EN

Case No COMP/M.5907 – VOTORANTIM / FISCHER / JV

Only the English text is authentic.

REGULATION (EC) No 139/2004
MERGER PROCEDURE

Article 8 (1)
Date: 04/05/2011

EUROPEAN COMMISSION

Brussels, 4.5.2011
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PUBLIC VERSION

COMMISSION DECISION

of 4.5.2011

declaring a concentration to be compatible with the internal market and the functioning of the EEA Agreement

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(Text with EEA relevance)

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 undertakings[1], and in particular Article 8(1) thereof,

Having regard to the Commission's decision of 7 January 2011 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations[2],

Having regard to the final report of the Hearing Officer in this case[3],

WHEREAS:

(1) On 24 November 2010, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 (hereinafter referred to as the "Merger Regulation") by which the undertakings Votorantim Group (Brazil) and Fischer Group (Brazil; hereinafter jointly referred to as "the parties") acquire within the meaning of Article 3(1)(b) and 3(4) of the Merger Regulation joint control of a newly-created company constituting a joint venture (hereinafter referred to as "JV") through the merger of their respective subsidiaries Citrovita and Citrosuco.

(2) By decision dated 7 January 2011[4], serious doubts as to the compatibility of the transaction with the internal market were found and the proceedings pursuant to

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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 C

3 OJ C

4 OJ C 8, 13.1.2011, p. 8.

Article 6(1)(c) of the Merger Regulation were initiated (hereinafter referred to as "the decision opening proceedings").

(3) A non-confidential version of certain key submissions of third parties collected during the first phase investigation was provided to the parties on 20 January 2011.

(4) On 21 January 2011, the parties submitted their written comments on the decision opening proceedings.

I. THE PARTIES

(5) Votorantim is a diversified Brazilian group with operations in the following sectors: cement and concrete, mining and metallurgy (aluminium, steel, nickel and zinc), pulp and paper, fruit juice and chemicals. It is also active in the self-generation of electric power and in the financial sector. Its activities in the fruit juice sector are carried out through its subsidiary Citrovita.

(6) Fischer is a Brazilian group active in the sector of support vessels for maritime petroleum platforms and, via its subsidiary Citrosuco, in the production and wholesale of fruit juices.

II. THE OPERATION AND THE CONCENTRATION

(7) On 14 May 2010, the parties announced that they had signed an agreement to merge their operations in the orange juice industry, which are currently carried out by their respective subsidiaries Citrovita and Citrosuco.[5]

(8) For corporate and organisational reasons, the proposed transaction will give rise to the creation of two jointly-controlled entities, the first of which will combine the parties' operations in Brazil whilst the second will bring together the parties' assets outside Brazil.[6] References to the JV in this Decision shall be understood as including these two entities or alluding to the appropriate entity between the two.

(9) Each of the parties will hold 50% of the share capital and voting rights of the JV.[7] In addition, each of the parties will have the right to appoint half of the members of the Supervisory Board (*Conselho de Administração*). The major strategic decisions will be subject to the approval of the Supervisory Board, including the determination of the business plan and the budget.[8] Therefore, the JV will be jointly controlled by Votorantim and Fischer.

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5 Citrosuco is also active in the production and supply of apple juice but this activity will not be transferred to the proposed joint venture.

6 As the parties' orange juice activities are different in terms of assets, production and marketing, the contributions of each party to the JV will be equalised such that each of the parties will have a 50% interest in the JV.

7 See Article VII, 2.3.5 and 2.3.6 of the Draft Association Agreement.

8 See Article 6.4 of the Draft Shareholders Agreement.

(10) The JV will have sufficient resources to act independently on the markets for the production and wholesale supply of orange juice and its by-products, as it will have its own groves for the production of oranges, its own processing plants, a dedicated management team and access to the appropriate land-based and maritime logistic services for the bulk transportation of orange juice. Moreover, the JV is intended to operate on a lasting basis as it is established for an indefinite duration.

(11) As a result of the proposed transaction, Votorantim and Fischer will thus exercise joint control over the new entity, which will be performing on a lasting basis all the functions of an autonomous economic entity. The operation therefore constitutes a concentration within the meaning of Article 3(1)(b) and 3(4) of the Merger Regulation.

III. UNION DIMENSION

(12) The undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5 000 million[9] (Votorantim: EUR 11 859 million, Fischer: EUR […]* million). Each of them has a Union-wide turnover in excess of EUR 250 million (Votorantim: EUR […]* million, Fischer: EUR […]* million), but they do not achieve more than two-thirds of their aggregate Union-wide turnover within one and the same Member State. The notified operation therefore has a Union dimension.

IV. COMPETITIVE ASSESSMENT

(13) The transaction concerns the activities of the parties with regards to the production and supply of orange juice and several by-products of the orange juice processing industry. These two activities are examined in Section IV.2 and Section IV.3, respectively, after a brief general introduction to the overall economic sector in Section IV.1.

IV.1. Introduction

(14) Orange juice and nectars account for 35% of all juices and nectars consumed in the EEA, which makes orange juice the most consumed fruit juice type in the EEA.[10] The second most popular juice, namely apple juice (and/or nectar), accounts only for 15% of overall juice consumption, followed by multi-fruit juice blends with an 11% share. These multi-fruit blends often use orange juice as a raw material.

(15) Brazil is the most important orange growing area in the world, accounting for 38% of global orange production.[11] Like Florida in the United States, which is also a

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

10 Form CO, Annex 6.23: AIJN European Fruit Juice Association market report 2010, p. 7. The report makes a distinction between orange juice (or pure juice) having 100% fruit content equivalent and nectars with a fruit content of 25 to 99%.

11 Form CO, Annex 6: Agra FNP Report - *The Brazilian Citrus Industry* (2007), report by consulting and agribusiness information company Agra FNP, p. 135.

* Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets and marked with an asterisk

significant orange producer, it lies within the climatic zone best suited to the cultivation of oranges (that is, a latitude between 40° North and 40° South).[12]

(16) Brazil's share of global orange juice production is, at 58%, even higher than its share of fresh orange production.[13] Most of this production of orange juice is located in the State of São Paulo, which accounts for 1.35 million tonnes of juice compared to 900 000 tonnes produced in Florida.[14] Brazil and the United States (Florida) together represent 89% of global orange juice production.[15]

(17) Whilst most of the orange juice produced in Florida is consumed in the domestic US market, up to 75% of Brazilian orange production is transformed into juice and then exported, while the remaining 25% is destined for domestic consumption.[16] The main Brazilian orange juice exports are destined for the EEA. Indeed, the major part of orange juice consumed in the EEA originates in Brazil.[17]

(18) In 2008/2009, the Contracting Parties to the EEA Agreement imported 897 000 tonnes of orange juice of which 799 000 tonnes came from Brazil and 98 000 tonnes from other origins (such as Mexico and the United States). In addition, EEA consumption includes approximately 106 000 tonnes of orange juice produced in the EEA.[18]

(19) Oranges can be processed into two types of orange juice: Frozen Concentrate Orange Juice (hereinafter referred to as "FCOJ") and Not From Concentrate Orange Juice (hereinafter referred to as "NFC").

(20) FCOJ is concentrated orange juice from which excess water has been removed through evaporation. FCOJ is usually stored at a temperature of around minus 10 degrees Celsius, for up to 36 months.

(21) NFC is pasteurized orange juice. The pasteurization process consists in successive heating and cooling and is designed to deactivate enzymes, eliminate microorganisms and stabilize the orange juice. Compared to FCOJ, which is 5 to 6 times more condensed (than NFC), NFC retains its original volume, as well as its flavour. Consequently, its transport costs are relatively higher than those for FCOJ. Due to the pasteurization process, NFC can be stored at a temperature of 0 degrees Celsius for up

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12 Form CO, p. 33.

13 Agra FNP Report - *The Brazilian Citrus Industry*, p. 135: data of fresh orange worldwide production in 2006/2007 as a percentage of volumes produced in 2006/2007; p. 139: data of orange juice worldwide production 2006/2007.

14 Form CO, p. 33.

15 Agra FNP Report - *The Brazilian Citrus Industry 2007*, p. 139.

16 Agra FNP Report - *The Brazilian Citrus Industry 2007*, pp. 82-83.

17 Agra FNP Report - *The Brazilian Citrus Industry 2007*, p. 110.

18 Form CO, Annex 7.2: United States Department of Agriculture (USDA) Gain Annual Citrus Report, 2009.

to 18 months. NFC started as a marketable product in the 1990s due to the development of aseptic processes and tanks that allow large-scale storage.[19]

(22) The production and supply of FCOJ and NFC is described in more detail in Section IV.2.

(23) The process of extracting juice from the fruits as well as other subsequent stages of the production process (such as the evaporation of juice to produce FCOJ) give rise to a number of by-products, namely orange oil and essences (notably orange essential oil, orange oil phase essence, orange water phase essence and orange terpene), pulp and citrus pellets.

(24) These by-products are described in detail in Section IV.3.

IV.2. Orange Juice

(25) The different stages in the production and supply of FCOJ and NFC and the overall orange juice business and the main processors is presented in more detail in Sections IV.2.1 and IV.2.2, as an introduction to the definition of the relevant product and geographic market(s) for orange juice (Sections IV.2.3 and IV.2.4 respectively) and the assessment of the competitive effects of the notified operation thereon (Section IV.2.5).

IV.2.1. Production and supply of FCOJ and NFC

(26) The main stages of the production and supply of orange juice, and in particular of FCOJ and NFC, include the procurement of oranges, the processing thereof into juice and the transport and storage of orange juice. This sub-section also briefly presents the main customers of the orange juice producers and the final products resulting from FCOJ and NFC respectively.

IV.2.1.1. Procurement of oranges

(27) Oranges are grown in Brazil generally in large groves owned by orange farmers or by the main orange juice processors themselves. The latter include Cutrale, Citrosuco, Citrovita and Louis Dreyfus Commodities (hereinafter referred to as “LDC”). A number of varieties of oranges are grown, the choice among them depending on factors such as their yield, their resistance to various diseases and their adaptation to characteristics of the soil, as well as the producers' objective of maximising the length of the growing and harvesting season. According to the parties, the varieties of orange typically grown for juice production in Brazil are Hamlin, Westin, Rubi, Pera, Valencia, Natal and Folha Murcha.[20]

(28) These varieties ripe at different times during the Brazilian harvest period, which extends from July to January, enabling the orange juice producers to extend the time

[19] European markets for NFC: supply and demand issues, Goodrich and Brown. Available at: http://www.unctad.org/infocomm/francais/orange/Doc/europeanmarkets.pdf

[20] Form CO, p. 46.

during which they can operate their processing plants.[21] The producers of orange juice blend the juices in the production process or afterwards in different proportions to reach standard juice specifications throughout the year. These specifications are given in terms of brix and ratio.

(29) The brix measures the amount of soluble solids in the juice. The higher the brix, the more condensed is the juice/concentrate and the more units of final product can be made out of a single unit of juice/concentrate. The other key characteristic that differentiates the juice from different regions and different oranges is acidity. The ratio measures the proportion of the soluble solids to the acidity of the juice. The higher the ratio, the sweeter the juice.

(30) The major orange juice processors in Brazil own and lease orange groves in São Paulo State which is the major producing region of oranges in that country.[22] The degree of vertical integration into orange growing varies across processors. Overall, for the four main processors, the share of oranges harvested from owned or leased groves accounts for 20 to 40 % of oranges processed with the remainder coming from independent orange farmers, based on long term contracts or procured on the spot market.[23]

(31) Since a considerable amount of the oranges that are supplied to the main orange juice processors does not come from their respective own groves, the processors also seek assurance of supply through long term contracts with farmers. The parties submit that on average these long term relationships with the growers tend to have duration of approximately 10 years, but explain that the average length of contracts varies. While Citrovita purchases most of the oranges on the basis of contracts with duration of at least […]* years, Citrosuco purchases most of the oranges on the basis of […]* years' contracts.[24] According to the parties, most long term contracts include a price mechanism that generally contains a fixed element and a variable element, the latter usually depending on the international orange juice market price as well as on the crop size.[25] Purchases on the spot market,[26] where the price varies at any given moment, complement procurement based on contracts.

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21 According to the parties, varieties are divided into three categories: (i) early varieties such as Hamlin, Westin and Rubi, whose harvesting is done in a regular crop from May to August, (ii) mid season varieties such as Pera, whose harvesting is done in a regular crop from July to October and (iii) late varieties such as Folha Murcha, Valencia and Natal, whose harvesting is typically undertaken from October to January: Form CO, p.46 and Annex 6. According to the Agra FNP Report, p. 38, the Pera variety is the most important variety cultivated in Brazil.

22 In 2009, 75% of all oranges produced in Brazil came from São Paulo State. See Annex 12 of the parties' reply to a request of information dated 9 February 2011 and Form CO, Annex 6.3.

23 Form CO, p. 38.

24 Form CO, p.44.

25 Form CO, p.41.

26 The spot market for oranges in the present case has been defined as supplies of oranges which (i) are not sold under long or short term contracts of one year or longer and/or (ii) do not belong to captive production.

IV.2.1.2. The processing of oranges

(32) After harvesting, oranges are delivered by truck to the processing plants where they are processed into orange juice (be it NFC or FCOJ). Oranges are selected to enable blending of optimal quality. The fruit is conveyed by belt through a washing process before entering the processing plant, where it is graded for bad or damaged fruit. The fruit is then separated by size and sent to the juice extractors.

(33) Inside the juice extractors the peel is pricked to extract the peel oils. Then the juice is extracted from the oranges and the pulp and seeds are removed. The pulp is subsequently used for other by-products such as citrus pulp (or pulp cells) and citrus pellets (used for cattle feed). These processes are further explained, as far as the elaboration of by-products is concerned, in Section IV.3.

(34) The extracted juice can then undergo one of two possible additional processing steps. Either an evaporation process which removes excess water from the juice and gives rise to FCOJ as well as two other by-products: orange water phase essence and orange oil phase essence (see also Section IV.3.1) or, a pasteurisation process which involves heating and cooling to deactivate enzymes, eliminate undesired microorganisms and stabilize the juice, to produce NFC.

(35) In order to meet customer specifications and requirements, FCOJ is blended after evaporation from the various tanks and sometimes oils and essences are added back already at this stage to enhance the flavour. Citrus pulp might also be added at this stage (see Section IV.3.3).

(36) In order to obtain the final product, FCOJ has to be reconstituted before it can be drunk by the final consumer. FCOJ is thus mixed with water, in order to achieve the desired sugar to acid ratio, and with oils/essences and pulp, to achieve the required colour, flavour and texture. This reconstitution is normally done after the juice is transported to the EEA. NFC requires less processing and no reconstitution - although orange pulp may also be added to the juice.

