanwerke ([5-10]%), Sulphur Mills Ltd ([0-5]%) and Isagro ([0-5]%). Among these competitors, 4 rivals are generic players (Nufarm, Montanwerke, Sulphur Mills Ltd, Isagro).
- (1266) According to the Parties' submission, [20-30]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for grapes in Hungary and therefore are active or potentially active in this market including large generic players such as FMC and Mitsui as well as Sumitomo.
- (1267) Most of Adama's offering consist in Folpet, mainly as a solo product ([70-80]% of sales) or in mixtures. By contrast, Syngenta's offering includes Folpet only in one mixture which represents [10-20]% of sales of Syngenta. In terms of active ingredients, the Parties overlap therefore only to a limited extent.
- (1268) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for grapes oomycetes fungicides in Hungary.

(B) Grapes - Fungicides - Oomycetes - Slovenia

- (1269) In the market for grapes oomycetes fungicides in Slovenia, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1270) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1271) As a result of the Transaction, the Parties will be market leader followed by Bayer and BASF with each [20-30]% market share.
- (1272) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 10 companies that hold fungicides product registrations for grapes in Slovenia and therefore are active or potentially active in this market including large generic players such as Belchim and Nufarm, as well as Sumitomo.
- (1273) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for grapes oomycetes fungicides in Slovenia.

(C) Other Fruit - Fungicides - Powdery mildew - Spain

- (1274) In the market for other fruit powdery mildew fungicides in Spain, the Parties have a combined market share of [20-30]% (Syngenta: [5-10]%, Adama: [10-20]%).

- (1275) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1276) As a result of the Transaction, the Parties will not be market leader and only the third largest competitor on the market. Other competitors currently present in the market are Dow/DuPont ([30-40]%) and Bayer ([20-30]%). According to the Parties' submission, [10-20]% of the market is represented by Other Competitors.
- (1277) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for other fruit powdery mildew fungicides in Spain.

(D) Pome fruit - Fungicides - Leafspots - Hungary

- (1278) In the market for pome fruit leafspots fungicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1279) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1280) As a result of the Transaction, the Parties will be market leader followed by BASF with [10-20]% market share, Bayer ([5-10]%), PSP ([0-5]%), Globachem ([0-5]%), IQV ([0-5]%), Nufarm ([0-5]%) and Sumitomo ([0-5]%). Among these competitors, five rivals are generic players (PSP, Globachem, IQV, Nufarm, Sumitomocorp).
- (1281) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for pome fruit in Hungary and therefore are active or potentially active in this market including large generic players such as FMC, Mitsui and Sharda.
- (1282) The Parties share active ingredients only to a limited extent. Adama's product range mainly consists in products manufactured with active ingredient Captan ([70-80]% of sales), as well as Bupirimate ([10-20]%) and Cyprodinil ([5-10]%). Syngenta does not use Captan or Bupirimate and only uses Cyprodinil in a product accounting for [...] of its sales.
- (1283) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit leafspots fungicides in Hungary.

(E) Pome fruit - Fungicides - Leafspots - Lithuania

- (1284) In the market for pome fruit leafspots fungicides in Lithuania, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%).
- (1285) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1286) As a result of the Transaction, the Parties will be market leader followed by BASF with [20-30]% market share, Bayer ([10-20]%) and Dow/DuPont ([10-20]%).
- (1287) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold fungicides product registrations for pome fruit in Lithuania and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and PSP.

(1288) The Parties share no active ingredients. Adama is active in this market with a formulated product based on active ingredient Captan which is not used by Syngenta in both products the other party is offering in this market.

(1289) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit leafspots fungicides in Lithuania.

(F) Pome fruit - Fungicides - Leafspots - Netherlands

(1290) In the market for pome fruit leafspots fungicides in Netherlands, the Parties have a combined market share of [30-40]% (Syngenta: [0-5]%, Adama: [30-40]%).

(1291) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1292) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market.

(1293) A high number of competitors are currently present in the market, namely BASF ([30-40]%), PSP ([10-20]%), Bayer ([5-10]%) and Eastman Chemical Company ([0-5]%). Among these competitors, two rivals are generic players (PSP, Eastman Chemical Company),

(1294) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit leafspots fungicides in Netherlands.

(G) Pome fruit - Fungicides - Leafspots - Romania

(1295) In the market for pome fruit leafspots fungicides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).

(1296) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1297) As a result of the Transaction, Syngenta will remain market leader followed by BASF with [10-20]% market share, Dow/DuPont ([10-20]%), Bayer ([10-20]%), PSP ([5-10]%), Solarex ([5-10]%) and Nipponsoda ([0-5]%). Among these competitors, three rivals are generic players (PSP, Solarex, Nipponsoda). According to the Parties' submission, [10-20]% of the market is represented by Other Competitors.

(1298) The Parties share no active ingredients. Adama is active in this market with formulated products based on active ingredients Captan and Tebucanazole which are not used by Syngenta in all products the other party is offering in this market.

(1299) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit leafspots fungicides in Romania.

(H) Pome fruit - Fungicides - Powdery mildew - Hungary

(1300) In the market for pome fruit powdery mildew fungicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).

- (1301) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1302) As a result of the Transaction, the Parties will remain market leader followed by BASF with 21% market share.
- (1303) A high number of competitors are currently present in the market, namely PSP ([10-20]%), Globachem ([5-10]%), Bayer ([5-10]%), Sumitomo ([0-5]%), Mitsui ([0-5]%) and Dow/DuPont ([0-5]%). Among these competitors, four rivals are generic players (PSP, Globachem, Sumitomo, Mitsui). According to the Parties' submission, [10-20]% of the market is represented by other competitors.
- (1304) The Parties share no active ingredients. Adama is active in this market with formulated products based on active ingredients Bupirimate and Tebuconazole which are not used by Syngenta in all products the other party is offering in this market.
- (1305) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit powdery mildew fungicides in Hungary.
- (I) Pome fruit - Fungicides - Powdery mildew - Lithuania
- (1306) In the market for pome fruit powdery mildew fungicides in Lithuania, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1307) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1308) As a result of the Transaction, the Parties will be market leader followed by BASF with [20-30]% market share, Bayer ([10-20]%) and Dow/DuPont ([10-20]%).
- (1309) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold fungicides product registrations for pome fruit in Lithuania and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and PSP.
- (1310) The Parties share no active ingredients. Adama is active in this market with formulated products based on active ingredient Bupirimate which is not used by Syngenta in both products the other party is offering in this market.
- (1311) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit powdery mildew fungicides in Lithuania.
- (J) Pome fruit - Fungicides - Powdery mildew - Portugal
- (1312) In the market for pome fruit powdery mildew fungicides in Portugal, the Parties have a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%).
- (1313) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1314) As a result of the Transaction, the Parties will be market leader followed by Oxon Sipcam Vischim with [10-20]% market share, Dow/DuPont ([10-20]%), Sapec ([10-20]%), Bayer ([0-5]%) and BASF ([0-5]%). Among these competitors,

two rivals are generic players (Oxon Sipcam Vischim, Sapec). According to the Parties' submission, [10-20]% of the market is represented by Other Competitors.

(1315) The Parties share active ingredients only to a limited extent. Syngenta offers only one product based on active ingredient Difenconazole. Adama sells four products, including one based on Difenconazole which accounts for [40-50]% of its sales.

(1316) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit powdery mildew fungicides in Portugal.

(K) Non-problematic markets with low concentration level/increase

(1317) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit fungicides markets listed in Table 59 based on 2015 market shares.

Table 59: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Grapes - Fungicides- leafspots - Italy	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Grapes – Fungicides - powdery mildew -	[0-5]%	[20-30]%	[30-40]%	[...]	[...]
Grapes – Fungicides - powdery mildew - Croatia	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Grapes – Fungicides- powdery mildew - Cyprus	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Grapes - Fungicides - powdery mildew -	[0-5]%	[30-40]%	[40-50]%	[...]	[...]
Grapes – Fungicides - oomycetes - Bulgaria	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Grapes - - Fungicides - oomycetes - Croatia	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Grapes - Fungicides -oomycetes - Romania	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Other fruit - Fungicides - leafspots - Greece	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Other fruit - Fungicides - leafspots - Romania	[10-20]%	[0-5]%	[20-30]%	[...]	[...]
Other fruit - Fungicides - molds - Greece	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Other fruit - Fungicides- powdery mildew -	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Other fruit – Fungicides - oomycetes -	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Other fruit – Fungicides - oomycetes - Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Pome fruit - Fungicides - powdery mildew - UK	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Pome fruit - Fungicides - oomycetes - Spain	[5-10]%	[10-20]%	[20-30]%	[...]	[...]

(L) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1318) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit fungicides markets listed in Table 60 based on 2015 market shares.

Table 60: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Grapes - Fungicides - powdery mildew – Romania	[10-20]%	[5-10]%	[20-30]%	Bayer	[30-40]%	BASF	[5-10]%	IQV	[5-10]%
Other fruit - Fungicides - leafspots – Hungary	[10-20]%	[10-20]%	[20-30]%	PSP	[10-20]%	Nufarm	[10-20]%	Dow/Du Pont	[10-20]%
Other fruit -Fungicides powdery mildew – Portugal	[5-10]%	[10-20]%	[20-30]%	Oxon Sipcam Vischim	[30-40]%	Dow/Du Pont	[10-20]%	Bayer	[5-10]%
Other fruit - Fungicides oomycetes - Czech Republic	[5-10]%	[20-30]%	[30-40]%	BASF	[20-30]%	Bayer	[20-30]%	Dow/Du Pont	[10-20]%
Pome fruit - Fungicides leafspots – Croatia	[10-20]%	[10-20]%	[20-30]%	Genera	[10-20]%	Bayer	[10-20]%	Indofil	[5-10]%
Pome fruit - Fungicides leafspots – France	[10-20]%	[10-20]%	[20-30]%	BASF	[30-40]%	PSP	[10-20]%	Dow/Du Pont	[5-10]%
Pome fruit -Fungicides leafspots – Slovenia	[10-20]%	[10-20]%	[20-30]%	BASF	[20-30]%	Bayer	[20-30]%	Dow/Du Pont	[5-10]%
Pome fruit - Fungicides powdery mildew – France	[10-20]%	[10-20]%	[20-30]%	UPL	[20-30]%	Dow/Du Pont	[10-20]%	BASF	[10-20]%
Pome fruit - Fungicides powdery mildew – Netherlands	[10-20]%	[10-20]%	[20-30]%	BASF	[40-50]%	Bayer	[10-20]%	PSP	[5-10]%
Pome fruit - Fungicides powdery mildew – Romania	[20-30]%	[5-10]%	[30-40]%	BASF	[20-30]%	Bayer	[10-20]%	Nippon Soda	[5-10]%

13.6.2.2. Markets where the Transaction would significantly impede effective competition

Table 61: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Fungicides	Grapes - Fungicides - Molds - Italy	2015	[30-40]%	[30-40]%	[0-5]%
		2014	[30-40]%	[30-40]%	[0-5]%
		2013	[40-50]%	[40-50]%	[0-5]%
	Grapes - Fungicides - Powdery mildew - Hungary	2015	[30-40]%	[30-40]%	[0-5]%
		2014	[30-40]%	[20-30]%	[0-5]%
		2013	[30-40]%	[30-40]%	[0-5]%
	Pome fruit - Fungicides - Leafspots - Czech Republic	2015	[40-50]%	[20-30]%	[20-30]%
		2014	[50-60]%	[20-30]%	[30-40]%
		2013	[30-40]%	[20-30]%	[10-20]%
	Pome fruit - Fungicides - Powdery mildew - Italy	2015	[20-30]%	[20-30]%	[5-10]%
		2014	[40-50]%	[30-40]%	[10-20]%
		2013	[40-50]%	[30-40]%	[5-10]%

(A) Grapes - Fungicides - Molds - Italy

(1319) First, post-Transaction the Parties would be the market leader with a combined share of [30-40]% (Adama [0-5]%, Syngenta [30-40]%), followed by Bayer ([20-30]%), Sumitomo ([10-20]%), Sipcam ([0-5]%), BASF ([0-5]%) and PSP ([0-5]%).

- (1320) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1321) Third, Syngenta's main grape fungicide for Italy sold under the "Switch" brand is a cyprodinil and fludioxonil mixture. Adama's main product in this market is cyprodinil formulation.⁶⁴⁴
- (1322) Fourth, Adama's internal documents show that it expects its European share for grape fungicides to increase from [...].⁶⁴⁵ Moreover, in its internal documents Adama forecasted a [...].⁶⁴⁶ Syngenta's internal documents indicate that Syngenta is a market leader in this market with a "[...]".⁶⁴⁷
- (1323) Fifth, the Parties are in the process of developing and launching new formulations and mixtures for use in this market. Adama is considering the development of a [...], while Syngenta is considering the development of a [...].
- (1324) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes fungicides molds in Italy.

(B) Grapes - Fungicides - Powdery mildew - Hungary

- (1325) First, post-Transaction the Parties would be the largest supplier with a combined market share of [30-40]% (Adama [0-5]%, Syngenta [30-40]%), followed by Dow/DuPont ([20-30]%), BASF ([10-20]%), IQV ([5-10]%), Sumitomo ([5-10]%), Bayer ([0-5]%), and UPL ([0-5]%).
- (1326) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1327) Third, Adama's main powdery mildew fungicides for use in Hungary include folpet and triadimenol mixtures as well a propiconazole formulation. Syngenta main products in this market also include folpet mixtures sold under the "Topas" and "Quadris" brands as well as penconazole and sulphur formulations.
- (1328) Fourth, Adama's internal documents show that it expects its European share for grape fungicides to [...].⁶⁴⁸ Syngenta's internal documents indicate that Syngenta is a market leader in this market with a "[...]".⁶⁴⁹ Syngenta also considers having a strong competitive position when compared to its competitors.⁶⁵⁰
- (1329) Fifth, the Parties are in the process of developing and launching new formulations and mixtures for use in this market. Adama is considering the development of a [...], while Syngenta is considering the development of a [...].
- (1330) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes fungicides powdery mildew in Hungary.

⁶⁴⁴ Form CO, paragraph 5064.

⁶⁴⁵ Notifying Party's response to Commission's request for information RFI 15, annex 3 - [...].

⁶⁴⁶ Notifying Party's response to Commission's request for information RFI 30 - [...].

⁶⁴⁷ Notifying Party's response to Commission's request for information RFI 27 - [...].

⁶⁴⁸ Notifying Party's response to Commission's request for information RFI 15, annex 3 - [...].

⁶⁴⁹ Notifying Party's response to Commission's request for information RFI 27 - [...].

⁶⁵⁰ Notifying Party's response to Commission's request for information RFI 27 - [...].

(C) Pome fruit - Fungicides - Leafspots - Czech Republic

- (1331) First, post-Transaction the Parties would be the clear market leader with a combined share of [40-50]% (Adama [20-30]%, Syngenta [20-30]%), followed by BASF ([10-20]%), PSP ([10-20]%), Bayer ([5-10]%), Dow/DuPont ([5-10]%) and NeraAgro ([0-5]%).
- (1332) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1333) Third, Adama is the largest generic player in this market.
- (1334) Fourth, Syngenta sells two leafspots fungicides for pome fruit in Czech Republic "Chorus", a cyprodinil formulation, and "Score", a difenoconazole formulation. Adama offers generic versions of Syngenta's products as well as a captan formulation.
- (1335) Fifth, Adama's internal documents show that it expects its European share for pome fruit fungicides [...].⁶⁵¹
- (1336) Sixth, the Parties are in the process of developing and launching new formulations and mixtures for use in this market. Adama is considering the development of [...], while Syngenta is considering the development of [...].
- (1337) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for pome fruit fungicides leafspots in Czech Republic.

(D) Pome fruit - Fungicides - Powdery mildew - Italy

- (1338) First, post-Transaction the Parties would be the market leader with a combined share of [20-30]% (Adama [5-10]%, Syngenta [20-30]%), followed by BASF ([10-20]%), PSP ([10-20]%), and Bayer ([0-5]%). Moreover, unidentified competitors in this market hold a share of [30-40]%.
- (1339) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1340) Third, Adama is the second largest generic player in this market.
- (1341) Third, Adama's main powdery mildew fungicides for use in Italy include a bupirimate formulation and a tebuconazole formulation. Syngenta main products in this market include penconazole formulations sold under the "Topas" brand and "Cydely" a cyflufenamid formulation.
- (1342) Fourth, Adama's internal documents show that it expects its European share for pome fungicides [...].⁶⁵² Whereas Syngenta's internal documents recognize the significance of [...].⁶⁵³
- (1343) Fifth, the Parties are in the process of developing and launching new formulations and mixtures for use in this market. Adama is considering the development of [...], while Syngenta is considering [...].

⁶⁵¹ Notifying Party's response to Commission's request for information RFI 15, annex 3 - [...].

⁶⁵² Notifying Party's response to Commission's request for information RFI 15, annex 3 - [...].

⁶⁵³ Notifying Party's response to Commission's request for information RFI 27 - [...].

(1344) The Commission notes that the combined market share of the Parties will remain below [...]%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity

(1345) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for pome fruit fungicides powdery mildew in Italy.

13.6.3. Selective herbicides

13.6.3.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

(1346) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit selective herbicides markets listed in Table 62 based on 2015 market shares.

Table 62: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Citrus - Selective herbicides - graminicides - post-emergence – Spain	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Other fruit - Selective herbicides - broad spectrum - post-emergence - Spain	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Other fruit - Selective herbicides - broadleaf - post-emergence – Spain	[30-40]%	[0-5]%	[30-40]%	[...]	[...]
Other fruit - Selective herbicides - graminicides - post-emergence - Netherlands	[0-5]%	[10-20]%	[20-30]%	[...]	[...]

(B) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1347) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit selective herbicides markets listed in Table 63 based on 2015 market shares.

Table 63: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Other fruit - Selective herbicides - graminicides - post-emergence - Spain	[10-20]%	[10-20]%	[20-30]%	Sumitomo	[20-30]%	PSP	[10-20]%	Bayer	[10-20]%

13.6.4. Insecticides

13.6.4.1. Markets where the Transaction would not significantly impede effective competition

(A) Citrus – Insecticides - Foliar - Broad spectrum - Portugal

(1348) In the market for citrus foliar broad spectrum insecticides in Portugal, the Parties have a combined market share of [70-80]% (Syngenta: [60-70]%, Adama: [0-5]%). The increment resulting from the Transaction is [0-5]%.

- (1349) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1350) According to the Parties' submission, [30-40]% of the market is represented by Other Competitors. The Parties have indicated that generic players Sapec, Sipcam and Sharda are also present.
- (1351) The Transaction would not substantially modify the market structure in the light of the modest market share of Adama in this market and the absence of pipeline products and expansion plans.
- (1352) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for citrus foliar broad spectrum insecticides in Portugal.

(B) Citrus - Insecticides - Foliar - Sucking - Cyprus

- (1353) In the market for citrus foliar sucking insecticides in Cyprus, the Parties have a combined market share of [50-60]% (Syngenta: [40-50]%, Adama: [5-10]%).
- (1354) As a result of the Transaction, the Parties will remain market leader followed by Bayer with [20-30]% market share.
- (1355) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1356) According to the Parties' submission, [20-30]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides foliar sucking registrations for citrus fruit in Cyprus and therefore are active or potentially active in this market including large generic players such as FMC and Nufarm.
- (1357) The Parties share no active ingredients. Adama sells one product based on active ingredient tau-fluvalinate which is not used by Syngenta in the three products it sells on this market.
- (1358) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for citrus foliar sucking insecticides in Cyprus.

(C) Grapes - Insecticides - Foliar - Chewing - Greece

- (1359) In the market for grapes foliar chewing insecticides in Greece, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1360) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1361) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market. Other identified players currently present in the market are Dow/DuPont ([60-70]%) and Bayer ([0-5]%).
- (1362) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for grapes foliar chewing insecticides in Greece.

(D) Pome fruit - Insecticides - Foliar - Broad spectrum - Lithuania

- (1363) In the market for pome fruit foliar broad spectrum insecticides in Lithuania, the Parties have a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%).
- (1364) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1365) As a result of the Transaction, the Parties will be market leader followed by BASF with [10-20]% market share, Dow/DuPont ([5-10]%) and Bayer ([5-10]%). According to the Parties' submission, [40-50]% of the market is represented by Other Competitors.
- (1366) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit foliar broad spectrum insecticides in Lithuania.

(E) Pome fruit - Insecticides - Foliar - Broad Spectrum - Romania

- (1367) In the market for pome fruit foliar broad spectrum insecticides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%).
- (1368) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1369) As a result of the Transaction, the Parties will be market leader followed by Bayer with [20-30]% market share, Dow/DuPont ([10-20]%) and Sumitomo Chemical ([10-20]%). Among these competitors, one rival (Sumitomo) is a generic player.
- (1370) According to the Parties' submission, [20-30]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides foliar broad spectrum registrations for pome fruit in Romania and therefore are active or potentially active in this market including large generic players such as FMC, PSP and Nufarm.
- (1371) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit foliar broad spectrum insecticides in Romania.

(F) Pome fruit - Insecticides - Foliar - Chewing - Croatia

- (1372) In the market for pome fruit foliar chewing insecticides in Croatia, the Parties have a combined market share of [40-50]% (Syngenta: [40-50]%, Adama: [5-10]%). As a result of the Transaction, the Parties will remain market leader.
- (1373) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1374) According to the Parties' submission, [50-60]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides foliar chewing registrations for pome fruit in Croatia and therefore are active or potentially active in this market including large generic players such as PSP and Sumitomo.

(1375) The Parties share no active ingredients. Adama sells one product based on active ingredient clofentezine whereas Syngenta sells one product based on enamectin-benzoate.

(1376) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit foliar chewing insecticides in Croatia.

(G) Pome fruit - Insecticides - Foliar - Chewing - Spain

(1377) In the market for pome fruit foliar chewing insecticides in Spain, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [10-20]%).

(1378) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1379) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market. Other identified competitors currently present in the market are Dow/DuPont ([50-60]%) and PSP ([20-30]%). Among these competitors, at least one rival is a generic player (PSP).

(1380) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit foliar chewing insecticides in Spain.

(H) Pome fruit - Insecticides - Foliar - Sucking - Romania

(1381) In the market for pome fruit foliar sucking insecticides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).

(1382) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1383) As a result of the Transaction, the Parties will be market leader but followed closely by Bayer with [30-40]% market share, Nufarm ([10-20]%) and Sumitomo ([10-20]%). Among these competitors, two rivals are generic players (Nufarm, Sumitomo) and they are both larger than Adama.

(1384) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit foliar sucking insecticides in Romania.

(I) Pome fruit - Insecticides - Foliar - Sucking - Slovenia

(1385) In the market for pome fruit foliar sucking insecticides in Slovenia, the Parties have a combined market share of [60-70]% (Syngenta: [60-70]%, Adama: [5-10]%).

(1386) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1387) As a result of the Transaction, the Parties will remain market leader followed by FMC/Cheminova with [20-30]% market share and Bayer ([5-10]%). Among these competitors, one rival is a generic player (FMC/Cheminova).

(1388) According to the Parties' submission, [0-5]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least

10 companies that hold insecticides foliar sucking registrations for pome fruit in Slovenia and therefore are active or potentially active in this market including large generic players such as Belchim, ISK and PSP.

- (1389) The Parties share no active ingredients. Adama sells two products based on active ingredients clofentezine and imidacloprid respectively. Syngenta sells these products based on three different active ingredients: thiamethoxam, abamectin and pirimicarb.
- (1390) Finally there are significant differences in the prices of the products. Adama sells products which are charged around [...] whereas Syngenta's products are charged minimum [...] (products based on thiamethoxam and pirimicarb) or even more than [...] (product based on abamectin).
- (1391) Therefore, although the market is concentrated and the combined market share is high, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pome fruit foliar sucking insecticides in Slovenia.

(J) Non-problematic markets with low concentration level/increase

- (1392) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit insecticides markets listed in Table 64 based on 2015 market shares.

Table 64: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Grapes - foliar - chewing - Slovenia	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Grapes - foliar - sucking - Portugal	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Other fruit - foliar - broad spectrum - Italy	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Other fruit - foliar - broad spectrum - Slovakia	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Other fruit - foliar - chewing - Portugal	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Other fruit - foliar - chewing - Spain	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Other fruit - foliar - sucking - Sweden	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Other fruit - soil - Hungary	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Pome fruit - foliar - broad spectrum - France	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Pome fruit - foliar - chewing - France	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Pome fruit - foliar - chewing - UK	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Pome fruit - foliar - sucking - Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

(K) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

- (1393) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit insecticides markets listed in Table 65 based on 2015 market shares.

Table 65: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
				Other fruit - foliar - sucking - Spain	[10-20]%	[10-20]%	[20-30]%	Bayer	[10-20]%
Pome fruit - foliar - chewing - Portugal	[10-20]%	[10-20]%	[20-30]%	Dow/Du Pont	[20-30]%	PSP	[20-30]%	Bayer	[10-20]%

13.6.4.2. Markets where the Transaction would significantly impede effective competition

Table 66: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Insecticides	Citrus - Insecticides - Foliar - Chewing - Spain	2015	[40-50]%	[5-10]%	[40-50]%
		2014	[50-60]%	[5-10]%	[40-50]%
		2013	[40-50]%	[0-5]%	[40-50]%
	Grapes - Insecticides - Foliar - Broad spectrum - Hungary	2015	[60-70]%	[50-60]%	[10-20]%
		2014	[70-80]%	[50-60]%	[10-20]%
		2013	[50-60]%	[40-50]%	[10-20]%
	Grapes - Insecticides - Foliar - Chewing - Italy	2015	[40-50]%	[40-50]%	[0-5]%
		2014	[30-40]%	[30-40]%	[0-5]%
		2013	[20-30]%	[20-30]%	[0-5]%
	Grapes - Insecticides - Foliar - Chewing - Portugal	2015	[40-50]%	[40-50]%	[0-5]%
		2014	[30-40]%	[30-40]%	[0-5]%
		2013	[20-30]%	[20-30]%	[5-10]%
	Grapes - Insecticides - Foliar - Chewing - Spain	2015	[20-30]%	[0-5]%	[20-30]%
		2014	[30-40]%	[0-5]%	[30-40]%
		2013	[30-40]%	[5-10]%	[20-30]%
	Grapes - Insecticides - Foliar - Sucking - Greece	2015	[30-40]%	[30-40]%	[0-5]%
		2014	[40-50]%	[40-50]%	[0-5]%
		2013	[20-30]%	[10-20]%	[5-10]%
	Grapes - Insecticides - Foliar - Sucking - Italy	2015	[50-60]%	[40-50]%	[0-5]%
		2014	[50-60]%	[50-60]%	[5-10]%
		2013	[20-30]%	[20-30]%	[0-5]%
	Other fruit - Insecticides - Foliar - Broad spectrum - Spain	2015	[30-40]%	[10-20]%	[10-20]%
		2014	[30-40]%	[20-30]%	[10-20]%
		2013	[40-50]%	[20-30]%	[10-20]%
	Pome fruit - Insecticides - Foliar - Broad spectrum - Greece	2015	[30-40]%	[5-10]%	[30-40]%
		2014	[30-40]%	[5-10]%	[30-40]%
		2013	[30-40]%	[5-10]%	[20-30]%
	Pome fruit - Insecticides - Foliar - Broad spectrum - Spain	2015	[20-30]%	[20-30]%	[5-10]%
		2014	[20-30]%	[20-30]%	[5-10]%
		2013	[30-40]%	[30-40]%	[5-10]%
Pome fruit - Insecticides - Foliar - Chewing - Greece	2015	[30-40]%	[20-30]%	[10-20]%	
	2014	[20-30]%	[20-30]%	[5-10]%	
	2013	[20-30]%	[10-20]%	[10-20]%	
Pome fruit - Insecticides - Foliar - Chewing - Italy	2015	[40-50]%	[30-40]%	[0-5]%	
	2014	[40-50]%	[30-40]%	[0-5]%	
	2013	[30-40]%	[30-40]%	[0-5]%	

(A) Citrus - Insecticides - Foliar - Chewing - Spain

- (1394) First, post-Transaction the Parties would be the clear market leader with a combined share of [40-50]% (Adama [40-50]%, Syngenta [5-10]%), followed by Dow/DuPont ([10-20]%) and PSP ([5-10]%).
- (1395) Second, the Transaction would reduce the number of sizeable players active in this market from 4 to 3. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1396) Third, Adama is the largest generic player in this market.
- (1397) Fourth, Adama's chewing insecticides for use on citrus fruit in Spain include two abamectin formulations, a chlorpyrifos formulation, and two pyriproxyfen formulations. Syngenta's main product in this market is a lufenuron formulation sold under the "Match" brand.
- (1398) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market would have a detrimental effect on competition.
- (1399) Fifth, Adama's internal documents show that [...].⁶⁵⁴ Whereas Syngenta's internal documents indicate that Syngenta expected to [...].⁶⁵⁵
- (1400) Sixth, Adama is considering [...].
- (1401) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for citrus insecticides foliar chewing in Spain.

(B) Grapes - Insecticides - Foliar - Broad spectrum - Hungary

- (1402) First, post-Transaction the Parties would be the clear market leader in Hungary with a combined share of [60-70]% (Adama [10-20]%, Syngenta [50-60]%), followed by Dow/DuPont ([10-20]%), Bayer ([5-10]%), and FMC/Cheminova ([0-5]%).
- (1403) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1404) Third, Adama is the largest generic player in this market.
- (1405) Fourth, Adama's broad spectrum insecticides for use on grapes in Hungary include a chlorpyrifos formulation and a tau-fluvalinate formulation. Syngenta's product in this market is a lambda-cyhalothrin formulation sold under the "Karate" brand. Tau-Fluvalinate and lambda-cyhalothrin belong to the same chemical class, the pyrethroids.
- (1406) Fifth, Adama's internal documents show that it expects [...].⁶⁵⁶ Moreover, Adama considers Syngenta's lambda-cyhalothrin formulations as one of the main

⁶⁵⁴ Notifying Party's response to Commission's request for information RFI 41 - [...].

⁶⁵⁵ Notifying Party's response to Commission's request for information RFI 14 - [...]; Notifying Party's response to Commission's request for information RFI 27, annex 2 -Q2 SYT.

⁶⁵⁶ Notifying Party's response to Commission's request for information RFI 25, annex 20 - [...].

competitors for its Tau-Fluvalinate formulations.⁶⁵⁷ Syngenta expects its sales of specialty insecticides, including grape insecticides, to [...].⁶⁵⁸

(1407) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes insecticides foliar broad spectrum in Hungary notably through the creation or strengthening of a dominant position.

(C) Grapes - Insecticides - Foliar - Chewing - Italy

(1408) First, post-Transaction the Parties would be the second largest supplier with a combined share of [40-50]% (Adama [0-5]%, Syngenta [40-50]%). Competitors in this market include Dow/DuPont ([50-60]%) and Mitsui ([5-10]%).

(1409) Second, the Transaction would reduce the number of sizeable players active in this market from 4 to 3. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1410) Third, Adama is the second largest generic player in this market.

(1411) Fourth, Adama's chewing insecticides for use on grapes in Italy include an abamectin formulation and a clofentezine formulation. Syngenta's main products in this market are an emamectin benzoate formulation sold under the "Affirm" brand and a chlorantraniliprole formulation sold under the "Virtako" and "Voliam" brands. Abamectin and emamectin benzoate belong to the same chemical class, the avermectins.

(1412) Fifth, Adama's internal documents show that [...].⁶⁵⁹ Syngenta's internal documents indicate that it expected to [...].⁶⁶⁰

(1413) Sixth, the Parties are in the process of developing and launching new formulations and mixtures for use in this market. Adama is considering the development [...], while Syngenta is considering the development of products based on [...].

(1414) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes insecticides foliar chewing in Italy.

(D) Grapes - Insecticides - Foliar - Chewing - Portugal

(1415) First, post-Transaction the Parties would be the second largest supplier with a combined share of [40-50]% (Adama [0-5]%, Syngenta [40-50]%). Competitors in this market include Dow/DuPont ([40-50]%) and Sipcam ([10-20]%).