IV.2.1.3. Transport and storage of orange juice

(37) After processing, Brazilian orange juice (FCOJ and NFC) destined for the EEA market is transported by tanker trucks to ports from where it is shipped by vessels to port terminals located in the EEA. The juice processed in São Paulo State is normally exported from the port of Santos, which has terminals dedicated to the handling of orange juice.[27] The juice is pumped from the tanker trucks directly into specially designed refrigerated tanks on board vessels that are normally dedicated to the transport of orange juice.[28]

(38) Around 90% of Brazilian orange juice is transported in bulk in tanker vessels in iso-tanks. The same bulk tanker vessel might transport FCOJ and NFC. The two products however must be placed in different iso-tanks at different temperatures, since FCOJ is

[27] Form CO, p. 51-53.

[28] Some orange juice suppliers own the vessels on which they export juice whereas others lease vessels. The special tanks are usually owned by the juice suppliers even though they may be installed on third party vessels.

usually transported at minus 10 degrees Celsius while NFC is transported at 0 degrees Celsius.[29]

(39) Smaller quantities of orange juice as well as its by-products (with the exception of citrus pellets) are transported in drums or refrigerated containers.[30] This transport takes place in container vessels or on the top of tanker vessels.[31]

(40) On arrival in the EEA, the juice is pumped from the vessel to storage tanks at the orange juice producers' terminals or sometimes at third parties' terminals.[32] All four major Brazilian juice producers have their own terminals in the EEA. Certain large customers are also able to receive ships at their own terminals. The storage tanks require refrigeration systems to keep them at the low temperatures required. The storage tanks for NFC (both on board the vessel and in the port) have to meet more specific requirements than the storage tanks for FCOJ in that they have to be aseptic and are usually equipped with an agitator[33].

(41) In the EEA, customers usually collect the juice from the port terminals by means of tanker trucks.

IV.2.1.4. Customers and final product

(42) Customers buying orange juice in the form of NFC and/or FCOJ are predominantly bottling companies (hereinafter referred to as "bottlers"). Bottlers purchase NFC/FCOJ from the orange juice processors, perform the required reconstitution and place the product in the requisite packaging. Bottlers usually produce juice products under their own brand and/or contract-manufacture for retailers (private labels) or other branded producers.

(43) Another group of orange juice customers are blenders. Blenders specialize in reconstituting and/or blending the purchased products (FCOJ/NFC) in order to obtain a demanded specification, taste or variety of a certain juice (orange or multi-fruit), nectar or drink. With regard to bottlers, blenders perform an intermediate activity, in that they buy and blend juices which they then sell on to bottlers.

(44) Customers of orange juice consist of global companies as well as smaller players with a more regional footprint (EEA-wide or limited to a number of Member States). The main global customers are Coca-Cola and PepsiCo, which with their respective brands Minute Maid and Tropicana are active world-wide. These companies usually purchase

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29 Form CO, p. 96.

30 Form CO, p. 55.

31 This transport does not necessarily have to take place on a vessel dedicated solely to the transport of orange juice (although the appropriate refrigeration and hygiene conditions must be respected).

32 The parties provided the example of terminals owned by customers such as PepsiCo (Zeebrugge) and Cargill (Amsterdam). Some terminals are also used as storage terminals and leased by the juice processors, like the terminals in Rotterdam and Vlissingen, owned by Kloosterboer.

33 An agitator is a device fitted onto a tank to mix the orange juice inside the tank so that the specification thereof remains the same irrespective of the juice's location in the tank.

large quantities and in a centralized manner.[34] Smaller customers either produce under their own brand - for example Granini, Orangina, Valensina or Friesland - and distribute their (branded) products to all distribution channels (such as supermarkets, shops and other), or produce under private label for retail customers. Bottlers producing private label orange juice products in the EEA include Refresco, Wesergold and Gerber. Companies only active in blending include Cargill and Döhler.

(45) Bottlers and blenders usually purchase orange juice on the basis of one year contracts which they negotiate after having asked for proposals/tenders from all the four major orange juice suppliers. Most European customers demand similar specifications in terms of brix (65-66 for FCOJ and 11-13 for NFC) and range of ratio (14-16 or 15-17). These specifications can generally be met by all major orange juice producers.

(46) In order to ensure continuity of supply of orange juice, customers often multi-source from the four main Brazilian suppliers. On the basis of the information submitted by the parties, it can be observed that, for FCOJ, none of their customers accounted for more than [20-30]*% of the sales of each of the parties and that a number of customers bought from both parties in the same year.[35]

(47) Global bottlers tend to have a special relationship with one of the four players. Hence, Coca Cola sources FCOJ mainly from Cutrale[36] whereas PepsiCo sources NFC principally from Citrosuco.

(48) Bottlers and blenders use FCOJ and NFC for a number of different juice products. According to Union legislation[37] the following fruit juice products might be distinguished in that regard: (i) fruit juice[38]; (ii) fruit juice from concentrate[39]; and (iii) fruit nectar[40]. These names are to be used in trade to designate the juice products and, in particular, the labelling must state clearly whether the juice is entirely or partially

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34 Form CO, p. 62.

35 This situation differs with regards to NFC sales by Citrosuco, where […]* is its main customer with purchases amounting to [60-70]*% of total Citrosuco's NFC sales.

36 Form CO, p. 184.

37 Council Directive 2001/112/EC of 20 December 2001 relating to fruit juices and certain similar products intended for human consumption, OJ L 10, 12.1.2002, p. 58, as amended by Commission Directive 2009/106/EC of 14 August 2009, OJ L 212, 15.8.2009, p. 42.

38 According to paragraph 1(a) of Annex 1 to Council Directive 2001/112/EC, fruit juice is the fermentable but unfermented product obtained from fruit which is sound and ripe, fresh or preserved by chilling, of one or more kinds mixed together, having the characteristic colour, flavour and taste typical of the juice of the fruit from which it comes. Flavour, pulp and cells from the juice that are separated during processing may be restored to the same juice.

39 According to paragraph 1(b) of Annex 1 to Council Directive 2001/112/EC, fruit juice from concentrate is obtained by replacing in the concentrated fruit juice water extracted from that juice during concentration, and restoring the flavours, and, if appropriate, pulp and cells lost from the juice but recovered during the process of producing the fruit juice in question or of fruit juice of the same kind.

40 According to paragraph 4 of Annex 1 to Council Directive 2001/112/EC, fruit nectar is a product obtained by adding water and sugars and/or honey to the products fruit juice or fruit concentrate, to fruit puree or to a mixture of those products. The addition of sugars and/or honey is permitted up to 20% of the total weight of the final product.

made with concentrate by stating: "made with concentrate(s)" or "partially made with concentrate(s)".

(49) Orange juice products based on NFC or FCOJ therefore consist of: (a) orange juices based on NFC; (b) orange juices based on FCOJ; and (c) orange nectars (orange juices based on FCOJ or NFC to which water, sugar/honey are added). NFC/FCOJ can also be used in the production of multi-fruit blends as well as soft drinks.

IV.2.2. Overall description of the orange juice business and the main processors

(50) The Brazilian orange juice industry has grown enormously since it started operating in the 1960s with the first plant for FCOJ. It gained popularity and expanded in particular due to the favourable climatic conditions and the inability of US production, mainly in Florida, to meet global demand. The main processors in Brazil have also built up an efficient supply-chain to bring juice from São Paulo State to Europe.[41]

(51) In the 1980s the Brazilian orange juice industry started to consolidate with a number of smaller companies being acquired by the leading players.[42] The most significant exit in recent years was the withdrawal of Cargill from orange juice processing in 2004. Cargill sold its plants, farms and port terminals in Brazil to Cutrale and Citrosuco.[43]

(52) According to the 2007 Agra FNP Report on the Brazilian Citrus industry, the main reasons for this consolidation were (i) to obtain economies of scale to expand into national and international logistics programs requiring larger capital and (ii) the necessity for the major players to be present in the southern regions of São Paulo State which had witnessed an increase in the planting of orange groves (expansion via buying the respective crushers).[44]

(53) In parallel to the consolidation of the Brazilian business, the main players active in Brazil – with the exception of Citrovita – expanded their orange juice activities into the USA. In effect, Cutrale, Citrosuco and LDC acquired crushing plants in Florida in the mid-1990s.

(54) Currently, there are four main Brazilian players operating in the international markets[45], namely Cutrale, Fischer's subsidiary Citrosuco, Votorantim's Citrovita and

41 Rabobank Market study - Brazilian orange juice, Annex 6.14 Form CO, pp. 19-20.

42 For example the acquisition of Citromogiana Ltda., Branco Peres by Cutrale, the acquisition of Frutropic by LDC or the recent acquisition of Sucoricco by Citrovita. See *Agra FNP Report 2007- The Brazilian Citrus Industry*, p. 112.

43 Agra FNP Report - *The Brazilian Citrus Industry*, p. 112.; Bloomberg Press Release of 2 July 2004: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aVlZqOr0mCE8&refer=latin_america

44 Agra FNP Report - *The Brazilian Citrus Industry*, p. 112.

45 Agra FNP Report - *The Brazilian Citrus Industry*, p. 112: 97% of the Brazilian orange juice sector is represented by the top four companies.

LDC[46]. Cutrale, LDC and Citrosuco produce both FCOJ and NFC, whereas Citrovita is only active in the production and wholesale supply of FCOJ.

(55) These four suppliers are vertically integrated and are thereby active at all stages of the orange juice supply chain – from the growing and procurement of oranges and processing of orange juice in Brazil, via the transportation of orange juice from Brazilian terminals by vessel to Europe to the distribution at the wholesale level to customers in the EEA.

(56) With regard to the procurement of oranges, the four main suppliers all grow a substantial part of their demand for oranges 'internally', since they own or lease orange farms, as indicated in recital (30). As competition for land in São Paulo State has increased because of farmers switching to other crops like sugar cane, orange juice producers aim at securing at least a part of their fruit requirements 'in house'. According to the parties' estimates, Cutrale grew [30-40]*% of its fruit requirements internally in the 2009/10 season, Citrosuco [20-30]*%, Citrovita [10-20]*% and LDC [20-30]*%.[47]

(57) Orange juice producers own processing plants in different locations in São Paulo State, all within a distance of 500 km of the port of Santos. Cutrale owns five plants in Brazil, while the three others each operate three plants. Apart from their activities in Brazil, Cutrale, Citrosuco and LDC operate processing plants in Florida serving mainly the domestic US market. Cutrale also owns one plant in Portugal, which processes oranges into NFC.

(58) The main players also have their own terminals in the port of Santos to which they deliver the juice from the processing plants and from which they ship the processed FCOJ and/or NFC by vessels to Europe and other parts of the world. Having own terminals is considered a critical factor in the logistics chain as it can provide for cheaper and faster loading and unloading.[48]

(59) Although all four companies have facilities at port locations in Brazil and in the EEA for the export/import of orange juice, there are certain differences in the way in which they choose to organise their maritime transport needs. While some use their own vessels, others rely to a greater extent on lease or chartering arrangements with providers of maritime transport.

(60) Citrosuco owns four vessels, all of which are exclusively used for the transport of orange juice. Citrovita has one such vessel and leases three others from a third party (Gearbulk). LDC also rents space on third party vessels – three in total – including from Gearbulk and Citrosuco. Cutrale operates six vessels.[49]

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46 While LDC is originally a European company, in so far its main activities in the production of orange juice are located in Brazil the said activities will be characterized as Brazilian operations throughout this decision.

47 Form CO, p. 38.

48 Agra FNP Report - *The Brazilian Citrus Industry*, p.126.

49 See Form CO, pp. 176 - 177.

(61) These four companies all own terminals in Europe, where their vessels can unload in a quick and efficient manner. Cutrale operates a terminal in Rotterdam (the Netherlands) as well as in the United Kingdom. Citrosuco and LDC each own terminals in Ghent (Belgium), whereas Citrovita's terminal is located in Antwerp (Belgium).[50]

IV.2.3. Relevant product market

(62) The JV will continue the parties' activities in the production and wholesale supply of orange juice. As indicated, Citrosuco's activities in the production and supply of apple juice will not be transferred to the JV[51].

(63) The parties submit that, on the grounds of a high degree of demand and supply side substitutability between orange juice and other fruit juices, the relevant product market for the assessment of the proposed transaction is the market for the production and wholesale supply of fruit juices.

(64) In case the Commission should consider a narrower market limited to the production and wholesale supply of orange juice, the parties submit that a further segmentation between FCOJ and NFC is not relevant because of demand and supply-side substitutability between the two types of orange juice.

IV.2.3.1. Orange juice / other fruit juices

(65) The parties submit that there is an overall market for the production and wholesale supply of fruit juices both from a demand-side and supply-side perspective. Furthermore, the parties state that in previous Commission decisions concerning the beverage sector, indications were given that a market for fruit juices could exist.[52]

(66) With respect to the previous decisional practice of the Commission concerning mergers in the beverage sector, a distinction has been made between carbonated soft drinks and other non-alcoholic beverages such as fruit juices, tea, coffee, water and energy drinks.[53] However, while further distinctions between some non-carbonated beverages, such as ice-teas[54], have been investigated, the exact product market definitions have been ultimately left open.[55]

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50 See Form CO, pp. 180-183.

51 See footnote 5.

52 Commission Decision of 27 September 2009 in Case No COMP/M.2276 - *Coca Cola Company/Nestlé/JV*- OJ C308, 1.11.2001, Commission Decision of 29 October 2001 in Case No COMP/M.2504 - *Cadbury Schweppes/Pernod Ricard* – OJ C 321, 16.11.2011; Commission Decision of 26 October 2009 in Case No COMP/M.5633 - *PepsiCo/The PepsiCo Bottling Group* – OJ C 272, 13.11.2009.

53 See for example Case COMP/M.2504 *Cadbury Schweppes / Pernod Ricard*, paragraphs. 8 and 9 and case COMP/M.2276 *The Coca Cola Company/Nestlé/JV*, paragraphs 16-18.

54 M.2504 *Cadbury Schweppes/Pernod Ricard*, paragraph 12.

55 See for example: Commission Decision of 16 February 1998 in Case No IV/1065 - *Nestlé/San Pellegrino* – OJ C81, 17.3.1998, paragraphs 7-11 for a discussion of sparkling and still mineral water.