(1416) Second, the Transaction would reduce the number of sizeable players active in this market from 4 to 3. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1417) Third, Adama is the second largest generic player in this market.

⁶⁵⁷ Notifying Party's response to Commission's request for information RFI 11, annex 13 - [...].

⁶⁵⁸ Notifying Party's response to Commission's request for information RFI 27 - [...].

⁶⁵⁹ Notifying Party's response to Commission's request for information RFI 41 - [...].

⁶⁶⁰ Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT pptx.

- (1418) Fourth, Adama's chewing insecticides for use on grapes in Portugal include a beta-cyfluthrin formulation, a clofentezine formulation, and a lambda-cyhalothrin formulation. Syngenta's main products in this market are an emamectin benzoate formulation sold under the "Affirm" brand and a chlorantraniliprole formulation sold under the "Virtako" and "Voliam" brands.
- (1419) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market with two strong leaders holding each a share above [40-50]% would have a detrimental effect on competition
- (1420) Fifth, Adama's internal documents show that it expects its European share for grape insecticides to [...].⁶⁶¹ Syngenta's internal documents indicate that Syngenta holds a leading position in chewing insecticides in Portugal⁶⁶² and that Syngenta expected to [...].⁶⁶³
- (1421) Sixth, Adama is considering the development of a [...].
- (1422) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes insecticides foliar chewing in Portugal.
- (E) Grapes - Insecticides - Foliar - Chewing - Spain
- (1423) First, the Parties' shares have fluctuated significantly over the past 3 years. When the average share of the last 3 years is taken into account, the Parties would be the second largest supplier with a combined share of [30-40]% (Adama [20-30]%, Syngenta [5-10]%). In any case, over the same period, the only sizeable competitor in this market is Dow/DuPont ([50-60]%).
- (1424) Second, the Transaction would reduce the number of sizeable players active in this market from 3 to 2. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].⁶⁶⁴
- (1425) Third, Adama is the largest generic player in this market.
- (1426) Fourth, Adama's main chewing insecticides for use on grapes in Spain include an abamectin formulation, a beta-cyfluthrin formulation, a chlorpyrifos formulation, and two clofentezine formulations. Syngenta's products in this market are an emamectin benzoate formulation sold under the "Affirm" brand and a fenoxycarb formulation sold under the "Insegar" brand. Abamectin and emamectin benzoate belong to the same chemical class, the avermectins.
- (1427) Fifth, Adama's internal documents show that it expects its European share for grape insecticides to [...]. Syngenta's internal documents indicate that Syngenta holds a leading position in chewing insecticides in Spain and that Syngenta expected to [...].⁶⁶⁵

⁶⁶¹ Notifying Party's response to Commission's request for information RFI 25, annex 20 - [...].

⁶⁶² Notifying Party's response to Commission's request for information RFI 27 - [...].

⁶⁶³ Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT.pptx

⁶⁶⁴ HHI calculations are based on the Parties' and their competitors' average shares for the last 3 years.

⁶⁶⁵ Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT.pptx.

- (1428) Sixth, Adama is considering the development of [...].
- (1429) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes insecticides foliar chewing in Spain.
- (F) Grapes - Insecticides - Foliar - Sucking - Greece
- (1430) First, post-Transaction the Parties would be the second largest supplier with a combined share of [30-40]% (Adama [0-5]%, Syngenta [30-40]%). Other competitors include Bayer ([50-60]%), Sumitomo ([0-5]%), and BASF ([0-5]%).
- (1431) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1432) Third, Adama is the largest generic player in this market.
- (1433) Fourth, Adama's sucking insecticide for use on grapes in Greece is an imidacloprid formulation. Syngenta's products in this market are "Actara", a thiamethoxam formulation, "Insegar", a fenoxycarb formulation, "Vertimec", an abamectin formulation, "Virtako/Voliam", a chlorantraniliprole formulation, and "Plenum", a pymetrozine formulation. Thiamethoxam and imidacloprid belong to the same chemical class, the neonicotinoids.
- (1434) Fifth, Adama's internal documents show that it expects its European share for grape insecticides to [...].⁶⁶⁶ Syngenta expects its sales of specialty insecticides, including grape insecticides, to [...].⁶⁶⁷ Over the same period, Syngenta expects Adama's share to [...].⁶⁶⁸
- (1435) Sixth, Adama is considering the development of [...].
- (1436) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes insecticides foliar sucking in Greece.
- (G) Grapes - Insecticides - Foliar - Sucking - Italy
- (1437) First, post-Transaction the Parties would be the clear market leader with a combined share of [50-60]% (Adama [0-5]%, Syngenta [40-50]%), followed by Oxon Italy ([10-20]%), FMC/Cheminova ([10-20]%) and Bayer ([10-20]%).
- (1438) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1439) Third, Adama's sucking insecticides for use on grapes in Italy are an eos formulation and a pyriproxyfen formulation. Syngenta's products in this market are "Actara", a Thiamethoxam formulation, "Vertimec", an abamectin formulation, "Virtako/Voliam", a chlorantraniliprole formulation, and "Plenum", a pymetrozine formulation.
- (1440) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly

⁶⁶⁶ Notifying Party's response to Commission's request for information RFI 25, annex 20 - [...].

⁶⁶⁷ Notifying Party's response to Commission's request for information RFI 27 - [...].

⁶⁶⁸ Notifying Party's response to Commission's request for information RFI 27 - [...].

concentrated market where Syngenta is the market leader with a share of almost 50% would have a detrimental effect on competition.

(1441) Fourth, Adama's internal documents show that it expects its European share for grape insecticides to [...].⁶⁶⁹ Syngenta's internal documents indicate that it expected to be [...].⁶⁷⁰

(1442) Sixth, Adama is considering the development of [...].

(1443) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for grapes insecticides foliar sucking in Italy notably through the creation of a dominant position.

(H) Other fruit - Insecticides - Foliar - Broad spectrum - Spain

(1444) First, post-Transaction the Parties would be the clear market leader with a combined share of [30-40]% (Adama [10-20]%, Syngenta [10-20]%), followed by Bayer ([10-20]%), Gowan ([5-10]%) and FMC/Cheminova ([0-5]%). Moreover, unidentified competitors in this market hold a share of [40-50]%.

(1445) Second, the Transaction significantly increases concentration in this market: the HHI level post-Transaction would be [...] with a delta of [...].

(1446) Third, Adama is the largest generic player in this market.

(1447) Fourth, Adama's broad spectrum insecticides for use on fruit in Spain include a chlorpyrifos formulation and lambda-cyhalothrin formulation. Syngenta's products in this market consist of various lambda-cyhalothrin formulations sold under the "Karate" brand.

(1448) Fifth, Adama in the process of developing and launching new formulations for use in this market. Adama is considering the development of [...].

(1449) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for other fruit insecticides foliar broad spectrum in Spain.

(I) Pome fruit - Insecticides - Foliar - Broad spectrum - Greece

(1450) First, post-Transaction the Parties would be the clear market leader with a combined share of [30-40]% (Adama [30-40]%, Syngenta [5-10]%), followed by BASF ([10-20]%), Bayer ([10-20]%), and Dow/DuPont ([5-10]%).

(1451) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1452) Third, Adama is the only sizeable generic player in this market.

(1453) Fourth, Adama's broad spectrum insecticide for use on pome fruit in Greece is a chlorpyrifos formulation. Syngenta's products in this market consist of two lambda-cyhalothrin formulations sold under the "Karate" brand and a chlorantraniliprole formulation old under the "Ampligo" brand.

⁶⁶⁹ Notifying Party's response to Commission's request for information RFI 25, annex 20 - [...].

⁶⁷⁰ Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT.pptx.

- (1454) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of a rival in a particularly concentrated market where Adama is the only generic alternative available would have a detrimental effect on competition.
- (1455) Fifth, Adama's internal documents show that it expects its European share for pome fruit insecticides to [...].⁶⁷¹ Syngenta's internal documents indicate that Syngenta expected to [...].⁶⁷²
- (1456) Sixth, Syngenta is considering the development of products based on [...] for use in this market.
- (1457) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for pome fruit insecticides foliar broad spectrum in Greece.
- (J) Pome fruit - Insecticides - Foliar - Broad spectrum - Spain
- (1458) First, post-Transaction the Parties would be the largest supplier together with [20-30]% (Adama [5-10]%, Syngenta [20-30]%), on par with Bayer ([20-30]%) and Gowan ([10-20]%).
- (1459) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1460) Third, Adama is the second largest generic player in this market.
- (1461) Fourth, Adama's broad spectrum insecticide for use on pome fruit in Greece is a chlorpyrifos formulation. Syngenta's products in this market consist of two lambda-cyhalothrin formulations sold under the "Karate" brand and a chlorantraniliprole formulation sold under the "Ampligo" brand.
- (1462) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market would have a detrimental effect on competition.
- (1463) Sixth, Adama is considering [...].
- (1464) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, pipe-line products and future expansion plans, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1465) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for pome fruit insecticides foliar broad spectrum in Spain.

⁶⁷¹ Notifying Party's response to Commission's request for information RFI 15, annex 3 (...).

⁶⁷² Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT (Annex 2).pptx.

(K) Pome fruit - Insecticides - Foliar - Chewing - Greece

- (1466) First, post-Transaction the Parties would be the market leader with a combined share of [30-40]% (Adama [10-20]%, Syngenta [20-30]%), followed by Dow/DuPont ([10-20]%), Bayer ([10-20]%) and BASF ([5-10]%).
- (1467) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1468) Third, Adama is the only sizeable generic player in this market.
- (1469) Fourth, Adama's chewing insecticides for use on pome fruit in Greece include a beta-cyfluthrin formulation and tau-fluvalinate formulation. Syngenta's main products in this market are an emamectin benzoate formulation sold under the "Affirm" brand and a chlorantraniliprole formulation sold under the "Voliam" brand.
- (1470) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of a rival in a particularly concentrated market where Adama is the only generic alternative available would have a detrimental effect on competition
- (1471) Fifth, Adama's internal documents show that it expects its European share for pome fruit insecticides to [...].⁶⁷³ Syngenta expected to [...].⁶⁷⁴
- (1472) Sixth, the Parties are in the process of developing and launching new formulations and mixtures for use in this market. Adama is considering the development of [...], while Syngenta is considering the development of [...].
- (1473) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for pome fruit insecticides foliar chewing in Greece.

(L) Pome fruit - Insecticides - Foliar - Chewing - Italy

- (1474) First, post-Transaction the Parties would be the second largest supplier with a combined share of [40-50]% (Adama [0-5]%, Syngenta [30-40]%). Competitors in this market include Dow/DuPont ([50-60]%) and Bayer ([0-5]%).
- (1475) Second, the Transaction would reduce the number of sizeable players active in this market from 4 to 3. Indeed, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1476) Third, Adama is the only sizeable generic alternative in this market.
- (1477) Fourth, Adama's chewing insecticides for use on pome fruit in Italy include an abamectin formulation and a clofentezine formulation. Syngenta's main products in this market are an emamectin benzoate formulation sold under the "Affirm" brand and a chlorantraniliprole formulation sold under the "Voliam" brand. Abamectin and emamectin benzoate belong to the same chemical class, the avermectins.
- (1478) Fifth, Adama's internal documents show that [...].⁶⁷⁵ Syngenta's internal documents indicate that it expected to [...].⁶⁷⁶

⁶⁷³ Annex 3 (all Crops executive presentation 5 01 16 V5 final).pptx.

⁶⁷⁴ Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT.pptx.

⁶⁷⁵ Abamectin Report 110117.pdf.

(1479) Sixth, Adama is considering the development of [...].

(1480) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for pome fruit insecticides foliar chewing in Italy.

13.6.5. Nutrients

13.6.5.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

(1481) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit nutrients markets listed in Table 67 based on 2015 market shares.

Table 67: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
IVC - Nutrients - Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

13.6.6. Post-harvest treatment

13.6.6.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

(1482) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following fruit post-harvest treatment markets listed in Table 68 based on 2015 market shares.

Table 68: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Citrus –Post-harvest treatment - Spain	[20-30]%	[0-5]%	[20-30]%	[...]	[...]

13.6.7. Conclusion

(1483) To conclude, the Commission considers that the Transaction would significantly impede effective competition in the crop protection markets for Fruit listed in Sections 13.6.2.2 and Section 13.6.4.2.

13.7. Vegetables

13.7.1. Overview of the crop

(1484) For the purpose of the Decision, the vegetable category includes amongst others beans, broccoli, cabbage, carrots, cauliflower, cucumbers, lettuce, melons, onions, okra, peas, peppers, spinach, squash, sweet corn, tomatoes, and watermelons as well as potatoes. They are further segmented into the following large categories⁶⁷⁷: tomatoes, cucurbits (squash, pumpkin, watermelon, and cucumber), industrial vegetable crops or IVC (crop grown to produce goods for manufacturing, for example fibre for clothing, rather than food for consumption), leafy/brassica/okra (cauliflower, cabbage, Brussels sprout, and broccoli) and pepper-eggplant.

⁶⁷⁶ Notifying Party's response to Commission's request for information RFI 14 - [...] and Notifying Party's response to Commission's request for information RFI 27, annex 2-Q2 SYT.pptx.

⁶⁷⁷ Form CO, paragraph 546.

- (1485) There are no general market data related to vegetables only as statistics relate to the overall fruit and vegetables market. As explained in Section 13.6.1, the global vegetable and fruit agrochemical market was worth USD 13 660 million in 2014. Potatoes represent 12.5% of this amount and vegetables (outside potatoes) represent 27%.
- (1486) Similarly to the overall fruit and vegetables category, the largest agrochemical market for vegetables are fungicides and insecticides, selective herbicides being a comparatively smaller market.

13.7.2. Fungicides

- (1487) At EEA level, the market for fungicides for potatoes is estimated to have valued USD [...] in 2015 ([5-10]% of the overall fungicide sector) and USD [...] for vegetables ([5-10]% of the overall fungicide sector).⁶⁷⁸
- (1488) As regards fungicides in potatoes, Syngenta is the market leader in the EEA with a share of [20-30]% whereas Adama holds [0-5]%. The other main players at EEA level are Bayer ([10-20]%), BASF ([5-10]%), Belchim ([5-10]%) and Dow-DuPont ([5-10]%).⁶⁷⁹
- (1489) As regards fungicides in vegetables as a whole, Syngenta is the market leader in the EEA with a market share of [20-30]% whereas Adama holds [0-5]%. The main players are Bayer ([10-20]%), BASF ([10-20]%), Isagro ([0-5]%) and Dow-DuPont ([0-5]%). The merged entity's share in the EEA is higher in industrial vegetable crops ([30-40]%) and leafy-brassica-okra ([20-30]%) and lower in cucurbits ([10-20]%), pepper/eggplant ([20-30]%) and tomatoes ([20-30]%).⁶⁸⁰

13.7.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Cucurbits - Fungicides - Powdery mildew - Croatia

- (1490) In the market for cucurbits powdery mildew fungicides in Croatia, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).
- (1491) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1492) As a result of the Transaction, the Parties will be the market leader. However, it will be closely followed by Bayer with [20-30]% market share and Chromosagro with a [20-30]% market share.
- (1493) Among these competitors, one of them is a generic player which holds a market share higher than Adama (Chromosagro) According to the Parties' submission, [20-30]% of the market is represented by other competitors. The Parties submitted that the following companies also hold fungicide product registrations for cucurbits in Croatia: BASF, Dow/DuPont, FMC, Isagro, ISK, Nufarm, PSP, or Sharda. This shows that besides Adama there are at least 6 generic players active or potentially active in this crop/segment.
- (1494) The Parties do not share the same active ingredients. Adama sells a single solo product based on bupirimate from the DMI chemical class. By contrast, Syngenta

⁶⁷⁸ Form CO, annex 6.1.II.B.1.

⁶⁷⁹ Form CO, annex 6.1.II.B.1.

⁶⁸⁰ Form CO, annex 6.1.II.B.1.

sells two solo products. One is based on sulphur and the other one contains a solo triazole active ingredient.

(1495) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cucurbits powdery mildew fungicides in Croatia.

(B) Cucurbits - Fungicides - Powdery mildew - Malta

(1496) In the market for cucurbits powdery mildew fungicides in Malta, the Parties have a combined market share of [40-50]% (Syngenta: [0-5]%, Adama: [30-40]%). As a result of the Transaction, the Parties will be market leader followed by Bayer and BASF with each [10-20]% market share and a number of other competitors with overall [40-50]%.

(1497) Syngenta is contributing [0-5]% (representing just [...] in sales in 2015) to this market share of [40-50]%.

(1498) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1499) The Parties do not share the same active ingredients. Adama sells a single solo product based on bupirimate from the DMI chemical class. By contrast, Syngenta sells a solo product based on a triazole active ingredient.

(1500) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cucurbits powdery mildew fungicides in Malta.

(C) Industrial vegetable crops - Fungicides - Leafspots - Finland

(1501) In the market for industrial vegetable crops leafspots fungicides in Finland, the Parties have a combined market share of [40-50]% (Syngenta: [10-20]%, Adama: [20-30]%). As a result of the Transaction, the Parties will be the market leader followed by Bayer with a [20-30]% market share and BASF with a [10-20]% market share.

(1502) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1503) According to the Parties' submission, [20-30]% of the market is represented by other competitors. The Parties submit that the following companies also hold fungicide product registrations for industrial vegetables crops in Finland: Chemfield, Dow/DuPont, ISK, Nippon-Soda and Sumitomo. This shows that besides Adama there are at least 4 generic players active or potentially active in this crop/segment.

(1504) The Parties have in common the same active ingredient as Adama sells a solo product based on azoxystrobin whereas Syngenta sells two products: one is a solo product based on azoxystrobin and the other one is a mixture of azoxystrobin and difeconazole. However, the price positioning of these products is different. Adama's products is priced at [...] whereas the most sold Syngenta's product is charged [...].

(1505) Although Syngenta's solo azoxystrobin product is priced at a similar level to Adama, if the Parties attempted to raise their prices on this solo product, they are more likely to drive sales to other low-priced generic products given that Syngenta's mixture product is more than twice as expensive as the solo azoxystrobin product. For

example, customers could buy products sold by Chemfield, which holds a fungicide product registration for industrial vegetable crops for a formulated product containing azoxystrobin in Finland.

(1506) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops leafspots fungicides in Finland.

(D) Industrial vegetable crops - Fungicides - Powdery mildew - Italy

(1507) In the market for industrial vegetable crops powdery mildew fungicides in Italy, the Parties have a combined market share of [30-40]% (Syngenta: [30-40]%, Adama: [5-10]%).

(1508) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1509) As a result of the Transaction, the Parties will remain market leader followed by BASF with [20-30]% market share. A high number of competitors are also currently present in the market, namely Bayer ([10-20]%), Isagro ([5-10]%), Gowan ([0-5]%) and Triagriberia ([0-5]%). Among these competitors, three rivals are generic players (Isagro, Gowan, Triagriberia).

(1510) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The Parties submitted that the following companies also hold fungicide product registrations for industrial vegetable crops in Italy: Albaugh, Chemia, Diachem, Dow/DuPont, Eastman Chemical, FMC, Indofil, IQV, Montanwerke, Nufarm, Organika, Oxon-Sipcam, PSP, Sapec, Sharda or UPL. This shows that besides Adama there are at least 7 generic players active or potentially active in this crop/segment.

(1511) The Parties share no common active ingredients. All of Adama's sales in this crop/segment are based on a solo formulated product containing an active ingredient of the carbamate chemical class (propamocarb). By contrast, Syngenta sells both mixtures and formulated products containing active ingredients from multiple chemical classes, including strobilurins, triazoles and sulphur.

(1512) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops powdery mildew fungicides in Italy.

(E) Industrial vegetable crops - Fungicides - Leafspots - Spain

(1513) In the market for industrial vegetable crops leafspots fungicides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).

(1514) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1515) As a result of the Transaction, the Parties will remain market leader followed by Bayer with [20-30]% market share.

(1516) Besides Bayer, a high number of competitors are currently present in the market, namely BASF ([10-20]%), Sapec ([10-20]%), IQV ([5-10]%) and Isagro ([5-10]%), the latter three being generic players.

(1517) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The Parties submitted that the following companies also hold fungicide product registrations for industrial vegetable crops in Spain: Belchim, Dow/DuPont, FMC, Globachem, Helm, Indofil, Nufarm, Oxon-Sipcam, PSP or UPL. This shows that besides Adama there are at least 9 generic players active or potentially active in this crop/segment.

(1518) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops leafspots fungicides in Spain.

(F) Industrial vegetable crops - Fungicides - Leafspots - Sweden

(1519) In the market for industrial vegetable crops leafspots fungicides in Sweden, the Parties have a combined market share of [20-30]% (Syngenta: [5-10]%, Adama: [20-30]%).

(1520) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1521) As a result of the Transaction, the Parties will not be market leader and only the second largest player on the market. BASF is the market leader with [30-40]% and the merged entity will also be challenged by BASF with [20-30]%.

(1522) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The Parties submitted that ISK and Verdera Oy also hold fungicide product registrations for industrial vegetable crops in Sweden. This shows that besides Adama there are at least 2 generic players active or potentially active in this crop/segment.

(1523) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops leafspots fungicides in Sweden.

(G) Leafy/Brassica/Okra - Fungicides - Leafspots - Finland

(1524) In the market for leafy/brassica/okra leafspots fungicides in Finland, the Parties have a combined market share of [60-70]% (Syngenta: [20-30]%, Adama: [30-40]%).

(1525) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1526) As a result of the Transaction, the Parties will remain market leader. Other competitors currently present in the market are Bayer ([20-30]%) and BASF ([10-20]%). According to the Parties' submission, [5-10]% of the market is represented by other competitors. According to the data submitted by the Parties, Chemfield and Verdura Oy hold fungicide product registrations for leafy/brassica/okra in Finland.

(1527) The Parties have in common the same active ingredient as Adama sells a solo product based on azoxystrobin whereas Syngenta sells two products: one is a solo product based on azoxystrobin ([30-40]% of Syngenta's sales) and the other one is a mixture of azoxystrobin and difeconazole ([60-70]% of Syngenta's sales). However, the price positioning of these products are different. Adama's products is priced at

[...] whereas the mixture of azoxystrobin and difeconazole sold by Syngenta is charged [...].

(1528) Although Syngenta's solo azoxystrobin product is priced at a similar level to Adama, if the Parties attempted to raise their prices on this solo product, they are more likely to drive sales to other low-priced generic products given that Syngenta's mixture product is more than twice as expensive as the solo azoxystrobin product. For example, customers could buy products sold by Chemfield, which holds a fungicide product registration valid as regards leafy/brassica/okra for a formulated product containing azoxystrobin in Finland.

(1529) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for leafy/brassica/okra leafspots fungicides in Finland.

(H) Leafy/Brassica/Okra - Fungicides - Leafspots - Spain

(1530) In the market for leafy/brassica/okra leafspots fungicides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).

(1531) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1532) As a result of the Transaction, the Parties will be the market leader but they will be closely followed by BASF with [20-30]% market share, Bayer ([10-20]%) and Dow/DuPont ([5-10]%).

(1533) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for leafy-brassica-okra in Spain and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and Sapec, as well as Sumitomo.

(1534) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for leafy/brassica/okra leafspots fungicides in Spain.

(I) Pepper/Eggplant - Fungicides - Powdery mildew - Spain

(1535) In the market for pepper/eggplant powdery mildew fungicides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).

(1536) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1537) As a result of the Transaction, the Parties will be the market leader followed by Bayer with [10-20]% market share, Oxon Sipcarn Vischim ([5-10]%), Dow/DuPont ([5-10]%) and Comercial Quimicamasoso ([0-5]%). Among these competitors, two of them are generic players (Oxon Sipcarn Vischim, Comercial Quimicamasoso).

(1538) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for pepper-eggplant in Spain and therefore are active or potentially active in this market including large generic players such as FMC, Nufarm and Sapec, as well as Sumitomo.

(1539) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pepper/eggplant powdery mildew fungicides in Spain.

(J) Pepper/Eggplant - Fungicides - Oomycetes - Spain

(1540) In the market for pepper/eggplant oomycetes fungicides in Spain, the Parties have a combined market share of [40-50]% (Syngenta: [30-40]%, Adama: [0-5]%).

(1541) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1542) As a result of the Transaction, the Parties will remain the market leader followed by Bayer with [20-30]% market share. Sapec ([10-20]%), Oxon Sipcam Vischim ([0-5]%), BASF ([0-5]%), Dow/DuPont ([0-5]%) and Isagro ([0-5]%). Among these competitors, three rivals are generic players (Sapec, Oxon Sipcam Vischim, Isagro) and at least two of them are larger than Adama.

(1543) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for pepper-eggplant in Spain and therefore are active or potentially active in this market including large generic players such as FMC and Nufarm, as well as Sumitomo.

(1544) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for pepper/eggplant oomycetes fungicides in Spain.

(K) Potatoes - Fungicides - Oomycetes - Croatia

(1545) In the market for potatoes oomycetes fungicides in Croatia, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [0-5]%).

(1546) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1547) As a result of the Transaction, the Parties will remain market leader but closely followed by Nortox with [20-30]% market share, FMC/Cheminova ([20-30]%), BASF ([10-20]%) and Bayer ([5-10]%). Among these competitors, two rivals are generic players (Nortox, FMC/Cheminova) and they are particularly larger than Adama.

(1548) The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for potatoes in Croatia and therefore are active or potentially active in this market including large generic players such as Isagro or Nufarm.

(1549) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes oomycetes fungicides in Croatia.

(L) Potatoes - Fungicides - Oomycetes - Germany/Austria⁶⁸¹

- (1550) In the market for potatoes oomycetes fungicides in Germany/Austria, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (1551) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1552) As a result of the Transaction, the Parties will remain the market leader followed by Bayer with [20-30]% market share, Belchim ([10-20]%), Dow/DuPont ([5-10]%), Mitsui ([5-10]%), BASF ([5-10]%) and FMC/Cheminova ([0-5]%). Among these competitors, three rivals are generic players (Belchim, Mitsui, FMC/Cheminova) and at least one of them is larger than Adama.
- (1553) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for potatoes in Germany-Austria and therefore are active or potentially active in this market including large generic players such as UPL, ISK and Nufarm.
- (1554) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes oomycetes fungicides in Germany/Austria.

(M) Tomatoes - Fungicides - Oomycetes - Italy

- (1555) In the market for tomatoes oomycetes fungicides in Italy, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (1556) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1557) As a result of the Transaction, the Parties will remain the market leader followed by BASF with [10-20]% market share, Bayer ([5-10]%), ISK Biosciences ([0-5]%), Isagro ([0-5]%), Dow/DuPont ([0-5]%) and UPL ([0-5]%). Among these competitors, three rivals are generic players (ISK Biosciences, Isagro and UPL).
- (1558) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for tomatoes in Italy and therefore are active or potentially active in this market including large generic players such as FMC-Cheminova and Sapec, as well as Sumitomo.
- (1559) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes oomycetes fungicides in Italy.

(N) Tomatoes - Fungicides - Leafspots - Portugal

- (1560) In the market for tomatoes leafspots fungicides in Portugal, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1561) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

⁶⁸¹ As explained in Section 13.1.1, Germany and Austria are jointly analysed because of the structure of the market share dataset.

(1562) As a result of the Transaction, the Parties will be the market leader but followed closely by Sapec with [20-30]% market share and Bayer ([20-30]%). Among these competitors, one rival is a generic player (Sapec) and it has a higher market share than Adama.

(1563) According to the Parties' submission, [20-30]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for tomatoes in Portugal and therefore are active or potentially active in this market including large generic players such as UPL, FMC-Cheminova and Nufarm.

(1564) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes leafspots fungicides in Portugal.

(O) Tomatoes - Fungicides - Leafspots - Romania

(1565) In the market for tomatoes leafspots fungicides in Romania, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).

(1566) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1567) As a result of the Transaction, the Parties will remain the market leader followed by Bayer with [10-20]% market share, BASF ([10-20]%) and Dow/DuPont ([10-20]%).

(1568) According to the Parties' submission, [20-30]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for tomatoes in Romania and therefore are active or potentially active in this market including large generic players such as Belchim, FMC-Cheminova and Nufarm.

(1569) The Parties share no common active ingredients. Adama is active in this market with two products based on Captan. Syngenta is active in this market with two solo products based on azoxystrobin and difenoconazole respectively and a mixture of these two active ingredients.

(1570) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes leafspots fungicides in Romania.

(P) Tomatoes - Fungicides - Oomycetes - Romania

(1571) In the market for tomatoes oomycetes fungicides in Romania, the Parties have a combined market share of [20-30]% (Syngenta: [20-30]%, Adama: [5-10]%).

(1572) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1573) As a result of the Transaction, the Parties will remain the market leader followed by Bayer with [10-20]% market share and Dow/DuPont ([10-20]%).

(1574) According to the Parties' submission, [40-50]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold fungicides product registrations for tomatoes in Romania and therefore are active or potentially active in this market including large generic players such as Belchim, FMC-Cheminova and Nufarm.

(1575) The Parties share no common active ingredients. Adama is active in this market with four products based on folpet and a mixture of methalxyl and copper. Syngenta is active in this market with two mixtures (mandipropamid and mancozeb, mefenoxam and mancozeb) and one solo product based on chlorothalonil.

(1576) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes oomycetes fungicides in Romania.

(Q) Non-problematic markets with low concentration level/increase

(1577) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables fungicides markets listed in Table 69 based on 2015 market shares.

Table 69: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Cucurbits - Fungicides - leafspots - Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - leafspots - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - leafspots - Portugal	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - leafspots - Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - powdery mildew - Germany/Austria	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - powdery mildew - Greece	[5-10]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - powdery mildew - Spain	[10-20]%	[10-20]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - oomycetes - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits - Fungicides - oomycetes - Spain	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
IVC - Fungicides - leafspots - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
IVC - Fungicides - leafspots - Italy	[0-5]%	[20-30]%	[30-40]%	[...]	[...]
IVC - Fungicides - leafspots - Romania	[10-20]%	[0-5]%	[20-30]%	[...]	[...]
IVC - Fungicides - powdery mildew - Greece	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Fungicides - IVC - oomycetes - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
IVC - Fungicides - oomycetes - Italy	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
IVC - Fungicides - oomycetes - Romania	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Leafy/brassica/okra - Fungicides - oomycetes - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Leafy/brassica/okra - Fungicides - oomycetes - Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Pepper/eggplant - Fungicides - molds - Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes -Fungicides - leafspots - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Fungicides - oomycetes - Denmark	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Fungicides - oomycetes - Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes -Fungicides - oomycetes - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Fungicides - oomycetes - Netherlands	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Fungicides - oomycetes - Romania	[5-10]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Fungicides - oomycetes - Sweden	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes - Fungicides - leafspots - Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes -Fungicides - leafspots - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes -Fungicides - leafspots - Spain	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Tomatoes -Fungicides - molds - Spain	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Tomatoes -Fungicides - powdery mildew - Germany/Austria	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes - Fungicides - powdery mildew - Greece	[5-10]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes - Fungicides - oomycetes - Greece	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes - Fungicides - oomycetes - Spain	[0-5]%	[20-30]%	[30-40]%	[...]	[...]

- (R) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1578) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables fungicides markets listed in Table 70 based on 2015 market shares.

Table 70: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
Cucurbits - Fungicides powdery mildew - Portugal	[10-20]%	[10-20]%	[20-30]%	Bayer	[20-30]%	BASF	[10-20]%	Saptec	[10-20]%
Leafy/brassica/okra - Fungicide - leafspots - Italy	[10-20]%	[10-20]%	[20-30]%	BASF	[30-40]%	Bayer	[10-20]%	Dow/Du Pont	[10-20]%
Pepper/eggplant - Fungicides - leafspots - Spain	[5-10]%	[20-30]%	[30-40]%	Bayer	[20-30]%	Saptec	[10-20]%	Oxon Sipcarn Vischim	[0-5]%
Potatoes - Fungicides - oomycetes - France	[5-10]%	[20-30]%	[20-30]%	Belchim	[20-30]%	UPL	[10-20]%	BASF	[5-10]%
Potatoes - Fungicides - oomycetes - Poland	[0-5]%	[10-20]%	[20-30]%	Bayer	[40-50]%	Dow/Du Pont	[5-10]%	BASF	[0-5]%
Tomatoes - Fungicides - powdery mildew - Cyprus	[10-20]%	[10-20]%	[30-40]%	BASF	[10-20]%	Bayer	[10-20]%	Dow/Du Pont	[5-10]%
Tomatoes - Fungicides - powdery mildew - Spain	[10-20]%	[10-20]%	[20-30]%	Bayer	[20-30]%	Oxon Sipcarn Vischim	[10-20]%	Dow/Du Pont	[0-5]%

13.7.2.2. Markets where the transaction would significantly impede effective competition

Table 71: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Fungicides	Industrial vegetables crops - Fungicides - Powdery/mildew - Spain	2015	[40-50]%	[20-30]%	[10-20]%
		2014	[50-60]%	[30-40]%	[20-30]%
		2013	[50-60]%	[30-40]%	[20-30]%
	Potatoes - Fungicides - Mildew/Oomycetes - Finland	2015	[40-50]%	[40-50]%	[0-5]%
		2014	N/A	N/A	N/A
		2013	N/A	N/A	N/A
	Potatoes - Fungicides - Mildew/Oomycetes - Ireland	2015	[40-50]%	[30-40]%	[0-5]%
		2014	[60-70]%	[50-60]%	[5-10]%
		2013	N/A	N/A	N/A
	Potatoes - Fungicides - Mildew/Oomycetes - United Kingdom	2015	[20-30]%	[10-20]%	[5-10]%
		2014	[40-50]%	[30-40]%	[0-5]%
		2013	[20-30]%	[20-30]%	[5-10]%

(A) Industrial vegetables crops - Fungicides - Powdery/mildew - Spain

- (1579) First, in the market for Fungicides Industrial vegetables crops: Powdery/mildew, the Transaction would strengthen the leading market position of Syngenta in Spain with a combined share of [40-50]% (Adama [10-20]%, Syngenta [20-30]%) in 2015, followed by Bayer ([20-30]%), BASF ([10-20]%), Sapec ([10-20]%), IQV ([5-10]%) and Isagro ([5-10]%). The merged entity would therefore hold a share more than twice the size its nearest competitor.
- (1580) Second, the increment resulting from the Transaction is [10-20]%, which is substantial.
- (1581) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1582) Fourth, there are a limited number of competitors currently present in the market (5). Although three of these competitors (excluding Adama) are generic players, Adama is the largest generic player in this market in Spain.
- (1583) Fifth, the combined market share was much higher in 2014 since it reached [50-60]% (Adama: [20-30]%, Syngenta: [30-40]%). Despite this sudden drop in market shares since then, they remain high and well above those of competitors.
- (1584) The Parties claim they are not close competitors because they do not share the same active ingredients. Adama is mainly active in the market with formulated products based on tebuconazole, which belongs to the triazole family and are priced in the range of [...]. Syngenta has a number of products in this market but a significant part of its turnover ([30-40]%) is achieved with products of the same triazole family within the same price range (Thiovit 80 and Topas 100 and 200, priced [...]) The Commission therefore concludes that a significant part of Syngenta's offer is priced at the same levels as the generics supplied by Adama and they are close competitors as regards pricing.
- (1585) Syngenta's internal documents also acknowledge this growing competition from generic players in vegetables in the triazole family for vegetables. "[...]".⁶⁸²
- (1586) As regards pipe-line products, Syngenta is considering launching a new product based on the active ingredient [...] for use against powdery mildew in industrial vegetables crops [...].⁶⁸³ This product has already been approved in the UK and in Ireland in 2015 and it is under registration in other countries, including Spain.
- (1587) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Fungicides - Industrial vegetables crops: Powdery/mildew in Spain.

(B) Potatoes - Fungicides - Mildew/Oomycetes - Finland

- (1588) First, in the market for Fungicides - Potatoes: Mildew/Oomycetes, the Transaction would strengthen the leading market position of Syngenta in Finland with a combined share of [40-50]% (Adama [0-5]%, Syngenta [40-50]%) in 2015, followed by Bayer ([10-20]%), BASF ([10-20]%) and Dow-DuPont ([10-20]%). The merged

⁶⁸² Notifying Party's response to Commission's request for information RFI 27, annex 7 - [...].

⁶⁸³ Notifying Party's response to Commission's request for information RFI 35, annex 3-1.

entity would therefore hold a share more than 4 times larger than its nearest competitor.

- (1589) Second, the increment resulting from the Transaction is [0-5]%. This increment is allegedly small but as explained in recital (1560), Adama is a new entrant which animated competition in the market
- (1590) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1591) Fourth, there are a limited number of competitors currently present in the market (5). Among these competitors, only one (Belchim) is a generic player. According to the Homologa database, Barclay, Nippon Soda and Sumitomo also hold fungicide product registrations for potatoes in Finland but the Parties have not been able to estimate their market shares.
- (1592) Fifth, the Transaction eliminates a dynamic player as Adama introduced in 2015 the “Fluazinam 200 + Dimetomorph 200 SC” product to the Finnish crop protection market and reached a [0-5]% market share in less than one year. There was no overlap between the Parties in this market in 2013 and 2014. Adama has been introducing this product to Finland in 2015 as the registration application has been accepted by the Finnish national regulator.⁶⁸⁴
- (1593) Sixth, the Parties are close competitors as they share some active ingredients. Adama is present in the market with a mixture of fluazinam and dimetomorph. Syngenta achieves [40-50]% of its sales in Finland with Shirlan, which is a fluazinam-based low-priced product and [40-50]% with Revus top, a more expensive mixture of mandipropamid and difeconazole.⁶⁸⁵ A significant part of Syngenta's offer is therefore based on the same active ingredient and within the same price range as Adama's.
- (1594) The Parties submit that Syngenta views Belchim as the most important generic competitor in potato fungicides as Belchim is the only singled out generic player in Syngenta's internal documents for potatoes in Northern Europe, while it includes Adama in 'generics'. However, this document also shows that the two main products of Syngenta are distant price competitors of Belchim. Shirlan is priced at the same level as Adama and other generics ([...]), Revus top is priced at the high end of the market ([...]) whilst Belchim's main products are priced in-between (Ranman top [...]) or target different pests (Narita which is a Belchim product focuses on early blight whereas Shirlan and other generics control late blight).⁶⁸⁶
- (1595) Seventh, Adama has the intention to develop its product offer in fungicides potatoes in the coming years. [...].⁶⁸⁷
- (1596) Finally, as regards pipe-line products, Adama is considering launching a [...].⁶⁸⁸ [...].
- (1597) [...].⁶⁸⁹ [...].

⁶⁸⁴ Notifying Party's response to Commission's request for information RFI 43.

⁶⁸⁵ Form CO, paragraph 5540.

⁶⁸⁶ Notifying Party's response to Commission's request for information RFI 27, annex 5-1, [...].

⁶⁸⁷ Notifying Party's response to Commission's request for information RFI 19, [...].

⁶⁸⁸ Notifying Party's crop submission of 16 December 2016, "Fungicides Potatoes", paragraph 27.

(1598) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Fungicides - Potatoes - Mildew/Oomycetes in Finland.

(C) Potatoes - Fungicides - Mildew/Oomycetes - Ireland

(1599) First, in the market for Fungicides - Potatoes - Mildew/Oomycetes, the Transaction would strengthen the leading market position of Syngenta in Ireland with a combined share of [40-50]% (Adama [0-5]%, Syngenta [30-40]%) in 2015, followed by Bayer ([10-20]%), BASF ([10-20]%), Dow-DuPont ([5-10]%) and Belchim ([5-10]%). The merged entity would therefore hold a share almost 4 times larger than its nearest competitor.

(1600) Second, the increment resulting from the Transaction is [0-5]%. This increment is allegedly small but, as explained in recitals (1595)-(1597), Adama has substantial growth objectives.

(1601) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1602) Fourth, there are a limited number of competitors currently present in the market (5). Among these competitors, only one (Belchim) is a generic player. The Parties have identified two fungicides potatoes competitors in Ireland (Nufarm and FMC) but they have not been able to estimate their market shares.

(1603) Fifth, the combined market share was much higher in 2014 since it reached [60-70]% (Adama: [5-10]%, Syngenta: [50-60]%). The Parties have explained that this drop in market shares is linked to an increase in market size due to adverse weather conditions and a decrease of Syngenta's sales linked to intensified competition from generic players.⁶⁹⁰ This means that the potential of Syngenta in terms of market share is probably higher than its 2015 market share suggests.

(1604) Sixth, the Parties are close competitors as they share some active ingredients. Adama is present in the market with a pure fluazinam product. Syngenta achieves [30-40]% of its sales in Finland with Shirlan, which is a low-price fluazinam-based product and [50-60]% with Revus, which is a mandipropamid-based product. A significant part of Syngenta's offer is therefore based on the same active ingredient as Adama's and within the same price range.

(1605) Similarly to Finland, the Parties submit that Syngenta views Belchim as the most important generic competitor in potato fungicides. While it is true that Revus [...] is priced similarly to Belchim's Ranman top ([...]), Adama's product is a direct price competitor to Syngenta's Shirlan ([...]). In terms of price positioning, Adama is therefore a significant competitor of Syngenta.

(1606) Seventh, Adama has the intention to develop its product offer in fungicides potatoes in the coming years. [...].

(1607) Finally, as regards pipe-line products as explained in recital (1596) Adama is considering launching [...].

⁶⁸⁹ Notifying Party's response to Commission's request for information RFI 35, annex 3-1.

⁶⁹⁰ Notifying Party's response to Commission's request for information RFI 43.

(1608) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Fungicides - Potatoes: Mildew/Oomycetes in Ireland.

(D) Potatoes - Fungicides - Mildew/Oomycetes - United Kingdom

(1609) First, in the market for Fungicides - Potatoes: Mildew/Oomycetes, the Transaction would create a new market leader in the UK with a combined share of [20-30]% (Adama [5-10]%, Syngenta [10-20]%) in 2015, on par with Belchim ([20-30]%) and followed by Dow-DuPont ([10-20]%), Bayer ([10-20]%), BASF ([0-5]%) and FMC ([0-5]%).

(1610) Second, the increment resulting from the Transaction is [5-10]%. However, Adama has substantial growth objectives as explained in recital (1616) and (1617).

(1611) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1612) Fourth the Transaction would eliminate a dynamic player. In a market which has declined by 16% between 2013 and 2015, Adama has managed to increase its market share from [5-10]% to [5-10]%.

(1613) Fifth, the combined market share was much higher in 2014 since it reached [40-50]% (Adama: [0-5]%, Syngenta: [30-40]%). The Parties have explained that this drop in market shares is linked to an increase in market size due to adverse weather conditions and a decrease of Syngenta's sales linked to intensified competition from generic players (this presumably includes Adama which has increased its share).⁶⁹¹ This means that the potential of Syngenta in terms of market share is probably higher than its 2015 market share suggests.

(1614) Sixth, the Parties are close competitors as they share some active ingredients. Adama is present in the market with a pure fluazinam product and a mixture of fluazinam and dimethomorph. Syngenta achieves [30-40]% of its sales in Finland with Shirlan, which is a fluazinam-based product and [50-60]% with Revus. A significant part of Syngenta's offer is therefore based on the same active ingredient as Adama's and within the same price range.

(1615) Similarly to Finland, the Parties submit that Syngenta views Belchim as the most important generic competitor in potato fungicides. While it is true that Revus ([...]) is priced closely to Belchim's Ranman top ([...]), Adama's product ([...]) is a direct price competitor to Syngenta's Shirlan ([...]). In terms of price positioning, Adama is therefore a significant competitor of Syngenta.

(1616) Seventh, Adama has the intention to develop its product offer in fungicides potatoes in the coming years. [...].

(1617) Finally, as regards pipe-line products as explained in recital (1596), Adama is considering launching [...].

(1618) [...].

(1619) The Commission notes that the combined market share of the Parties will remain below [30-40]%. However, in light of the qualitative evidence collected about

⁶⁹¹ Notifying Party's response to Commission's request for information RFI 43.

closeness between the Parties' products, pipe-line products and future expansion plans, it considers that the current combined market share does not necessarily reflect the market potential of the merged entity.

(1620) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Fungicides - Potatoes: Mildew/Oomycetes in the UK.

13.7.3. *Selective Herbicides*

(1621) At EEA level, the market for selective herbicides for potatoes is estimated to have valued USD [...] in 2015 ([0-5]% of the overall selective herbicides sector) and USD [...] for vegetables ([0-5]% of the overall selective herbicides sector).⁶⁹²

(1622) As regards selective herbicides in potatoes, Adama is n°2 in the EEA with a share of [10-20]% whereas Syngenta holds [5-10]%. The other main players at EEA level are Bayer ([30-40]%), Dow-DuPont ([10-20]%), BASF ([5-10]%) and Belchim ([5-10]%).⁶⁹³

(1623) As regards selective herbicides in vegetables as a whole, Adama is n°2 in the EEA with a share of [10-20]% whereas Syngenta holds [5-10]%. The main players are BASF ([20-30]%), Bayer ([10-20]%), Dow-DuPont ([10-20]%) and Belchim ([5-10]%). The merged entity's share in the EEA is higher in cucurbits ([30-40]%), tomatoes ([30-40]%), pepper/eggplant ([20-30]%), industrial vegetable crops ([20-30]%) and lower in leafy-brassica-okra ([5-10]%).⁶⁹⁴

13.7.3.1. Markets where the Transaction would not significantly impede effective competition

(A) Industrial vegetable crops - Selective herbicides - Broadleaf - Pre-emergence - France

(1624) In the market for industrial vegetable crops broadleaf pre-emergence selective herbicides in France, the Parties have a combined market share of [30-40]% (Syngenta: [0-5]%, Adama: [20-30]%).

(1625) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1626) As a result of the Transaction, the Parties will not be the market leader and only the second largest competitor on the market. It will face competition from Bayer ([50-60]%), BASF ([10-20]%) and Belchim ([0-5]%). Among these competitors, at least one rival is a generic player (Belchim).

(1627) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops broadleaf pre-emergence selective herbicides in France.

⁶⁹² Form CO, annex 6.1.II.B.1.

⁶⁹³ Form CO, annex 6.1.II.B.1.

⁶⁹⁴ Form CO, annex 6.1.II.B.1.

(B) Industrial vegetable crops - Selective herbicides - Graminicides - Post-emergence - Greece

- (1628) In the market for industrial vegetable crops graminicides post-emergence selective herbicides in Greece, the Parties have a combined market share of [40-50]% (Syngenta: [20-30]%, Adama: [20-30]%).
- (1629) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1630) As a result of the Transaction, the Parties will become the market leader followed by BASF with [20-30]% market share, Bayer ([20-30]%) and Dow/DuPont ([10-20]%).
- (1631) The elements provided by the Parties show that there are at least 10 companies that hold selective herbicides product registrations for industrial vegetable crops graminicides in Greece and therefore are active or potentially active in this market including large generic players such as Sapec or Sharda.
- (1632) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops graminicides post-emergence selective herbicides in Greece.

(C) Industrial vegetable crops - Selective herbicides - Graminicides - Post-emergence - Spain

- (1633) In the market for industrial vegetable crops graminicides post-emergence selective herbicides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%).
- (1634) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1635) As a result of the Transaction, the Parties will become the market leader followed by Bayer with [20-30]% market share, but also Dow/DuPont ([20-30]%), BASF ([5-10]%) and FMC/Cheminova ([0-5]%). Among these competitors, one rival is a generic player (FMC/Cheminova).
- (1636) According to the Parties' submission, [0-5]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 10 companies that hold selective herbicides product registrations for industrial vegetable crops graminicides in Spain and therefore are active or potentially active in this market including large generic players such as UPL and Nufarm.
- (1637) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops graminicides post-emergence selective herbicides in Spain.

(D) Leafy/Brassica/Okra - Selective herbicides - Graminicides - Post-emergence - Greece

- (1638) In the market for leafy/brassica/okra graminicides post-emergence selective herbicides in Greece, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1639) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

- (1640) As a result of the Transaction, the Parties will not be the market leader and only the second largest competitor in the market. Other competitors currently present in the market are Dow/DuPont ([40-50]%), Bayer ([20-30]%) and BASF ([0-5]%).
- (1641) According to the Parties' submission, [0-5]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 10 companies that hold selective herbicides product registrations for industrial vegetable crops graminicides in Greece and therefore are active or potentially active in this market including generic players such as Sapec or Sharda.
- (1642) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for leafy/brassica/okra graminicides post-emergence selective herbicides in Greece.
- (E) Potatoes - Selective herbicides - Graminicides - Post-emergence - Slovenia
- (1643) In the market for potatoes graminicides post-emergence selective herbicides in Slovenia, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [10-20]%).
- (1644) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1645) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market. Other identified competitors currently present in the market are BASF ([30-40]%) and Dow/DuPont ([10-20]%).
- (1646) According to the Parties' submission, [30-40]% of the market is represented by Other Competitors. The elements provided by the Parties show that there is at least one company (Karsia) that holds selective herbicides product registrations for industrial vegetable crops graminicides in Slovenia and therefore is active or potentially active in this market.
- (1647) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes graminicides post-emergence selective herbicides in Slovenia.
- (F) Potatoes - Selective herbicides - Graminicides - Pre-emergence - Hungary
- (1648) In the market for potatoes graminicides pre-emergence selective herbicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (1649) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1650) As a result of the Transaction, the Parties will not be the market leader and only the second largest competitor on the market. Other competitors currently present in the market are Bayer ([30-40]%), Belchim ([10-20]%) and PSP ([5-10]%). Among these competitors, two rivals are generic players (Belchim, PSP).
- (1651) According to the Parties' submission, [5-10]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least two companies that hold selective herbicides product registrations for industrial vegetable crops graminicides in Hungary and therefore are active or potentially active in this market including generic players: Chemark and DSM.

(1652) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes graminicides pre-emergence selective herbicides in Hungary.

(G) Tomatoes - Selective herbicides - Graminicides - Post-emergence - Greece

(1653) In the market for tomatoes graminicides post-emergence selective herbicides in Greece, the Parties have a combined market share of [40-50]% (Syngenta: [10-20]%, Adama: [20-30]%),

(1654) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1655) As a result of the Transaction, the Parties will be the market leader followed by Bayer with [20-30]% market share, Monsanto ([20-30]%), BASF ([5-10]%) and FMC/Cheminova ([0-5]%). Among these competitors, at least one rival is a generic player (FMC/Cheminova).

(1656) According to the Parties' submission, [5-10]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 10 companies that hold selective herbicides product registrations for tomatoes graminicides in Greece and therefore are active or potentially active in this market including generic players such as PSP or Sharda.

(1657) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes graminicides post-emergence selective herbicides in Greece.

(H) Tomatoes - Selective herbicides - Graminicides - Post-emergence - Spain

(1658) In the market for tomatoes graminicides post-emergence selective herbicides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [10-20]%).

(1659) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1660) As a result of the Transaction, the Parties will be market leader but followed closely by Bayer with [30-40]% market share, ([30-40]%), BASF ([10-20]%), Dow/DuPont ([10-20]%) and PSP ([0-5]%). Among these competitors, at least one rival is a generic player (PSP).

(1661) According to the Parties' submission, [5-10]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 10 companies that hold selective herbicides product registrations for tomatoes graminicides in Spain and therefore are active or potentially active in this market including generic players such as Nufarm and FMC-Cheminova, as well as Sumitomo.

(1662) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes graminicides post-emergence selective herbicides in Spain.

(I) Non-problematic markets with low concentration level/increase

(1663) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables selective herbicides markets listed in Table 72 based on 2015 market shares.

Table 72: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HH I	HHI Delta
Cucurbits -Selective herbicides - graminicides - post-emergence – Greece	[10-20]%	[10-20]%	[20-30]%	[...]	[...]
IVC - Selective herbicides - graminicides - post-emergence - Netherlands	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
IVC - Selective herbicides - graminicides - post-emergence – Slovakia	[20-30]%	[5-10]%	[20-30]%	[...]	[...]
Leafy/brassica/okra - Selective herbicides - broad spectrum - post-emergence - Portugal	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Potatoes - Selective herbicides - graminicides - post-emergence – Bulgaria	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Selective herbicides - graminicides - post-emergence – Denmark	[10-20]%	[0-5]%	[20-30]%	[...]	[...]
Potatoes -Selective herbicides - graminicides - post-emergence – Finland	[30-40]%	[0-5]%	[30-40]%	[...]	[...]
Potatoes - Selective herbicides - graminicides - post-emergence – Lithuania	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Tomatoes -Selective herbicides - broad spectrum - pre-emergence – Portugal	[30-40]%	[0-5]%	[30-40]%	[...]	[...]
Tomatoes -Selective herbicides - graminicides - post-emergence – Italy	[40-50]%	[0-5]%	[50-60]%	[...]	[...]

(J) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1664) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables selective herbicides markets listed in Table 73 based on 2015 market shares.

Table 73: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
IVC - Selective herbicides - graminicides - post-emergence - Italy	[20-30]%	[5-10]%	[30-40]%	Dow/Du Pont	[20-30]%	Bayer	[20-30]%	BASF	[5-10]%
IVC - Selective herbicides - graminicides - post-emergence - Slovenia	[10-20]%	[10-20]%	[20-30]%	BASF	[40-50]%	Karsia	[10-20]%	Dow/DuPont	[5-10]%
IVC - Selective herbicides - graminicides - post-emergence - UK	[10-20]%	[5-10]%	[20-30]%	BASF	[70-80]%	Chemwise	[0-5]%	Clayton	[0-5]%
Potatoes - Selective herbicides - graminicides - post-emergence - Greece	[10-20]%	[10-20]%	[20-30]%	PSP	[40-50]%	Nissan Chemicals	[20-30]%	BASF	[0-5]%
Potatoes - Selective herbicides - graminicides - post-emergence - Romania	[20-30]%	[5-10]%	[20-30]%	Dow/Du Pont	[20-30]%	PSP	[10-20]%	Nippon Soda	[10-20]%

13.7.3.2. Markets where the transaction would significantly impede effective competition

Table 74: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Selective Herbicides	Potatoes - Selective herbicides - Graminicides - Post-emergence - Cyprus	2015	[40-50]%	[30-40]%	[10-20]%
		2014	[60-70]%	[50-60]%	[10-20]%
		2013	N/A	N/A	N/A
	Potatoes - Selective herbicides - Graminicides - Post-emergence - Italy	2015	[60-70]%	[0-5]%	[60-70]%
		2014	[60-70]%	[0-5]%	[50-60]%
		2013	[60-70]%	[0-5]%	[50-60]%
	Potatoes - Selective herbicides - Graminicides - Post-emergence - Spain	2015	[40-50]%	[5-10]%	[30-40]%
		2014	[60-70]%	[5-10]%	[60-70]%
		2013	[70-80]%	[10-20]%	[50-60]%
	Industrial vegetable crops - Selective herbicides - Graminicides - Pre-emergence - Hungary	2015	[60-70]%	[10-20]%	[40-50]%
		2014	[60-70]%	[10-20]%	[50-60]%
		2013	[70-80]%	[5-10]%	[60-70]%

(A) Potatoes - Selective herbicides - Graminicides - Post-emergence - Cyprus

- (1665) First, in the market for Selective herbicides - Potatoes: Graminicides Post emergence, the Transaction would strengthen the leading market position of Syngenta in Cyprus with a combined share of [40-50]% (Adama [10-20]%, Syngenta [30-40]%) in 2015, followed by Karsia ([20-30]%) The merged entity would therefore hold a share almost twice the size of its nearest competitor.
- (1666) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1667) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1668) Fourth, there are a limited number of competitors currently present in the market (4). Among these competitors, only Adama is a sizable generic player. The Parties have explained that other competitors such as Sharda, PSP and Nissan collectively represented a [20-30]% share in 2015 but they have not been able to allocate market shares to these players.⁶⁹⁵
- (1669) Fifth, the combined market share was much higher in 2014 since it reached [60-70]% (Adama: [10-20]%, Syngenta: [50-60]%). The Parties explained that this drop in market shares is due to a sharp increase of market size which Syngenta has not been able to take fully advantage of.⁶⁹⁶ Conversely, Adama has doubled its sales between 2013 and 2014 and remained stable afterwards, which demonstrates the intensity of

⁶⁹⁵ Notifying Party's submission of 16 December 2016, "Selective herbicides other fruit/potatoes", paragraph 31.

⁶⁹⁶ Notifying Party's response to Commission's request for information RFI 43.

competition between Adama and Syngenta. These shares in any case remain high and well above those of competitors.

- (1670) The Parties claim they are not close competitors because the Parties' products are not close substitutes. Adama is active in the market with a formulated product based on propaquizafop. Syngenta has two types of products in this market: Arcade 880 EC and Boxer 80 EC, which are both based on prosulfocarb and Fusilade 125 EC, which is based on the active ingredient fluazifop. The Parties submit that both Boxer and Arcade can control weeds in both pre- and post-emergence, while Adama's propaquizafop is only effective in post-emergence. According to the Parties, Arcade and Boxer also offer control of some broadleaf weeds, while Adama's product is effective exclusively on grass weeds, and offer longer residual grass weeds control than Adama's propaquizafop.⁶⁹⁷
- (1671) However, Arcade and Bower represent [40-50]% of Syngenta's turnover in this market in Cyprus. The majority of this turnover is achieved with Fusilade ([50-60]%), a formulated product which is based on the active ingredient Fluazifop, which belong to the same chemical class as Propaquizafop (aryloxyphenoxypropionates)⁶⁹⁸ and is priced within the same range ([...]). By contrast, Arcade and Boxer are priced at a higher level ([...]). The Parties themselves explain that fluazifop products and Adama's propaquizafop active ingredients both have the same mode of action (inhibition of fatty acid synthesis).⁶⁹⁹ A majority of Syngenta's turnover as regards selective herbicides for potatoes in Cyprus is then based on a product in direct competition with Adama's offer and within the same price range which indicates that Adama is a significant competitor of Syngenta in this market.
- (1672) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Selective herbicides - Potatoes: Graminicides Post Emergence in Cyprus.
- (B) Potatoes - Selective herbicides - Graminicides - Post-emergence - Italy
- (1673) First, in the market for Selective herbicides - Potatoes: Graminicides Post emergence, the Transaction would strengthen the leading market position of Adama in Italy with a combined share of [60-70]% (Adama [40-50]%, Syngenta [10-20]%) in 2015, followed by Bayer ([20-30]%) and BASF ([5-10]%). The merged entity would therefore hold a share three times larger than its nearest competitor.
- (1674) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1675) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1676) Fourth, there are a limited number of competitors currently present in the market (5). Among these competitors, only Adama is a sizable generic player. The Parties have explained that other competitors such as Sharda, PSP and Isagro collectively

⁶⁹⁷ Notifying Party's submission of 16 December 2016, "Selective herbicides other fruit/potatoes", paragraph 30.

⁶⁹⁸ Form CO, paragraph 1359.

⁶⁹⁹ Form CO, paragraph 2004.

represented a [20-30]% share in 2015 but they have not been able to allocate market shares to these players.

- (1677) Fifth, these combined shares have remained quite stable ([60-70]% in 2013 and [60-70]% in 2014). Despite the growth of the market over the same period ([30-40]% from 2013 to 2015), Adama has managed to keep its leading position.
- (1678) The Parties claim that they are not close competitors because the Parties' products are not close substitutes. Adama is active in the market with one formulated product based on propaquizafop ([80-90]% of its turnover) and one based on quizalofop ([10-20]%). Syngenta has only Fusilade 125 EC, which is based on the active ingredient fluazifop.
- (1679) As explained in recital (1670), Fusilade is based on the active ingredient fluazifop, which belong to the same chemical class as propaquizafop and quizalofop (aryloxyphenoxypropionates)⁷⁰⁰. Moreover it is also priced within the same range ([...] for propaquizafop and [...] for quizalofop). The Parties themselves explain that fluazifop products and Adama's propaquizafop active ingredients both have the same mode of action (inhibition of fatty acid synthesis).⁷⁰¹ A majority of Adama's turnover as regards selective herbicides for potatoes in Italy is then based on a product in direct competition with Syngenta's offer and within the same price range which indicates that Syngenta is a significant competitor of Adama in this market.
- (1680) The Parties also claim that post emergence grass herbicides for potatoes represent [10-20]% of usage of their products in Italy. The Parties' products are also sold as post-emergence grass herbicides for citrus, grapes, other fruit, pome fruit, oilseed rape/rapeseed, plantations crops, soybeans, sugar beets, sunflowers, cucurbits, industrial vegetable crops, leafy/brassica/okra, pepper/eggplant, and tomatoes. Since the Parties explain that they cannot price discriminate based on how growers use their products, they will have no ability to exercise market power and raise prices in this particular crop/segment.⁷⁰²
- (1681) However, in this market, Syngenta sells one product and Adama sells two main products (accounting for respectively [80-90]% and [10-20]% of the sales). The Commission is not in a position to assess whether all three products are primarily sold in other non-problematic markets or if one of these products is primarily sold for potatoes. In the latter case, the merged entity would still have incentives to raise prices for this particular product.
- (1682) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Selective herbicides - Potatoes: Graminicides Post Emergence in Italy notably through the creation of a dominant position.

(C) Potatoes - Selective herbicides - Graminicides - Post-emergence - Spain

- (1683) First, in the market for Selective herbicides - Potatoes: Graminicides Post emergence, the Transaction would strengthen the leading market position of Adama in Spain

⁷⁰⁰ Form CO, paragraph 1359.

⁷⁰¹ Notifying Party's submission of 16 December 2016, "Selective herbicides other fruit/potatoes", paragraph 36.

⁷⁰² Notifying Party's submission of 16 December 2016, "Selective herbicides other fruit/potatoes", paragraph 37.

with a combined share of [40-50]% (Adama [30-40]%, Syngenta [5-10]%) in 2015, followed by Bayer ([10-20]%) and BASF ([5-10]%). The merged entity would therefore hold a share more than four times larger than its nearest competitor.

- (1684) Second, although the increment resulting from the Transaction is comparatively low ([5-10]%), the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...], and the Transaction eliminates a significant player in a concentrated market.
- (1685) Third, there are a limited number of competitors currently present in the market (6). Among these competitors, only Adama is a sizable generic player. The Parties have explained that other competitors such as PSP and Kenogard collectively represented a [20-30]% share in 2015 but they have not been able to allocate market shares to these players.
- (1686) Fourth, the combined market share was much higher in 2014 since it reached [60-70]% (Adama: [60-70]%, Syngenta: [5-10]%). Despite these sudden drops in market shares, their shares remain high and well above those of competitors.
- (1687) The Parties claim that they are not close competitors because the Parties' products are not close substitutes. Adama is active in the market with one formulated product based on propaquizafop ([60-70]% of its turnover) and one based on quizalofop ([30-40]%). Syngenta has only Fusilade 125 EC, which is based on the active ingredient fluazifop.
- (1688) As explained in recital (1670), Fusilade is based on the active ingredient fluazifop, which belong to the same chemical class as propaquizafop and quizalofop (aryloxyphenoxypropionates)⁷⁰³. Moreover it also priced within the same range [...] for propaquizafop and [...] for quizalofop). The Parties themselves explain that fluazifop products and Adama's propaquizafop active ingredients both have the same mode of action (inhibition of fatty acid synthesis).⁷⁰⁴ A majority of Syngenta's turnover as regards selective herbicides for graminicides potatoes in Spain is then based on a product in direct competition with Adama's offer and within the same price range which indicates that Adama is a significant competitor of Syngenta in this market.
- (1689) The Parties also claim that post emergence grass herbicides for potatoes represent less than [10-20]% of usage of their products in Spain. The Parties' products are also sold as post-emergence grass herbicides for cotton, citrus, grapes, other fruit, pome fruit, other diverse field crops, potatoes, sugar beets, industrial vegetable crops, leafy/brassica/okra, pepper/eggplant, and tomatoes. According to the Parties, since that they cannot price discriminate based on how growers use their products, they will have no ability to exercise market power and raise prices in this particular crop/segment.⁷⁰⁵
- (1690) However, in this market, Adama sells two main products (accounting for respectively [60-70]% and [30-40]% of the sales) and Syngenta sells one product. The

⁷⁰³ Form CO, paragraph 1359.