(67) Those precedents refer however to activities encompassing the retail distribution of beverages. The beverages thus considered constituted the final products in the relevant production and supply chain. In contrast, the products of the parties constitute an input to such beverages and their activities take place upstream in the production and supply chain. Hence, the interaction between supply and demand in the present case is at a different level of trade compared to the cases referred to by the parties. Furthermore, the geographic markets also differ with respect to the present case and the precedents quoted by the parties; while the market(s) for the production and wholesale distribution of orange juice are EEA-wide [see recital (140)], the downstream retail activities of sales of beverages considered in previous cases are likely to constitute national markets[56]. Moreover, in the previous decisions the focus of the market investigation was not the fruit juice sector, as it is in the present case, but the sector of carbonated beverages. Thus, fruit juices have so far not been assessed in-depth separately. In sum, the existing precedents can only be considered relevant to a limited degree for the present case. Finally, the fact that, in past cases, the Commission may not have distinguished, for the purposes of its assessment, between orange juice and other fruit juices does not prevent it from considering, on the basis of its in-depth market investigation in this case, that a separate market for orange juice (or separate markets for FCOJ and NFC) exist(s)[57].

IV.2.3.1.1. Demand-side substitutability

(68) The parties argue that demand-side substitutability at the level of the end consumer as well as at the level of the bottlers demonstrates that all fruit juices form part of the same product market.

(69) The parties put forward, in particular, that in the juice sector there is a high degree of demand-side substitutability between orange juice and other types of fruit juices in terms of characteristics, use, and most importantly, price. Such substitutability, according to the parties, has grown along with a trend towards consumption of blended and exotic juices. The parties refer to the healthy character associated with all fruit juices, to consumers' varying and changing tastes between different fruit juices and to consumers' price sensitivity.

(70) To support their arguments, the parties stress that in recent years juice consumption in the Union has been shifting slightly from traditional juice flavours (namely orange and apple) towards other fruit juices, either single fruit juices or blends or multi-fruit juices. As indicated, the parties maintain that all fruit juices share common characteristics in terms of consumer perception, in particular their image as healthy products.

(71) The parties also explain that customers are price sensitive and thus, in case of an increase in the price of orange juice, they tend to substitute orange juice with other fruit juices. The parties also indicate that consumption of fruit juices depends on consumers' preferences (since the latter are the main driver with respect to demand for different flavours). According to the parties, the price of the juice determines the preferences of customers, the latter being ultimately the main factor driving demand.

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56 See for example: Case IV/M.1065 – *Nestle / San Pellegrino*, Case COMP/M.2504 *Cadbury Schweppes / Pernod Ricard*.

57 Case T-151/05 *NVV and Others v Commission* [2009] ECR II-1219, paragraph 136.

The parties also note that the Union regulatory framework applies to all fruit juices alike.[58]

(72) In order to support these arguments, the parties submitted a report by their economic advisors, arguing that there is evidence of significant competitive constraints on orange juice, exerted by other juices and drinks.[59] The parties claim that these competitive constraints could be strong enough to fully warrant the inclusion of orange juice within a broader market comprising other juices. The parties also indicate the existence of a correlation in terms of pricing between orange juice and apple juice, which could indicate supply-side substitutability between these two products.

(73) In view of the arguments of the parties, the market investigation aimed, in particular, at establishing whether other fruit juices, notably apple juice, are considered by the customers of orange juice processors (bottlers and/or blenders) as credible substitutes, thus justifying their inclusion in the same relevant market as orange juice.

(74) The majority of respondents to the requests for information sent during the market investigation - including some of the parties' largest EEA customers - indicated that a 5% to 10% increase in the price of orange juice compared to other fruit juices would have no effect on the amount of orange juice they would purchase.[60] In particular, some large customers explained that substitution of orange juice by other fruit juices is unlikely given that orange juice constitutes the preferred flavour of their customers and/or constitutes a very large portion of their portfolio.

(75) A few respondents indicated that a price increase of 5% to 10% would lead them to reduce the amount of orange juice purchased, but it would not lead them to switch to other fruit juices. Some respondents report that a price increase of orange juice would lead them to offer more orange nectars and drinks with lower orange juice content than pure orange juice. Only a limited number of respondents indicated that a price increase of 5% to 10% would lead them to replace a limited percentage of orange juice by other juice such as apple, pear or grape; however this could take place only with respect to multi-fruit juices (drinks / blends).

(76) Multi-fruit juices, where, according to some respondents, the limited replacement of orange juice by other fruit juices could take place, still constitute a small segment compared to pure orange juice[61]. What is more, the degree of substitution within multi-fruit juices is, in any event, limited by the flexibility of the recipes and required changes to packaging.[62] Indeed, customers explain that most blends already have a

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58 See Council Directive 2001/112/EC, cited in footnote 37.

59 "*Economic analysis of the demand for orange juice: preliminary findings*", A report for Votorantim and Fischer, LECG, 7 December 2010. For a more comprehensive presentation of this report and the assessment thereof see Section IV.2.3.1.3.

60 See Commission Notice on the definition of relevant market for the purposes of Community competition law, OJ C 372, 9.12.1997, paragraph 17.

61 Form CO, pp. 84-85. According to the 2010 Market Report of the European fruit juice association blends and multivitamin fruit juice constitute only 17% of the overall consumption of fruit juice in Europe, orange being the most consumed juice (35%), followed by apple (15%).

62 See replies to questions 14-17 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers. .

maximum amount of apple and grape juice, considering that these are by far the cheapest ingredients and therefore that the margin of substitution of orange juice with other fruit juices is limited.[63] Some of the customers indicated, in that regard, that the share of orange juice in blends is already limited to around 10% to 25% of the final product.

(77) Furthermore, whilst some market reports indicate a slight shift in consumption patterns from orange juice to other juices (either single fruit juices or blends/multi-fruit juices), orange juice remains by far the most important juice on the market in terms of consumption (roughly one third of all juice consumed in the Union and up to a half in certain Member States[64]) and substitution by other products, at least in the short term, seems to be limited.

(78) Moreover, while customers in general confirmed that the equipment used to store and transport orange juice and other fruit juices is roughly the same, they also explained that a substitution of orange juice by other type of juices is either not possible for technical reasons or would be an intensive, costly and time consuming process as it requires the changing of recipes, which has to be approved by the downstream customer (both bottlers and/or retailers) for which they prepare the juices. According to some customers[65], changing recipes would only become feasible with a price increase of a significantly larger magnitude than 5% to 10%.

(79) In the market investigation, customers were also asked to provide examples of their past behaviour with respect to switching between FCOJ /NFC and other types of juice, in particular following the price increase in orange juice caused by hurricanes in 2004/2005 in Florida. Most customers explained that, at that time, they did not switch their purchases of orange juice to other fruit juices irrespective of the higher prices of orange juice. Only a minority of the customers indicated that they had indeed switched a (minor) part of their demand to other types of juice, [66] including apple as well as grape and/or pineapple.[67]

(80) Finally, since the parties indicated that there was a strong correlation between apple and orange juice, the market investigation aimed also at verifying whether apple, in particular, constitutes a close substitute to orange juice.[68] A large majority of the respondents to the requests for information sent during the market investigation

63 Ibid.

64 Form CO, pp. 84-85.

65 See replies to questions 14-17 of the Commission's request for information of 26 November 2010 addressed to orange juice customers.

66 See replies to question 7 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

67 One customer provided an example of switching 4% of their demand for orange juice to cheaper apple juice to be used in bends. This however took place when the price of orange juice increased by 100%.

68 More detailed analysis in this respect is provided in Section IV.2.3.1.3.

indicated however that, in case of a price increase of 5% to 10% for FCOJ/NFC, they would not switch their purchases thereof to apple concentrate/NFC.[69]

(81) Some of the customers explained that the difference of price between apple juice and orange FCOJ/NFC is so significant that an increase of 5% to 10% would not influence their purchasing patterns. The investigation indicates that bottlers/blenders would to a certain extent try first to absorb the price increase in their margins[70]. Even if their customers downstream may, in the long term, react to a certain extent to a price change for orange juice, bottlers/blenders find it difficult to foresee whether such an increase would shift the final customers' demand to other juices. Finally, as indicated, the possible replacement of orange juice by apple juice would require changes in the recipes in order to replace one product by another.[71]

(82) In light of the foregoing, it is concluded that there is no significant substitutability, from a demand-side perspective, between orange and other fruit juices, notably apple juice.

IV.2.3.1.2. Supply-side substitutability

(83) The parties claim that defining a single market for all fruit juices is supported also by supply-side considerations, in that some producers such as Citrosuco and LDC are active in several types of juice other than orange juice (notably apple juice). The parties put forward that different fruit juices exert competitive constraints on each other and market players need to take into account the trends in the different segments when defining their strategies.

(84) The parties indicate that fruit juices share many similarities in terms of their processing, transportation and delivery methods. In particular, in the parties' view, all fruits are processed following the same steps and with the use of similar equipment (with the exception of fruit extractors)[72] Also with regards to the transportation of fruit juice, it is usually done in bulk or drums by similar kinds of vessels specialized in juice transportation.

(85) The results of the market investigation do not confirm however the parties' view as to the alleged supply-side substitutability between orange juice and other fruit juices. First, market players active in the wholesale supply of orange juice and other types of

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69 See replies to questions 4-7 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

70 Customers explained that it is usually not possible for them to pass on the price increase to final customers within the duration of the contract, therefore in case of price increase of the raw material they are obliged to decrease their margins and sell the final product within the price indicated in their contracts with retailers; see customers' answers to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011, question 8.

71 See replies to questions 4-7 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

72 The parties indicate, for instance, that the juice extractor for citrus fruit is different to the extractor for apples – Form CO p. 94.

juices into the EEA are generally different.[73] Second, the production areas for each fruit (and thus fruit juices) are located in various regions. While the main production areas for orange juice are Brazil (São Paulo State) and the USA (Florida), apple juice, on the other hand, is mainly processed in China and the EEA.[74] As explained by some respondents to the market investigation, this relates to the fact that the climate conditions for the growth of different fruits are different and therefore they cannot be grown in the same geographic areas.

(86) The respondents to the market investigation contest as well the allegedly low barriers to entry into orange juice. For instance, a competitor active also in apple juice indicated that "*as an [orange juice] processing plant is not easily transformed in an [apple juice concentrate] processing plant and as orange growing regions differ from apple growing regions due to climate differences, then if a juice company is interested in entering the [orange juice] business it would enter either from scratch or by buying an existing player. In both strategies it would require a very large amount of capital to enter in this industry with a competitive scale.*"[75]

(87) Furthermore, despite some similarities in terms of processing and equipment used for the production of different fruit juices, there seem to be significant peculiarities for the processing of different types of fruit juice and specific expertise seems to be necessary with respect to each of them. There are also some differences in terms of logistics as well as in terms of organisation and business model.

(88) In light of the above, there seems to be only limited substitutability from the supply-side perspective between orange juice and other type of fruit juices.

(89) Further economic arguments and data presented by the parties concerning the substitutability between orange juice and apple juice and other fruit juices as well as the alleged correlation between orange juice and apple juice are discussed in more detail in Section IV.2.3.1.3.

IV.2.3.1.3. Assessment of the economic report submitted by the parties

(90) The parties submitted a report by their economic advisors that argued that there is evidence of significant competitive constraints on orange juice, exerted in particular by other juices and drinks.[76] Although the report claims that it does not attempt to draw implications for the definition of the relevant markets, it suggests that the constraints it identified could be strong enough to fully warrant the inclusion of orange juice within a broader market comprising other juices as well.

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73 For example, Cutrale and Citrovita are not active in apple juice, which is the second juice consumed in EEA.

74 The plants of LDC which produce apple juice are located in China; the plants of Citrosuco are located in different areas than its plants for production of orange juice; namely, in the south of Brazil, in Santa Catarina State, where due to relatively colder weather the apples are grown.

75 See LDC's reply to question 5 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004of 14 February 2011.

76 See reference in footnote 59.

(91) The report bases its conclusions on several analyses conducted both at the retail and wholesale level. However, neither analysis provides convincing evidence that other juices or drinks, and in particular apple juice, exert a significant competitive constraint on orange juice, notably in view of supporting a product market definition broader than orange juice for the purposes of this decision.

IV.2.3.1.3.1. Analysis of wholesale data

(92) The report submitted by the parties presents the results of correlation and stationarity analyses using wholesale price data.[77] However, these analyses do not provide conclusive evidence that apple juice would exert a strong competitive constraint on orange juice that would justify including both products in the same market. As acknowledged in the report, price correlation could be consistent with both products competing closely, but does not establish such a conclusion. This caveat also applies with respect to stationarity analysis, as stationarity may be observed for the relative price of products that are not close substitutes. As such, stationarity between two products would be consistent with these products competing closely, but does not establish that they do.[78]

(93) Such evidence is not meant to be assessed in isolation, but together with the other evidentiary material gathered during the market investigation. In this respect, the relatively low correlation coefficients between the prices of orange juice and other fruit juices (including apple juice) are in line with the results of the market investigation, which point to a very limited substitution between such products (see Section IV.2.3.1.1).

(94) In addition, although a finding of stationarity would be in principle consistent with two products competing with each other, when analyzed in light of the results of the market investigation indicating a lack of substitution between apple and orange juices, such a finding would appear more likely to be driven by unrelated factors.[79]

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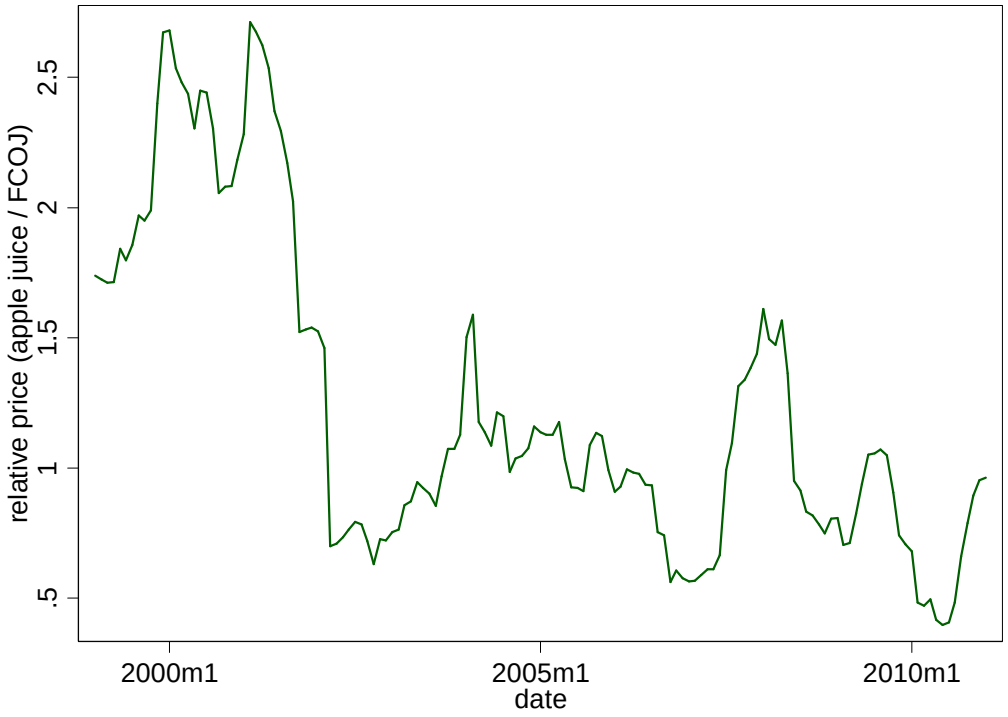
77 At the wholesale level, the report first calculates correlation coefficients between the price of orange juice and other fruit juices using wholesale price data between 2002 and 2010 from Agra Informa. The report finds that the correlation coefficient between apple and orange juice prices is 0.56, while it is 0.64 between grapefruit juice and orange juice prices, and -0.08 between pineapple and orange juice prices. Second, the report tests whether the prices of orange juice and other fruit juices tend to revert to a common value over time by conducting stationarity tests using monthly retail data from Agra Informa between 2002 and 2010. The report finds that the relative price of apple and orange juice (i.e. the price of apple juice divided by orange juice) is relatively stable over time, while this is not the case for the relative price of orange juice and grapefruit or pineapple juice.

78 The report also compares the evolution of wholesale orange juice prices with the evolution of the respective shares of pure juice, nectar and drinks (calculated at the retail level in Europe using yearly data from Canadean between 2002 and 2008). On this basis, the report concludes that the decline in the share of pure juice accelerated when the price of orange juice increased significantly between 2004 and 2007, which would be consistent with bottlers substituting pure orange juice by lower concentration products (nectar and drinks) in response to increases in the price of orange juice. However, it is apparent from figure 6 in the report that the share of orange juice versus nectars and fruit drinks has been declining over time irrespective of the wholesale orange juice price (as can be seen for example between 2007 and 2008, where the share of orange juice declined despite a decrease in the price of orange juice), and it is thus unclear how much of the claimed acceleration would be due to the increase in the price of orange juice.

79 In their response to the decision opening proceedings, the parties argued that if the alleged stationarity of the relative price of orange and apple juice was due to common factors, the same type of co-movement between the prices of all juices should be expected. This claim is unfounded, not only because different

(95) Furthermore, a review of the parties' stationarity analysis leads to the conclusion that the results are not robust to the time period analyzed. Indeed, the analysis submitted by the parties is restricted to data from 2002 onward, without a proper justification for truncating the available dataset to this sub-period. If the period under investigation is extended slightly, the results of stationarity found by the parties no longer hold. The graph in Figure 1 presents the relative price of apple and orange juice from 1999, using the same data source (AgraInforma) as the parties. The evolution of the relative price during this extended period clearly appears non-stationary, as was confirmed by the formal stationarity tests carried out by the Commission.

Figure 1: Relative price of apple juice versus FCOJ



Source: Commission's analysis of Agra Informa data.

(96) The analysis of wholesale data therefore does not provide evidence that orange juice and apple (or other) juice(s) exert a significant competitive constraint on each other that would justify including both products in the same market, which is consistent with the findings of the market investigation indicating the absence of such a constraint.

IV.2.3.1.3.1.1. Analysis of retail data

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fruit juices may be differently affected by supply conditions, but also because price movements could be driven by similar demand evolutions for some (but not necessarily all) fruit juices.

(97) At the retail level, the report estimates own-and cross-price elasticities using a log-linear model of demand with monthly retail data from AC Nielsen for France, Germany, The Netherlands and the United Kingdom. [80] On this basis, the report argues that orange juice is subject to a high own-price elasticity and large cross-price elasticities with respect to other juices and drinks (at the retail level).

(98) For the purpose of this decision, however, measuring elasticities several levels down in the supply chain would at best provide indirect evidence. Indeed, although retail and wholesale elasticities are normally related, the two are generally not identical and the relationship between them depends on the elasticity of retail price with respect to wholesale price. In addition, the relevance of such retail elasticity estimates for the wholesale supply of orange juice in the EEA is further complicated by the different findings in the few Contracting Parties to the EEA Agreement analyzed in the report.

(99) Furthermore, irrespective of this caveat, the analysis' methodological shortcomings limit its evidentiary value. In this respect, the decision opening proceedings indicated that the estimated elasticities rely on a very limited number of observations[81], which casts doubts with respect to the robustness of the estimated elasticity parameters. In addition, it mentioned that the confidence intervals around many estimates are relatively large, which calls for further caution in interpreting the elasticity coefficients calculated in the report.[82] Moreover, it indicated that the specifications chosen in the report appear questionable since the regressions do not include any control variables beyond the price of the various juices and drinks included in the regressions.

(100) The parties did not supply any additional analysis to address these points during the second phase investigation, with the following exception. In their response to the decision opening proceedings, the parties included two control variables (separately), namely quarterly GDP and monthly average temperature, in their regression for France, and argued that their results are robust to such changes. However, such an analysis is extremely incomplete as it only concerns one Member State (France). In addition, the use of quarterly data with such a short time frame of analysis is unconvincing, as the analysis relies on less than 10 different GDP observations.

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80 The report's point estimates of the own-price elasticity of orange juice is, for the ordinary least square (OLS) and instrumental variables (IV) estimation respectively, -1.6 and -2.3 in France, -2.0 and -3.0 in Germany, -0.8 and -1.1 in the Netherlands, while the OLS estimate is between -1.7 and -2.4 (depending on product type and format) in the United Kingdom. The report finds that the other juices or drinks with the larger cross-elasticities with respect to orange juice are multi-fruit juices in France, orange nectar in Germany, apple juice in the Netherlands, and orange drinks or apple juice and nectar (according to product type and format) in the United Kingdom. The report presents some estimates of own and cross-price elasticities from the literature to document the existence of substitution between orange juice and other fruit juices or beverage. However, the studies referenced in the report do not provide support for the strong substitution patterns claimed therein. Indeed, not all studies are relevant in the context of this investigation (due to their respective scope and focus), the range of estimates with respect to the estimated own-prices elasticities of orange juice found in these studies is relatively large, and the cross-price elasticities vary significantly across studies.

81 In particular, 39 for the OLS and 38 for IV.

82 For example, the report's point estimate of the own cross-price elasticity for orange juice in France (estimated with instrumental variables) is -2.33, but the 95% confidence interval is [-3.95; -0.71].

Furthermore, the estimation submitted by the parties does not appear to be robust to other changes.[83]

(101) Moreover, there is a high level of uncertainty as to the precise magnitude of the relevant elasticities calculated in the report. Indeed, in light of the relevant confidence intervals around the estimated elasticities, it cannot be confidently concluded whether the orange juice at the retail level is relatively inelastic or relatively elastic. In itself, this means that the information carried over by the estimate is of limited value, in particular since the relevant test for the question at hand is not whether the own-price elasticity for orange juice is significantly different from zero, but rather whether it would be high enough to justify broadening the market definition.

(102) Finally, even if the report's estimation were to be considered adequate, the own-price elasticity estimated therein would not be consistent with a market broader than orange juice under recent margins. Therefore, any possible constraint exerted by apple juice would not be sufficient to prevent a hypothetical monopolist from increasing the price of orange juice by 5%.

(103) For these reasons, it is concluded that the analysis presented in the report does not provide conclusive evidence that the orange juice price is subject to strong constraints from other juices and/or drinks, or that the relevant market should be larger than orange juice.

IV.2.3.1.4. Conclusion

(104) The Commission's market investigation has not confirmed the submission of the parties that the relevant market for the assessment of the proposed transaction would be as broad as one comprising all fruit juices. Instead, it has shown that the relevant product market for the purposes of this decision is not broader than the market for the production and wholesale supply of orange juice.

IV.2.3.2. Orange juice: FCOJ / NFC

(105) The investigation also examined whether the market for the production and wholesale supply of orange juice should be further segmented into separate product markets for FCOJ and NFC.

(106) As indicated in recitals (63)-(64) the parties, which oppose the definition of a market limited to the production and wholesale supply of orange juice, maintain that such a market, in any event, should not be further segmented between FCOJ and NFC.[84]

(107) As explained in recital (67), the production and wholesale supply of orange juice has not been assessed in the Commission's previous decisional practice. Hence, there are no precedents with regards to this market and its segments, namely FCOJ and NFC.

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83 For example, including year-fixed effects in the regression makes the observation of the parties disappear. This lack of robustness is not surprising given the low number of observations, which comes from the unjustified choice of using aggregated monthly data for a short period of time.

84 Form CO, p. 95.

IV.2.3.2.1. Demand side substitutability

(108) The parties submit that FCOJ and NFC compete against each other. They put forward that most customers need to buy both NFC and FCOJ in order to create a broad range of products to appeal to end customers. Also, they provide data according to which the growth of NFC has been detrimental to the sales of FCOJ.[85]

(109) According to the market investigation, the substitution between FCOJ and NFC is however limited from the demand side (namely, at the level of bottlers or blenders).

(110) Firstly, FCOJ and NFC are inputs into two differentiated end products, since they are used in different applications and products of different brand concepts. FCOJ is referred to as a standard product, whereas NFC is clearly considered as a premium, high(er) quality and fresh(er) product, as it is perceived by end customers to be more natural than products made from concentrate.[86]

(111) Secondly, according to some responses, the equipment used for storage and packaging of FCOJ is different than the equipment used for NFC. For example, some customers explained that NFC requires more transport and storage facilities to fill the same number of bottles. NFC therefore requires more investment in receiving capacity and in tanks. Furthermore, NFC can be stored for a shorter period of time before it is filled. A number of customers explained that they use different packaging lines for FCOJ and NFC since FCOJ is usually packed in cartoon packaging whereas the NFC is mainly packed in aseptic bottles.[87]

(112) Thirdly, the prices of FCOJ and NFC as raw materials differ, notably due to the different equipment and steps involved in the production and transportation of these products. Based on the information provided by the parties in the Form CO, the average price of NFC in the 2009/2010 season would be USD 476 per ton whereas FCOJ's average price would be USD 1082 per ton.[88] However FCOJ is about six times more concentrated than NFC.[89] Hence, converted into comparable units, NFC is considerably more expensive than FCOJ.

(113) Fourthly, this price difference at the wholesale level translates into different retail prices of juices/drinks based on FCOJ and NFC respectively with FCOJ-based juices being significantly cheaper than juices produced using NFC.[90]

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85 Form CO, Annex 6: Brazilian Citrus Industry Long Term Outlook, AgraFNP and GCONCI, April 2010.

86 One of the competitors active in FCOJ and in NFC stated for example that it has observed in recent years a growing customer preference for NFC over FCOJ due to better taste (for example, closer to fresh orange juice taste) provided by NFC and consumers' willingness to pay the higher price demanded by NFC – competitors answers to the Commission's request for information of 2 February 2011, question 5.

87 See replies to questions 26-28 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

88 Form CO, p. 105, Table 28 Evolution of the price of FCOJ and NFC in the EEA (USD/ton).

89 See replies to questions 18-22 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

90 See data based on sales to retailers from customers' answers to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011, question 36.

(114) Fifthly, the referred considerable price difference between FCOJ and NFC translates as well into a significantly low degree of switching between them in case of a price increase of 5% to 10%. According to the market investigation, such a price increase in either of the products would not be high enough to achieve significant switching, as the break-even point of costs between the two products would not be reached[91]. Several customers therefore indicated that the price of FCOJ could increase considerably while still remaining cost effective in comparison to NFC.[92]

(115) Finally, the relative quantities purchased by customers who purchase both FCOJ and NFC differ. The focus of most customers is mainly on FCOJ, while only some customers specialise in NFC. A shift from an FCOJ based-product to an NFC-based product involves the development of a different brand concept and the move from a cheaper, low-end product to a more expensive, high-end product with specific characteristics. In fact, several customers of the parties limit their offer to FCOJ based products.

(116) In sum, as largely confirmed by the customers that expressed their views during the market investigation[93], including some of the largest customers of the parties, a 5% to 10% increase in the price of either NFC or FCOJ would not result in any significant switching between these two products.

(117) In light of the foregoing, it is concluded that there exists very limited substitutability from a demand-side perspective between FCOJ and NFC.

IV.2.3.2.2. Supply-side substitutability

(118) The parties submit that the supply of FCOJ and NFC is similar with regard to their respective production process, transportation and storage. According to them, the production process of FCOJ/NFC would require only minor adjustments in the processing plant, such as the acquisition of an evaporator to produce FCOJ or of a pasteurizer to produce NFC[94]. Juice is transported on vessels, most of which are manufactured to transport both products (in particular to enable obtaining different temperatures – for FCOJ minus 10 degrees Celsius and for NFC 0 degrees Celsius). The parties also indicate that, in contrast to older tanks, which were designed to store FCOJ only, newer tanks are able to store both types of juice (though not at the same time).

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91 See replies to questions 18-21 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

92 For instance, a customer indicated that: *"End 2009 and beginning 2010 we have noticed an enormous gap between FCOJ and NFC prices. Despite this gap, we have hardly seen a switch from NFC to FCOJ. Currently, the price gap has become extremely small and we do not notice a significant switch either."* – Customer's answers to the Commission's request for information of 31 January 2011, question 13.

93 See replies to questions 18-21 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

94 Form CO, p. 105. The parties estimate that the cost of the evaporator, related equipment and civil construction would be around USD […]* million and a pasteurizer, related equipment and civil construction USD […]* million (considering […]* million boxes of oranges per year).

(119) In addition, the parties submit that all the large orange producers, namely Cutrale, Citrosuco and LDC, produce both types of orange juice. Citrovita is the only major producer that does not produce NFC. However, according to the parties, Citrovita could easily enter the production of NFC in the short term since it has the necessary know-how and industrial facilities to switch production. Regarding LDC, while it has focused on FCOJ for many years, it managed in 2009 to successfully enter the segment of NFC.[95] Also, many European producers would be active in the production of both types of orange juice.

(120) The parties also argue that the cost structure for FCOJ and NFC is similar. The price of oranges used for the production of FCOJ and NFC is the same, the processing costs are also similar. Further, the parties explained that the logistics costs (including transport by trucks in Brazil), terminal costs in Brazil and in the EEA and costs of transportation by vessels are comparable per tonne with regards to both types of products.[96]

(121) The results of the market investigation confirm only to some extent the parties' arguments.

(122) First of all, the market investigation indicates, in particular, that entering the NFC segment requires significant investments for a supplier of FCOJ.

(123) Since the supply of NFC involves the transportation of much larger volumes of juice (the volume for NFC is not concentrated and is therefore six times larger than the one of FCOJ), putting in place the logistics system required for the supply of NFC to reach a sizeable presence in the EEA requires important investments, notably for small/medium size producers.