⁷⁰⁴ Notifying Party's submission of 16 December 2016, "Selective herbicides other fruit/potatoes", paragraph 36.

⁷⁰⁵ Notifying Party's submission of 16 December 2016, "Selective herbicides other fruit/potatoes", paragraph 43.

Commission is not in a position to assess whether all three products are primarily sold in other non-problematic markets or if one of these products is primarily sold for potatoes. In the latter case, the merged entity would still have incentives to raise prices for this particular product.

- (1691) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Selective herbicides - Potatoes: Graminicides Post Emergence in Spain.
- (D) Industrial vegetable crops - Selective herbicides - Graminicides - Pre-emergence -Hungary
- (1692) First, in the market for Selective herbicides - Industrial vegetable crops: Graminicides Pre emergence the Transaction would strengthen the leading market position of Adama in Hungary with a combined share of [60-70]% (Adama [40-50]%, Syngenta [10-20]%) in 2015, followed by Bayer ([20-30]%), BASF ([10-20]%) and Dow-DuPont ([5-10]%). The merged entity would therefore hold a share three times larger than its nearest competitor.
- (1693) Second, the increment resulting from the Transaction is [10-20]%, which is significant.
- (1694) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1695) Fourth, there are a limited number of competitors currently present in the market (5). Among these competitors, only Adama is a generic player.
- (1696) Fifth, although the combined shares of the Parties have slightly decreased since 2013 ([70-80]% in 2013 and [60-70]% in 2014), they have remained at a very high level and well above their rivals' shares. That Parties argue that Sharda sells a pre-emergence broad spectrum herbicides for industrial crops in Hungary which can also be used on graminicides, but they have been unable to allocate market shares to this player
- (1697) The Parties claim that they are not close competitors because the Parties' products are not close substitutes. First, s-metolachlor, the active ingredient in Syngenta's Dual Gold 960 EC controls a broader spectrum of grass weeds than pendimethalin, the active ingredient in Adama's only product in this overlap. Second, s-metolachlor has a stronger residual effect and one application controls weeds longer than one application of Adama's pendimethalin product. Third, pendimethalin and s-metolachlor use different modes of action to control weeds and belong to different chemical classes. The Parties argue that Adama that competes more with BASF's product, which is also based on pendimethalin.⁷⁰⁶
- (1698) Even assuming that Adama competes more closely with BASF in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Syngenta is the leader with a share of almost [50-60]% and Adama represents the only generic available alternative would have a particularly detrimental effect on competition.

⁷⁰⁶ Notifying Party's submission of 16 December 2016, "Selective herbicides IVC", paragraphs 6-9.

(1699) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Selective herbicides - Industrial vegetables crops: Graminicides Pre Emergence in Hungary notably through the creation of a dominant position.

13.7.4. *Insecticides*

(1700) At EEA level, the market for insecticides for potatoes is estimated to have valued USD 103 million in 2015 (6.8% of the overall insecticides sector) and USD 400 million for vegetables (26.5% of the overall insecticides sector).⁷⁰⁷

(1701) As regards insecticides in potatoes, Syngenta is n°1 in the EEA with a share of [30-40]% whereas Adama holds [0-5]%. The other main players at EEA level are Bayer ([20-30]%), Dow-DuPont ([10-20]%) and Mitsui ([5-10]%).⁷⁰⁸

(1702) As regards fungicides in vegetables as a whole, Syngenta is n°3 in the EEA with a share of [10-20]% whereas Syngenta holds [0-5]%. The main players are Dow-DuPont ([20-30]%), Bayer ([10-20]%), and BASF ([0-5]%). The merged entity's share in the EEA is higher in industrial vegetable crops ([20-30]%), leafy-brassica-okra ([10-20]%) and tomatoes ([10-20]%) and lower in cucurbits ([10-20]%) and pepper-eggplant ([10-20]%).⁷⁰⁹

13.7.4.1. Markets where the Transaction would not significantly impede effective competition

(A) Cucurbits - Insecticides - Foliar - Sucking - Bulgaria

(1703) In the market for cucurbits foliar sucking insecticides in Bulgaria, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%).

(1704) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1705) As a result of the Transaction, the Parties will not be the market leader and only the second largest competitor on the market. Other competitors currently present in the market are Nippon Soda ([50-60]%), Bayer ([5-10]%) and Nissan Chemicals ([0-5]%). Among these competitors, two rivals are generic players (Nippon Soda, Nissan Chemicals) and one is larger than Adama or the merged entity itself.

(1706) According to the Parties' submission, [0-5]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides product registrations for cucurbits foliar sucking in Bulgaria and therefore are active or potentially active in this market including generic players such as Nufarm and PSP, as well as Sumitomo.

(1707) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cucurbits foliar sucking insecticides in Bulgaria.

⁷⁰⁷ Form CO, annex 6.1.II.B.1.

⁷⁰⁸ Form CO, annex 6.1.II.B.1.

⁷⁰⁹ Form CO, annex 6.1.II.B.1.

(B) Cucurbits - Insecticides - Foliar - Sucking - Hungary

- (1708) In the market for cucurbits foliar sucking insecticides in Hungary, the Parties have a combined market share of [40-50]% (Syngenta: [40-50]%, Adama: [0-5]%).
- (1709) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1710) As a result of the Transaction, the Parties will not be market leader and only the second largest competitor on the market. Other competitors currently present in the market are Dow/DuPont ([40-50]%), market leader and Bayer ([10-20]%).
- (1711) The Parties share no active ingredients. Adama is active in this cucurbits insecticides markets in Hungary with two products based on fenamiphos and imidacloprid respectively. None of the 10 products sold by Syngenta in the cucurbits insecticides markets in Hungary contain one of these active ingredients.
- (1712) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cucurbits foliar sucking insecticides in Hungary.

(C) Cucurbits - Insecticides - Soil - Hungary

- (1713) In the market for cucurbits soil insecticides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%). As a result of the Transaction, the Parties will not be the market leader and only the second largest competitor on the market, behind Bayer ([30-40]%).
- (1714) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1715) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 10 companies that hold insecticides product registrations for cucurbits soil in Hungary and therefore are active or potentially active in this market including generic players such as PSP and Sharda.
- (1716) The Parties share no active ingredients. Adama is active in this cucurbit insecticides markets in Hungary with two products based on fenamiphos and imidacloprid respectively. None of the 10 products sold by Syngenta in the cucurbits insecticides markets in Hungary contain one of these active ingredients
- (1717) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for cucurbits soil insecticides in Hungary.

(D) Industrial vegetable crops - Insecticides - Foliar - Broad spectrum - Slovakia

- (1718) In the market for industrial vegetable crops foliar broad spectrum insecticides in Slovakia, the Parties have a combined market share of [40-50]% (Syngenta: [40-50]%, Adama: [0-5]%).
- (1719) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1720) As a result of the Transaction, the Parties will remain the market leader.

(1721) According to the Parties' submission, [50-60]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 15 companies that hold insecticides product registrations for industrial vegetable crops for foliar broad spectrum in Slovakia and therefore are active or potentially active in this market including generic players such as PSP, Belchim and FMC-Cheminova.

(1722) The Parties share no active ingredients. Adama has beta-cyfluthrin 25 EC and Tau-fluvalinate 240 EW (based on beta-cyfluthrin and tau-fluvalinate respectively), while Syngenta sells Karate Zeon 5 CS FP and Pirimor 50 WG (active ingredients: lambda-cyhalothrin and pirimicarb respectively). Whilst beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, this is not the case of pirimicarb.

(1723) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops foliar broad spectrum insecticides in Slovakia.

(E) Industrial vegetable crops - Insecticides - Foliar - Sucking - Sweden

(1724) In the market for industrial vegetable crops foliar sucking insecticides in Sweden, the Parties have a combined market share of [30-40]% (Syngenta: [30-40]%, Adama: [5-10]%).

(1725) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].

(1726) As a result of the Transaction, the Parties will be the market leader followed by Dow/DuPont with [10-20]%, Belchim ([10-20]%) and BASF ([0-5]%). Among these competitors, at least one competitor is a generic player (Belchim), which is larger than Adama.

(1727) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 2 companies that hold insecticides product registrations for industrial vegetable crops foliar sucking in Sweden and therefore are active or potentially active in this market including other (generic) players ISK and Nihon-Nohyaku.

(1728) The Parties share no active ingredients. Adama has beta-cyfluthrin 25 EC (based on beta-cyfluthrin), while Syngenta sells Pirimor 50 WG (pirimicarb) ([80-90]% of its sales) and Karate 2.5 WG (lambda-cyhalothrin). Whilst beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, this is not the case of pirimicarb, which is the most sold Syngenta's product.

(1729) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for industrial vegetable crops foliar sucking insecticides in Sweden.

(F) Potatoes - Insecticides - Foliar - Broad spectrum - Lithuania

(1730) In the market for potatoes foliar broad spectrum insecticides in Lithuania, the Parties have a combined market share of [40-50]% (Syngenta: [5-10]%, Adama: [30-40]%). As a result of the Transaction, the Parties will be the market leader.

(1731) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1732) According to the Parties' submission, [50-60]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides product registrations for potatoes foliar broad spectrum in Lithuania and therefore are active or potentially active in this market including generic players PSP, FMC-Cheminova and Nufarm.

(1733) The Parties share no common active ingredients: Adama has tau-fluvalinate 240 EW and beta-cyfluthrin 25 EC (active ingredients: tau-fluvalinate and beta-cyfluthrin respectively) and Syngenta has Karate Zeon 5 CS FP, which is not based on one of these active ingredients. Whilst beta-cyfluthrin and lambda-cyhalothrin belong to the same chemical class, this is not the case of tau-fluvalinate

(1734) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes foliar broad spectrum insecticides in Lithuania.

(G) Potatoes - Insecticides - Foliar - Broad spectrum - Sweden

(1735) In the market for potatoes foliar broad spectrum insecticides in Sweden, the Parties have a combined market share of [60-70]% (Syngenta: [0-5]%, Adama: [60-70]%).

(1736) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1737) As a result of the Transaction, the Parties will remain market leader but the Transaction will not substantially modify Syngenta's market position in this market.

(1738) However, according to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides product registrations for potatoes foliar broad spectrum in Sweden and therefore are active or potentially active in this market including generic players PSP and Nufarm, as well as Sumitomo.

(1739) The Parties share no common active ingredients: Adama has tau-fluvalinate 240 EW and Syngenta has Karate Zeon 2.5 WG, which is not based on tau-fluvalinate.

(1740) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes foliar broad spectrum insecticides in Sweden.

(H) Potatoes - Insecticides - Foliar - Sucking - Italy

(1741) In the market for potatoes foliar sucking insecticides in Italy, the Parties have a combined market share of [40-50]% (Syngenta: [20-30]%, Adama: [10-20]%).

(1742) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1743) As a result of the Transaction, the merged entity will be the market leader followed by Bayer with [20-30]% market share. Other competitors currently present in the market are Oxon Sipcam Vischim ([10-20]%) and Sivam ([5-10]%). Among these competitors, two rivals are generic players (Oxon Sipcam Vischim, Sivam).

(1744) However, according to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 20 companies that hold insecticides product registrations for potatoes foliar

sucking in Italy and therefore are active or potentially active in this market including generic players FMC-Cheminova and Nufarm, as well as Sumitomo.

(1745) The Parties share no common active ingredients: Adama has imidacloprid 200 SL NMP Free (active ingredient: imidacloprid) and Syngenta has Actara 25 WG (active ingredient: thiamethoxam).

(1746) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes foliar sucking insecticides in Italy.

(I) Potatoes – Insecticides - Foliar - Sucking - Spain

(1747) In the market for potatoes foliar sucking insecticides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [30-40]%, Adama: [0-5]%).

(1748) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1749) As a result of the Transaction, the merged entity will not be market leader and only the second largest competitor on the market. The other identified competitor currently present in the market is Bayer ([40-50]%).

(1750) According to the Parties' submission, [10-20]% of the market is represented by Other Competitors. The elements provided by the Parties show that there are at least 15 companies that hold insecticides product registrations for potatoes foliar sucking in Spain and therefore are active or potentially active in this market including generic players FMC-Cheminova and Nufarm, as well as Sumitomo.

(1751) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for potatoes foliar sucking insecticides in Spain.

(J) Potatoes - Insecticides - Soil - Spain

(1752) In the market for potatoes soil insecticides in Spain, the Parties have a combined market share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%).

(1753) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1754) As a result of the Transaction, the merged entity will become the market leader followed by Mitsui with [20-30]% market share.

(1755) However, a high number of competitors are currently present in the market, namely Mitsui ([20-30]%), Dow/DuPont ([10-20]%), Bayer ([10-20]%) and Belchim ([10-20]%). Among these competitors, two rivals are generic players (Mitsui, Belchim) and one is larger than Adama.

(1756) According to the Parties' submission, [0-5]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides product registrations for potatoes soil in Spain and therefore are active or potentially active in this market including generic players ISK and PSP.

(1757) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not

significantly impede effective competition in the market for potatoes soil insecticides in Spain.

(K) Tomatoes - Insecticides - Foliar - Chewing - Portugal

- (1758) In the market for tomatoes foliar chewing insecticides in Portugal, the Parties have a combined market share of [20-30]% (Syngenta: [10-20]%, Adama: [5-10]%).
- (1759) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1760) As a result of the Transaction, the merged entity will not be the market leader and only the second largest competitor on the market. Rivals already present in the market are Dow/DuPont ([40-50]%) and Bayer ([10-20]%).
- (1761) According to the Parties' submission, [10-20]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides product registrations for tomatoes foliar chewing in Portugal and therefore are active or potentially active in this market including generic player FMC-Cheminova, as well as Sumitomo.
- (1762) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes foliar chewing insecticides in Portugal.

(L) Tomatoes - Insecticides - Soil - Hungary

- (1763) In the market for tomatoes soil insecticides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [5-10]%).
- (1764) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1765) As a result of the Transaction, the merged entity will be market leader but closely followed by Bayer with [30-40]% market share.
- (1766) According to the Parties' submission, [30-40]% of the market is represented by other competitors. The elements provided by the Parties show that there are at least 5 companies that hold insecticides product registrations for tomatoes soil in Hungary and therefore are active or potentially active in this market including generic players ISK and Sharda.
- (1767) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for tomatoes soil insecticides in Hungary.

(M) Non-problematic markets with low concentration level/increase

- (1768) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables insecticides markets listed in Table 75 based on 2015 market shares.

Table 75: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Cucurbits – Insecticides - foliar -sucking - Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Cucurbits –Insecticides - soil - Italy	[20-30]%	[5-10]%	[20-30]%	[...]	[...]
IVC - Insecticides - foliar - chewing - Italy	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
IVC – Insecticides - foliar - chewing - Spain	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
IVC - Insecticides - foliar - sucking - Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
IVC - Insecticides - foliar - sucking - Spain	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
IVC - Insecticides - soil- Spain	[20-30]%	[0-5]%	[20-30]%	[...]	[...]
Leafy/brassica/okra - Insecticides - foliar - broad spectrum- Italy	[0-5]%	[30-40]%	[30-40]%	[...]	[...]
Leafy/brassica/okra - Insecticides - foliar - sucking- Belgium	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Leafy/brassica/okra - Insecticides - foliar - sucking- Hungary	[0-5]%	[40-50]%	[40-50]%	[...]	[...]
Leafy/brassica/okra - Insecticides - foliar - sucking- Italy	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Pepper/eggplant - Insecticides - foliar- chewing – Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Pepper/eggplant - Insecticides - foliar - sucking – Spain	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Insecticides - foliar - broad spectrum – Portugal	[10-20]%	[5-10]%	[20-30]%	[...]	[...]
Potatoes - Insecticides - foliar - broad spectrum- Slovakia	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Insecticides - foliar - sucking- Hungary	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Potatoes - Insecticides - foliar- sucking - Portugal	[0-5]%	[20-30]%	[20-30]%	[...]	[...]
Tomatoes - Insecticides - foliar - sucking – Greece	[0-5]%	[30-40]%	[30-40]%	[...]	[...]

(N) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1769) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables insecticides markets listed in Table 76 based on 2015 market shares.

Table 76: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
IVC -Insecticides - foliar - sucking -	[5-10]%	[10-20]%	[20-30]%	Bayer	[40-50]%	BASF	[10-20]%	Berner	[0-5]%
IVC -Insecticides - soil - Portugal	[5-10]%	[10-20]%	[20-30]%	Bayer	[40-50]%	Dow/Du Pont	[0-5]%	FMC/Che minova	[0-5]%
Potatoes – Insecticides - foliar -	[20-30]%	[5-10]%	[30-40]%	Bayer	[40-50]%	Dow/Du Pont	[5-10]%	Sumitomo	[5-10]%
Tomatoes - Insecticides - soil -	[10-20]%	[10-20]%	[20-30]%	Dow/Du Pont	[20-30]%	BASF	[10-20]%	FMC/Che minova	[5-10]%

13.7.4.2. Markets where the Transaction would significantly impede effective competition

Table 77: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Insecticides	Cucurbits - Insecticides - Foliar - Chewing - Spain	2015	[50-60]%	[40-50]%	[5-10]%
		2014	[50-60]%	[40-50]%	[5-10]%
		2013	[40-50]%	[30-40]%	[5-10]%
	Leafy/Brassica/Okra - Insecticides - Foliar - Sucking - Lithuania	2015	[50-60]%	[40-50]%	[5-10]%
		2014	[70-80]%	[70-80]%	[5-10]%
		2013	[50-60]%	[50-60]%	[5-10]%
	Pepper/eggplant - Insecticides - Foliar - Broad spectrum - Cyprus	2015	[60-70]%	[5-10]%	[50-60]%
		2014	[60-70]%	[10-20]%	[50-60]%
		2013	[70-80]%	[5-10]%	[60-70]%
	Tomatoes - Insecticides - Foliar - Broad spectrum - Cyprus	2015	[40-50]%	[10-20]%	[20-30]%
		2014	[80-90]%	[30-40]%	[40-50]%
		2013	[40-50]%	[20-30]%	[10-20]%
	Tomatoes - Insecticides - Foliar - Chewing - Italy	2015	[30-40]%	[20-30]%	[10-20]%
		2014	[40-50]%	[20-30]%	[10-20]%
		2013	[30-40]%	[10-20]%	[10-20]%
	Tomatoes - Insecticides - Foliar - Chewing - Romania	2015	[50-60]%	[50-60]%	[0-5]%
		2014	[50-60]%	[50-60]%	[0-5]%
		2013	[30-40]%	[20-30]%	[0-5]%
	Tomatoes - Insecticides - Foliar - Sucking - Hungary	2015	[50-60]%	[40-50]%	[10-20]%
		2014	[50-60]%	[40-50]%	[10-20]%
		2013	[60-70]%	[50-60]%	[10-20]%
	Tomatoes - Insecticides - Foliar - Sucking - Italy	2015	[30-40]%	[20-30]%	[5-10]%
		2014	[40-50]%	[30-40]%	[10-20]%
		2013	[30-40]%	[20-30]%	[5-10]%
Tomatoes - Insecticides - Foliar - Sucking - Romania	2015	[70-80]%	[60-70]%	[10-20]%	
	2014	[70-80]%	[60-70]%	[5-10]%	
	2013	[20-30]%	[20-30]%	[0-5]%	
Tomatoes - Insecticides - Foliar - Sucking - Slovakia	2015	[90-100]%	[70-80]%	[10-20]%	
	2014	[80-90]%	[60-70]%	[10-20]%	
	2013	[70-80]%	[60-70]%	[5-10]%	

(A) Cucurbits - Insecticides - Foliar - Chewing - Spain

(1770) First, in the market for insecticides- Cucurbits: foliar chewing the Transaction would strengthen the leading market position of Syngenta in Spain with a combined share of [50-60]% (Adama [5-10]%, Syngenta [40-50]%) in 2015 followed by Bayer ([30-40]%), Dow-DuPont ([10-20]%) and BASF ([5-10]%). The merged entity would therefore hold a share almost twice the size of its nearest competitor.

- (1771) Second, albeit the increment resulting from the Transaction ([5-10]%) is comparatively small, the Transaction eliminates a significant player in a concentrated market.
- (1772) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1773) Fourth, only five competitors have been identified and the Transaction would reduce this number to four. Among these competitors, Adama is the only generic player.
- (1774) Fifth, these combined shares have remained quite stable or even increased over the period 2013-2015 ([40-50]% in 2013 and [50-60]% in 2014). Despite a [10-20]% market size decrease between 2014 and 2015, Syngenta has managed to keep its leading position.
- (1775) The Parties do not share the same active ingredients. Adama uses 4 different products: one product based on active ingredient Abamectin ([60-70]% of Adama sales) Bacillus Thuringiensis 320 WP ([10-20]% of Adama sales), Lambda-Cyhalothrin 100 CS ([10-20]% of Adama sales) and two products based on active ingredient Clofentazine ([10-20]% of Adama's sales). None of the three products Syngenta sells in this market is based on one of these active ingredients
- (1776) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Syngenta is the leader with a share of almost [50-60]% and Adama represents the only generic available would have a detrimental effect on competition.
- (1777) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.
- (1778) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Insecticides - Cucurbits: foliar chewing in Spain, notably through the creation or strengthening of a dominant position.

(B) Leafy/Brassica/Okra - Insecticides - Foliar - Sucking - Lithuania

- (1779) First, in the market for insecticides- leafy/brassica/okra: foliar sucking the Transaction would strengthen the leading market position of Syngenta in Lithuania with a combined share of [50-60]% (Adama [5-10]%, Syngenta [40-50]%) in 2015. The Parties have indicated that other smaller players would hold a share of [40-50]% but they have not been able to identify these players and allocate market shares to them.
- (1780) Second, although the increment resulting from the Transaction is comparatively low ([5-10]%), the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...], and the Transaction eliminates a significant player in a concentrated market.
- (1781) Third, only two competitors have been identified and the Transaction would reduce this number to one.

- (1782) Fourth, the combined market share was much higher in 2014 since it reached [70-80]% (Adama: [5-10]%, Syngenta: [70-80]%). Despite this sudden drop in market shares, they remain high and well above those of competitors.
- (1783) The Parties do not share the same active ingredients. Adama has one product based on the old pyrethroid active ingredient beta-cyfluthrin (beta-cyfluthrin 25 EC) while Syngenta has Actara 25 WG (based on the active ingredient thiamethoxam).⁷¹⁰
- (1784) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Syngenta is the market leader with a share of almost 50% and Adama represents the only generic alternative available would have a detrimental effect on competition.
- (1785) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.
- (1786) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- leafy/brassica/okra: foliar sucking in Lithuania notably through the creation or strengthening of a dominant position.

(C) Pepper/eggplant - Insecticides - Foliar - Broad spectrum - Cyprus

- (1787) First, in the market for insecticides- pepper/eggplant foliar broad spectrum the Transaction would strengthen the leading market position of Adama in Cyprus with a combined share of [60-70]% (Adama [50-60]%, Syngenta [5-10]%) in 2015. The Parties have indicated that other smaller players would hold a share of [30-40]% but they have not been able to identify these players and allocate market shares to them.
- (1788) Second, although the increment resulting from the Transaction is comparatively low ([5-10]%), the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...], and the Transaction eliminates a significant player in a concentrated market.
- (1789) Fourth, only two competitors have been identified and the Transaction would reduce this number to one.
- (1790) Fifth, although the combined shares of the Parties have slightly decreased since 2013 ([70-80]% in 2013 and [60-70]% in 2014.), they have remained at a very high level and well above their rivals' shares.
- (1791) The Parties do not share the same active ingredients. Adama has chlorpyrifos 480 EC based on active ingredient chlorpyrifos while Syngenta has Engeo 045 ZC (thiamethoxam), Ampligo (chlorantraniliprole) and Karate Zeon 1.5 CS (lambda-cyhalothrin).⁷¹¹
- (1792) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Adama is the market leader with a share of

⁷¹⁰ Form CO, paragraph 1088.

⁷¹¹ Form CO, paragraph 1116.

almost [50-60]% and Syngenta is the only identified alternative would have a detrimental effect on competition.

(1793) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market and strengthen its leading position.

(1794) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- pepper/eggplant foliar sucking in Cyprus notably through the creation or strengthening of a dominant position.

(D) Tomatoes - Insecticides - Foliar - Broad spectrum - Cyprus

(1795) First, in the market for insecticides- tomatoes foliar broad spectrum the Transaction would strengthen the leading market position of Syngenta in Cyprus with a combined share of [40-50]% (Adama [10-20]%, Syngenta [20-30]%) in 2015. The Parties have indicated that other smaller players would hold a share of [50-60]% but they have not been able to identify these players and allocate market shares to them.

(1796) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

(1797) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1798) Fourth, only two competitors have been identified and the Transaction would reduce this number to one.

(1799) Fifth, the combined market share was much higher in 2014 since it reached [80-90]% (Adama: [30-40]%, Syngenta: [40-50]%). Despite this sudden drop in market shares, they remain high and presumably well above those of competitors.

(1800) The Parties do not share the same active ingredients. Adama has imidacloprid 200 SL NMP free based on the active ingredient imidacloprid and Syngenta has Engeo 045 ZC (thiamethoxam/lambda-cyhalothrin), Ampligo (chlorantraniliprole) and Karate Zeon 1.5 CS (lambda-cyhalothrin).⁷¹²

(1801) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where the new entity has a share of almost 50% and Adama represents the only generic alternative available would have a detrimental effect on competition.

(1802) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.

(1803) [...].⁷¹³

⁷¹² Form CO, paragraph 1116.

⁷¹³ Notifying Party's response to Commission's request for information RFI 35, annex 3-1.

(1804) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- tomatoes foliar broad spectrum in Cyprus.

(E) Tomatoes - Insecticides - Foliar - Chewing - Italy

(1805) First, in the market for insecticides- tomatoes foliar chewing the Transaction would create a strong n°2 in Italy with a combined share of [40-50]% (Adama [10-20]%, Syngenta [20-30]%) in 2015. The only identified alternative player is Dow-DuPont with a market share of [50-60]%. The Parties have indicated that other smaller players would hold a share of [5-10]% but they have not been able to identify these players and allocate market shares to them.

(1806) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

(1807) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1808) Fourth, only three competitors have been identified and the Transaction would reduce this number to two.

(1809) Fifth, these combined shares have remained quite stable or even increased over the period 2013-2015 ([30-40]% in 2013 and [40-50]% in 2014).

(1810) The Parties do not share the same active ingredients. Adama has a number of products, including products based on active ingredients clofentezine, beta-cyfluthrin, chlorpyrifos, methomyl, tau-fluvalinate, deltamethrin, chlorpyrifos 250+deltamethrin pyriproxyfen, abamectin and a mixture of chlorpyrifos and deltamethrin. Syngenta has Affirm 0.95 SG (emamectin benzoate), Javelin/Delfin WG (BTs), Voliam Targo (chlorantraniliprole) and Match 050 EC (lufenuron).⁷¹⁴ Some of these active ingredients (notably enamectin benzoate and abamectin) belong though to the same chemical class.

(1811) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market with only two players and where Adama represents the only generic alternative available would have a detrimental effect on competition.

(1812) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with Syngenta.

(1813) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- tomatoes foliar chewing in Italy.

(F) Tomatoes - Insecticides - Foliar - Chewing - Romania

(1814) First, in the market for insecticides- tomatoes foliar chewing the Transaction would strengthen the leading market position of Syngenta in Romania with a combined share of [50-60]% (Adama [0-5]%, Syngenta [50-60]%) in 2015, followed by

⁷¹⁴ Form CO, paragraph 1235.

Sumitomo ([10-20]%), FMC ([10-20]%) and Dow-DuPont ([5-10]%). The merged entity would therefore hold a share almost four times larger than its nearest competitor. The Parties have indicated that other smaller players would hold a share of [10-20]% but they have not been able to identify these players and allocate market shares to them.

- (1815) Second, the increment resulting from the Transaction is [0-5]%. Allegedly, this is a small increment but as explained in recital (1821), Adama has plans to develop its offering in competition with the market leader Syngenta.
- (1816) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1817) Fourth, only five competitors have been identified and the Transaction would reduce this number to four.
- (1818) Fifth, these combined shares have remained quite stable or even increased over the period 2013-2015 ([30-40]% in 2013 and [50-60]% in 2014).
- (1819) The Parties do not share the same active ingredients. Adama has clofentezine 500 SC and Syngenta has Affirm 0.95 SG (emamectin benzoate), Voliam Targo (chlorantraniliprole) and Match 050 EC (lufenuron).⁷¹⁵
- (1820) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Syngenta is the market leader with a share above [50-60]% would have a detrimental effect on competition.
- (1821) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.
- (1822) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- tomatoes foliar chewing in Romania, notably through the creation or strengthening of a dominant position.

(G) Tomatoes - Insecticides - Foliar - Sucking - Hungary

- (1823) First, in the market for insecticides- tomatoes foliar sucking the Transaction would strengthen the leading market position of Syngenta in Hungary with a combined share of [50-60]% (Adama [10-20]%, Syngenta [40-50]%) in 2015, followed by Dow-DuPont ([30-40]%) and Bayer ([5-10]%). The Parties have indicated that other smaller players would hold a share of [5-10]% but they have not been able to identify these players and allocate market shares to them.
- (1824) Second, the increment resulting from the Transaction is [10-20]%, which is significant in an already concentrated market.
- (1825) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

⁷¹⁵ Form CO, paragraph 1183.

- (1826) Fourth, only four competitors have been identified and the Transaction would reduce this number to three. Among these competitors, only Adama is a generic player.
- (1827) Fifth, although these combined shares have slightly decreased over the period 2013-2014 ([60-70]% in 2013 and [50-60]% in 2014), they have remained at a very high level and well above those of their main competitors.
- (1828) The Parties do not share the same active ingredients. Adama has clofentezine 500 SC and Syngenta has Affirm 0.95 SG (emamectin benzoate), Voliam Targo (chlorantraniliprole) and Match 050 EC (lufenuron).⁷¹⁶
- (1829) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where the merged entity holds a share above [50-60]% would have a detrimental effect on competition.
- (1830) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta
- (1831) [...].⁷¹⁷ [...].
- (1832) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- tomatoes foliar sucking in Hungary notably through the creation or strengthening of a dominant position.
- (H) Tomatoes - Insecticides - Foliar - Sucking - Italy
- (1833) First, in the market for insecticides- tomatoes foliar sucking the Transaction would create a new market leader in Italy with a combined share of [30-40]% (Adama [5-10]%, Syngenta [20-30]%) in 2015, followed by Bayer ([20-30]%), Sipcam ([10-20]%) and ISK ([5-10]%). The Parties have indicated that other smaller players would hold a share of [20-30]% but they have not been able to identify these players and allocate market shares to them.
- (1834) Second, the increment resulting from the Transaction is [5-10]%. This is a non-negligible increment in an already concentrated market and Adama has plans to increase its market share.
- (1835) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1836) Fourth, only five competitors have been identified and the Transaction would reduce this number to four.
- (1837) The Parties do not share the same active ingredients. Adama has methomyl 200 SL, beta-cyfluthrin 25 EC, imidacloprid 200 SL NMP Free, EOS 980 EW, cyfluthrin 25+imidacloprid 75 EC and tau-fluvalinate 240 EW; Syngenta has Trigard 75 WP - cyromazine, Actara 25 WG - thiamethoxam, Voliam Targo - chlorantraniliprole,

⁷¹⁶ Form CO, paragraph 1183.

⁷¹⁷ Notifying Party's response to Commission's request for information RFI 35, annex 3-1.

Vertimec Pro 018 EC and Vertimec 018 EC NMPF - abamectin and Plenum 50 WG - pymetrozine.⁷¹⁸

(1838) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market would have a detrimental effect on competition.

(1839) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.

(1840) [...].⁷¹⁹ [...].

(1841) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- tomatoes foliar sucking in Italy.