(124) The parties themselves indicate that different equipment is needed in order to store FCOJ and NFC.[97] What is more, the reports submitted by the parties with respect to the possibility of extending Citrovita's activities into the production and supply of NFC contain forecasts of significant investments for Citrovita to enter the NFC market (a total of around USD […]* million, on the basis of […]* million boxes of oranges processed). This investment would cover the costs of plants, terminals and maritime transport. [98] The parties further explained that Citrovita did not investigate the investment into NFC further, among other reasons due to […]*[99], which suggest the large scale of investment to be made in order to enter the NFC segment.

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95 Form CO, p. 106 and competitor's answer to the Commission's request for information of 25 November 2010, question 21.

96 Form CO, pp. 98-103.

97 In particular, they point out that the price of storage tanks used in terminals differ depending on the type of product to be stored, the price of tank for NFC in a terminal being USD […]* per ton and the price of a tank for FCOJ being USD […]* per ton, see: Form CO, p. 104.

98 McKinsey reports prepared for Citrovita – annex 5.7 to the Form CO; for further arguments concerning the entry of Citrovita into NFC see section IV.2.5.4.

99 See reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011, p.8.

(125) In the market investigation, some small and middle – size producers located outside the EEA have indicated that they currently do not possess the necessary capital and size to invest in the required logistics in order to enter the NFC business.[100] They explain that the production and supply of NFC to the EEA would require large-scale investments in storage, machinery and bulk transport.[101] For instance, one respondent to the market investigation explained that *"the major Brazilian operators who supply NFC invested in total close to a billion dollars for in-plant tank storage, transportation to Santos, export terminals, large bulk size vessels and distribution terminals overseas"* and that it does not have the capital and size to make a change over to an NFC logistics system.[102]

(126) The scale of the required investments would explain why there are hardly any small and medium size operators from outside the EEA active in the wholesale supply of NFC into the EEA[103]. Small/middle-sized non-EEA based orange juice suppliers (Brazilian or other South American producers) have largely confirmed, in that regard, that even if they could switch between the production of FCOJ and NFC, they might face difficulties at the supply level in the EEA.

(127) Large orange producers, in turn, also explain that entering the production of NFC required significant investment in specific processing machinery/equipment, transport means and also the building of a storage facility both at the processing plant and in the port to reach a sizeable presence in the EEA.[104]

(128) As opposed to small and middle-sized orange juice producers, these additional investments do not however seem to constitute a major barrier to entry for large orange juice producers. It is particularly well illustrated by the fact that LDC entered the market for NFC in 2008 while before it was only active in FCOJ. Within the first year of commercialisation, LDC seems to have achieved a non-negligible presence in the market for NFC in the EEA[105].

(129) Regarding orange juice producers located in the EEA, their responses have not been entirely conclusive. In the market investigation, a few of them indicated that they could and did change part of their production plants from FCOJ to NFC, but

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[100] See replies to question 14 of the Commission's request for information of 26 November 2010 addressed to competitors.

[101] The bulk transportation, due to its lower costs, seems crucial regarding the investments into NFC since only this means of transport would enable economies of scale, see replies to question 21 of the Commission's request for information of 25 November 2010 addressed to competitors.

[102] See replies to question 14 of the Commission's request for information of 26 November 2010 pursuant to Article 11 of Council Regulation (EC) No 139/2004 addressed to competitors.

[103] Form CO Page 133, the combined market share of non EEA based suppliers other than the parties, Cutrale and LDC are below [0-5]*% in volume for 2009.

[104] See replies to question 14 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 25 November 2010 addressed to competitors.

[105] Form CO, pp 134-135: The market shares of LDC correspond to [0-5]*% in volume and [0-5]*% in value. In comparison, the combined market share of other non-EEA-based producers (with the exception of the parties, Cutrale and LDC) correspond to [0-5]*% in volume and [0-5]*% in value.

substitution is less likely to occur the other way around[106]. However, the position of EEA based players on this(ese) market(s) differs from the position of the players located outside EEA. The producers located in the EEA are mostly active in NFC (mainly due to the higher margins on NFC and their competitive advantage with regards to transport) and they are usually not, or only to a limited extent, active in FCOJ[107].

(130) Also, there seem to be some differences with respect to NFC and FCOJ regarding the cost structure of these products. On the basis of the information obtained in the course of the market investigation and the data provided by the parties, it seems that the respective margins that the companies active in FCOJ and NFC obtain are different depending on the product to be supplied.

(131) In light of the above, there seems to be only limited substitutability from a supply-side perspective between FCOJ and NFC.

IV.2.3.2.3. Conclusion

(132) The market investigation tends to confirm the existence of separate product markets for the production and wholesale supply of FCOJ and NFC, respectively. The precise segmentation of the production and wholesale supply of orange juice along these lines can however be ultimately left open in this case, in so far as it does not affect the results of the competitive assessment of the notified operation.

IV.2.3.3. Conclusion on product market definition

(133) For the purposes of this decision, the relevant product market is thus defined as the production and wholesale supply of orange juice or, alternatively, as comprising separate product markets for, on the one hand, the production and wholesale supply of FCOJ and, on the other hand, the production and wholesale supply of NFC.

IV.2.4. Relevant geographic market

(134) The parties maintain that the geographic market for the wholesale supply of fruit juice (or a separate market for orange juice) is EEA-wide in scope.[108] The parties quote, in this respect, previous Commission decisions where the geographic market for the supply of ingredients to the food industry has been considered to be EEA-wide in

[106] See replies to question 14 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 25 November 2010 addressed to competitors.

[107] Form CO, p. 133, the combined market share of EEA-based orange producers is estimated to be less than 5% in volume for 2009.

[108] See Form CO, paragraph 78. While in paragraph 481 the parties indicate that the geographic market for the wholesale supply of fruit juice is at least EEA-wide, the examination of the effects of the transaction on the market(s) for orange juice is conducted at the level of the EEA market throughout the Form CO. Also, in the response of 21 January 2011 to the decision opening proceedings, the parties explain that they share the Commission's view that the geographic market for the assessment of the proposed concentration is EEA wide.

scope.[109] The parties indicate also that the Commission has observed that the market for fruit at the import/production level has an EEA dimension.[110]

(135) The parties also note that their customers are large bottlers, which deliver the products throughout the EEA. In addition, the parties state that prices for orange juice are comparable throughout the EEA.

(136) The result of the market investigation confirmed the parties' view that the relevant geographic market is EEA-wide for both FCOJ and NFC, and thus more generally for orange juice.

(137) Most of the orange juice producers supply to the EEA via their own terminals in the EEA located in Rotterdam, Ghent and Antwerp. The smaller producers rent storage place in third parties' terminals in the EEA.[111] Also, many of the orange juice producers have their own sales office located in the EEA taking care of the wholesale supply within the EEA.[112]

(138) Bottlers and/or blenders located in different EEA Member States, thus, source orange juice (FCOJ and NFC) from roughly the same location, namely the port terminals mentioned in recital (137),[113] from where they transport the products to their production facilities (usually) via tanker trucks.

(139) Moreover, most of the market participants confirmed that prices for orange juice do not differ within the EEA but are rather homogenous throughout the EEA for FCOJ and NFC. Customers and some competitors indicate, in contrast, the existence of price differences between the EEA and the rest of the world. Transportation costs and tariffs differ as well.[114]

(140) Based on recitals (136) - (139), it is concluded that the relevant geographic market for the assessment of the present case, either for the production and wholesale supply of orange juice or, alternatively, of FCOJ and of NFC, is EEA wide.

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[109] See Commission Decision of 15 January 2007 in Case No COMP/M.4323 - *Arla/Ingman Foods* – OJ C24, 2.2.2007.

[110] See Commission Decision of 8 February 2008 in Case No COMP/M.4896 - *CVC Capital Partners/Katope International* – OJ C87, 8.4.2008 and Commission Decision of 30 May 2006 in Case No COMP/M.4216 - *CVC/Bocchi/De Weide Blik* – OJ C151, 29.6.2006.

[111] See replies to question 16 and question 22 of the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 and 1 February 2011 addressed to small/middle sized competitors.

[112] See replies to question 15 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to small/middle sized competitors.

[113] See replies to question 29 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

[114] See replies to questions 32 and 33 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

IV.2.5. Competitive assessment

(141) The combination of Citrovita's and Citrosuco's activities will result in the creation of the world's leading orange juice producer and largest supplier of orange juice to the EEA market. On the overall market for the production and wholesale supply of orange juice (encompassing thus both FCOJ and NFC) in the EEA and, alternatively, in a market for the production and wholesale supply of FCOJ in the EEA, the concentration will reduce the number of main competitors from four to three. On a potential market for the production and wholesale supply of NFC in the EEA there is no overlap between the parties as Citrovita is not active in NFC.

(142) The decision opening proceedings raised serious doubts with regard to the overall orange juice market and, alternatively, on a market for FCOJ, notably on the basis of potential non-coordinated effects. This theory of harm was based on the JV being able to increase prices and decrease output post transaction, without being counterbalanced by the remaining competitors notably due to capacity constraints, mainly at the level of access to oranges. In addition, the decision did not exclude the possibility of coordinated effects post transaction in the said markets, as well as of anti-competitive effects derived from the elimination of a potential competitor (Citrovita) in the segment of NFC.

(143) The in-depth investigation focused on exploring in detail the various strategies that the JV could implement that would lead to higher prices (in particular through output reduction). In any given crop season, the overall amount of oranges available for processing is largely fixed for each processor (through long-term contracts and own fruits). Bilateral negotiations between customers and suppliers determine the price of orange juice in contracts that usually last one year. These prices are based – among others – on the balance between supply and demand.

(144) Considering possible strategies to reduce output, the in-depth investigation focused on the existence of barriers to expansion at the different levels of the supply chain, in particular with regard to access to oranges and processing capacity. In that respect, more refined, exhaustive and detailed data requests were sent to the parties and their main competitors complementing what had been requested in first phase. Specific attention was given to the varieties of oranges available for processing, the distance between the various plants and orange groves and the existence of idle capacity at the various stages of production (in particular in processing).

(145) This quantitative approach was complemented by comprehensive requests for information addressed to the parties' customers as well as to their main and smaller competitors in the orange juice markets. The investigation was widened through extensive telephone interviews with Brazilian orange growers and further requests for internal documents addressed to the parties.

(146) Since the relevant products are largely homogeneous, anti-competitive effects are more likely the higher the post-merger market share (any incentive to reduce output and increase prices is greater if the benefits of a price increase are on a wider output base); the more capacity-constrained competitors are (as they would then not be able to respond by significantly expanding output); and the higher switching costs are for customers (even if competitors are able to increase output, customers would not be able to easily and with little cost shift their purchases away from the JV – any significant switch would make any strategy to increase prices less profitable).

(147) As described in more detail in Section IV.2.5.2, the investigation did not confirm the existence of non-coordinated effects as identified in the decision opening proceedings, notably due to the possibility that competitors will have to expand their own production and sales to the EEA in case of any strategy to reduce output/sales by the JV in the EEA. The absence of switching costs on the part of customers was another crucial factor in the assessment.

(148) Further, as for the possibility of coordinated effects resulting from the notified operation, the investigation did not provide elements supporting a possible coordination between the three main remaining players, as explained in more detail in Section IV.2.5.3. Finally, Section IV.2.5.4 presents the results in relation to the possible elimination of a potential entrant. It is concluded that no anti-competitive effects are likely to derive from the disappearance of Citrovita as an independent potential competitor on the NFC market.

IV.2.5.1. Market structure post transaction

(149) According to the parties, the market for the production and wholesale supply of orange juice in the EEA in 2009 had a total volume of 1.12 million tons, FCOJ representing 931 000 tons and NFC 191 300 tons.[115] Orange juice consumption by end customers in the EEA has been relatively constant during the last years (2002: 13 821 million litres, 2008: 13 379 million litres).[116]

(150) For 2009, the parties estimate that their combined volume based market shares would be post transaction [40-50]*% in an overall market for the production and wholesale supply of orange juice in the EEA (Citrosuco [20-30]*%, Citrovita [10-20]*%) – see

[115] Form CO, pp. 133-134, Table 44.

[116] Form CO, p. 83, Table 21.

Table 1. The figure would be similar in a hypothetical FCOJ market ([40-50]*%). For NFC there is no overlap as only Citrosuco is active with a market share of [40-50]*%. In all potential markets Cutrale (with around [20-30]*% market share) would be the second largest supplier, followed by LDC ([10-20]*% in orange juice, [10-20]*% in FCOJ, [0-5]*% in NFC – which LDC only entered in 2009) and smaller suppliers.[117]

[117] The 'others' category is made up of a large number of small competitors located inter alia in Brazil, Latin America, the Untied States and the EEA. According to information contained in the Form CO, these smaller competitors had a share in 2009 of less than [0-5]*% each on the market for orange juice with the exception of Marata ([0-5]*%).

Table 1: Parties' estimates of market shares in volume for the supply of orange juice, FCOJ and NFC to the EEA in 2009 – Source: Form CO.

In%	*Orange Juice*	*FCOJ*	*NFC*
Citrovita	[10-20]*	[10-20]*	--
Citrosuco	[20-30]*	[20-30]*	[40-50]*
Combined	[40-50]*	[40-50]*	[40-50]*
Cutrale	[20-30]*	[20-30]*	[20-30]*
LDC	[10-20]*	[10-20]*	[0-5]*
Others	[20-30]*	[20-30]*	[30-40]*
Size of total market (in tons)	1 122 307	931 036	191 271

(151) The decision opening proceedings indicated, on the basis of the market share reconstruction undertaken in the first phase investigation, that the merged entity would become the market leader with a combined market share which could amount (in volume) to [40-45]% in the overall orange juice market and [45-50]% in the FCOJ segment. These reconstructed market shares were thus relatively higher than the roughly [40-50]*% estimation provided by the parties, notably because there were indications that the market share of Cutrale had been overestimated in the Form CO, which had consequently led to relatively lower market shares for the parties.

(152) The subsequent market reconstruction undertaken during the in-depth investigation did not support this preliminary conclusion. Cutrale's market share was in fact not overestimated to any significant degree. However, it was not possible to fully confirm the parties' estimates for smaller competitors, therefore market shares have ultimately been calculated based on the market size estimated in the Report by the United States Department of Agriculture's (USDA) Global Agriculture Information Network (GAIN), which estimates the total size of the orange juice market in the EEA at 1.015 million tons in 2009 (9.5% smaller than the parties' estimates). Based on this more conservative approach, the market shares in volume are as shown in Table 2.

Table 2: Market shares in volume for the supply of orange juice, FCOJ, NFC to the EEA in 2009 – Source: Form CO and market investigation.

In%	*Orange Juice*	*FCOJ*	*NFC*
Citrovita	[10-20]*	[20-30]*	--
Citrosuco	[20-30]*	[20-30]*	[40-50]*
Combined	[40-50]*	[40-50]*	[40-50]*
Cutrale	[20-30]*	[20-30]*	[20-30]*
LDC	[10-20]*	[10-20]*	[0-5]*
Others	[10-20]*	[10-20]*	[30-40]*
Size of total market (in tons)	1 015 806	824 535	191 271

(153) The estimated market shares show a post-merger share for the JV of [40-50]*% in volume while competitors would control the remaining [50-60]*% of the market for sales of FCOJ to EEA customers. The parties' market shares in value are similar (slightly under [40-50]*% in 2009, according to their own estimates). The market shares of the parties are also similar in a potential market consisting of all orange juice (both FCOJ and NFC: around [40-50]*% in volume and [30-40]*% in value in 2009, according to their own estimates; using USDA figures, the parties' combined market share in volume would amount to [40-50]*%).

(154) A larger market share increment creates greater incentives to reduce output given that a larger part of the price externality (that is, competitors also benefit from price rises) is internalized. The increment of [20-30]*% signals that the JV will lead to a large increment in market share (the JV will be the leading supplier to the EEA with about [40-50]*%) but the benefits of an eventual price increase would still largely accrue to competitors. The JV will continue to face two significant competitors (Cutrale with [20-30]*-[30-40]*% and LDC with [10-20]*-[10-20]*%) as well as a fringe of small competitors.[118]

IV.2.5.2. Non-coordinated effects

(155) According to the Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (hereinafter referred to as "the Horizontal Merger Guidelines")[119] mergers in oligopolistic markets involving the elimination of important competitive constraints that the merging parties previously exerted upon each other together with a reduction of competitive pressure on the remaining competitors may, even where there is little likelihood of coordination between the members of the oligopoly, also result in a significant impediment of competition.[120]

(156) Indeed, several customers indicated during the investigation that the proposed transaction would remove one competitor and reduce the available options for their procurement of orange juice, or alternatively FCOJ, from four to three. As a consequence, sourcing would become more difficult and, due to the reduction in competition, prices would go up for the products concerned.[121] Other competitors, in particular Cutrale and LDC, would not be able to step in because they lack the ability

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[118] Considering the on average higher margins and growth for NFC, most of the EEA based suppliers are indeed mainly active in NFC as opposed to FCOJ where they indicate that they are less competitive vis-à-vis large Brazilian suppliers such as the parties. As NFC is not concentrated (NFC is six times larger in volume than FCOJ), the transportation costs are more significant. This seems to constitute an important obstacle for most of the small processors from outside the EEA that explain their relatively small presence in the EEA in the segment of NFC – see replies to question 14 of the Commission's request for information of 26 November 2010 addressed to competitors (small/middle sized exporters of orange juice).

[119] OJ C 31, 5.2.2004, p.5.

[120] See Horizontal Merger Guidelines, paragraph 25.

[121] See replies to questions 42 and 45 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011addressed to orange juice customers.

as well as the incentive to counteract any price increases. The ability, according to these customers, would be limited because of insufficient access to oranges; moreover, competitors would rather follow a price increase instead of supplying additional volumes.[122]

(157) However, a number of factors may influence whether significant non-coordinated effects are likely to result from a merger. These factors include, among others, the substitutability of products between the merging parties, but also between them and their competitors, the ability of customers to switch suppliers as well as whether competitors are likely to increase supply if prices increase.[123]

(158) Therefore, sub-sections IV.2.5.2.1. – IV.2.5.2.3.3. examine in detail (i) the extent to which orange juice (and in particular FCOJ) is homogeneous across the main competitors; (ii) the possibility for customers to switch between suppliers in order to verify whether indeed the two remaining competitors are credible alternative suppliers to the parties and (iii) the existence of spare capacity of the parties' competitors, as well as potential bottlenecks at each level of the production and supply chain.

IV.2.5.2.1. Degree of substitutability of products of the merging parties and their competitors

(159) Following the Horizontal Merger Guidelines "*the merging firms' incentive to raise prices is more likely to be constrained when rival firms produce close substitutes to the products of the merging firms than when they offer less close substitutes. It is therefore less likely that a merger will significantly impede effective competition […] when there is a high degree of substitutability between the products of the merging firms and those supplied by rival producers*."[124]

(160) In the present case, the parties argue that although specifications for orange juice may differ depending on the customer, all juice producers can meet such specifications with their standard technological equipment and raw material supply.[125] Consequently, the parties are constrained by their rivals.

(161) Although customers indicated that there are indeed differences in terms of quality and taste between the oranges produced in Brazil and other countries such as Mexico, Cuba or Spain, these differences are rather limited across oranges produced in Brazil since most of them are grown in the citrus-belt in São Paulo State.[126] In 2009, 75% of all oranges grown in Brazil came from the citrus-belt and 91% of the oranges

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122 See replies to question 44 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

123 See Horizontal Merger Guidelines, paragraphs 26-38.

124 See Horizontal Merger Guidelines, paragraph 28.

125 See Form CO, paragraph 256.

126 See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011, Annex 1.d.2 OJ, from *O Retrato da Citricultura Brasileira*, October 2010, Marcos Fava Neves, pp. 38 and 39.

processed into juice originated from there.[127] Even if oranges from outside this citrus-belt have a more bitter taste, as indicated by a competitor to the parties, these fruits can be and are still used for the production of orange blends or are mixed with orange juice coming from the São Paulo region without affecting the taste of the final product.[128]

(162) As the four main orange juice processors, according to information provided by the parties and confirmed in the investigation, have their processing plants within the São Paulo citrus-belt (with the exception of Citrosuco's Videira plant which is located in the State of Santa Catarina) and procure almost all their oranges within the region, their orange juice has consequently similar characteristics. The investigation has shown that, for most customers in the EEA, all of the four main players, Citrovita, Citrosuco, Cutrale and LDC, are equally able to provide FCOJ in the requested volumes and quality.[129] Customers tend to systematically request quotes from all of these main competitors and, moreover, switching between suppliers of orange juice takes place on a regular basis.[130]

(163) Consequently, the parties cannot be considered as being the closest competitors, since orange juice, especially that coming from Brazil, is widely perceived as a homogeneous good. To the contrary, Cutrale as well as LDC are equally close competitors[131] of the parties and the high degree of substitutability between the parties, Cutrale and LDC makes it therefore less likely that the proposed transaction will result in a significant impediment to effective competition.

IV.2.5.2.2. Switching between suppliers and LDC and Cutrale as alternatives to the parties post transaction

(164) Non-coordinated effects are more likely to occur if customers of the merging parties may have difficulties switching to other suppliers because there are few alternative suppliers or because they face substantial switching costs.[132] According to the parties' submissions,[133] these difficulties are not to be expected post transaction because customers could easily switch between the parties, LDC and Cutrale. Switching costs

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[127] Own calculations based on Form CO and the parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011, Annex 11.

[128] See replies to question 29 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers and replies to question 16 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

[129] See replies to question 55 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

[130] See replies to question 58 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers and the more detailed analysis in Section IV.2.5.2.2.

[131] Taking into account the ability to supply FCOJ as well as NFC, Cutrale and LDC could be considered to be even closer competitors to Citrosuco as Citrovita supplies only FCOJ.

[132] See Horizontal Merger Guidelines, paragraph 31.

[133] See Form CO, paragraph 735, and parties' reply to the decision opening proceedings, paragraph 60.

are low as all suppliers have their terminals located in the same area in the EEA (Ghent, Antwerp and Rotterdam) and orange juice is a commodity.

(165) Moreover, the parties refer to customer behaviour clearly showing multi-sourcing from several suppliers, among them, but not exclusively, Citrovita and Citrosuco. The parties therefore conclude that competition on the orange juice market does not mainly take place between them, but rather between all the orange juice producers alike.

(166) The investigation broadly confirmed that the parties, Cutrale and LDC typically compete against each other as customers usually approach all of them simultaneously to get quotes.[134] Moreover, a wide majority of customers perceive the four main Brazilian suppliers as equally able to meet the required quality in large (bulk) quantities.[135] Customers explained that, in general, they do not depend on specific suppliers as long as producers can supply the required quality in sufficient quantities. Finally, almost all respondents are of the view that switching does not entail significant costs for customers.[136]

(167) However, since the transaction will bring about a decrease in the number of players in the market, the majority of customers responding in the investigation expressed concerns about a possible price increase in the FCOJ segment post transaction. These customers are concerned about a possible shifting of bargaining power from them to the JV and less competition on the market.

(168) These claims have however not been substantiated. In particular, customers did not convincingly explain why the existence of three suppliers with sufficient quantity and quality would not allow them to ensure similar prices as before, given the frequency and ease with which customers are able to switch supplier and in particular since a significant number of these respondents expect no change in the quantities supplied to the market.[137]

(169) Rather to the contrary, customers confirmed that they not only multi-source to ensure security of supply, but also tend to switch between suppliers of orange juice (and particularly FCOJ) on a regular basis. This has also been confirmed by an analysis undertaken by the Commission based on customer-level sales data from the parties and their competitors, including all the sales of FCOJ and NFC by the four main suppliers for the last four years.

(170) The sales datasets provided by the parties and their main competitors provided the annual volumes and sales value of purchases of FCOJ and NFC, customer by customer. The analysis confirmed (i) the extent of multi-sourcing; and (ii) the high degree of switching. Switching mostly takes the form of customers shifting high volumes amongst the four main suppliers whilst ensuring multi-sourcing (but some

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[134] See replies to question 40 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

[135] See replies to question 55 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

[136] See replies to question 59 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

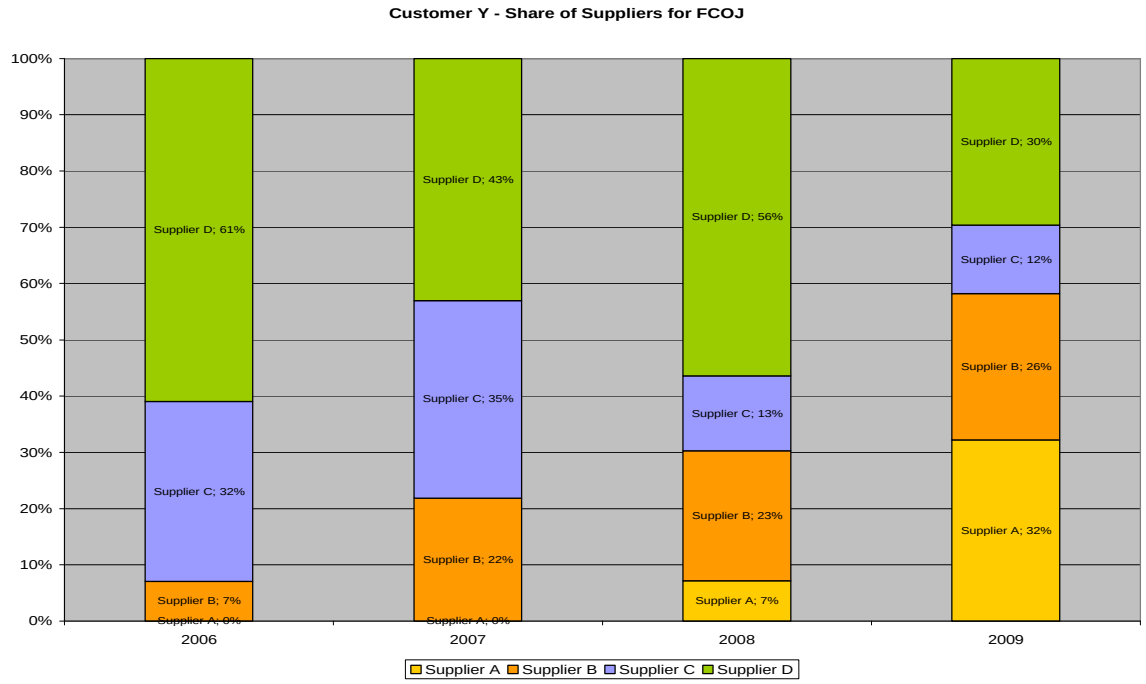
[137] See replies to question 41 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

customers are also entirely switching their purchases from one supplier to another from one year to the next). Figure 2 and Figure 3 show examples of the data analysis undertaken for two large customers in the market.

(171) Customer X tends to use at least three suppliers but it has reallocated overtime its purchases from Supplier A (who was the main supplier in 2006) to Supplier C (who has been the main supplier in 2007-2009). As of 2008, customer X bought only minimal volumes from supplier A. Customer X also started purchasing FCOJ from supplier D in 2008. Customer Y also uses at least three suppliers and considerably changed its procurement sources between 2006 (when Supplier D was its main supplier and it did not purchase anything from Supplier A) and 2009 (when Supplier A became the main supplier, supplying almost a third of the customer's FCOJ). For all the largest customers, similar yearly changes can be observed.

Figure 2: Example of switching of suppliers - share of FCOJ suppliers to Customer X in the EEA in 2006-2009 – Source: market investigation.

Figure 3: Example of switching of suppliers - share of FCOJ suppliers to Customer Y in the EEA in 2006-2009 – Source: market investigation.



(172) A systematic analysis of the FCOJ data revealed that customers having switched significant volumes of FCOJ to Citrosuco/Citrovita represented more than 40% of Citrosuco's/Citrovita's FCOJ sales, while at the same time customers having switched significant volumes away from Citrosuco/Citrovita also represented an important proportion of these companies' sales. The same analysis was carried out for Cutrale and LDC and also found evidence of customers switching very significant volumes to and from these companies.

(173) Such evidence is consistent with suppliers competing closely with each other, with the existence of low switching costs and with the view that all four suppliers are generally seen as highly interchangeable. Therefore, should the parties unilaterally increase their prices following the merger, their customers would face no difficulty in switching significant sales to the parties' competitors, in the absence of significant barriers to expansion for the latter (see Section IV.2.5.2.3).

IV.2.5.2.3. The existence of spare capacity of competitors to the parties, as well as potential bottlenecks at the different levels of the supply chain

(174) While the homogeneity of the product and the ability of customers to switch suppliers are important elements limiting the risk that the proposed transaction will significantly impede effective competition, it is also necessary to demonstrate that competitors could respond to any strategy leading to output restrictions and price rises. Thus, the investigation had a particular focus on the ability of competitors, in particular LDC and Cutrale, to expand their production of orange juice.

(175) In that respect, plant level capacity and production data at each level of the production and supply chain of orange juice (and FCOJ in particular) were gathered and analysed starting with the processing capacity as well as storage and transport/logistic facilities available to the parties' competitors. Detailed data on the procurement of oranges was requested from the parties and their main competitors.

IV.2.5.2.3.1. Capacity constraints at the procurement level

(176) In the decision opening proceedings, it was preliminarily concluded that access to oranges may be constrained by several factors and that therefore the parties' competitors may not be in a position to expand their production in reaction to a price increase post-merger. The constraining factors identified were: the land available for planting orange trees, the growing conditions, the demand for oranges from the fresh fruit market, the proximity of oranges to the processing plant as well as the specifications and quality standards of oranges demanded by the bottlers.