(I) Tomatoes - Insecticides - Foliar - Sucking - Romania

(1842) First, in the market for insecticides- tomatoes foliar sucking the Transaction would strengthen the leading market position of Syngenta in Romania with a combined share of [70-80]% (Adama [10-20]%, Syngenta [60-70]%) in 2015, followed by Sumitomo ([10-20]%), Bayer ([5-10]%) and FMC ([0-5]%). The merged entity would therefore hold a share more than six times larger than its nearest competitor.

(1843) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

(1844) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1845) Fourth, only four competitors have been identified and the Transaction would reduce this number to three.

(1846) Fifth, these combined shares have significantly increased over the period 2013-2015 ([20-30]% in 2013 and [70-80]% in 2014).

(1847) The Parties do not share the same active ingredients. Adama has imidacloprid 200 SL NMP Free and chlorpyrifos 480 EC and Syngenta has Actara 25 WG (thiamethoxam), Vertimec 018 EC NMPF (abamectin) and Voliam Targo (chlorantraniliprole/abamectin).⁷²⁰

(1848) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Syngenta is the market leader with a share above [60-70]% would have a detrimental effect on competition notably through the creation or strengthening of a dominant position.

(1849) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter

⁷¹⁸ Form CO, paragraph 1235.

⁷¹⁹ Notifying Party's response to Commission's request for information RFI35, annex 3-1.

⁷²⁰ Form CO, paragraph 1183.

of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.

(1850) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides- tomatoes foliar sucking in Romania, notably through the creation or strengthening of a dominant position.

(J) Tomatoes - Insecticides - Foliar - Sucking - Slovakia

(1851) First, in the market for insecticides- tomatoes foliar sucking the Transaction would strengthen the leading market position of Syngenta in Slovakia with a combined share of [90-100]% (Adama [10-20]%, Syngenta [70-80]%) in 2015. The Parties have indicated that other smaller players would hold a share of [5-10]% but they have not been able to identify these players and allocate market shares to them.

(1852) Second, the increment resulting from the Transaction is [10-20]%, which is significant.

(1853) Third, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1854) Fourth, only two competitors have been identified and the Transaction would reduce this number to one, creating a quasi-monopoly in this market.

(1855) Fifth, these combined shares have significantly increased over the period 2013-2015 ([70-80]% in 2013 and [80-90]% in 2014).

(1856) The Parties do not share the same active ingredients. Adama sells chlorpyrifos 480 EC, while Syngenta's main product is Vertimec 018 EC NMPF (abamectin).⁷²¹

(1857) Even assuming that Adama and Syngenta are not particularly close competitors in terms of active ingredient, the elimination of an alternative in a particularly concentrated market where Syngenta is the market leader with a share of almost 80% and Adama is the only alternative would have a detrimental effect on competition, notably through the creation or strengthening of a dominant position.

(1858) Finally, as regards pipe-line products, Adama is considering launching [...]. Registration application for this product has been submitted in the 4th quarter of 2015. Adama has therefore plans to develop its offering in this market in competition with market leader Syngenta.

(1859) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for insecticides tomatoes foliar sucking in Slovakia notably through the creation or strengthening of a dominant position.

13.7.5. *Seed treatment*

13.7.5.1. Markets where the Transaction would not significantly impede effective competition

(A) Industrial vegetable crops - Insecticides – Seed treatment - Netherlands

(1860) In the market for seed treatment industrial vegetable crops insecticides in the Netherlands, the Parties have a combined market share of [30-40]%

⁷²¹ Form CO, paragraph 944.

(Syngenta: [5-10]%, Adama: [20-30]%). As a result of the Transaction, Syngenta will remain market leader.

- (1861) The Transaction significantly increases concentration in the market: the HHI level post-Transaction would be [...] with a delta of [...].
- (1862) According to the Parties' submission, [60-70]% of the market is represented by Other Competitors. The elements provided by the Parties show that Bayer hold insecticides product registrations for industrial vegetable crops seed treatment in the Netherlands and therefore is active or potentially active in this market.
- (1863) Adama is present in this market with two products: Chlorpyrifos 250 CS ([60-70]% of sales) and Imidacloprid 600 FS (uncoloured, [30-40]% of sales). These two products are divested at EEA level (see Section 16) so as to eliminate any competition concerns related to other insecticides products in which the Parties' position strongly overlap.
- (1864) Therefore, based on the above and in light of the evidence available to it, the Commission considers that it is not necessary to conclude whether the Transaction significantly impedes effective competition in the market for seed treatment industrial vegetable crops insecticides in the Netherlands.

(B) Non-problematic markets with low concentration level/increase

- (1865) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables seed treatment markets listed in Table 78 based on 2015 market shares.

Table 78: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Potatoes - fungicides - Denmark	[0-5]%	[20-30]%	[20-30]%	[...]	[...]

(C) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

- (1866) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following vegetables seed treatment markets listed in Table 79 based on 2015 market shares.

Table 79: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Potatoes - fungicides - Netherlands	[20-30]%	[10-20]%	[30-40]%	Bayer	[30-40]%	Mitsui	[20-30]%	Nihon Nohyaku	[5-10]%

13.7.6. Conclusion

- (1867) To conclude, the Commission considers that the Transaction would significantly impede effective competition in the crop protection markets for Vegetables listed in Sections 13.7.2.2, 13.7.3.2 and 13.7.4.2.

13.8. Sunflower

13.8.1. Overview of the crop

- (1868) In 2014, Europe represented 69% of the global agrochemical market for sunflowers.⁷²²
- (1869) Selective herbicides represent the major agrochemical market for sunflowers. Selective herbicides for sunflowers account for [60-70]% of the overall sunflower EEA crop protection market and correspond to [5-10]% of the overall EEA selective herbicides market.⁷²³ At EEA level, the Parties' [30-40]% combined market share in selective herbicides for sunflowers is the highest of all crops and with the highest increment (Adama [10-20]%, Syngenta [20-30]%).⁷²⁴ Indeed, the selective herbicides market for sunflower is one of Adama's major markets.
- (1870) Fungicides for sunflowers account for [10-20]% of the overall sunflower EEA crop protection market and correspond to [0-5]% of the overall EEA fungicide market. In 2015 the Parties' combined market share in sunflower fungicides at EEA level was [20-30]% (Adama [10-20]%, Syngenta [10-20]%).
- (1871) Insecticides for sunflowers account for [0-5]% of the overall sunflower EEA crop protection market and correspond to [0-5]% of the overall EEA insecticide market. In 2015 the Parties' combined market share in sunflower insecticides at EEA level was [5-10]% (Adama [5-10]%, Syngenta [0-5]%).
- (1872) Seed treatment for sunflowers account for [5-10]% of the overall sunflower EEA crop protection market and correspond to [0-5]% of the overall EEA seed treatment market. In 2015 the Parties' combined market share in sunflower seed treatment at EEA level was [40-50]% (Adama [0-5]%, Syngenta [40-50]%).

13.8.2. Fungicides

13.8.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Sunflower - Fungicides - Leafspots - Hungary

- (1873) In the market for sunflower leafspots fungicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%).
- (1874) The market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1875) As a result of the Transaction, the merged entity will be the market leader followed by BASF with [20-30]% market share.
- (1876) Other competitors currently present in the market are Bayer ([20-30]%) and DuPont ([10-20]%). According to the Parties' submission, [0-5]% of the market is represented by Other Competitors.
- (1877) The parties share no active ingredients. Adama offers its Purasolve product (tebuconazole + prochloraz), which represents [70-80]% of its sales in the market, and its Mirage product (based on prochloraz). Syngenta offers its Amistar product

⁷²² Phillips McDougall – AgriService, Crops Section, 2014 Market.

⁷²³ Form CO, paragraph 1333.

⁷²⁴ The Parties' combined share in selective herbicides for vegetables – cucurbits also reaches [30-40]%, but with a smaller increment ([5-10]%).

([70-80]% of the sales), as well as its Amistar Xtra pack (both based on azoxystrobin+ciproconazole).

(1878) The proposed modifications of the Transaction appear to remove the overlaps in this market in relation to Adama's tebuconazole-based products (see Section 16).

(1879) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for sunflower leafspots fungicides in Hungary.

(B) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1880) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sunflower fungicides markets listed in Table 80 based on 2015 market shares.

Table 80: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Fungicide - Leafspots - Romania	[10-20]%	[5-10]%	[20-30]%	BASF	[20-30]%	Dow/DuPont	[20-30]%	Bayer	[10-20]%

13.8.3. Insecticides

13.8.3.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

(1881) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sunflower insecticides markets listed in Table 81 based on 2015 market shares.

Table 81: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Insecticides - Romania	[20-30]%	[0-5]%	[30-40]%	[...]	[...]

13.8.4. Seed treatment

13.8.4.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

(1882) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sunflower seed treatment markets listed in Table 82 based on 2015 market shares.

Table 82: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Seed Treatment - Soil – Spain	[10-20]%	[0-5]%	[20-30]%	[...]	[...]

13.8.5. *Selective Herbicides*

13.8.5.1. General overview

- (1883) In its sunflower crop strategy, Adama claims that "[...]"⁷²⁵ Again, in a more recent update of its sunflower strategy, Adama restates that "[...]"⁷²⁶.
- (1884) Adama's overall objective is to advance its sunflower herbicide market position in Europe from [...].⁷²⁷
- (1885) According to its internal documents, Adama considers that Syngenta has (i) "[...]"⁷²⁸

Figure 21 - Adama's views on Syngenta in relation to sunflowers in Europe⁷²⁹

[...]

- (1886) This shows that Adama perceives Syngenta as a close and real threat to its sunflower position despite their different business models.
- (1887) During the market investigation, several market participants identified sunflower herbicides as one of the areas where the Parties compete head to head.⁷³⁰

13.8.5.2. Markets where the Transaction would not significantly impede effective competition

(A) Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence - France

- (1888) First, in the market for Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence, the Parties would be post-Transaction the second largest player in France with a combined share of [30-40]% (Syngenta: [5-10]%, Adama: [20-30]%) in 2015.
- (1889) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1890) Third, post-Transaction there will be a few other competitors left in the market, namely the market leader Bayer ([40-50]%), BASF ([20-30]%), PSP ([0-5]%) and Phyteurop ([0-5]%). Among these competitors, two rivals are generic players (PSP, Phyteurop).
- (1891) Fourth, Syngenta is present on the market with a copack product, Mercantor Gold plus Listego, based on s-metolachlor and imazamox. Adama offers 5 products, including Aclonifen 300+Pendimethalin 200 SC ([50-60]% of its sales), Pendimethalin 400 ([20-30]% of the sales), Pendimethalin 200+Flurochloridone 125 ME ([10-20]% of the sales), Aclonifen 600 SC ([5-10]%) and a flurochloridone/metolachlor mixture ([0-5]%). The Parties argue that their products do not closely compete in this market and that other suppliers might have products which more closely compete with their own.
- (1892) The market investigation did not reveal any strong evidence about closeness between the Parties' products. In light of the existing market structure whereby Adama used to be much stronger than Syngenta and the Parties will post-Transaction continue to

⁷²⁵ Notifying Party's response to Commission's request for information RFI 31, question 3, annex 3, [...].

⁷²⁶ Notifying Party's response to Commission's request for information RFI 31, question 3, annex 3 - [...].

⁷²⁷ Notifying Party's response to Commission's request for information RFI 31, question 3, annex 3 - [...].

⁷²⁸ Notifying Party's response to Commission's request for information RFI 15, annex 6.4 - [...].

⁷²⁹ Notifying Party's response to Commission's request for information RFI 15, annex 6.4 - [...].

⁷³⁰ Replies to questions 39 of Questionnaire (Q2) to crop protection distributors.

face competition from the market leader Bayer and other 3 players (including 2 generic players), the elimination of an alternative supplier would not likely have a detrimental effect on competition.

(1893) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for sunflower broad spectrum pre-emergence selective herbicides in France.

(B) Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence - Hungary

(1894) First, in the market for Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence, the merged entity would be post-Transaction the second largest player in Hungary with a combined market share of [30-40]% (Syngenta: [20-30]%, Adama: [10-20]%) in 2015.

(1895) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1896) Third, post-Transaction there will be a few other competitors left in the market, namely the market leader BASF ([40-50]%), Dow ([10-20]%) and FMC/Cheminova ([5-10]%). Among these competitors, at least one rival is a generic player (FMC/Cheminova).

(1897) Fourth, Syngenta is present on the market with Dual Gold Oxy and Gardoprim Plus Gold 500 SC. Adama offers Flurochloridone 156+ S-metolachlor 360. The Parties argue that their products do not closely compete in this market and that other suppliers might have products which more closely compete with their own.

(1898) The market investigation did not reveal any strong evidence about closeness between the Parties' products. In light of the existing market structure whereby the Parties will post-Transaction continue to face competition from the market leader BASF and other two players (including one generic player), the elimination of an alternative supplier would not likely have a detrimental effect on competition.

(1899) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for sunflower broad spectrum pre-emergence selective herbicides in Hungary.

(C) Sunflower - Selective Herbicides - Graminicides - Post-emergence - Hungary

(1900) In the market for sunflower graminicides post-emergence selective herbicides in Hungary, the Parties have a combined market share of [30-40]% (Syngenta: [10-20]%, Adama: [20-30]%). As a result of the Transaction, the Parties will be market leader but followed closely by PSP with its [30-40]% market share.

(1901) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1902) Third, a high number of competitors are currently present in the market in addition to the Parties and PSP, namely Motanwerke ([10-20]%), Nissan Chemicals ([10-20]%), Good Farmer ([0-5]%) and BASF ([0-5]%). Therefore, post-Transaction at least five alternative suppliers will be active in the market. Among these players, four of them are generic players (PSP, Motanwerke, Nissan Chemicals, Good Farmer).

(1903) Fourth, in this market, the Parties offer their Agil ([60-70]% of Adama's sales) and Fusilade products. The remainder of Adama's sales in the market is represented by sales of its quizalofop 50 EC SS product. Contrary to what observed in Czech Republic and Greece sunflower graminicide post-emergence markets, Hungary appears to be a less concentrated market where more alternatives will be available post Transaction. The Parties highlight as well that Nissan Chemicals, Chemtura and Good Farmer all offer products based on quizalofop.

(1904) Therefore, although the market is concentrated, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would not significantly impede effective competition in the market for sunflower graminicides post-emergence selective herbicides in Hungary.

(1905) In any case, the Parties' share in this market will be reduced by the proposed sale of Syngenta's Fusilade product registrations at EEA-level as part of the divestment package that has been submitted by the Parties to alleviate competition concerns in other markets.

(D) Non-problematic markets with low concentration level/increase

(1906) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sunflower selective herbicides markets listed in Table 83 based on 2015 market shares.

Table 83: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Selective herbicides - graminicides - post-emergence - Bulgaria	[0-5]%	[10-20]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - Romania	[5-10]%	[10-20]%	[20-30]%	[...]	[...]
Selective herbicides - graminicides - post-emergence - Slovakia	[10-20]%	[0-5]%	[20-30]%	[...]	[...]

(E) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1907) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sunflower selective herbicides markets listed in Table 84 based on 2015 market shares.

Table 84: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Market share	Company	Market share	Company	Market share
Selective herbicides - graminicides - post-emergence - Croatia	[10-20]%	[10-20]%	[20-30]%	Agrochem Maks	[40-50]%	BASF	[20-30]%	PSP	[10-20]%

13.8.5.3. Markets where the Transaction would significantly impede effective competition

Table 85: Markets where the Transaction would significantly impede effective competition

Sector	Market	Year	Combined share	Share Syngenta	Share Adama
Selective Herbicides	Selective Herbicides - Broad spectrum - Pre-emergence - Bulgaria	2015	[50-60]%	[40-50]%	[10-20]%
		2014	[40-50]%	[40-50]%	[0-5]%
		2013	[40-50]%	[30-40]%	[0-5]%
	Selective Herbicides - Broad spectrum - Pre-emergence - Romania	2015	[50-60]%	[50-60]%	[0-5]%
		2014	[30-40]%	[30-40]%	[0-5]%
		2013	N/A	N/A	N/A
	Selective Herbicides - Graminicides - Pre-emergence - Hungary	2015	[50-60]%	[40-50]%	[0-5]%
		2014	[40-50]%	[40-50]%	[0-5]%
		2013	[50-60]%	[50-60]%	[0-5]%
	Selective Herbicides - Graminicides - Post-emergence - Czech Republic	2015	[20-30]%	[0-5]%	[20-30]%
		2014	[30-40]%	[0-5]%	[20-30]%
		2013	[30-40]%	[0-5]%	[30-40]%
	Selective Herbicides - Graminicides - Post-emergence - Greece	2015	[40-50]%	[5-10]%	[30-40]%
		2014	[20-30]%	[0-5]%	[20-30]%
		2013	N/A	N/A	N/A

(A) Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence - Bulgaria

(1908) First, in the market for Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence, the merged entity would be post-Transaction the clear market leader in Bulgaria with a 2015 combined share of [50-60]% (Adama [10-20]%, Syngenta [40-50]%).

(1909) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1910) Third, post-Transaction there will be a limited number of competitors left in the market, namely BASF ([30-40]%) and Sumitomo Chemical ([5-10]%).⁷³¹

(1911) Fourth, Syngenta is present on the market with Gardoprim Plus Gold 500 SC based on s-metolachlor and terbuthylazine. Adama offers Pendimethalin 330 EC based on pendimethalin.

(1912) The Parties submit that their products do not compete closely with each other as they are priced differently and do not share the same AI.⁷³² According to the Parties,

⁷³¹ The remaining [0-5]% of the market is attributed to the category "Other competitors".

pendimethalin is a broad spectrum herbicide that controls a wider range of grass weeds as compared to broadleaf weeds, but it does not have the same effectiveness against the broad spectrum of weeds controlled by Syngenta's mixture, which combines a grass herbicide, s-metolachlor with a broadleaf herbicide, terbuthylazine. According to the Parties, Adama's product competes more directly with BASF's Stomp 330 EC, which is based on pendimethalin, the same AI in Adama's product, than with any of Syngenta's products.

- (1913) Even assuming that Adama and Syngenta are not close competitors in terms of active ingredients as argued by the Parties, the elimination of an alternative supplier in a highly concentrated market with a limited number of competitors, where Adama used to be the largest generic player, would have a detrimental effect on competition.
- (1914) Moreover, Adama appears to be a dynamic player on the market [...].⁷³³ [...].⁷³⁴
- (1915) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Sunflower - Selective Herbicides - Broad spectrum- Pre-emergence in Bulgaria notably through the creation or strengthening of a dominant position.
- (B) Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence - Romania
- (1916) First, in the market for Sunflower - Selective Herbicides - Broad spectrum - Pre-emergence, the Parties would be post-Transaction the clear market leader in Romania with a combined share of [50-60]% (Adama [0-5]%, Syngenta [50-60]%) in 2015, followed by BASF ([10-20]%). The merged entity will therefore hold a share more than 3 times larger than its nearest competitor.
- (1917) Second, the market is concentrated: the HHI level post-Transaction would be [...], but the delta HHI would be [...].
- (1918) Third, post-Transaction there will be few other competitors left in the market, namely BASF ([10-20]%), Monsanto ([5-10]%), Dow ([5-10]%), Bayer ([5-10]%) and a fringe of three smaller players whose combined market share accounts for [5-10]%.
- (1919) Fourth, the Transaction eliminates a dynamic player as Adama has been doubling its sales between 2014 and 2015 in the market for Sunflower Selective Herbicides Broad spectrum Pre-emergence (2014: [0-5]%; 2015: [0-5]%).
- (1920) Fourth, Syngenta is present on the market with Gardoprim Plus Gold 500 SC (representing [50-60]% of Syngenta's sales) and a copack product, Mercantor Gold plus Listego, based on s-metolachlor and imazamox. Adama offers Pendimethalin 330 EC based on pendimethalin.
- (1921) The Parties submit that their products do not share any common AI. According to the Parties, similarly to what argued for Bulgaria (see recital (1912)), their products offer different degree of effectiveness and, thus do not compete with each other. The Parties argue that Adama's product compete much more closely with BASF' Stomp

⁷³² Notifying Party's submission of 16 December 2016, "Selective herbicides Sunflowers", paragraphs 42-46.

⁷³³ Notifying Party's response to Commission's request for information RFI 36, question 1.

⁷³⁴ Notifying Party's response to Commission's request for information RFI 31, question 3, annex 3 - [...].

330 product than with Syngenta's product. Finally the Parties stress that Syngenta's products are both based on s-metolachlor, which is one of AI where Syngenta expects to face increased generic competition and regulatory restrictions.⁷³⁵

(1922) Even assuming that Adama and Syngenta are not close competitors in terms of active ingredients as argued by the Parties, the elimination of an alternative supplier who has been growing its presence in an already highly concentrated market where Syngenta is the market leader with a share above [50-60]% would have a detrimental effect on competition.

(1923) Moreover, Adama appears to be a particularly dynamic player in the market [...].⁷³⁶ [...].⁷³⁷

(1924) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Sunflower - Selective Herbicides - Broad spectrum- Pre-emergence in Romania notably through the creation or strengthening of a dominant position.

(C) Sunflower - Selective Herbicides - Graminicides - Pre-emergence - Hungary

(1925) First, in the market for Sunflower - Selective Herbicides - Graminicides - Pre-emergence, the Parties would remain post-Transaction the clear market leader in Hungary with a combined share of [50-60]% (Adama [0-5]%, Syngenta [40-50]%) in 2015, followed by BASF ([20-30]%), Dow ([0-5]%) and PSP ([0-5]%).⁷³⁸ The merged entity will therefore hold a share more than 2 times larger than its nearest competitor.

(1926) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].

(1927) Third, a limited number of significant competitors are currently present in the market. Among these competitors, PSP is a generic player. Therefore, post-Transaction only three alternative suppliers will continue to be active in the market.

(1928) Fourth, Syngenta is present on the market with Dual Gold 960 EC based on s-metolachlor. Adama offers Pendimethalin 330 EC based on pendimethalin.

(1929) The Parties argue that their products are not close competitors in this market. They indeed submit that s-metolachlor controls a broader spectrum of grass weeds than pendimethalin. Also, s-metolachlor has a stronger residual effect and one application controls weeds longer than one application of Adama's pendimethalin product. In addition, the two products have different mode of action to control for weeds. Finally the Parties, argue that Syngenta's Dual Gold compete more closely to BASF's Frontier product, rather than to Adama's product. s Adama's product competes more closely with BASF' Stomp product rather than to Syngenta's one. Finally, Syngenta

⁷³⁵ Notifying Party's submission of 16 December 2016, "Selective herbicides Sunflowers", paragraphs 54-59.

⁷³⁶ Notifying Party's response to Commission's request for information RFI 36, question 1.

⁷³⁷ Notifying Party's response to Commission's request for information RFI 31, question 3, annex 3 - [...].

⁷³⁸ The remaining [10-20]% of the market is attributed to the category "Other competitors".

stresses that s-metolachlor is expected to face increasing competition from generic players in the future which should further constraint its position in the future⁷³⁹

- (1930) Even assuming that Adama and Syngenta are not close competitors in terms of active ingredients as argued by the Parties, the elimination of an alternative supplier in an already highly concentrated market and the further strengthening of the market leader that would post-Transaction account for more than [50-60]% of the market would have a detrimental effect on competition.
- (1931) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Sunflower - Selective Herbicides - Graminicides - Pre-emergence in Hungary notably through the creation of a dominant position.
- (D) Sunflower - Selective Herbicides - Graminicides - Post-emergence - Czech Republic
- (1932) First, in the market for Sunflower - Selective Herbicides - Graminicides - Post-emergence, the Parties would be post-Transaction the market leader in Czech Republic with a combined share of [20-30]% (Adama [20-30]%, Syngenta [0-5]%) in 2015, followed by Dow ([20-30]%).⁷⁴⁰ In 2013 and 2014, the Parties combined market share was respectively [30-40]% (Adama [20-30]%, Syngenta [0-5]%) and [30-40]% ([30-40]% Adama, [0-5]% Syngenta).⁷⁴¹
- (1933) Second, the HHI level post-Transaction would be [...] with a delta of [...]. Therefore, the Transaction would not bring the market to a high level of concentration. Nonetheless, only one significant competitor, besides the Parties, is currently present in the market. The Parties could not, based on their own intelligence, estimate the share of additional players supposedly present in the market. The Homologa dataset⁷⁴² reports a number of additional products being registered in this market by players other than the Parties and Dow. The Parties indicate that three other generic players are active in this market, all with a quizalofop-based product, as well as BASF. All these players appear indeed to have products registered in Czech Republic under the Homologa database. However, absent the information on sales, it is not possible to establish the extent to which these players constrain the Parties.
- (1934) Third, the Parties' products appear to compete closely in this market. Adama sells Agil (based on propaquizafop) and Syngenta offers Fusilade Forte 150 (based on fluazifop). The Parties argue that they do not compete closely as their products don't share any common AI. In addition, they argue that Adama's propaquizafop controls a wider spectrum of weeds and has a quicker action than Syngenta's fluazifop product. The Parties also argue that the price to the distributors of the two products is quite different.⁷⁴³ Finally, they indicate that this market is relatively small (about [...])

⁷³⁹ Notifying Party's submission of 16 December 2016, "Selective herbicides Sunflowers", paragraphs 30-37.

⁷⁴⁰ The remaining [40-50]% of the market is attributed to the category "Other competitors".

⁷⁴¹ It should be noted that the Parties' estimated the size of the market in 2015 on the basis of the estimated size in 2014.

⁷⁴² Notifying Party's submission of 1 December 2016, "Homologa database".

⁷⁴³ Notifying Party's submission of 16 December 2016, "Selective herbicides Sunflowers", paragraphs 48-52.

in 2015) and, thus, is not likely to drive pricing decisions in relation to Agil and Fusilade products.

- (1935) The Commission notes that although these products are not based on the same AIs, their underlying AIs belong to the same chemical class and thus share the same mode of action.
- (1936) Moreover, the Commission notes that, in its internal documents, Adama [...].⁷⁴⁴

Figure 22 - Adama's Agil product threatened by Syngenta's Fusilade⁷⁴⁵

[...]

- (1937) In addition, also Adama's value maps show that [...].⁷⁴⁶
- (1938) Furthermore, in the course of the market test, several market participants pointed to the closeness of competition between Agil and Fusilade products.⁷⁴⁷
- (1939) The Commission notes that the combined market share of the Parties will remain below 30%. However, in light of the qualitative evidence collected regarding closeness between the Parties' products, the Commission considers that the current combined market share does not fully reflect the degree of competitive pressure currently exerted by the Parties on each other and the future market strength of the merged entity.
- (1940) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Sunflower - Selective Herbicides - Graminicides - Pre-emergence in Czech Republic.
- (E) Sunflower - Selective Herbicides - Graminicides - Post-emergence - Greece
- (1941) First, in the market for Sunflower - Selective Herbicides - Graminicides - Post-emergence, the Parties would be post-Transaction the second largest player in Greece with a combined share of [40-50]% (Adama [30-40]%, Syngenta [5-10]%) in 2015, following PSP ([50-60]%).
- (1942) Second, the market is concentrated: the HHI level post-Transaction would be [...] with a delta of [...].
- (1943) Third, a limited number of significant competitors are present in the market. Besides the generic player PSP, Dow ([5-10]%) is the only other player active in the market. Therefore, post-Transaction only two alternative suppliers will remain active in the market.
- (1944) Fourth, the Transaction eliminates a particularly dynamic player as Adama has been increasing in terms of sales between 2014 and 2015 in the market for Sunflower - Selective Herbicides - Graminicides - Post-emergence (2014: [20-30]%; 2015: [30-40]%). Likewise, Syngenta has been improving its position in the market, from [0-5]% in 2014 to [5-10]% share in 2015.

⁷⁴⁴ Notifying Party's response to Commission's request for information RFI 15, annex 6.4, [...].

⁷⁴⁵ Notifying Party's response to Commission's request for information RFI 25, annex 8.1 - [...].

⁷⁴⁶ Notifying Party's response to Commission's request for information RFI 25, value maps.

⁷⁴⁷ Replies to questions 47.1, 48.1, 49 of Questionnaire (Q2) to crop protection distributors; Replies to question 16 of Questionnaire (Q1) to crop protection customers (Farmers).

- (1945) Fifth, the Parties' products appear to compete closely in this market. Syngenta is present on the market with Fusilade 125EC (based on fluazifop) and Adama with Agil (quizalofop- based product representing [50-60]% of its sales in the market) and Propaquizafop 100 NMP FREE EC (fluazifop based).
- (1946) In line with the arguments presented in relation to the Czech Republic market, the Parties argue that their products do not compete closely (see recital (1934)).⁷⁴⁸
- (1947) However, as already indicated in recitals (1936) - (1938), Fusilade and Agil appear to compete head-to-head on the basis of the analysis contained in Adama's internal documents. Moreover, based on the value maps prepared by Adama at the time of the market launch, [...].
- (1948) Therefore, on balance and in light of the evidence available to it, the Commission concludes that the Transaction would significantly impede effective competition in the market for Sunflower - Selective Herbicides - Graminicides - Pre-emergence in Greece.

13.8.6. Conclusion

- (1949) To conclude, the Commission considers that the Transaction would significantly impede effective competition in the crop protection markets for Sunflower listed in Section 13.8.5.3.

13.9. Other crops

13.9.1. Cotton - Selective Herbicides

13.9.1.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with low concentration level/increase

- (1950) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following cotton selective herbicides markets listed in Table 86 based on 2015 market shares.

Table 86: Non-problematic markets with low concentration level/increase

Market	Adama	Syngenta	CMS	HHI	HHI Delta
Selective herbicides - broadleaf - Spain	[20-30]%	[0-5]%	[20-30]%	[...]	[...]

(B) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

- (1951) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following sunflower selective herbicides markets listed in Table 87 based on 2015 market shares.
- (1952) In relation to Greece, the Parties were not able to provide the breakdown of their sales by relevant application. Adama offers fluometuron 500 SC and Syngenta the fluometuron-based Rocket 50. However, Syngenta sources its Rocket 50 SC product via a local agreement with Adama. Since all of its sales are already dependent on this agreement between the Parties, the Transaction will have no effect on the structure of competition in this crop/segment.

⁷⁴⁸ Notifying Party's submission of 16 December 2016, "Selective herbicides Sunflowers", paragraphs 38-41.

Table 87: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Selective herbicides - Greece	[10-20]%	[10-20]%	[20-30]%	PSP	[10-20]%	Oxon Sipcam Vischim	[10-20]%	Dow/DuPont	[5-10]%

13.9.2. Soybeans - Selective Herbicide

13.9.2.1. Markets where the Transaction would not significantly impede effective competition

(A) Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

(1953) As explained in Section 13.1.2, the Commission considers that the Transaction is not likely to significantly impede effective competition on the following soybean selective herbicides markets listed in Table 88 based on 2015 market shares.

Table 88: Non-problematic markets with modest combined market shares and at least 3 significant alternative competitors

Market	Adama	Syngenta	CMS	Largest competitor		Second largest competitor		Third largest competitor	
				Company	Share	Company	Share	Company	Share
Selective herbicides - graminicides - post- emergence - Croatia	[10-20]%	[10-20]%	[20-30]%	Agrochem Maks	[40-50]%	BASF	[20-30]%	PSP	[5-10]%

14. COMPETITIVE ASSESSMENT - NON-HORIZONTAL EFFECTS IN CROP PROTECTION MARKETS

14.1. Foreclosure through bundling practices

(1954) During the Commission's investigation, concerns have been raised by market participants in relation to the risk that the combination of Adama's and Syngenta's activities may increase the Parties' ability and incentives to foreclose competitors from access to the downstream distribution channel through the implementation of bundling strategies. In particular, one competitor raised concerns that the Transaction would increase the ability and incentives to engage in bundled discounts for crop protection products for (i) Syngenta and Adama by increasing the range of products the Parties can offer and by giving Adama access to Syngenta's AIs and (ii) other R&D companies by removing from the market Adama as an independent generic force.⁷⁴⁹

(1955) As regards the bundling of Adama's and Syngenta's crop protection products, the Commission has come to the view that the Transaction would not materially affect the Parties' ability and incentives to engage in bundling strategies. This is for the following reasons.