(177) In their response to the decision opening proceedings, the parties argue that their competitors could in the short as well as in the long-term increase their procurement of oranges. In the short-term, orange juice processors could buy additional volumes of oranges on the spot market, which according to the parties' estimates represents roughly 50 million boxes in 2009, i.e. approximately 18% of the overall orange supply in the São Paulo citrus-belt.[138] Moreover, the supply of oranges could be expanded on the back of existing contracts with farmers because not all farmers commit to sell their entire production, but instead contract to deliver a given quantity. Excess quantity could therefore be obtained through short-term contracts. Finally, each year a number of long-term contracts becomes due and is available for all orange juice processors. According to the Form CO the parties estimate that on average roughly 15%-25% of their contracted volumes will be up for renewal in the following years.[139]

(178) Moreover, the parties argue that in the short-term the number of oranges is fixed because of existing procurement contracts and own trees. Limiting supply would thus mean either wasting production (in the case of own trees), storing orange juice for later supply or procuring less contracted volumes from farmers. Not using own oranges or storing oranges would entail opportunity costs, while under procurement from existing contracts would result in penalties and increased availability of oranges for competitors.

(179) In the long run, the parties argue, competitors could increase their number of orange trees as in particular Cutrale and LDC both hold significant land and own orange production capabilities. According to the parties' own estimates, LDC has been able to double its own orange production during the past five seasons.[140] In addition, competitors could try to increase their procurement under contract since each year existing contracts come due and farmers look for the most valuable offer.

(180) The in-depth investigation was not able to confirm the constraining factors preliminarily identified in the decision opening proceedings. To the contrary, on balance the investigation confirmed that access to oranges for processing cannot be considered as a significant capacity constraint.

(181) In particular, two of the possible constraints that had been identified were systematically reviewed using the data provided from the four main competitors: (i) whether there was a constraint relative to the varieties of oranges available for

[138] See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011, Annex Q3 OJ.

[139] See Form CO, paragraphs 126 and 135.

[140] See Form CO, Table 4.

processing; and (ii) whether there was a maximum economical distance from which to source oranges that may hamper the competitors' ability in having access to additional oranges. The availability of land for the growing of oranges, which was also identified in the decision opening proceedings as a possible constraint, has also been examined.

(182) It was not confirmed that access to oranges for the processing industry is limited because only particular varieties of oranges are suitable for processing (as opposed to those suitable for the fresh market). Although it emerges from the investigation that there are some varieties which focus on the fresh market, differences in geographic availability of orange varieties do not appear to be a constraint on the procurement level. The information provided by competitors and growers confirmed that the processing industry also uses orange varieties that are suitable for the fresh market.[141]

(183) In the decision opening proceedings, it was argued that oranges are procured within a radius of around 100 km around the processing plant, thereby limiting the access to oranges by forcing processors to source only from groves that are located within 100 km of their processing plants. This would potentially limit the accessibility – at an economical and profitable cost – even to oranges that the JV may not purchase should it decide to reduce output by not procuring all its contracted oranges. The detailed analysis of the procurement data of the parties in Brazil rather showed that the majority of oranges procured comes from within a 200 km radius around their processing plants – see Figure 4, as an example, based on Citrosuco's plants, which shows that, in 2010, […]*% of the processed oranges came from a distance of 100-200 km and […]*% from above 200 km. Data coming from other competitors based in Brazil confirmed these sourcing patterns since – as was explained by LDC – "*all processing plants in the sector are very close to each other and in the very heart of the citrus belt*". In addition, growers claim that in past cases of shortage in the citrus-belt of São Paulo processors have procured oranges for example in the Northeast of Brazil (800-1000 km far from the citrus-belt).[142]

Figure 4: Procurement of oranges – distance from grower to plant – crop season 2006 – 2010. Source: Own calculations based on procurement data delivered by the parties.

[…]*

(184) All the processing plants (except Citrosuco's Videira plant) are located in the citrus-belt and tend to be clustered in similar areas, in relative vicinity of each other: all four main competitors have plants close to the town of Araras, all four main competitors (and a small competitor, Bascitrus) have plants located around the town of Araraquara and both LDC and Citrosuco have plants in Bededouro.

(185) All main processors are vertically integrated and have made investments during recent years in their 'own production' of oranges. The parties estimate that LDC and Cutrale have been able to increase the amount of own oranges significantly over the last five years – see Table 3. While LDC doubled its own production, Cutrale further increased its own volume by roughly 20%.

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[141] See LDC's reply to question 11 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011, Cutrale's reply to question 18 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 2 February 2011, and agreed non-confidential minutes of telephone conferences with growers.

[142] See agreed non-confidential minutes of telephone conferences with growers.

Table 3: Total of fruit grown internally – Source: Form CO.

Own fruit (M boxes)					
	05/06	**06/07**	**07/08**	**08/09**	**09/10**
Citrosuco	[10-20]*	[10-20]*	[10-20]*	[10-20]*	[10-20]*
Citrovita	[5-10]*	[5-10]*	[10-20]*	[10-20]*	[5-10]*
Cutrale	[30-40]*	[30-40]*	[30-40]*	[40-50]*	[40-50]*
LDC	[0-5]*	[0-5]*	[5-10]*	[5-10]*	[5-10]*

(186) The investigation did not provide any evidence contradicting these estimates, rather to the contrary, Cutrale for example indicated that it invested in additional trees up to 2010 and expects these investments in new trees to both replace existing capacity (as trees over a certain age become less productive and need to be replaced) and increase its own grove capacity.[143]

(187) These investments are explained by the expectation that the overall plantations in Brazil will remain constant or may even decline (due to diseases and farmers switching to sugar cane, which is considered to provide a more stable income) though the volume of oranges produced is expected to increase due to an increase in the planting density of trees per hectare and improvements in agricultural husbandry.[144] Although the degree of vertical integration will increase in the coming years for the processors, it was indicated in the investigation that the volume procured under contract should overall remain constant, implying an increase of the amount of oranges available in the next two years. Citrosuco, for example, intends to increase the number of oranges (including own and contracted oranges) by almost […]*% by 2013.

(188) Moreover, a detailed analysis of the contract portfolio of the four main processors with their farmers indicated that the average contract duration appears to be declining (due to price developments and unfavourable exchange rates)[145] and confirms that each year a significant number of contracts and respective volumes of oranges become available on the procurement market. For example, for Citrosuco, in 2012 and 2013, contracts covering about [0-5]* and [5-10]* million of boxes of oranges, respectively, will expire.[146] For Citrovita, in 2011 and 2012, contracts covering about [0-5]* and [10-20]* million of boxes of oranges, respectively, will expire and therefore these volumes will become contestable.[147]

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143 See Cutrale's reply to question 5 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 February 2011.

144 See AgraFNP Report - *The Brazilian Citrus Industry*, 2007, pp. 58-59. In terms of planting density, the report notes that the number of orange trees has increased from 250 trees per hectare in the 1980s to 475 trees per hectare at the time of the report's publication.

145 See Cutrale's reply to question 3 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 2 February 2011. This is confirmed by some growers - see agreed non-confidential minutes of telephone conferences with growers.

146 Based on 2010 volumes of oranges procured.

147 Ibid.

(189) Also, although farmers generally enter into short-term and long-term contracts with only one processor, the investigation indicated that they sometimes also reserve a fixed percentage of their crops for the spot and fresh markets, thereby being able to supply other orange processors.[148] The market investigation indicated that in 2009 the fresh market represented approximately 14% of the overall production of oranges in the São Paulo citrus-belt[149], whereas the spot market was approximately 16% of the overall production of oranges in the São Paulo citrus-belt.[150]

(190) In addition, if the parties decided not to renew their contracts with the orange growers (with the aim of reducing their production of orange juice) or purchase less on the spot market, these oranges would become available to their competitors. Indeed, this was confirmed, for example, by Cutrale, which considers that "*the supply of oranges available to Cutrale at an economical price would likely increase if the merging parties were to reduce their purchases of oranges through the spot market or through long term contracts. Indeed, in such a situation, the reduced demand on the part of the merging parties should normally make growers keen to find a replacement to pick up the slack, resulting in competitively priced oranges.*"[151]

(191) As far as the availability of land for the growing of oranges is concerned, while it seems to be correct that the area available is limited, faces competition from other crops, in particular sugar cane, and diseases have been a regular phenomenon in orange groves,[152] countervailing factors like improved disease control as well as improved productivity per tree and the number of trees per hectare of land have to be taken into account. The AgraFNP Report on the Brazilian Citrus Industry notes that although the area dedicated to orange production in Brazil decreased from some 960 000 hectares in 1996 to a little over 800 000 hectares in 2006, total production in terms of numbers of boxes increased by nearly 5% to nearly 443 million. In a similar fashion, although some sources expect that the land available will decrease over the coming years to 700 000 hectares, the AgraFNP Report forecasts an increase in the

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148 See agreed non-confidential minutes of telephone conferences with Centro de Estudos Avançados em Economia Aplicada (CEPEA) from the São Paulo University of 22 February 2011 and with growers.

149 While the price of oranges sold on the fresh market is higher than the price of oranges sold for processing, the parties argue that these two markets absorb or release each other to a certain extent (see the parties' reply to the follow up questions of 17 February 2011). In particular, the parties submit that they can and do process the varieties which are usually considered as “fresh fruit” varieties. The parties also provide examples of how the fresh fruit market absorbs/releases oranges depending on the crop size and price (during the crop 1999/2000 - the largest crop in the series - the fresh fruit market absorbed 127 million boxes of oranges whereas only one year before - 1998/1999 - the parties submit that the fresh fruit market was only 68 million boxes).

150 See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 2 February 2011, Annex 12, from *O Retrato da Citricultura Brasileira*, October 2010, Marcos Fava Neves, pp. 48 and 49. According to CEPEA, these figures may vary depending on the orange production. When the orange production volumes are high and the demand is low, the orange juice industry procures fewer oranges through short-term contracts and there are more oranges available in the spot market. On the other hand, when there are fewer oranges available, the industry seeks to negotiate more short-term contracts to the detriment of the spot market. See agreed non-confidential minutes of telephone conference with CEPEA of 22 February 2011.

151 See reply to question 3 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011.

152 See Cutrale's reply to question 33 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 2 February 2011.

production of oranges of 1.5-2% per year because of "*improved technology levels, better disease control and denser planting*".[153] Thus, land and other factors should not be considered as a constraining factor.

(192) On the basis of these elements taken together, it is therefore concluded that there are hardly any capacity constraints at the level of fruit procurement either in the short or in the long-term.

IV.2.5.2.3.2. Capacity constraints at the processing level

(193) In the decision opening proceedings, it was preliminarily concluded that there is idle processing capacity. Since this analysis was done on the basis of yearly capacity, it did not take into account the fact that orange processing is subject to significant seasonal variations and the annual capacity data analyzed during the first phase investigation was not necessarily likely to capture appropriately the potential existence of capacity constraints during the harvesting season. Therefore, the in-depth investigation compiled capacity utilisation data on a monthly basis and for each individual plant, which allowed a more refined and detailed analysis of potential capacity constraints, since these data take into account the variation of capacity utilisation over the entire season and do not average fluctuations over the year.

(194) The analysis carried out led to the conclusion that spare capacity for orange juice exists at the processing level for the parties' competitors. For one competitor, even during the peak month of the season, about [10-20%] of total processing was not utilised in the last two years and the capacity utilisation is even lower just before or just after the peak month.[154] Some competitors indicated that during the peak of the crop season they utilised their capacity fully in most (but not all) plants, others, however, exhibit spare capacity even during the peak of the crop season.[155]

(195) In total, respondents indicated that they could theoretically process up to [10-20] million boxes of additional oranges (in particular by increasing the length of the

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153 See AgraFNP Report - *The Brazilian Citrus Industry*, 2007, p. 58. Similarly, Rabobank explains that "gains in yields have mitigated the decrease in area dedicated to orange" – see Rabobank's *Brazilian orange juice, opportunities and challenges in the global market*, 2007, p. 30.

154 According to the parties, there may be several reasons why there is spare capacity in the industry, some of which may be linked to external factors (weather, diseases) and others linked to the state of demand which does not justify full production: "*First, orange juice producers need to have extra-capacity to process and store the extra-production when crops of oranges are larger. Second, equipment providers [...] lease equipment to the orange juice industry and often provide additional machines at no extra costs. [...]. Third, entrants on the market in the 80's and 90's have added processing capacity. Because the world demand of orange juice did not increase, operators now have idle capacity*." Form CO, paragraphs 718-720.

155 For example, another competitor has a plant whose capacity utilization during the peak months (August and September) is 70% - see agreed non-confidential minutes of telephone conference. This is confirmed by Pamiro Comércio e Participações LTDA, another competitor, which stated "*During the last 5 years the industry operated with reduced capacity of approximately 65-70% on an average basis*" – see reply to question 21 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to competitors (small/middle sized exporters of orange juice).

production season in order to process the late season fruit).[156] Others have been more reserved on the issue of the increase of processing capacity. However, they replied that by bridging potential shortages of oranges with stored orange juice as well as processing additional boxes using their spare capacity, a reaction in case of an increase in the price of orange juice would be possible.

(196) Finally, respondents to the investigation, in particular the main competitors Cutrale and LDC stressed the importance of economies of scale in the processing of oranges. According to them, orange juice producers have an incentive to use as much capacity as possible in their plants since "*the higher […] capacity usage rates during the season, the lower the per unit processing cost will be.*"[157]

(197) Indeed, if the JV were to reduce output following the transaction, the optimal reaction of competitors would be to increase their sales. When a competitor sets its output level pre-merger, profit optimization implies that the gained margins on additional quantities equal the profit lost due to the depressing effect that the output expansion would have on the prices of existing sales. If the JV decreased its production to push up prices, the competitors' additional margins on the additional quantities would increase, giving them an incentive to expand production in response. Due to the absence of capacity constraints in this market, however, competitors would be able to serve the freed demand without substantially increasing marginal cost, which means that the impact on price of such an output reduction would necessarily be limited (and hence not profitable for the combined entity).[158]

(198) As a result, competitors not only have the ability, but also the incentive to use existing spare capacity to counteract a potential price increase by the parties.[159]

IV.2.5.2.3.3. Capacity constraints in transport/logistics

(199) In the Form CO,[160] the parties explain that after the processing phase, orange juice can be transported in two modes: bulk shipments done with iso-tanks or 200-litre drum

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156 Assuming a yield of 250 boxes for one ton of FCOJ, processing an additional [10-20] million boxes of oranges would equate to [40 000-80 000] tons of FCOJ or [4-9%] of the EEA volumes consumed in 2009.