(1956) First, Syngenta is already pre-Transaction the second largest supplier of crop protection products in the EEA and offers one of the broadest ranges of products. It must also be noted that there are today no restrictions for Syngenta to bring to the

⁷⁴⁹ Response to Phase II invitation to comment 07.12.2016 - REDACTED.pdf.

market off-patent AIs, such as those offered by Adama. Moreover, Syngenta's commercial strategy consists in having for each market segment a diversified offering including multiple products ranging from entry level, low value, generic products to premium on-patent products. Finally, as the complainant points out, Syngenta is already offering bundled discounts pre-Transaction.

- (1957) Second, Adama is the main generic player in Europe and offers a broad range of products already today. Moreover, while it cannot be excluded that through the Transaction Adama would gain access to certain of Syngenta's AIs, it is unlikely that Adama would have systematic access to Syngenta's AI in order to produce generic versions thereof as this would dilute their value. Moreover, Adama already today offers several off-patent Syngenta AIs and has access from time to time to AIs that are not yet off-patent. In this respect, Adama is not unique as it is not uncommon for generic players to acquire or obtain access to patent protected AIs by R&D companies.
- (1958) As regards the bundling of third parties' crop protection products, the Commission has come to the view that the Transaction would not materially affect other R&D companies' ability and incentives to also engage in bundling strategies. Indeed, as the complainant points out certain of its R&D and generic competitors are already offering bundled discounts pre-Transaction. Moreover, in the EEA there are several generic players which on many parameters are comparable to Adama, such as FMC, Nufarm, and PSP, and that will continue to constrain R&D players post-Transaction.

14.2. Other foreclosure effects

14.2.1. Increased difficulties for smaller generic players to maintain and renew authorizations and registrations of AIs and products in the EEA

- (1959) Certain market participants have raised concerns that the Transaction may make it harder for smaller generic agrochemical players to maintain and renew registrations of AIs and products in the EEA. In particular, ECCA (the European Crop Care Association) indicated that post-Transaction Adama and Syngenta would have a broader portfolio than the individual companies had before the Transaction and that this may increase their incentives and ability to (i) reduce the number of AIs for which they seek renewals at the EEA level, (ii) restrict participation to their task-forces, and (iii) limit the number of data sharing agreements they enter into. According to ECCA, the combined effect of these actions would be that of increasing the cost and effort required by smaller generic players to maintain and renew authorizations and registrations of AIs and products in the EEA.
- (1960) Another generic player expressed similar concerns in relation to access to task forces. According to this company, *"it will post-merger become even harder for small undertakings to enter Task Forces where Adama and/or Syngenta is present. The Parties will have greater power to reject a newcomer, in practice forcing small undertakings to abandon their efforts with respect to the molecule in question. As such, small undertakings will be less and less powerful and will be forced to pick projects more selectively. Finchimica further states that post-merger the Parties will have a very large portfolio, and that generics will never be able to overcome the gap."*⁷⁵⁰

⁷⁵⁰ Minutes of the conference call with a competitor of 9 December 2016.

- (1961) Such concerns are to a large extent not merger specific and to the extent they are, it appears unlikely that the Transaction would make it materially more difficult for smaller generic players to maintain and renew authorizations and registrations of AIs and products in the EEA than it is today. This is for the following reasons.
- (1962) First, the ECCA indicated in one of its submissions that in its view, the challenge was rather due to the contested regulatory framework and therefore not merger-specific "*while [...] Regulation [1107] endeavours to create the same opportunities for small and medium-sized enterprises, it eventually fails to achieve this due to flaws in the process, interpretation and enforcement of the applicable provisions*".⁷⁵¹ Indeed, the challenges for smaller generic players in maintaining and renewing authorizations and registrations of AIs and products in the EEA appear to mainly arise from the existing regulatory framework which encourages agrochemical companies to cooperate but in the companies' views does not systematically grant a right to access existing data and task-forces.⁷⁵² Therefore, smaller generic players pre- and post-Transaction cannot have an expectation that they would be allowed to cooperate with R&D players and larger generic players to maintain and renew authorizations and registrations of AIs and products in the EEA.
- (1963) Second, Syngenta already today when deciding whether to cooperate with third Parties in order to maintain and renew registrations of AIs in the EEA [...].⁷⁵³ In a similar fashion, Adama when deciding whether to cooperate with third parties to maintain and renew registrations of AIs in the EEA [...]. It appears unlikely that the Parties' incentives to cooperate with third parties would be materially affected by the Transaction because it would not significantly modify the costs and opportunities of cooperation.
- (1964) Third, the AIs that can be registered and sold in the EEA are under constant regulatory review and have declined significantly in recent years.⁷⁵⁴ The current expectation is that such decline will continue and a number of AIs and chemical classes, among others the neonicotinoids, are candidates for exiting the EEA market in the coming years.⁷⁵⁵ Indeed, both Adama's and Syngenta's product portfolios include AIs that are under regulatory threat, such as chlorpyrifos and bromoxynil. Moreover, to develop and bring to the market an AI or to maintain its registration is a challenging and costly endeavour.⁷⁵⁶ In this scenario, it appears unlikely that Adama and Syngenta would decide not to register an AI, thus reducing the scope of their product portfolio, which would have a regulatory future in the EEA and is supported by a business case exclusively to limit competition from smaller generic players.

⁷⁵¹ ECCA's Submission of 28 November 2016, "Observations on the prior notification of a concentration".

⁷⁵² See, for example, Article 59 of Regulation (EC) No. 1107/2009 which provides for data protection on tests and studies but allows the owner of the data to grant access to it to third parties.

⁷⁵³ Notifying Party's submission of 27 November 2016, "SYT EU reg process and operating models.ppt".

⁷⁵⁴ Syngenta estimates that the ratio between product withdrawals and new product introductions in the EU is [...]. Moreover, Syngenta indicated that approximately [...] active substances ([70-80]% of the total) have been withdrawn over the past 25 years ([...]).

⁷⁵⁵ Notifying Party's submission of 27 November 2016, "ADA EC Meeting Brussels.pptx".

⁷⁵⁶ Syngenta estimates that the cost to bring a new AI to the market is approximately [...] while AI renewals and product re-registrations cost approximately [...] ([...]).

15. CONCLUSION

(1965) For the reasons set out in Section 13.2 to Section 13.8, the Transaction would significantly impede effective competition in relation to the crop protection markets listed in recitals (938), (1107), (1128), (1259), (1483), (1867) and (1949).

16. MODIFICATIONS TO THE TRANSACTION

(1966) With a view to rendering the concentration compatible with the internal market in relation to the markets identified by the Commission as raising competition concerns, the Notifying Party submitted commitments pursuant to Article 8(2) of the Merger Regulation on 9 January 2017. On 10 January 2017, the Parties submitted a second version of the commitments containing some very limited modifications ("the Initial Commitments"). The Commission launched an exercise to market test the Initial Commitments. The market test indicated that the Initial Commitments were insufficient to eliminate entirely the concerns raised by the Transaction.

(1967) In order to address the issues raised in the market test, the Notifying Party submitted a further set of commitments on 27 January 2017 ("the Final Commitments").

16.1. General principles for the assessment of remedies

(1968) The principles in the case-law of the Court of Justice of the European Union⁷⁵⁷ and in the Commission's Notice on Remedies acceptable under Council Regulation (EC) No. 139/2004 and under Commission Regulation (EC) No. 802/2004 ("Remedies Notice")⁷⁵⁸ set out in recitals (1969)-(1976) apply where parties to a merger choose to offer commitments in order to restore effective competition.

(1969) Where a concentration raises competition concerns that it could significantly impede effective competition, in particular as a result of the creation or strengthening of a dominant position, the parties may seek to modify the concentration in order to resolve the competition concerns and thereby gain clearance of their merger.⁷⁵⁹

(1970) The Commission only has power to accept commitments that are deemed capable of rendering the concentration compatible with the internal market in that they will prevent a significant impediment to effective competition in all relevant markets where competition concerns were identified.⁷⁶⁰ To that end, the commitments must

⁷⁵⁷ See Case C-12/03P *Tetra Laval* ECLI:EU:C:2005:87, para 87; Case T-102/96 *Gencor*, ECLI:EU:T:1999:65, para 318; Case T-342/07, *Ryanair* ECLI:EU:T:2010:280 paras 452 – 453, and jurisprudence cited therein.

⁷⁵⁸ Commission's Notice on Remedies acceptable under Council Regulation (EC) No. 139/2004 and under Commission Regulation (EC) No. 802/2004 ("Remedies Notice"), (OJ C 267, 22.10.2008, p. 1).

⁷⁵⁹ Remedies Notice, paragraph 5.

⁷⁶⁰ Remedies Notice, paragraph 9.

eliminate the competition concerns entirely⁷⁶¹ and must be comprehensive and effective from all points of view.⁷⁶²

- (1971) In assessing whether proposed commitments are likely to eliminate its competition concerns, the Commission considers all relevant factors including *inter alia* the type, scale and scope of the commitments, judged by reference to the structure and particular characteristics of the market in which the concerns arise, including the position of the parties and other participants in the market.⁷⁶³ Moreover, commitments must be capable of being implemented effectively within a short period of time.⁷⁶⁴
- (1972) Where a proposed concentration threatens to significantly impede effective competition the most effective way to maintain effective competition, apart from prohibition, is to create the conditions for the emergence of a new competitive entity or for the strengthening of existing competitors via divestiture by the merging parties.⁷⁶⁵
- (1973) The divested activities must consist of a viable business that, if operated by a suitable Purchaser, can compete effectively with the merged entity on a lasting basis and that is divested as a going concern. The business must include all the assets which contribute to its current operation or which are necessary to ensure its viability and competitiveness and all personnel which are currently employed or which are necessary to ensure the business' viability and competitiveness.⁷⁶⁶
- (1974) Personnel and assets which are currently shared between the business to be divested and other businesses of the parties, but which contribute to the operation of the business or which are necessary to ensure its viability and competitiveness, must also be included. Otherwise, the viability and competitiveness of the business to be divested would be endangered. Therefore, the divested business has to include the personnel providing essential functions for the business such as, for instance, group R&D and information technology staff even where such personnel are currently employed by another business unit of the parties —at least in a sufficient proportion to meet the on-going needs of the divested business.⁷⁶⁷
- (1975) Normally, a viable business is a business that can operate on a stand-alone-basis, which means independently of the merging parties as regards the supply of input materials or other forms of cooperation other than during a transitory period.⁷⁶⁸

⁷⁶¹ Case C-202/06 *P Cementbouw Handel & Industrie v Commission* [2007] ECR 2007 I-12129, paragraph 54: “it is necessary, when reviewing the proportionality of conditions or obligations which the Commission may, by virtue of Article 8(2) of Regulation No 4064/89, impose on the parties to a concentration, not to determine whether the concentration still has a Community dimension after those conditions or obligations have been complied with, but to be satisfied that those conditions and those obligations are proportionate to and would entirely eliminate the competition problem that has been identified”.

⁷⁶² Remedies Notice, paragraphs 9 and 61.

⁷⁶³ Remedies Notice, paragraph 12.

⁷⁶⁴ Remedies Notice, paragraph 9.

⁷⁶⁵ Remedies Notice, paragraph 22.

⁷⁶⁶ Remedies Notice, paragraphs 23-25.

⁷⁶⁷ Remedies Notice, paragraph 26.

⁷⁶⁸ Remedies Notice, paragraph 32.

(1976) The intended effect of the divestiture will only be achieved if and once the business is transferred to a suitable Purchaser in whose hands it will become an active competitive force in the market. The potential of a business to attract a suitable Purchaser is an important element of the Commission's assessment of the appropriateness of the proposed commitment. In order to ensure that the business is divested to a suitable Purchaser, the commitments must include criteria to define the suitability of potential Purchasers. This will allow the Commission to conclude that the divestiture of the business to such a Purchaser will likely remove the competition concerns identified.⁷⁶⁹

16.2. Description of the Initial Commitments

(1977) The Initial Commitments provided for the following elements ("the Divestment Business") by either Adama or Syngenta ("the divesting party"):⁷⁷⁰

- (a) the divesting party's⁷⁷¹ crop protection product registrations, in each EEA Member State⁷⁷² in which it holds such registrations, for 48 formulated products, currently sold on the market, as listed in Table 1 of the Initial Commitments, including an irrevocable, exclusive, transferable, royalty-free licence, to access and use any active ingredient and formulated product registration data required to support and maintain such product registrations in the EEA ("Portfolio 1").⁷⁷³ Portfolio 1 also includes a royalty-free, exclusive, irrevocable EEA-wide licence to access and use the lead active ingredients' registration data and the product registration data underlying those products whose registration would be transferred;⁷⁷⁴
- (b) the divesting party's crop protection product registrations, in the EEA Member States in which it holds such registrations, for 6 pipeline products listed in Table 2 on the Initial Commitments, including an irrevocable, exclusive, transferable, royalty-free licence, to access and use any active ingredient and formulated product registration data required to support and maintain such product registrations in the EEA ("Portfolio 2"). Portfolio 2 also includes an irrevocable, exclusive or non-exclusive, as the case may be, transferable, royalty-free licence, to access and use any studies (including internal studies) and field trial results initiated or completed in relation to 10 pipeline products listed in Table 2 of the Initial Commitments. Any such licence would be limited to introducing crop protection products in the EEA;
- (c) the divesting party's crop protection product registrations, in each EEA Member State in which it holds such registrations, for 21 formulated products

⁷⁶⁹ Remedies Notice, paragraph 47.

⁷⁷⁰ See Notifying Party's submission of 10 January 2017 "Schedule of the Commitments".

⁷⁷¹ Either Adama or Syngenta.

⁷⁷² The term "EEA Member State" designates any of the Contracting Party to the EEA Agreement.

⁷⁷³ For 9 products, the divestments were however limited to some EEA Member States and it removed overlaps between the Parties only in the Member States where the Transaction raised concerns. These products were Pendimethalin 330 EC (Hungary, Bulgaria and Romania), Pendimethalin 330 EC SSS ITY (Italy, Malta), Clofentezine 500 SC and Clofentezine 500 SC NC (Spain and Romania), Tau-fluvalinate 240 EW (Hungary), Nicosulfuron 40 OD and Nicosulfuron 40 ODV (Spain), S-metolachlor 312.5 + Terbutylazine 187.5 + Sulco and S-metolachlor 312.5 + Terbutylazine 187.5 (Spain).

⁷⁷⁴ The licence of the AI was also limited to the impacted Member States for the formulated products whose registrations were divested only in some Member States.

listed in Table 3 of the Initial Commitments ("Portfolio 3").⁷⁷⁵ These relate to formulated products which, according to the Parties, are likely to lose their regulatory approval between 2017 and 2023. Portfolio 3 also includes an irrevocable, exclusive, transferable, royalty-free licence, to access and use any active ingredient and formulated product registration data required to support and maintain such product registrations in the EEA;

- (d) all registered intellectual property including brand names primarily used in connection to the products included in the Divestment Business in the EEA or free access thereto, and the trademarks primarily used by the Divestment Business in the EEA or free access thereto;
 - (e) know-how used by the Divestment Business.
 - (f) contracts with third party suppliers for the manufacture and sale of the products in the Divestment Business where applicable, manufactured in accordance with the product registrations transferred with the Divestment Business.
 - (g) if requested by the Purchaser, the Divestment Business may also include solely for sale in the EEA and for a period of up to [...] after Closing (such period may be further extended up to an additional [...], in consultation with the Commission and the Monitoring Trustee), agreements to either (i) toll manufacture and supply, by the Parties, at their respective production costs, of the products in the Divestment Business, including secondary active ingredients as required to produce the mixtures included in the Divestment Business and mixtures containing any of the lead active ingredients in the Divestment Business as the lead active ingredient in such products for sale in the EEA, and manufactured in accordance with the product registrations transferred with the Divestment Business, where such products or secondary active ingredients are manufactured by the Parties or (ii) where such products or secondary active ingredients referred to in this paragraph are supplied to the Divestment Business by third party suppliers, the Parties shall use their best efforts to supply such products or such secondary active ingredients through back-to-back supply agreements with such third parties at the wholesale price paid by the Parties.
 - (h) an irrevocable, transferable, royalty-free licence, to obtain access to, and to use the registration data relating to the secondary active ingredients used in the mixtures included in the Divestment Business, to support and maintain crop protection product registrations in the EEA for mixture products included in the Divestment business.
 - (i) EEA customer list and other records.
 - (j) Inventory and arrangements for the supply of transitional services for a [...] duration (which may be further extended for [...]).
- (1978) The Initial Commitments envisaged that Portfolio 1 and Portfolio 2 would be acquired together and in their entirety by a single Purchaser. Portfolio 3 could be sold separately from Portfolio 1 and Portfolio 2 and could be acquired, in whole or in part or not at all, by the Purchaser of Portfolio 1 and Portfolio 2 or by one or more other

⁷⁷⁵ Except for Epoxiconazole 125 SEC NEW which is limited to Slovenia.

Purchasers, as the case may be, subject to the Commission's approval. The divesting party would be free to retain any product in Portfolio 3 not receiving an offer at the end of the First Divestiture period as defined in the Initial Commitments.⁷⁷⁶

- (1979) The Divestment Business would not include:
- (a) production plants, sales office or other physical plants;
 - (b) any personnel;
 - (c) any of the products in the Divestment Business manufactured for sale outside the EEA including any brands, registration rights, know-how, intangible assets and brand names used outside the EEA.

16.3. Assessment of the Initial Commitments

16.3.1. The Parties' arguments

- (1980) In the Parties' view, the Initial Commitments are sufficient to remove the competition concerns identified by the Commission. The Parties submitted that the Initial Commitments would eliminate, or at the very least substantially reduce, the overlaps in the all the national crop/pest markets raising competition concerns.⁷⁷⁷
- (1981) More specifically, the Parties have explained that the Initial Commitments would eliminate the full overlaps all the PGR markets. As regards selective herbicides, the Initial Commitments would also remove the full overlaps, or even reduce the Parties' combined position beyond the overlap, in all problematic markets. In fungicides, where 21 markets are considered to raise competition concerns, the Initial Commitments would remove the full overlaps or more in 10 markets and significantly lower the combined shares of the Parties in 11 of them. As regards insecticides, where 46 markets are considered to raise competition concerns, the Initial Commitments would remove the full overlaps or more in 34 markets and significantly lower the combined shares of the Parties in 12 of them. Lastly, the Initial Commitments would remove the full overlaps in all seed treatment markets that are to raise competition concerns.⁷⁷⁸
- (1982) The Parties have also explained that the EEA-wide formulated product portfolio is a highly attractive business, having generated total revenues in 2015 of approximately [...] and a robust EBITDA margin in excess of [40-50]%. According to the Parties, the value of the Divestment Business goes far beyond the value of the Parties' sales in the markets raising concerns (as most of the products would be divested on an EEA-wide basis, whereas the majority of the problematic overlaps concern only some specific Member States) and the scope of the Divestment Business would enable a generic purchaser to improve its competitive position in the EEA materially.⁷⁷⁹
- (1983) The Parties have explained that the Divestment Business is part of the Parties' overall crop protection business and does not currently operate as a stand-alone business or entity. As a result, the Divestment Business would be carved out of the Parties' respective business entities.

⁷⁷⁶ Notifying Party's Submission of 9 January 2017 "Schedule of the Initial Commitments", paragraph 2a).

⁷⁷⁷ Form RM of 10 January 2017, paragraph 18.

⁷⁷⁸ Form RM of 10 January 2017, annex 1.

⁷⁷⁹ Form RM of 10 January 2017, paragraph 88.

- (1984) According to the Parties, the fact that the Divestment Business does not operate as a stand-alone entity does not constitute an obstacle to its viability and competitiveness. In particular, the Parties consider that the divestment of production assets used to manufacture the divested products is not necessary. The Initial Commitments would require the Parties either to undertake to, or use their best efforts to, arrange toll manufacturing and/or supply agreements required for the manufacturing of the relevant products (ingredients or formulated products) if and as requested by the purchaser.⁷⁸⁰
- (1985) Similarly, the Parties submit that other resources, such as personnel, should remain with the relevant selling party as these resources are not primarily dedicated to the Divestment Business or to any active ingredients or formulated products included in the Initial Commitments.⁷⁸¹

16.3.2. *The Commission's assessment*

- (1986) The Commission's assessment focused on (i) whether the Initial Commitments were sufficient to remove the competition concerns raised by the Transaction in terms of horizontal overlaps, particularly given that the Parties were proposing to keep products in Portfolio 3 in the event that no suitable purchaser showed an interest in these products; (ii) whether the Divestment Business constituted a viable business able to compete effectively with Adama and Syngenta on a lasting basis, taking into account the exclusion of production plants and personnel; (iii) whether the Divestment Business was sufficiently interesting to attract a suitable Purchaser who would operate it as a viable and effective competitive force in the long run; and (iv) whether the various Portfolios ought to be sold to a single purchaser or could be split.
- (1987) On 10 January 2017, the Commission launched an exercise to market test the Initial Commitments, covering all of the questions outlined in recital (1986). The results of the market test showed that the Initial Commitments were in principle deemed a suitable solution to resolve the competition concerns identified by the Commission. However, a number of issues relating to the viability of the Divestment Business were also identified. These issues were addressed by the Notifying Party through improvements made to the Initial Commitments.

16.3.2.1. Removal of competition concerns

- (1988) The Commission considers that the Initial Commitments remove the vast majority of the overlaps between the Parties in the problematic crop protection markets. In the markets where the overlaps are not entirely eliminated, the merged entity would hold a market share which would not raise competition concerns, as shown in annex 1 to the Form RM.
- (1989) As explained in Section 16.3.1, the portfolios of products to be included in the Divestment Business generated total revenues in 2015 of approximately [...]. This represented approximately [30-40]% of Adama's turnover in crop protection in the EEA. The value of this portfolio is considered to be a sound basis for a potential purchaser to develop a crop protection business in Europe.

⁷⁸⁰ Form RM of 10 January 2017, paragraph 30.

⁷⁸¹ Form RM of 10 January 2017, paragraph 30.

- (1990) These views are endorsed by the majority of respondents to the market test, who considered the Initial Commitments to be suitable in principle to effectively remove the competition concerns raised by the Transaction. Only a minority of respondents argued that additional divestment would be necessary, referring to crop-pest combinations or geographic areas other than the ones in which the Commission had identified competition concerns.⁷⁸²
- (1991) As regards products included in Portfolio 3, the Commission considers that the Parties' proposal that any product in Portfolio 3 not receiving an offer at the end of the First Divestiture period (as defined in the Initial Commitments) may be retained by the divesting party could lead to situations where some of the competition concerns are not ultimately eliminated. Even if the lifespan on the relevant markets is shorter for Portfolio 3 products than for Portfolio 1 products, the divestment of Portfolio 3 products would contribute to the removal of overlaps between the Parties. The final clearance of the Transaction should therefore be conditional on the full divestment of all the formulated products and active ingredients in order to preserve competitive market structures, with no possibility for the Parties to retain any products.
- (1992) These views are shared by the majority of respondents to the market test.⁷⁸³ They explained that the divestment of Portfolio 3 products would fulfil the same objective as the divestment of Portfolio 1 products. Moreover, Portfolio 3 products are often complementary to and sometimes rely on the same active ingredient as Portfolio 1 products. One competitor explained in that regard that "*All actions have to be taken in order to incentivise ChemChina to reach an agreement with possible Purchasers. If ChemChina is allowed to retain unsold products, this will not constitute an effective incentive.*"⁷⁸⁴
- (1993) The Parties claimed that these products have a short life-span as they are unlikely to survive a regulatory review process in the coming years and that it is therefore unlikely that a purchaser would be interested. However, a number of competitors responding to the market test expressed an interest in the acquisition of these products. In particular, these players indicated that Portfolio 3 products could complement their current product offering or would fill, at least temporarily, existing gaps in their portfolio.⁷⁸⁵

16.3.2.2. Viability of the Divestment Business

(A) Intangible assets

- (1994) A clear majority of respondents to the market test who expressed an opinion took the view that the scale and scope of the Divestment Business is appropriate to ensure its viability and competitiveness in the crop protection markets. To the extent that the Divested Business is operated by a suitable purchaser who is in a position to fit the divested products into its existing business, the assets divested appear to be sufficient

⁷⁸² Replies to question 1 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁸³ Replies to question 25 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁸⁴ Reply to question 25 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁸⁵ Replies to question 33 of Questionnaire to competitors on commitments offered by ChemChina.

to ensure viability and competitiveness since they largely include what is customarily transferred in this type of transaction.⁷⁸⁶

- (1995) Similarly, the EEA-wide licence for the lead active ingredients in the divested products was considered by a majority of respondents to be sufficient to run the Divestment Business in a viable and competitive way, given that licences to registration data are customary in the crop protection industry. Some respondents, however, called for a clearer distinction between lead and secondary active ingredients.⁷⁸⁷
- (1996) With respect to intellectual property rights and, in particular, brand names and trademarks, no specific comments were made in relation to the scope of these assets. However, some respondents questioned the suitability of the EEA-wide licence envisaged by the Parties. In particular, it was suggested that the Divestment Business should be able to make use of the intangible assets as if it were the sole owner of them. More specifically, where the Parties still needed to use the intangible assets used by the Divestment Business (for non-crop protection products or outside the EEA or any other usage unconnected with the Divestment Business), the assets should be transferred to the Divestment Business, where the latter is the predominant user of them, and licensed back to the divesting party. A licence from the Parties to the purchaser would only be suitable if the merged entity remained the predominant user of those assets.⁷⁸⁸ The Commission therefore considers that such a modification of the licence provisions for the intangible assets would strengthen the viability of the Divestment Business.
- (1997) In relation to pipeline products in Portfolio 2, the market test triggered several comments about the licences for studies and field trials, as proposed by the Parties. Broadly speaking, respondents called for the provision of hard copies of the relevant scientific data packages on the divested molecules and related product formulations. The main objective for the purchaser would be to get full and complete knowledge of the content of the studies. This is crucial for proper regulatory support and defence. Moreover, access to the full data package would enable the purchaser to sell the asset or license it onwards, and enter into partnerships, with a view to maximising the future value of pipeline products.⁷⁸⁹ The Commission considers such access to be necessary for the long-term viability of the Divestment Business

(B) Production facilities and transitional agreements

- (1998) The absence of production plants in the Initial Commitments was not a concern for respondents to the market test. As explained by one respondent, "*All active ingredients are off-patent and it might be even an advantage of not owning proprietary active ingredient plants. Beside the supply agreement for a certain period of time "make or buy" decisions will be made on an individual case-by-case basis.*"⁷⁹⁰ Moreover, as explained in Section 6, many companies operate in this industry without needing to control/internalise the production process.

⁷⁸⁶ Replies to questions 2 and 3 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁸⁷ Replies to question 4 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁸⁸ Replies to question 7 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁸⁹ Replies to question 8 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁹⁰ Reply to question 22 of Questionnaire to competitors on commitments offered by ChemChina.

- (1999) The supply agreements submitted by the Parties appeared to be an adequate solution to enable the Purchaser to gain access to active ingredients and products, subject to reasonable terms of the agreements. As explained by one respondent "*If the key terms (price, escalators, terms, volumes) of the supply agreement are correctly and fairly set, the purchaser will be put in a condition of having access to formulated products, lead or secondary active ingredients at a sustainable and competitive cost without having the additional financial and organizational burden of acquiring and running a new and unknown manufacturing plant*".⁷⁹¹
- (2000) In that regard, the proposed duration of the supply agreements, namely [...], extendable potentially by up to [...], was considered sufficient for the purchaser to find alternative sources for lead and secondary active ingredients. The purchaser would thus be assured continuity during the period of transition [...]), whilst at the same time being able to secure independent arrangements for such services.⁷⁹² Respondents agreed that the products should be offered at production cost.⁷⁹³
- (2001) In relation to the transitional service agreements current arrangements under which the Parties supply services to the Divestment Business, the Parties proposed to maintain for [...], extendable potentially by up to [...]. The market test, however, has shown that this duration might not be sufficient for the purchaser to establish an independent position. In particular, as regards registration services, a minimum of [...] of seasonal campaigns would be needed in order to hand over full field know-how and knowledge of the products and active substances. Respondents hence suggested that the duration of the transitional service agreements should be aligned with the duration of the supply agreements [...]. The Commission considers this appropriate.
- (C) Personnel
- (2002) The Commission has investigated in detail whether the Divestment Business would be viable and competitive without any personnel from the Parties, leaving the purchaser to rely exclusively on the internal human resources available to it. The Commission has assessed this issue in particular with respect to (i) sales personnel, (ii) regulatory personnel and (iii) R&D and formulation personnel.
- (2003) Respondents to the market test have indicated that, in general, transfer of personnel from Adama and Syngenta might be necessary in order (i) to ensure a smooth transition, (ii) to quickly integrate the products within the purchaser's product portfolio and (iii) to guarantee continuity in the sales to customers. How far such a transfer would be required would depend on whether the purchaser was a fully established crop protection player in the EEA and already had staff resources available at its disposal to handle the products from a commercial, regulatory and R&D perspective.
- (2004) Sales personnel were considered important because a deep technical understanding of the product is crucial to its commercial success.⁷⁹⁴ One player indicated that the transfer of sales personnel would thus help reduce the risk associated with the

⁷⁹¹ Reply to question 22 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁹² Reply to question 13 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁹³ Reply to question 15 of Questionnaire to competitors on commitments offered by ChemChina.

⁷⁹⁴ Replies to question 19 of Questionnaire to competitors on commitments offered by ChemChina.

divestment: *"The deep technical understanding of the product is crucial to its commercial success. This applies to all AIs and products of the divested business. The transfer of sales personnel who has been in charge of the AIs and products of the parties will provide additional knowledge. This is needed for lowering the risk associated to the Transaction."*⁷⁹⁵ Another generic player explained that the sales personnel's technical expertise about the products, as well as their knowledge of the customers, would be important to facilitate the transfer of the business. *"The sales personnel is key in the Transaction since they have had the contact with the clients, so have an image associated to these products and help to sell the product, on the other hand these people know well the technical management of the products so they can help introducing the product and instructing personal of the acquiring company."*⁷⁹⁶

- (2005) As regards regulatory personnel, despite the fact that regulatory support would be part of the transitional service agreement, the majority of respondents considered that, depending on the identity of the purchaser, the exclusion of regulatory personnel might have a negative impact on the viability of the Divestment Business.⁷⁹⁷ One competitor explained that regulatory personnel would be key to enable the purchaser to maintain the acquired business. *"The ability to defend the portfolio is essential to keep the licence to sell. Dedicated regulatory personnel in charge of the maintenance of registration in different countries is a prerequisite to any kind of commercial activity."*⁷⁹⁸ Moreover, a number of players stressed that many of the divested products would soon be subject to regulatory review. Therefore, in order to preserve the value of the acquired portfolio of products, the purchaser would need to be able to ensure that the associated regulatory dossiers were maintained and progressed as swiftly as possible. *"A purchaser of the Divestment Business would need immediately to be able to maintain compliance with regulatory requirements in order to be able to market the products. In relation to pipeline products, regulatory personnel will be required in order to achieve product registrations, and any delay in obtaining such staff would delay registration and introduction of those products. Suitable personnel would need to be familiar with the products and the regulatory requirements attaching to each of them."*⁷⁹⁹
- (2006) One respondent suggested that the regulatory personnel that should potentially be transferred to the purchaser should include *"Regulatory Affairs managers, toxicologists and ecotoxicologists in charge of the registration and regulatory defence of the molecule"*.⁸⁰⁰ Another respondent explained that the purchaser would be likely to have its own regulatory team, but that team would be sized and shaped to fit its existing portfolio and, so, some key regulatory personnel should be transferred. *"The product manager related to these molecules and some high level staff dealing with these active ingredients are necessary in order to, in a suitable way, manage the renewal of the molecules and take care of the regulatory aspect affecting these active ingredients. The size of any regulatory team of any company is dimensioned for the molecules they are managing as well as their knowledge so if the company acquires*

⁷⁹⁵ Reply to question 19 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁹⁶ Reply to question 19 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁹⁷ Replies to question 20 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁹⁸ Reply to question 20 of Questionnaire to competitors on commitments offered by ChemChina.
⁷⁹⁹ Reply to question 20 of Questionnaire to competitors on commitments offered by ChemChina.
⁸⁰⁰ Reply to question 20 of Questionnaire to competitors on commitments offered by ChemChina.

some new molecules they must improve the team accordingly. In the same way the seller will have over sized the regulatory team."⁸⁰¹ Finally, some respondents suggested that it is important that the regulatory personnel transferred should be those who have acquired already a certain amount of experience in the management of the AI/products. "*Registration specialist involved in the divested product for more than 3 years.*"⁸⁰²

- (2007) Lastly, with respect to R&D and formulation personnel, continuing R&D and formulation development is essential to ensure that products meet customer demand. R&D and formulation personnel would be needed to ensure the continued viability of the products being transferred, and to bring the pipeline products to market.⁸⁰³ Although a number of respondents suggested that outsourcing and cooperation with external consultants might be easier in this area rather than in the regulatory one, ultimately the majority agreed that a transfer of R&D and formulation personnel could be necessary to guarantee the viability of the Divestment Business depending on the identity of the purchaser and its business model/current capabilities.
- (2008) In the light of all these factors, the Commission considers that sales, regulatory and R&D and formulation personnel are required to ensure the continued viability of the Divestment Business.
- (D) Attractiveness of the Divestment Business and suitable purchaser
- (2009) The intended effect of the divestiture will only be achieved if the business is transferred to a suitable purchaser in whose hands it will become an active competitive force in the market. The potential of the business to attract a suitable purchaser is an important element in the Commission's assessment of the appropriateness of the proposed commitment.
- (2010) The ability and incentives of the purchaser to maintain and develop the Divestment Business are crucial for the long term effectiveness of the remedies. In this regard, all the active ingredients included in the Initial Commitments would require re-registration at some point in time and the incentives on the purchaser to register would depend, in each case, on the probability of success, the costs of the additional studies that are required and the future turnover/margin generated on the active ingredient.
- (2011) In order to increase the incentives on the purchaser to re-register the products and the active ingredients, the Commission considers it appropriate to include in the Initial Commitments a provision requiring the Parties to allow the purchaser to participate in future task forces entered into by Adama and Syngenta in relation to the active ingredients contained in the divested formulated products, for the next round of re-registration of such products. This would allow the purchaser to share the costs of such re-registrations, at least for the next round where it might need support.
- (2012) With regard to the suitable purchaser, respondents to the market test showed a preference for an established seller of crop protection products in the EEA, in order to control, defend and grow the Divestment Business in the EEA. A commercial structure capable of serving a significant number of EEA countries, sufficient

⁸⁰¹ Reply to question 20 of Questionnaire to competitors on commitments offered by ChemChina.

⁸⁰² Reply to question 20 of Questionnaire to competitors on commitments offered by ChemChina.

⁸⁰³ Replies to question 21 of Questionnaire to competitors on commitments offered by ChemChina.

logistical support, regulatory knowledge to manage the necessary requirements and financial strength to afford the bid were also mentioned as important elements.⁸⁰⁴

(2013) In the light of these elements, and taking into account the results of the market test regarding the need for sales, regulatory and R&D and formulation personnel for the Divestment Business, the Commission considers that the potential purchaser must either already possess all the necessary sales, regulatory and R&D and formulation personnel to ensure viability of the Divestment Business, or be ready to acquire these resources from the Parties.

(E) Splitting of the package

(2014) Finally, during the market test, the Commission sought the view of respondents on whether the Divestment Business should be sold as a single package to a single purchaser (as proposed by the Parties in relation to Portfolios 1 and Portfolio 2) or whether a split of the Divestment Business was acceptable.

(2015) Splitting the Divestment Business into three portfolios (existing products, pipeline products, and products likely to lose their regulatory approval between 2017 and 2023) was not criticised by respondents. They did not consider that all three portfolios should be divested to the same purchaser.⁸⁰⁵ Some respondents argued that smaller companies would make a greater effort to exploit the assets more, and that the size of the investment required to purchase the Divestment Business as one single package would be likely to exclude numerous potential buyers. Other arguments included the concern that the obligation to purchase the entire list of products in Portfolio 1 and Portfolio 2 might have adverse effects as some parts of the divested portfolio may not fit within the purchaser's current business strategy and focus and it would, thus, weaken the overall economic performance.

(2016) The Commission considers that the divestiture of the three Portfolios to the same purchaser would be the most appropriate way to restore the competitive constraint exerted by Adama on Syngenta pre-merger. As the success and the market presence of Adama in the EEA is also linked to its wide portfolio of products, divesting the remedy package to a single purchaser is the safest way to ensure competitiveness and viability of the package in the long term, once it is separated from Adama.

(2017) Furthermore, given the costs and difficulties involved in developing and bringing products to market, it is also important that the pipeline products in Portfolio 2 are sold as a single package together with the corresponding products in Portfolio 1. This ensures that the purchaser will acquire a business that is already able to sustain itself prior to bringing the pipeline products to market. The products included in Portfolio 2 are likely to complement or substitute for the corresponding ones in Portfolio 1 and keeping them together will allow the Purchaser to position itself as a credible competitor.

(2018) In the light of these considerations, the Commission believes that the Divestment Business should be sold as a single package to a single purchaser. However, in the light of the results of the market test and the overall preference of respondents for smaller packages, it also considers that the Divestment Business could be split in order to increase the number of potential buyers, provided that all products are sold

⁸⁰⁴ Replies to question 28 of Questionnaire to competitors on commitments offered by ChemChina.

⁸⁰⁵ Replies to question 23 of Questionnaire to competitors on commitments offered by ChemChina.

and these splits have no detrimental effect on the viability and the competitiveness of the Divestment Business.

16.4. Description of the Final Commitments of 27 January 2017

(2019) Given the issues described in Section 16.3.2, the Notifying Party submitted the Final Commitments on 27 January 2017. The full text of the Final Commitments is set out in the Annex to this Decision. The Final Commitments improve on the Initial Commitments as regards the sale of the Divestment Business to a suitable purchaser in the following main ways:

- (a) The Final Commitments provide for the inclusion of personnel in the Divestment Business: at the option of the purchaser, the Divestment Business will include the personnel reasonably considered to be necessary to maintain the viability, marketability and competitiveness of the Divestment Business (paragraph 5 of the Schedule to the Final Commitments).
- (b) The Final Commitments provide for the possibility of selling the three Portfolios to different purchasers: the three Portfolios would be marketed for sale by the Parties as a single business but could also be sold individually to different purchasers, or in different parts or combinations to separate Purchasers, provided all products from all three Portfolios are sold and, a sale to multiple Purchasers has no effect on the viability and competitiveness of the Divestment Business (paragraph 2 (a) of the Schedule to the Final Commitments).
- (c) The Final Commitments extend the duration of the transitional service agreements: the duration of the transitional service agreement from the Parties was extended from [...] years to [...] years to be in line with the duration of transitional supply/toll manufacturing agreement[...] (paragraph 5 of the Schedule).
- (d) The Final Commitments introduce an ad hoc review mechanism for Portfolio 3 products (namely products with a short lifespan due to regulatory barriers): the Initial Commitments provided that the Parties should be allowed to retain the products in Portfolio 3 for which no purchaser had been found by the end of the Divestment Period. The Final Commitments remove this right but allow the Parties to trigger an ad hoc review mechanism of the Final Commitments exclusively for Portfolio 3 products, if the registration for any Portfolio 3 product has expired before the purchaser has acquired the Divestment Business, unless the relevant governmental authorities permit such Portfolio 3 product to continue to be sold in the EEA or any EEA Member States for more than one year after the completion of the Transaction (paragraph 2(a) of the Schedule to the Final Commitments).
- (e) The Final Commitments provide for the introduction of an "*access right*" for the purchaser to have access to future task forces: in order to increase incentives for the purchaser to continue selling the divested products in the long run, the Final Commitments provide for the right to the purchaser to be invited to participate in future task forces in which the Parties are involved for the next round of registration of the products, with a view to sharing costs and avoiding duplication of studies and trials (paragraph 2(b) and 2(f) of the Schedule to the Final Commitments).

- (f) The Final Commitments clarify the definition of "Lead" and "Secondary" active ingredients which are now included in the Schedule to the Final Commitments.
- (g) The Final Commitments specify that intellectual property used primarily by the Divestment Business in the EEA (or in the relevant EEA Member State for the products divested at national level) are to be transferred to the purchaser with the Parties retaining a licence to use such intellectual property, including brand names, outside of the scope of the Divestment Business (paragraph 2(b) of the Schedule to the Final Commitments). Conversely, intellectual property also used by the Divestment Business, but used primarily by the Parties in any part of the Parties' business which relates to any other products aside from the Divestment Business, are to be retained by the Parties and licensed to the purchaser.

16.5. Assessment of the Final Commitments

- (2020) The Commission considers that the Final Commitments fully address its concerns with respect to the Initial Commitments, as described in Section 16.3. They eliminate the competition concerns entirely⁸⁰⁶ and are comprehensive and effective from all points of view.⁸⁰⁷
- (2021) The Commission's assessment of the suitability of the divestment to remove the identified competition concerns described in Section 16.3 applies equally to the Final Commitments.

16.6. Conclusion on remedies

- (2022) In the light of its assessment, the Commission concludes that the Final Commitments are adequate and sufficient to eliminate the significant impediment to effective competition in the crop protection markets where competition concerns have been identified.

17. CONDITIONS AND OBLIGATIONS

- (2023) Pursuant to the second subparagraph of Article 8(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the internal market.
- (2024) The fulfilment of a measure that gives rise to a structural change of the market is a condition, whereas the implementing steps which are necessary to achieve that result are generally obligations on the Parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal

⁸⁰⁶ See for this requirement Case C-202/06 *P Cementbouw Handel & Industrie v Commission* [2007] ECR 2007 I-12129, paragraph 54: "it is necessary, when reviewing the proportionality of conditions or obligations which the Commission may, by virtue of Article 8(2) of Regulation No 4064/89, impose on the parties to a concentration, not to determine whether the concentration still has a Community dimension after those conditions or obligations have been complied with, but to be satisfied that those conditions and those obligations are proportionate to and would entirely eliminate the competition problem that has been identified".

⁸⁰⁷ Remedies Notice, paragraphs 9 and 61.

market is no longer applicable. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 8(6)(b) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.

(2025) In accordance with the basic distinction described in recital (2023) between conditions and obligations, this Decision should be made conditional on the full compliance by the Parties with Section B of the Annex (including the Schedule). All other Sections should be obligations within the meaning of Article 8(2) of the Merger Regulation.

HAS ADOPTED THIS DECISION:

Article 1

The notified concentration whereby China National Chemical Corporation acquires control of Syngenta AG within the meaning of Article 3(1)(b) of the Regulation (EC) No 139/2004 is compatible with the internal market and the European Economic Area Agreement.

Article 2

Article 1 is subject to compliance with the conditions set out in Section B of the Annex (including the Schedule).

Article 3

China National Chemical Corporation shall comply with the obligations set out in the remaining Sections of the Annex not referred to in Article 2.

Article 4

This Decision is addressed to:

China National Chemical Corporation

No. 62 Beisihuanxilu

Haidian District

Beijing 100080

People's Republic of China

Done at Brussels, 5.4.2017

For the Commission

(signed)

Margrethe VESTAGER

Member of the Commission

Annex

Case M.7962 – CHEMCHINA/SYNGENTA

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Articles 8(2) and 10(2) of Council Regulation (EC) No 139/2004 (the “**Merger Regulation**”), China National Chemical Corporation and China National Agrochemical Corporation (the “**Notifying Party**”) hereby enter into the following Commitments (the “**Commitments**”) vis-à-vis the European Commission (the “**Commission**”) with a view to rendering the acquisition of sole control over Syngenta AG (the “**Concentration**”) compatible with the internal market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission’s decision pursuant to Article 8(2) of the Merger Regulation to declare the Concentration compatible with the internal market and the functioning of the EEA Agreement (the “**Decision**”), in the general framework of European Union law, in particular in light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the “**Remedies Notice**”).

Section A. Definitions

1. For the purpose of the Commitments, the following terms shall have the following meaning:

Adama: Adama Agricultural Solutions Ltd, incorporated under the laws of Israel, with its registered office at Airport City, Golan Street, 7019900, Israel.

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the “**Consolidated Jurisdictional Notice**”).

Assets: the assets that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business as indicated in Section B, paragraph 6 (a), (b), and (c) and described more in detail in the Schedule.

ChemChina: China National Chemical Corporation (“**ChemChina**”), incorporated under the laws of the People’s Republic of China, with its registered office at 62 Beisihuanxilu, Haidian District, Beijing 100080, China and registered with the Commercial/Company Register with the Beijing Administration for Industry and Commerce under number 100000000038808.

CNAC: China National Agrochemical Corporation (“**CNAC**”), incorporated under the laws of the People’s Republic of China, with its registered office at 62 Beisihuanxilu, Haidian District, Beijing 100080, China and registered with the Commercial/Company Register with the Beijing Administration for Industry and Commerce under number 91110000100011399Y.

Closing: the transfer of the legal title to the Divestment Business to the Purchaser.

Closing Period: the period of [...] from the approval of the Purchaser and the terms of sale by the Commission.

Confidential Information: any business secrets, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.

Conflict of Interest: any conflict of interest that impairs the Trustee's objectivity and independence in discharging its duties under the Commitments.

Direct production costs: direct production costs include raw materials, direct labour costs, 70% of energy, packaging, toll manufacturing, transport and duties, warehousing, ecology and direct depreciation costs of incurred by the fixed assets used to produce such products for the Purchaser.

Divestment Business: the business or businesses as defined in Section B and in the Schedule which the Notifying Party commits to divest.

Divestiture Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by the Notifying Party and who has/have received from the Notifying Party the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.

Effective Date: the date of adoption of the Decision.

First Divestiture Period: the period of [...] from the Effective Date.

Hold Separate Manager: the person appointed by the Notifying Party for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Lead Active Ingredient: for the purpose of these Commitments, the following active ingredients used by the Divestment Business shall be lead active ingredients: trinexapac-ethyl, chlormequat-chloride, beta-cyfluthrin, imidacloprid, pyriproxifen, chlorpyrifos-methyl, cyprodinil, tebuconazole, fluazinam, clodinafop, fluazifop-P, pendimethalin, acetamiprid.

Monitoring Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by the Notifying Party, and who has/have the duty to monitor the Notifying Party's compliance with the conditions and obligations attached to the Decision.

Party or Parties: the Notifying Party, Syngenta and their respective Affiliated Undertakings as the case may be.

Personnel: all staff currently employed by the Divestment Business, including staff seconded to the Divestment Business, shared personnel as well as the additional personnel listed in the Schedule.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Purchaser Criteria: the criteria laid down in paragraph 18 of these Commitments that the Purchaser must fulfil in order to be approved by the Commission.

Schedule: the schedule to these Commitments describing more in detail the Divestment Business.

Secondary Active Ingredient: for the purpose of these Commitments, secondary active ingredient refers to any active ingredient included in a product registration in the Divestment Business where such active ingredient is not the Lead Active Ingredient.

Syngenta: Syngenta AG, incorporated under the laws of Switzerland, with its registered office at Schwarzwaldallee 215, 4058 Basel, Switzerland.

Trustee(s): the Monitoring Trustee and/or the Divestiture Trustee as the case may be.

Trustee Divestiture Period: the period of [...] from the end of the First Divestiture Period.

Section B. The commitment to divest and the Divestment Business

Commitment to divest

2. In order to maintain effective competition, the Notifying Party commits to divest, or procure the divestiture of, the Divestment Business by the end of the Trustee Divestiture Period as a going concern to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 19 of these Commitments. To carry out the divestiture, the Notifying Party commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Business within the First Divestiture Period. If the Notifying Party has not entered into such an agreement at the end of the First Divestiture Period, the Notifying Party shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 31 in the Trustee Divestiture Period.
3. The Notifying Party shall be deemed to have complied with this commitment if:
 - (a) by the end of the Trustee Divestiture Period, the Notifying Party or the Divestiture Trustee has entered into a final binding sale and purchase agreement and the Commission approves the proposed purchaser and the terms of sale as being consistent with the Commitments in accordance with the procedure described in paragraph 19; and
 - (b) the Closing of the sale of the Divestment Business to the Purchaser takes place within the Closing Period.
4. In order to maintain the structural effect of the Commitments, the Notifying Party shall, for a period of 10 years after Closing, not acquire, whether directly or indirectly, the possibility of exercising influence (as defined in paragraph 43 of the Remedies Notice, footnote 3) over the whole or part of the Divestment Business, unless, following the submission of a reasoned request from the Notifying Party showing good cause and accompanied by a report from the Monitoring Trustee (as provided in paragraph 65 of these Commitments), the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the internal market. For the avoidance of doubt, the provisions of this paragraph 4 shall not prevent the Notifying Party from providing services to the Divestment Business as described in the Schedule.
5. With respect to each crop protection product registration included in the Divestment Business (a "***Divestment CP Product***"), the Party divesting certain rights in relation to that Divestment CP Product in some or all Member States, as set forth in Tables 1 to 3 of the Schedule (the "***Divestment Product Territory***"), shall not, for a period of [...] after Closing, introduce and

sell any new product with substantially the same formulation as such Divestment CP Product in the Divestment Product Territory, provided that the foregoing shall not prevent or restrict either Party or its Affiliated Undertakings in any way from marketing or selling, or obtaining or maintaining a product registration for, any product that is sold in the Divestment Product Territory at the date of Closing by any Affiliated Undertaking of a Party or any person that becomes an Affiliated Undertaking of that Party following the proposed Concentration, including, for the avoidance of doubt, products that contain any of the active ingredients contained in such Divestment CP Product as the sole active ingredient.

Structure and Definition of the Divestment Business

6. The Divestment Business consists of crop protection products from Adama or Syngenta, as the case may be, from each of the following sectors: fungicides, herbicides, insecticides, seed treatment and plant growth regulators (“PGRs”). The legal and functional structure of the Divestment Business as operated to date is described in the Schedule. The Divestment Business, described in more detail in the Schedule, includes all assets that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business, in particular:
 - (a) all tangible and intangible assets (including intellectual property rights);
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business;
 - (c) all contracts, commitments and customer orders of the Divestment Business; all customer, credit and other records of the Divestment Business; and
 - (d) at the option of the Purchaser, the Personnel as described in paragraph 5 of the Schedule.
7. The Notifying Party also commits to grant the Purchaser an irrevocable, exclusive or non-exclusive, as the case may be, transferable, royalty-free licence, excluding the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use, the studies (including internal studies) and field trial results started or completed at Closing in relation to the pipeline products listed in Table 2 of the Schedule for the purpose of introducing and selling crop protection products in the EEA. For the avoidance of doubt, such licence to the Purchaser shall permit the Purchaser to collaborate with third parties for the development of these pipeline products in the EEA provided such third parties agree in writing to comply with the terms of the licence and agree that such collaboration does not give such third parties any intellectual property rights to any studies and/or field trial results included in Portfolio 2.
8. In addition, the Divestment Business may, at the request of the Purchaser, include the benefit, for a transitional period of [...] after Closing (such period may be further extended up to [...]), in consultation with the Commission and the Monitoring Trustee, if required to preserve the viability and competitiveness of the Divestment Business), of all current arrangements under which the Notifying Party or its Affiliated Undertakings supply products or services to the Divestment Business, both of which shall be provided at Direct Production Cost of the

supplying Party or Affiliated Undertaking, as detailed in the Schedule, unless otherwise agreed with the Purchaser.

9. If requested by the Purchaser, the Divestment Business may also include for a period of [...] after Closing (such period may be further extended up to [...], in consultation with the Commission and the Monitoring Trustee, if required to preserve the viability and competitiveness of the Divestment Business), agreements to either (i) toll manufacture and supply by the Parties, at their respective Direct Production Costs, of the Divestment CP Products and/or Lead Active Ingredients in the Divestment Business, including such Secondary Active Ingredients as required to produce the Divestment CP Products solely for sale in the EEA and manufactured in accordance with the quality specifications of the product registrations of the Divestment CP Products, to the extent such Divestment CP Products, Lead or Secondary Active Ingredients are manufactured by the Parties or their Affiliated Undertakings as of the Effective Date or (ii) where such Divestment CP Products, Lead or Secondary Active Ingredients are supplied to the Divestment Business as of the Effective Date by third party suppliers, the Parties shall use their best efforts to (a) obtain the assignment of the relevant supply agreements, if any, to the Purchaser or, in the event such assignment is not possible, (b) supply such Divestment CP Products, Lead or Secondary Active Ingredients through back-to-back supply agreements with such third parties at the wholesale price paid by the Notifying Party, Syngenta or their Affiliated Undertakings. Such products delivered to the Purchaser shall meet all quality requirements which would apply to Adama or Syngenta, as the case may be. In all cases, strict firewall procedures will be adopted by way of non-disclosure agreements so as to ensure that any competitively sensitive information related to, or arising from, such supply arrangements (for example, product roadmaps) will not be shared with, or passed on to, anyone outside the relevant business unit providing the product/service operations.

Section C. Related commitments

Preservation of viability, marketability and competitiveness

10. From the Effective Date until Closing, the Notifying Party shall preserve or procure the preservation of the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business. In particular the Notifying Party undertakes:
- (a) not to carry out any action that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;
 - (b) to make available, or procure to make available, sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans;

- (c) to take all reasonable steps, or procure that all reasonable steps are being taken, including appropriate incentive schemes (based on industry practice), to encourage the Hold Separate Manager to remain with the Divestment Business, and not to solicit or move the Hold Separate Manager to the Notifying Party's remaining business. Where, nevertheless, the Hold Separate Manager exceptionally leaves the Divestment Business, the Notifying Party shall provide a reasoned proposal to replace the person concerned to the Commission and the Monitoring Trustee. The Notifying Party must be able to demonstrate to the Commission that the replacement is well suited to carry out the functions exercised by the Hold Separate Manager. The replacement shall take place under the supervision of the Monitoring Trustee, who shall report to the Commission.

Hold-separate obligations

11. The Notifying Party commits, from the Effective Date until Closing, to maintain the Divestment Business as a viable, competitive and saleable business and to keep the Divestment Business currently part of Adama separate from the Syngenta business being retained and the Divestment Business currently part of Syngenta separate from the Adama business being retained.
12. Until Closing, the Notifying Party shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a saleable business. Immediately after the adoption of the Decision, the Notifying Party shall appoint a Hold Separate Manager. The Hold Separate Manager shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness. The Hold Separate Manager shall closely cooperate with and report to the Monitoring Trustee and, if applicable, the Divestiture Trustee. Any replacement of the Hold Separate Manager shall be subject to the procedure laid down in paragraph 10(c) of these Commitments. The Commission may, after having heard the Notifying party, require the Notifying Party to replace the Hold Separate Manager.

Ring-fencing

13. The Notifying Party shall implement, or procure to implement, all necessary measures to ensure that it does not, after the Effective Date, obtain any Confidential Information relating to the Divestment Business and that any such Confidential Information obtained by the Notifying Party before the Effective Date will be eliminated and not be used by the Notifying Party except as required by the Notifying Party to maintain the Divestment Business as a viable, competitive and saleable business. This includes measures vis-à-vis the Notifying Party's appointees on the supervisory board and/or board of directors of the Divestment Business. The Notifying Party may obtain or keep information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or the disclosure of which to the Notifying Party is required by law.

Non-solicitation clause

14. In the instance that the Purchaser exercises the option as described in paragraph 5 of the Schedule, the Notifying Party undertakes, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit such Personnel hired by the Purchaser for a period of [...] after Closing.

Due diligence

15. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, The Notifying Party shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process, provide to potential purchasers sufficient information as regards the Divestment Business.

Reporting

16. The Notifying Party shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request). The Notifying Party shall submit a list of all potential purchasers having expressed interest in acquiring the Divestment Business to the Commission at each and every stage of the divestiture process, as well as a copy of all written offers made by potential purchasers within five days of their receipt.
17. The Notifying Party shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of any information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section D. The Purchaser

18. In order to be approved by the Commission, the Purchaser must fulfil the following criteria:
 - (a) The Purchaser shall be independent of and unconnected to the Notifying Party and its Affiliated Undertakings (this being assessed having regard to the situation following the divestiture);
 - (b) The Purchaser shall have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the Parties and other competitors;
 - (c) The acquisition of the Divestment Business by the Purchaser must neither be likely to create, in light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed. In particular, the Purchaser must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business.

19. The final binding sale and purchase agreement (as well as ancillary agreements) relating to the divestment of the Divestment Business shall be conditional on the Commission's approval. When the Notifying Party or its Affiliated Undertakings have reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), within one week to the Commission and the Monitoring Trustee. The Notifying Party must be able to demonstrate to the Commission that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commission's Decision and the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commitments including their objective to bring about a lasting structural change in the market. The Commission may approve the sale of the Divestment Business without one or more Assets, or by substituting one or more Assets with one or more different assets, if this does not affect the viability and competitiveness of the Divestment Business after the sale, taking account of the proposed purchaser.

Section E. Trustee

Appointment procedure

20. The Notifying Party shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee. The Notifying Party commits not to close the Concentration before the appointment of a Monitoring Trustee.
21. If the Notifying Party has not entered into a binding sale and purchase agreement regarding the Divestment Business one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by the Notifying Party at that time or thereafter, the Notifying Party shall appoint a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.
22. The Trustee shall:
- (i) at the time of appointment, be independent of the Notifying Party and its Affiliated Undertakings;
 - (ii) possess the necessary qualifications to carry out its mandate, for example have sufficient relevant experience as an investment banker or consultant or auditor; and
 - (iii) neither have nor become exposed to a Conflict of Interest.
23. The Trustee shall be remunerated by the Notifying Party in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Business, such success premium may only be earned if the divestiture takes place within the Trustee Divestiture Period.

Proposal by the Notifying Party

24. No later than two weeks after the Effective Date, the Notifying Party shall submit the name or names of one or more natural or legal persons whom the Notifying Party proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period or on request by the Commission, the Notifying Party shall submit a list of one or more persons whom the Notifying Party proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the person or persons proposed as Trustee fulfil the requirements set out in paragraph 22 and shall include:
- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
 - (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks;
 - (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

25. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, the Notifying Party shall appoint or cause to be appointed the person or persons concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, the Notifying Party shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by the Notifying Party

26. If all the proposed Trustees are rejected, the Notifying Party shall submit the names of at least two more natural or legal persons within one week of being informed of the rejection, in accordance with paragraphs 20 and 25 of these Commitments.

Trustee nominated by the Commission

27. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom the Notifying Party shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

Functions of the Trustee

28. The Trustee shall assume its specified duties and obligations in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the

Trustee or the Notifying Party, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

29. The Monitoring Trustee shall:

- (i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.
- (ii) oversee, in close co-operation with the Hold Separate Manager, the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by the Notifying Party with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
 - (a) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business currently part of Adama separate from the Syngenta business being retained and the Divestment Business currently part of Syngenta separate from the Adama business being retained , in accordance with paragraphs 10 and 11 of these Commitments;
 - (b) supervise the management of the Divestment Business as a saleable business, in accordance with paragraph 12 of these Commitments;
 - (c) with respect to Confidential Information:
 - i. determine all necessary measures to ensure that ChemChina, CNAC and Syngenta do not after the Effective Date obtain any Confidential Information relating to the Divestment Business except as required to maintain the Divestment Business as a viable, competitive and saleable business,
 - ii. in particular strive for the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business,
 - iii. make sure that any Confidential Information relating to the Divestment Business obtained by the Notifying Party before the Effective Date is eliminated and will not be used by the Notifying Party except as required to maintain the Divestment Business as a viable, competitive and saleable business, and
 - iv. decide whether any Confidential Information relating to the Divestment Business obtained by the Notifying Party before the Effective Date may be disclosed to or kept by the Notifying Party if the disclosure is

reasonably necessary to allow the Notifying Party to maintain the Divestment Business as a viable, competitive and saleable business, to carry out the divestiture or if the disclosure is required by law;

- (d) monitor the splitting of assets between the Divestment Business and the Notifying Party or its Affiliated Undertakings;
- (iii) propose to the Notifying Party such measures as the Monitoring Trustee considers necessary to ensure the Notifying Party's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business currently part of Adama separate from the Syngenta business being retained and the Divestment Business currently part of Syngenta separate from the Adama business being retained and the nondisclosure of competitively sensitive information;
- (iv) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process potential purchasers receive sufficient and correct information relating to the Divestment Business in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process;
- (v) act as a contact point for any requests by third parties, in particular potential purchasers, in relation to the Commitments;
- (vi) provide to the Commission, sending the Notifying Party a non-confidential copy at the same time, a written report within 15 days after the end of every month that shall cover the operation and management of the Divestment Business as well as the splitting of assets so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers;
- (vii) promptly report in writing to the Commission, sending the Notifying Party a non-confidential copy at the same time, if it concludes on reasonable grounds that the Notifying Party is failing to comply with these Commitments;
- (viii) within one week after receipt of the documented proposal referred to in paragraph 19 of these Commitments, submit to the Commission, sending the Notifying Party a non-confidential copy at the same time, a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the Sale and as to whether the Divestment Business is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Business without one or more Assets affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser;

- (ix) broker a resolution of any dispute that may arise between the Purchaser and the Notifying Party regarding compliance with the conditions and obligations attached to the Decision;
 - (x) monitor whether the Direct Production Costs charged in application of paragraphs 8 and 9 of these Commitments as the case may be are consistent with standard industry practice,
 - (xi) advise and, if need be, make written recommendations to the Commission as to the Notifying Party's compliance with the conditions and obligations attached to the Decision when any dispute between the Purchaser and the Notifying Party regarding such compliance would be brought before the Arbitral Tribunal referred to in paragraph 48 below; and
 - (xii) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.
30. If the Monitoring and Divestiture Trustee are not the same legal or natural persons, the Monitoring Trustee and the Divestiture Trustee shall cooperate closely with each other during and for the purpose of the preparation of the Trustee Divestiture Period in order to facilitate each other's tasks.

Duties and obligations of the Divestiture Trustee

31. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding sale and purchase agreement (and ancillary agreements) as in line with the Commission's Decision and the Commitments in accordance with paragraphs 18 and 19 of these Commitments. The Divestiture Trustee shall include in the sale and purchase agreement (as well as in any ancillary agreements) such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of the Notifying Party, subject to the Notifying Party's unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.
32. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Notifying Party.

Duties and obligations of the Parties

33. The Notifying Party shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of the Notifying

Party's or the Divestment Business' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and the Notifying Party and the Divestment Business shall provide the Trustee upon request with copies of any document. The Notifying Party and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.

34. The Notifying Party shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. The Notifying Party shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. The Notifying Party shall inform the Monitoring Trustee on possible purchasers, submit lists of potential purchasers at each stage of the selection process, including the written offers made by potential purchasers at those stages, and keep the Monitoring Trustee informed of all developments in the divestiture process.
35. The Notifying Party shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale (including ancillary agreements), the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, the Notifying Party shall cause the documents required for effecting the sale and the Closing to be duly executed.
36. The Notifying Party shall indemnify the Trustee and its employees and agents (each an "***Indemnified Party***") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to the Notifying Party for, any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the willful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
37. At the expense of the Notifying Party, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to the Notifying Party's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should the Notifying Party refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard the Notifying Party. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 36 of these Commitments shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served the Notifying Party during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

38. The Notifying Party agrees that the Commission may share Confidential Information proprietary to the Notifying Party with the Trustee. The Trustee shall not disclose such information and the principles contained in Article 17 (1) and (2) of the Merger Regulation apply *mutatis mutandis*.
39. The Notifying Party agrees that the contact details of the Monitoring Trustee are published on the website of the Commission's Directorate-General for Competition and they shall inform interested third parties, in particular any potential purchasers, of the identity and the tasks of the Monitoring Trustee.
40. For a period of 10 years from the Effective Date the Commission may request all information from the Parties that is reasonably necessary to monitor the effective implementation of these Commitments.

Replacement, discharge and reappointment of the Trustee

41. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a Conflict of Interest:
 - (a) the Commission may, after hearing the Trustee and the Notifying Party, require the Notifying Party to replace the Trustee; or
 - (b) The Notifying Party may, with the prior approval of the Commission, replace the Trustee.
42. If the Trustee is removed according to paragraph 41 of these Commitments, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 20-27 of these Commitments.
43. Unless removed according to paragraph 41 of these Commitments, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section F. Fast track dispute resolution

44. In the event that the Purchaser claims that the Notifying Party is failing to comply with its obligations arising from these Commitments, in particular the obligation to supply the relevant active ingredients and/or formulated products, as the case may be, at Direct Production Cost or wholesale price (as applicable) as referred to in paragraph 2(d) of the Schedule, the Purchaser may invoke the dispute settlement procedure described in this Section.
45. The Purchaser shall notify the Notifying Party and the Monitoring Trustee of its request in writing and specify the reasons why it believes that the Notifying Party is failing to comply

with the Commitments. The Notifying Party shall use its best efforts to resolve all differences of opinion and to settle all disputes of which it has been notified through co-operation and consultation within a reasonable period of time not to exceed fifteen working days after receipt of the request.

46. The Monitoring Trustee shall present its own proposal for resolving the dispute within eight working days, specifying in writing the action, if any, to be taken by the Notifying Party to ensure compliance with the Commitments vis-à-vis the Purchaser, and be prepared, if requested, to facilitate the settlement of the dispute.
47. Should the Notifying Party and the Purchaser fail to resolve their differences of opinion through cooperation and consultation, the Purchaser may initiate the arbitration process described below. The arbitration process shall be used only to resolve disputes regarding compliance with the Commitments.
48. To initiate the arbitration process, the Purchaser shall give written notice to the Notifying Party nominating an arbitrator and stating the specific nature of the claim, the factual basis of its position and the relief requested. The Notifying Party shall appoint another arbitrator within 14 calendar days after receipt of the written notice. The arbitrators so appointed shall appoint a third arbitrator to be president of the arbitral tribunal within seven calendar days after both arbitrators have been nominated. Should the notifying Party fail to nominate an arbitrator, or if the two arbitrators fail to agree on the president, the default appointment(s) shall be made by the International Chamber of Commerce (“*ICC*”). The three-person arbitral tribunal shall herein be referred to as the “*Arbitral Tribunal*.”
49. The dispute shall be finally resolved by arbitration under the ICC Rules of Arbitration, with such modifications or adaptations as foreseen herein (the “*Rules*”). The arbitration shall be conducted in Paris, in the English language.
50. The procedure shall be a fast-track procedure. For this purpose, the Arbitral Tribunal shall shorten all applicable procedural time-limits under the Rules as far as appropriate in the circumstances.
51. The Arbitral Tribunal shall, as soon as practical after the confirmation of the Arbitral Tribunal, hold an organisational conference to discuss any procedural issues with the parties to the arbitration. Terms of reference shall be drawn up and signed by the parties to the arbitration and the Arbitral Tribunal at the organisational meeting or thereafter and a procedural time-table shall be established by the Arbitral Tribunal. An oral hearing shall, as a rule, be established within two months of the confirmation of the Arbitral Tribunal.
52. In order to enable the Arbitral Tribunal to reach a decision, it shall be entitled to request any relevant information from the Notifying Party and/or its Affiliated Undertakings or the Purchaser, to appoint experts and to examine them at the hearing, and to establish the facts by all appropriate means. The Arbitral Tribunal is also entitled to ask for assistance by the Monitoring Trustee in all stages of the procedure if the parties to the arbitration agree.
53. The arbitrators shall agree in writing to keep any confidential information and business secrets disclosed to them in confidence. The Arbitral Tribunal may take the measures

necessary for protecting confidential information in particular by restricting access to confidential information to the Arbitral Tribunal, the Monitoring Trustee and outside counsel and experts of the opposing party.

54. The burden of proof in any dispute governed under the Rules shall be as follows:
 - (i) the Purchaser must produce evidence of a *prima facie* case;
 - (ii) if the Purchaser does so, the Arbitral Tribunal must find in favour of the Purchaser unless the Notifying Party can produce evidence to the contrary.
55. The Commission shall be allowed and enabled to participate in all stages of the procedure by:
 - (a) receiving all written submissions (including documents and reports, etc.) made by the parties to the arbitration;
 - (b) receiving all orders, interim and final awards and other documents exchanged by the Arbitral Tribunal with the parties to the arbitration (including terms of reference and procedural time-table);
 - (c) filing any Commission *amicus curiae* briefs; and
 - (d) being present at the hearing(s) and being allowed to ask questions to parties, witnesses and experts.
56. The Arbitral Tribunal shall forward, or shall order the parties to the arbitration to forward, the documents mentioned to the Commission without delay.
57. In the event of disagreement between the parties to the arbitration regarding the interpretation of the Commitments, the Arbitral Tribunal shall inform the Commission, and may seek the Commission's interpretation of the Commitments before finding in favour of any party to the arbitration and shall be bound by the Commission's interpretation.
58. The Arbitral Tribunal shall decide the dispute on the basis of the Commitments and the Decision. The Commitments shall be construed in accordance with the Merger Regulation, EU law and general principles of law common to the legal orders of the Member States without a requirement to apply a particular national system. The Arbitral Tribunal shall take all decisions by majority vote.
59. Upon request of the third party, the Arbitral Tribunal may make a preliminary ruling on the dispute. The preliminary ruling shall be rendered within one month after the confirmation of the Arbitral Tribunal, shall be applicable immediately and, as a rule, remain in force until a final decision is rendered.
60. The Arbitral Tribunal shall, in the preliminary ruling as well as in the final award, specify the action, if any, to be taken by the Notifying Party to comply with the Commitments vis-à-vis the Purchaser (e.g., modify a supply contract pricing formula). The final award shall be final and binding on the parties to the arbitration and shall resolve the dispute and determine any and all claims, motions or requests submitted to the Arbitral Tribunal. The arbitral award

shall also determine the reimbursement of the costs of the successful party and the allocation of the arbitration costs. In case of granting a preliminary ruling or if otherwise appropriate, the Arbitral Tribunal shall specify that terms and conditions determined in the final award apply retroactively.

61. The final award shall, as a rule, be rendered within three months after the confirmation of the Arbitral Tribunal. The time-frame shall, in any case, be extended by the time the Commission takes to submit an interpretation of the Commitments if asked by the Arbitral Tribunal.
62. The parties to the arbitration shall prepare a non-confidential version of the final award, without business secrets. The Commission may publish the non-confidential version of the award.
63. Nothing in the above-described arbitration procedure shall affect the powers of the Commission to take decisions in relation to the Commitments in accordance with its powers under the Merger Regulation and the Treaty on the Functioning of the European Union.

Section G. The review clause

64. The Commission may extend the time periods foreseen in the Commitments in response to a request from the Notifying Party or, in appropriate cases, on its own initiative. Where the Notifying Party requests an extension of a time period, it shall submit a reasoned request to the Commission no later than one month before the expiry of that period, showing good cause. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. Only in exceptional circumstances shall the Notifying Party be entitled to request an extension within the last month of any period.
65. The Commission may further, in response to a reasoned request from the Notifying Party showing good cause waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section H. Entry into force

66. The Commitments shall take effect upon the date of adoption of the Decision.

.....
duly authorised for and on behalf of
Haifeng Li, Chief Legal Officer of ChemChina/CNAC

SCHEDULE

1. The Divestment Business as operated to date has the following legal and functional structure:
 - (a) The Divestment Business is part of the Parties' overall crop protection business offering and does not currently operate as a standalone business or entity. As a result, the Divestment Business will be carved out of Adama's or Syngenta's, as the case may be, crop protection business.

2. In accordance with paragraph 6 of these Commitments, the Divestment Business is comprised of:
 - (a) The three portfolios of existing or pipeline crop protection products as described in Table 1 ("Portfolio 1"), Table 2 ("Portfolio 2") and Table 3 ("Portfolio 3") and related assets outlined below. These three Portfolios shall be marketed for sale by the Notifying Party as a single business and sold to a single purchaser. However, the Portfolios may be sold individually to different purchasers or in different parts and combinations to separate purchasers, provided all products from all portfolios are sold, and for so long as a sale to multiple purchasers has no effect on the viability and competitiveness of the Divestment Business and each purchaser satisfies the Purchaser requirements. For the avoidance of doubt, the Commission will, in response to a reasoned request from the Notifying Party, waive the Notifying Party's undertaking to sell Divestment CP Products contained in Portfolio 3 if the registration for such Divestment CP Product has expired before the Purchaser has acquired the Divestment Business, unless the relevant governmental authorities permit such Divestment CP Product to continue to be sold in the EEA or any EEA Member States for more than [...] after the date of the Closing.
 - (i) Portfolio 1:
Portfolio 1 shall include:
 - a) the divesting Party's crop protection product registrations in each EEA Member State where such Party holds such registrations for the formulated products listed in Table 1 and as described in **Annex 1.1** and **Annex 1.2**, including an irrevocable, exclusive, transferable, royalty-free licence, including the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use any Divestment CP Product registration data (to the extent such rights are held by the divesting Party) required to support, maintain, develop and improve such product registrations in the EEA.¹ Where the consent of third parties is required, Adama and Syngenta, as the case may be, will use their best efforts to ensure that the relevant consents are provided, and
 - b) for Lead Active Ingredients, an irrevocable, exclusive, transferable, royalty-free licence, including the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use any registration data owned at Closing (including studies launched or completed by Closing, technical information or

¹ In the case of tau-fluvalinate in Hungary, Adama will provide [...] required to support, maintain, develop and improve such product registration.

data which are or may be necessary for supporting an application for a product registration, such as toxicology, residues or efficacy studies) by Adama or Syngenta (as applicable) for the purpose of maintaining, supporting and renewing the EEA active ingredient registrations for these Lead Active Ingredients and maintaining, developing and improving the product registrations for any Divestment CP Product registration in the EEA based on these Lead Active Ingredients, as described more fully in **Annex 2.1** and **Annex 2.2**. For the Lead Active Ingredients in Annex 2.1. and Annex 2.2., at the option of the Purchaser, Adama or Syngenta (as the case may be) will use their (i) best efforts to enable the Purchaser to join (a) existing task forces to which the Parties are a member (subject to third party consents) or (b) the Parties' own individual existing or future renewal efforts to the extent undertaken by the Parties in their sole discretion or (ii) reasonable best efforts to enable the Purchaser to join future task forces to which the Parties become a member, provided that, in all cases, the Purchaser agrees to abide by the relevant terms and conditions of the applicable task force agreement and the standards that are applied by Adama or Syngenta (as the case may be) in the ordinary course and pay its pro rata share of costs. The Parties' best efforts or reasonable best efforts, as the case may be, shall be limited to enabling the Purchaser to join existing or future task forces and/or the Parties' own individual renewal efforts for only up to the next EEA expiry date (as of Closing) of the approval of the relevant Lead Active Ingredient. If Adama or Syngenta choose not to continue to be engaged in a Lead Active Ingredient task force of which they are currently a member, they will use their best effort to transfer their existing task force membership to the Purchaser provided that, in all cases, the Purchaser agrees to abide by the relevant terms and conditions of the applicable task force agreement and the standards that are applied by Adama or Syngenta (as the case may be) in the ordinary course and pay its pro rata share of costs. Where the consent of third parties is required for the transfer of registration data of a Lead Active Ingredient to which Adama or Syngenta have rights, Adama and Syngenta, as the case may be, will use their best efforts to ensure that the relevant consents are provided. For the avoidance of doubt, notwithstanding anything to the contrary in this Schedule, Adama and/or Syngenta, as applicable, shall retain the right to use such registration data to (i) support, maintain, develop and improve non-crop protection registrations in the EEA, and/or (ii) subject to paragraph 5 of the Commitments, support, maintain, develop and improve crop protection registrations in the EEA for Adama's and/or Syngenta's, as applicable, crop protection mixtures.

Table 1 Portfolio 1			
Divesting Party	Scope of Divestment	Geographic Scope of Divestment	Associated 2015 Sales
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient trinexapac-ethyl • All Adama product registrations in the EEA for formulated crop protection products with trinexapac-ethyl as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Trinexapac-Ethyl 175 EC ○ Trinexapac-Ethyl 175 EC NC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient chlormequat-chloride • All Adama product registrations in the EEA for formulated crop protection products with chlormequat-chloride as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Chlormequat Chloride 675 SL ○ Chlormequat Chloride 725 SL ○ Chlormequat Chloride 64 SL ○ Chlormequat Chloride 400 LSC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient beta-cyfluthrin • All Adama product registrations in the EEA for formulated crop protection products with beta-cyfluthrin as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Beta-Cyfluthrin 25 EC ○ Beta-Cyfluthrin 25 SC ○ Beta-Cyfluthrin 25 SC NC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient imidacloprid • All Adama product registrations in the EEA for formulated crop protection products with imidacloprid as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Imidacloprid 200 SL NMP Free ○ Imidacloprid 600 FS (red) ○ Imidacloprid 600 FS (uncoloured) ○ Imidacloprid 700 WG ○ Imidacloprid 200 SL NMP Free NC ○ Imidacloprid 21.5 Gel NC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient pyriproxifen • All Adama product registrations in the EEA for formulated crop protection products with pyriproxifen as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Pyriproxifen 100 EC ○ Pyriproxifen 100 EC NC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient chlorpyrifos-methyl • All Adama product registrations in the EEA for formulated crop protection products with chlorpyrifos-methyl as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Chlorpyrifos-methyl 225 EC 	EEA	[...]

Table 1 Portfolio 1			
Divesting Party	Scope of Divestment	Geographic Scope of Divestment	Associated 2015 Sales
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient cyprodinil • All Adama product registrations in the EEA for formulated crop protection products with cyprodinil as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Cyprodinil 300 ECNA ○ Cyprodinil 375 + Fludioxonil 250 WG 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient tebuconazole • All Adama product registrations in the EEA for formulated crop protection products with tebuconazole as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Tebuconazole 200 EW ○ Tebuconazole 133 + Prochloraz 267 EW (Purasolve) ○ Tebuconazole 250 EW ○ Tebuconazole 60 FS ○ Tebuconazole 20 WS ○ Tebuconazole 20 + Imazalil 30 FS ○ Tebuconazole 250 WG ○ Tebuconazole 43 SE ○ Tebuconazole 200 WG ○ Tebuconazole 15 + Prochloraz 60 ES ○ Tebuconazole 133 + Prochloraz 267 EW ○ Tebuconazole 133 + Prochloraz 267 EC 	EEA	[...]
Syngenta	<ul style="list-style-type: none"> • All rights held by Syngenta in the EEA to Lead Active Ingredient fluazinam² • All Syngenta product registrations in the EEA for formulated crop protection products with fluazinam as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Shirlan ○ Shirlan Gold 	EEA	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient clodinafop³ • All Adama product registrations in the EEA for formulated crop protection products with clodinafop as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Clodinafop-Propargyl 80 EC Italy + Cloquintocet ○ Clodinafop-Propargyl 240 EC + Cloquintocet ○ Clodinafop-Propargyl 80 EC + Cloquintocet 	EEA	[...]

² In the case of fluazinam, Syngenta will relinquish its [...] distribution rights back to [...], including any rights to use the [...] trademarks (e.g., [...]).

³ Clodinafop-propargyl 80 EC + cloquintocet and Clodinafop-propargyl 80 EC Italy + cloquintocet: Adama has made an ordinary course business decision to discontinue this formulation [...]. The product authorisation expires in August 2018 and, [...], the Purchaser can sell this product up until that time.

Table 1 Portfolio 1			
Divesting Party	Scope of Divestment	Geographic Scope of Divestment	Associated 2015 Sales
Syngenta	<ul style="list-style-type: none"> • All rights held by Syngenta in the EEA to Lead Active Ingredient fluazifop-P • All Syngenta product registrations in the EEA for formulated crop protection products with fluazifop-P as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Fusilade 125EC NUBIW 1 ○ Fusilade Forte 150 EC 	EEA	[...]
Syngenta	<ul style="list-style-type: none"> • Following Syngenta product registrations for formulated crop protection product in Estonia and Lithuania: <ul style="list-style-type: none"> ○ Banvel 4 S 	Estonia Lithuania	[...]
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient pendimethalin • Following Adama product registrations for formulated crop protection products with pendimethalin as the Lead Active Ingredient: <ul style="list-style-type: none"> ○ Pendimethalin 330 EC 	Hungary Bulgaria Romania	[...]
	<ul style="list-style-type: none"> ○ Pendimethalin 330 EC SSS ITY 	Italy Malta	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products in the EEA: <ul style="list-style-type: none"> ○ Sulcotrione 300 SC ○ Sulcotrione 150 + Nicosulfuron 20 SC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products in Spain and Romania: <ul style="list-style-type: none"> ○ Clofentezine 500 SC ○ Clofentezine 500 SC NC 	Spain Romania	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection product in Hungary: <ul style="list-style-type: none"> ○ Tau-fluvalinate 240 EW 	Hungary	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products in the EEA: <ul style="list-style-type: none"> ○ Fluroxypyr 200 DS EC ○ Fluroxypyr 200 S EC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products in Spain: <ul style="list-style-type: none"> ○ Nicosulfuron 40 OD ○ Nicosulfuron 40 ODV 	Spain	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products in Spain:⁴ <ul style="list-style-type: none"> ○ S-metolachlor 312.5 + Terbutylazine 187.5 + Sulcotrione ○ S-metolachlor 312.5 + Terbutylazine 187.5 SC 	Spain	[...]

⁴ Adama sells these products only in Spain under a local written agreement [...]. The Notifying Party is committing Syngenta to provide access to the purchaser only in Spain for up to [...] years under the same terms and conditions Syngenta is currently providing to Adama.

Table 1 Portfolio 1			
Divesting Party	Scope of Divestment	Geographic Scope of Divestment	Associated 2015 Sales
Adama	<ul style="list-style-type: none"> • All rights held by Adama in the EEA to Lead Active Ingredient acetamiprid • All Adama product registrations in the EEA for formulated crop protection products with acetamiprid as the Lead Active Ingredient as listed in Portfolio 2 below 	EEA	N/A

(ii) Portfolio 2:

Portfolio 2 shall include:

- a) the divesting Party's crop protection product registrations in the EEA Member State where such Party holds such registrations at Closing for the pipeline products listed in Table 2 below, including an irrevocable, exclusive, transferable, royalty-free licence, including the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use any active ingredient and formulated product registration data (to the extent such rights are held by the divesting Party) required to support, maintain, develop and improve such product registrations in the EEA. Where the consent of third parties is required, Adama and Syngenta, as the case may be, will use their best efforts to ensure that the relevant consents are provided, or
- b) an irrevocable, exclusive or non-exclusive, as the case may be, transferable, royalty-free licence, excluding the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use, any studies (including internal studies) and/or field trial results initiated or completed as of Closing in relation to the pipeline products listed in Table 2 below. Any such licence will be limited to introducing and selling crop protection products in the EEA. For the avoidance of doubt, nothing in the Commitments prevents Adama from using such studies and field trials to develop its own pipeline products in the EEA or elsewhere, including the same pipeline products in Portfolio 2 and such licence to the Purchaser shall permit the Purchaser to collaborate with third parties for the development of these pipeline products in the EEA provided such third parties agree in writing to comply with the terms of the licence and agree that such collaboration does not give such third parties any intellectual property rights to any studies and/or field trial results included in Portfolio 2.

**Table 2
Portfolio 2**

Sector	Crop	Pipeline Product(s)	Expected Launch Date	Scope of Divestment
Fungicides	Grapes, Pome Fruits	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Barley, Wheat	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Barley, Wheat	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Barley, Wheat	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Barley, Wheat	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Barley, Wheat	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Barley, Wheat	[...]	[...]	Non-exclusive licence to studies/field trials
Fungicides	Oilseed Rape/Rapeseed	[...]	[...]	Exclusive licence to studies/field trials
Insecticides	Barley, Wheat, Citrus, Grapes, Pome Fruits, Other Fruits, Oilseed Rape/Rapeseed, Vegetables – leafy/brassica/okra, Tomatoes	[...]	[...]	Pending registrations in [...]
Insecticides	Barley, Wheat, Corn, Oilseed Rape/Rapeseed	[...]	[...]	Registrations in Austria, Czech Republic, France, Hungary, Italy, Poland, Romania, Slovakia, Slovenia, Spain and access to sell in Greece ⁵
Selective Herbicides	Corn	[...]	[...]	Non-exclusive licence to studies/field trials

⁵ Adama [...] in Greece, but it currently sells this product in Greece through [...]. This [...] will also be transferred to the purchaser, allowing for sales in Greece.

Table 2 Portfolio 2				
Sector	Crop	Pipeline Product(s)	Expected Launch Date	Scope of Divestment
Selective Herbicides	Corn	[...]	[...]	Registrations in Austria, Belgium, Czech Republic, Denmark, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Romania, Slovakia AND Pending registrations in [...]
Selective Herbicides	Corn	[...]	[...]	Non-exclusive licence to studies/field trials
Selective Herbicides	Corn	[...]	[...]	Pending registrations in [...]
Selective Herbicides	Corn	[...]	[...]	Non-exclusive licence to studies/field trials

(iii) Portfolio 3:

Portfolio 3 shall include:

- a) the divesting Party's crop protection product registrations in each EEA Member State where such Party holds such registrations for the formulated products listed in Table 3 below and as described in **Annex 3**, with the exception of epoxiconazole, and
- b) an irrevocable, exclusive, transferable, royalty-free licence, including the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use any active ingredient and formulated product registration data (to the extent such rights are held by the divesting Party) required to support, maintain, develop and improve such product registrations in the EEA. Where the consent of third parties is required, Adama and Syngenta, as the case may be, will use their best efforts to ensure that the relevant consents are provided.

Table 3 Portfolio 3			
Divesting Party	Scope of Divestment	Geographic Scope of Divestment	Associated 2015 Sales
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Abamectin 18 EC ○ Abamectin 18 EC NC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Beta-Cyfluthrin 12 + Chlorpyrifos 250 ZW ○ Beta-Cyfluthrin 3 + Chlorpyrifos 50 GR 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Bromoxynil 200 + Terbutylazine 300 SC ○ Bromoxynil OCT 225 EC SS 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Chlorpyrifos 250 + Deltamethrin 6 ZC ○ Chlorpyrifos 250 CS ○ Chlorpyrifos 250 CS Tech Agro ○ Chlorpyrifos 480 EC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Diflufenican 100 + Isoproturon 500 SC ○ Diflufenican 40 + Oxyfluorfen 150 SC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection product: <ul style="list-style-type: none"> ○ Epoxiconazole 125 SC NEW 	Slovenia	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Folpet 700 + Triadimenol 20 WDG ○ Folpet 700 + Triadimenol 15 WP 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection product: <ul style="list-style-type: none"> ○ Isoproturon 500 SC⁶ 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection product: <ul style="list-style-type: none"> ○ Oxyfluorfen 240 EC SP 	EEA	[...]

⁶ The isoproturon-based products are no longer approved for use in the EEA as of the end of 2016 and hence cannot technically be divested. Adama's sales of these products accounted for [...] (2014), [...] (2015) and [...] (2016).

Table 3 Portfolio 3			
Divesting Party	Scope of Divestment	Geographic Scope of Divestment	Associated 2015 Sales
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection products: <ul style="list-style-type: none"> ○ Sulcotrione 100 + Nicosulfuron 13.33 + Bromoxynil 7 ○ Sulcotrione 150 + Bromoxynil 112.5 SC 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection product: <ul style="list-style-type: none"> ○ Tebuconazole 66.5 + Prochloraz 133.5 + Triadimenol 83.3 NMP FREE EW 	EEA	[...]
Adama	<ul style="list-style-type: none"> • Following Adama formulated crop protection product: <ul style="list-style-type: none"> ○ Terbuthylazine 270 + Pendimethalin 64 SE 	EEA	[...]

- (b) all intellectual property used by the Divestment Business, including the brand names as described more fully in [Annex 4.1](#) and [Annex 4.2](#), the registered trademarks as described more fully in [Annex 4.3](#) and [Annex 4.4](#), and knowhow will be disposed as follows:
1. intellectual property used primarily by the Divestment Business in the EEA or in the relevant EEA Member State for such Divestment CP Products which have a geographic scope limited to one or more EEA Member States (as the case may be) shall be transferred to the Purchaser with the Notifying Party or its Affiliated Undertakings retaining an exclusive, irrevocable, perpetual, royalty free, licence to use such intellectual property, including brand names, outside of the scope of the Divestment Business (e.g., non-crop protection products, crop protection products not included in the Divestment Business or outside the EEA or the relevant Member States covered by Divestment CP Products); and
 2. intellectual property also used by the Divestment Business, but used primarily by the Notifying Party or its Affiliated Undertakings in any part of the Parties' business which relates to any other products aside from the Divestment Business shall be retained by the Notifying Party or its Affiliated Undertakings and licensed to the Purchaser on an irrevocable, perpetual, royalty free basis exclusively for use in the Divestment Business as required pursuant to these Commitments.
- (c) contracts with third party suppliers for the manufacture and sale of the products in the Divestment Business where applicable, manufactured in accordance with the product registrations transferred with the Divestment Business, as and if requested by the Purchaser, as described more fully in [Annex 5.1](#) and [Annex 5.2](#), subject to third parties' consent to the extent such consent is contractually required.
- (d) if requested by the Purchaser, the Divestment Business may also include for a period of up to [...] after Closing (such period may be further extended up to [...]), in consultation with the Commission and the Monitoring Trustee, if required to preserve the viability and competitiveness of the Divestment Business), agreements to either (i) toll manufacture and supply by the Parties, at their respective Direct Production Costs, of the Divestment CP Products and/or Lead Active Ingredients in the Divestment Business, including such Secondary Active Ingredients as required to

produce the Divestment CP Products, solely for sale in the EEA and manufactured in accordance with the quality specifications of the product registrations of the Divestment CP Products, to the extent such Divestment CP Products, Lead or Secondary Active Ingredients are manufactured by the Parties or their Affiliated Undertakings as of the Effective Date or (ii) where such Divestment CP Products, Lead or Secondary Active Ingredients are supplied to the Divestment Business as of the Effective Date by third party suppliers, the Parties shall use their best efforts to supply such Divestment CP Products, Lead or Secondary Active Ingredients through back-to-back supply agreements with such third parties at the wholesale price paid by the Notifying Party, Syngenta or their Affiliated Undertakings. Such products delivered to the Purchaser shall meet all quality requirements which would apply to Adama or Syngenta, as the case may be.

- (e) an irrevocable, transferable, royalty-free licence, excluding the right to sub-licence, to obtain access to (including, to the extent legally permissible, to hard copies of), and to use the registration data (to the extent held by the divesting Party) relating to the Secondary Active Ingredients included in the Divestment Business, to support, maintain, develop and improve crop protection product registrations in the EEA for products included in the Divestment Business. For the avoidance of doubt, shall Adama or Syngenta, as the case may be, decide not to renew and/or not support the renewal of any of the Secondary Active Ingredients included in the Divestment Business in the EEA, Adama or Syngenta, as the case may be, shall give written notice to the Purchaser within two weeks from their decision not to renew and/or support the renewal of any such Secondary Active Ingredient in the EEA to allow the Purchaser to undertake the renewal of such Secondary Active Ingredient.
- (f) in so far as Secondary Active Ingredients are concerned, at the option of the Purchaser, Adama or Syngenta (as the case may be) will use their (i) best efforts to enable the Purchaser to join (a) existing task forces to which the Parties are a member (subject to third party consents) or (b) the Parties' own individual existing or future renewal efforts to the extent undertaken by the Parties in their sole discretion or (ii) reasonable best efforts to enable the Purchaser to join future task forces to which the Parties become a member, provided that, in all cases, the Purchaser agrees to abide by the relevant terms and conditions of the applicable task force agreement and the standards that are applied by Adama or Syngenta (as the case may be) in the ordinary course, and pay its pro rata share of costs. The Parties' best efforts or reasonable best efforts, as the case may be, shall be limited to enabling the Purchaser to join existing or future task forces and/or the Parties' own individual renewal efforts for only up to the next EEA expiry date (as of Closing) of the approval of the relevant Secondary Active Ingredients.
- (g) EEA customer lists and other records for each product in the Divestment Business, as described more fully in **Annex 6.1** and **Annex 6.2**. For the avoidance of doubt, other records in the preceding sentence shall mean financial records available electronically including pricing, volume, incentive, payment, credit and rebate information for the past five years.
- (h) inventory for sale in the EEA, including in-progress mixtures and formulations, packaging, supplies and material to the extent such exist, are required by the Purchaser and is commercially and technically feasible, together with authorisation for the Purchaser(s) to use any brand names displayed on such packaging for the purpose of selling the inventory, for a period of [...].
- (i) arrangements for the supply of transitional services at Direct Production Cost, if requested by the Purchaser, by the Notifying Party or Affiliated Undertakings for a

transitional period of [...]after Closing (such period may be further extended up to [...], in consultation with the Commission and the Monitoring Trustee, if required to preserve the viability and competitiveness of the Divestment Business). For the avoidance of doubt, such transitional services may include technical assistance in relation to the manufacture, by the Purchaser, of the Divestment CP Products and/or Lead Active Ingredients in the Divestment Business and/or assistance of technical or regulatory personnel in relation to the support, maintenance, development and improvement of the registrations included in the Divestment Business.

3. The Divestment Business shall not include:
 - (a) Any part of the Parties' crop protection business which relates to any other products aside from the Divestment Business;
 - (b) Any assignment under an agreement with third parties where Adama's or Syngenta's relationship is not governed by a specific agreement;
 - (c) Production plants, sales offices or other physical plants;
 - (d) Any products manufactured for sale outside the EEA that are the same or substantially the same as any of the Divestment CP Products, including any registration rights for such products and any know-how, intangible assets and brand names used primarily for such products.
4. For the avoidance of doubt, any intangible assets that are also used outside of the scope of the Divestment Business (*i.e.*, non-crop protection products or outside the EEA) will be licensed to the Purchaser on a royalty-free basis exclusively for the Divestment Business as required pursuant to these Commitments, but will not be transferred to the Purchaser.
5. At the option of the Purchaser, the Divestment Business will include the Personnel who would reasonably be considered necessary to maintain the viability, marketability and competitiveness of the Divestment Business. The exercise of such option shall be supervised by the Monitoring Trustee and subject to applicable local employment legislation.
6. For any or all of the assets listed in **Annex 7** of the Schedule, which identifies all of the Lead Active Ingredients and Divestment CP Products which require third party consents to be transferred, the Parties shall obtain such consents and supply them to the Commission as part of the Parties' reasoned submission for the Purchaser approval. If any asset or assets in Annex 7 cannot be transferred to the Purchaser as a result of the Parties' inability to obtain the appropriate third party consent by the End of the First Divestiture Period, the Parties shall sell the corresponding replacement assets identified in Annex 7 which correspond to product or products for which the required consent has not been obtained. [...].
7. If there is any asset that is not covered by paragraph 2 of this Schedule but that is both used (exclusively or not) by the Divestment Business and is necessary for the continued viability and competitiveness of the Divestment Business, that asset or an adequate substitute will be offered to potential Purchasers either outright for sale if such asset or adequate substitute is used exclusively by the Divestment Business or by way of an irrevocable, exclusive, transferable, royalty-free licence, including the right to sub-licence if such asset or adequate substitute is used by both the Divestment Business and the Parties' retained businesses.

Annex 1.1 [...]
Annex 1.2 [...]
Annex 2.1 [...]
Annex 2.2 [...]
Annex 3 [...]
Annex 4.1 [...]
Annex 4.2 [...]
Annex 4.3 [...]
Annex 4.4 [...]
Annex 5.1 [...]
Annex 5.2 [...]
Annex 6.1 [...]
Annex 6.2 [...]
Annex 7 [...]