157 See Cutrale's reply to question 11 of the Commission's request for information of 2 February 2011. Similarly LDC "*Fixed costs in orange juice processing sector is very relevant and any addition fruit volumes that cover variable costs would improve company's results*." – see reply to question 3 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011.

158 This was also explained by Cutrale: "*If, hypothetically, the parties were to reduce the volume of oranges they procure, Cutrale expects that other processors would likely purchase these surplus volumes and produce additional juice, assuming the market demand for juice remains steady and all other supply side factors remain equal*." – see Cutrale's reply to question 11 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 February 2011.

159 Moreover, should quantities sold to the EEA be reduced by the parties (and prices rise), competitors could re-direct part of their production aimed at other parts of the world to the EEA. Indeed, the capacity analysis undertaken above concerns the entire Brazilian production, which is mostly, but not exclusively, sold to the EEA. For example, between 2005 and 2009, Citrosuco sold between [60-70]*% and [70-80]*% of its Brazilian production to the EEA (the rest was sold in the US, Asia or other parts of the world). The corresponding figures for Citrovita are [60-70]*% to [60-70]*%.

160 See Form CO, paragraphs 158-159.

shipments done with either refrigerated or general cargo trucks. As bulk shipment is the most cost effective way to transport juice overseas and since most of the customers require juice in bulk, more than 90% of the Brazilian juice is exported in bulk.

(200) According to the parties, expansion of transport capacities should not be problematic because at least two independent providers, Gearbulk and Atlanship, offer their transport services to orange juice processors. Moreover, companies like Saga Forest Carriers, Westfal-Larsen Shipping or the Clipper Group operate ships able to transport tanks. Orange juice processors only have to provide, according to the parties, the necessary tank equipment. The investment for a tank with a capacity of 3 000 tons is approximately USD 3.6 million.

(201) During the initial investigation as well as the in-depth investigation, almost all competitors confirmed that there are no possible capacity constraints in transport/logistics. While Citrosuco is currently shipping orange juice for LDC under a contract expiring in 2012, there are no indications that LDC will be short of transport capacity in case Citrosuco does not renew the said contract and instead ships FCOJ produced by Citrovita. First, such a reallocation of transport would free up third party capacity (especially in the view of the fact that Citrovita is currently renting space on Gearbulk vessels), which could be used by LDC. Second, the investigation confirmed that alternatives should be available in the market for bulk transport (namely the possibility of leasing space for bulk transportation on third party vessels).[161]

(202) Finally, no concerns were voiced with respect to potential storage capacity bottlenecks at the terminals in Brazil and in the EEA.

(203) Consequently, it can be concluded that no capacity constraints exist in relation to transport or logistics in the supply of orange juice.

IV.2.5.2.4. Overall conclusion on non-coordinated effects

(204) Although the proposed transaction would result in the creation of the leading supplier of orange juice, in particular of FCOJ, to the EEA, it can be concluded that the establishment of the JV is unlikely to significantly impede effective competition in the market for the production and wholesale supply of orange juice in the EEA (or alternatively of FCOJ). The parties are not particularly close competitors and customers have the possibility to revert to at least two credible competitors, LDC and Cutrale, which have the ability and incentive to increase their output of orange juice in case of a price increase post transaction by the parties.

IV.2.5.3. Coordinated effects

(205) Although the decision opening proceedings focused mainly on non-coordinated effects, it did not exclude the risk of coordinated effects, in particular given the rather homogenous nature of the orange juice products, the significant concentration of orange juice suppliers and uncertainty about LDC's capacity to counter a hypothetical coordination between the parties and Cutrale. The in-depth investigation therefore

[161] See agreed non-confidential minutes of telephone conferences with Atlanship and Gearbulk of 22 October 2010.

assessed whether the transaction may lead to coordinated effects. In particular, it was investigated whether, as a result of the transaction, the parties would likely coordinate their behaviour with Cutrale (and possibly LDC) to increase prices to their customers.[162]

(206) As explained by the Court of Justice in the *Impala* Judgment,[163] coordinated effects should be assessed in reference to an overall economic mechanism of tacit coordination, that is by taking into account a coherent economic framework in which tacit coordination would take place. The market investigation therefore sought to identify candidate variables on which colluding partners would reach a collusive understanding, plausible mechanisms for detecting, and retaliating against, deviations from such a collusive understanding, and the existence of potentially destabilizing factors. In light of these considerations, the investigation also assessed whether the transaction makes coordination more likely, stable or effective.

(207) The vast majority of customers during the second phase investigation did not consider that the merger may lead to increased prices through coordination between orange juice suppliers.[164] Although a few respondents indicated that the transaction might lead to price alignment and one customer invoked the possibility of customer sharing, none of these respondents were able to substantiate what the proposed transaction would change compared to the current situation with four players, except for the obvious fact that the number of suppliers would decrease from four to three. In addition, none of the respondents could explain the mechanism by which such a coordination would likely work.

(208) The market investigation indicated that the change brought about by the merger is unlikely to make coordination more likely, stable or effective in the industry. In fact, the proposed JV increases the degree of asymmetry between the remaining three players, which would likely make reaching a collusive understanding more difficult. Based on market shares, the JV would be the clear market leader ([40-50]*% in FCOJ), followed by Cutrale [[20-30]*%] and LDC [[10-20]*%] as the third player.[165] Moreover, the degree of vertical integration, as well as the cost structure, differs between suppliers consequently providing different incentives for the suppliers to co-ordinate. For example, Cutrale procures approximately [[30-40]]*% of its orange needs internally, while the JV only procures approximately [[10-20]*-[20-30]*]% of its orange needs internally[166].

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162 In assessing the likelihood of coordinated effects, the Commission takes into account all available relevant information on the characteristics of the markets concerned, including both structural features and the past behaviour of firms. With respect to the latter, in its decision opening proceedings, the Commission observed that there is an on-going antitrust investigation in Brazil regarding an alleged cartel between the major orange juice processors for the procurement of oranges. Evidence of past coordination is important if the relevant market characteristics have not changed appreciably or are not likely to do so in the near future.

163 Case C-413/06 P, Bertelsmann and Sony Corporation of America v Impala, [2008].

164 See replies to question 42 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

165 See Table 2.

166 See Form CO, paragraph 108. These numbers are expected to increase in the future in view of the investments undertaken in the plantation of own trees.

(209) Although the merger reduces the number of major players from four to three, it leaves the countervailing force that LDC would play on a hypothetical coordination mechanism between the parties and Cutrale unchanged.[167] In this respect, the market investigation has also shown that smaller suppliers would have significant capacity to counteract such a hypothetical collusive understanding.[168]

(210) More generally, the evidence gathered during the in-depth investigation indicates that coordination on prices appears unlikely in this industry. Indeed, price transparency at the customer levels is limited due to the high variations in the prices charged across customers and through time.[169] Although larger volumes are associated with lower prices on average, volume effects only explain a small part of the variation observed in the sales data. These wide price ranges are illustrated in Figure 5 for the parties.

Figure 5 - Prices paid by European customers for FCOJ

[…]*

Source: Commission's analysis of sales data submitted by the parties. Figure 5 describes the prices paid by European customers for FCOJ to the parties (competitors' sales data were also analysed but omitted from this graph for confidentiality reasons). For each year and supplier, the line within the box is the median price, the upper (lower) limit of the box corresponds to the 75^{th} (25^{th}) price percentile, and the top and bottom line displays the adjacent value. It is weighted by volume.

(211) This lack of price transparency would likely make it difficult to achieve and monitor a price agreement in this industry. In addition, the high level of switching by customers observed in the sales data gathered during the investigation does not appear to be consistent with coordination on prices, as it would be difficult to justify the amount of observed switching under such a scenario.

(212) A coordination mechanism based on customer allocation among orange juice suppliers does not appear likely either. Indeed, the market investigation and the analysis of sales data provided by the parties and their competitors have shown that there is a high level of switching among customers.[170] If suppliers coordinated by allocating customers among themselves, it would be unlikely to observe such a high level of customer switching between suppliers.[171]

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167 LDC is a smaller competitor with a different business model and strategy – see Form CO, paragraphs 762-772.

168 See replies to question 36 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2011 addressed to competitors (small/middle sized exporters of orange juice).

169 Although the existence of a price index for orange juice in the US suggests that there might be a certain transparency on the market, the actual transaction prices agreed bilaterally between producers and buyers are not public.

170 See replies to questions 58 and 59 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 26 November 2010 addressed to orange juice customers.

171 Since customers multi-source to a very large extent, this switching takes place in part by varying the sales to each relevant supplier. Multi-sourcing may also make it more difficult to agree on a stable customer allocation (although the impact of multi-sourcing on coordination may lead to different conclusions according to the circumstances at stake, in particular as it may decrease the incentive to deviate, but also decrease the scope for retaliation).

(213) Finally, coordination on output appears unlikely. Any attempt at limiting the quantities of oranges processed by the main suppliers would free oranges on the market.[172] This freed supply of oranges would enhance the incentive of the members of a collusive agreement to deviate from such an understanding. Moreover, this would also give the opportunity to smaller competitors to process these oranges. In particular, the market investigation has shown that smaller suppliers would have sufficient spare capacity to counteract a decrease in production by the parties in such cases.[173]

(214) The results of market investigation therefore lead to the conclusion that the transaction is unlikely to create coordinated effects. Indeed, the market investigation has not pointed to any coherent coordination mechanism that would be consistent with the facts of the industry, and the transaction does not appear to change the current situation in a way that would make coordination more likely, stable or effective.

IV.2.5.4. Elimination of potential competition in NFC

(215) In a potential separate market for the production and wholesale supply of NFC, the proposed concentration does not remove actual competition between the activities of the parties, but might result in the removal of a potential entrant given that Citrovita is present in FCOJ but is the only main player not present in NFC.

(216) For a merger with a potential competitor to significantly impede effective competition, two basic conditions must be fulfilled.[174] First, the potential competitor must already exert a significant constraining influence or there must be a significant likelihood that it would grow into an effective competitive force. Second, there must not be a sufficient number of other potential competitors, which could maintain sufficient competitive pressure after the merger.

(217) The parties argue that the proposed concentration will not give rise to anti-competitive effects as a result of the elimination of a potential competitor in the NFC market for several reasons. Firstly, Citrovita does not currently exert a significant constraining influence and there are no reasons supporting the assumption that, with significant likelihood, Citrovita would have entered the NFC market absent the merger. Secondly, should the concentration result in the elimination of a potential competitor which would have entered the NFC market, there would remain sufficient competitive pressure because the market is competitive and dynamic and customers are not strongly dependent on particular producers.

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[172] In theory, orange juice suppliers could also reduce their own-production of oranges. However, the market investigation has indicated that vertical integration is a key strategic factor that suppliers would be unlikely to reduce.

[173] As explained in footnote 155, the orange juice industry is not operating at full capacity. Furthermore, for example, Citrofoods is building a new processing plant in the region of Rio Grande do Sul which will start operating in 2011 and Brasfrut – Frutos do Brasil, Ltda. is negotiating the installation of a new processing plant in the region of Bahia – see agreed non-confidential minutes of telephone conferences with Citrofoods and Brasfrut of 23 and 24 February 2011. In addition, for example, another competitor would redirect output from other geographic markets to the EEA market – see reply to question 10 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to competitors (small/middle sized exporters of orange juice).

[174] See Horizontal Merger Guidelines, paragraph 60.

(218) When assessing whether there would be anti-competitive effects deriving from the elimination of Citrovita as a potential competitor, the Commission considered the ability of Citrovita to switch production from FCOJ to NFC in a short period of time, the evidence concerning Citrovita's plans to enter the relevant market, customers' views regarding Citrovita's potential entry in the market, as well as the structure of the NFC market.

(219) Citrovita has stated that it has the know-how and industrial facilities to switch to producing NFC in the short term.[175] In this respect, the parties sustain that the supply of FCOJ and NFC is similar with regard to their production process, transportation and storage.[176] Switching the production of FCOJ to NFC would require only minor adjustments in the processing plant (acquisition of pasteurizer to produce NFC[177]). The same bulk tanker vessel may transport FCOJ and NFC. Although storage tanks for NFC (both on board the vessel and in the port) have to meet more specific requirements than the storage tanks for FCOJ in that they have to be aseptic and are usually equipped with an agitator, newer tanks for FCOJ may alternatively hold NFC as agitators can easily be fitted to these tanks. The investment for a tank with a capacity of […]* tons is approximately USD […]* million.

(220) On the other hand, Citrovita submitted a simulation of the investment needed to add NFC to its portfolio (on the basis of […]* million boxes of oranges processed), dated February 2008, which shows rather high costs for entering the NFC market (a total of around USD […]* million, which cover costs regarding plants, a terminal in Brazil, a terminal in Santos and maritime transport).[178] This is consistent with some of the customers' statements in the market investigation, which suggest that Citrovita would have to invest considerable resources in order to enter the NFC market.

(221) The market investigation also strongly suggests that the vast majority of customers do not perceive Citrovita as a potential entrant into the NFC market.[179] For example, Döhler considered that "*Citrovita has never claimed to enter into the NFC market*".

(222) Furthermore, most customers confirmed that Citrovita had not approached them with the intention to become active in the NFC market.[180] This is consistent with the assessment of internal documents requested from Citrovita, which did not show any firm intention or attempt on the part of Citrovita to enter the NFC market. Citrovita discussed internally in early 2008 whether to enter the NFC market but it considered

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175 See Form CO, p. 106.

176 See Form CO, p. 95.

177 See Form CO, p. 105. The parties estimate that the cost of pasteurizer, related equipment and civil construction would be around USD […]* million (considering […]* million boxes of oranges per year).

178 Annex 6.26 of the Form CO.

179 Eleven in sixteen customers did not view Citrovita as a potential entrant – see replies to question 22 of the Commission's request for information of 31 January 2011 addressed to orange juice customers. For example, PepsiCo stated that they "*do not believe [Citrovita] has made the investment necessary to enter the not from concentrate [orange juice] market*".

180 See replies to question 22 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011addressed to orange juice customers.

that […]*.[181] This is consistent with the lack of discussion in Citrovita's internal documents of potential entrance in the NFC market after April 2008, the month in which Citrovita discussed a report commissioned from a firm of management consultants that recommended investing in the NFC market.[182]

(223) The parties also argue that the elimination of a potential competitor represents a critical deterioration in the competitive structure only if the market is characterized by weak competition and strong dependency of customers.

(224) Citrosuco (whose market share for the supply of NFC in the EEA, according to the parties, was approximately [40-50]*% in 2009) faces strong competition from Cutrale (market share of [20-30]*%) and other European producers.[183] The latter account for almost [30-40]*% of the market. Citrosuco's market share, moreover, does not seem indicative of any market power[184] because it is dependent on a substantial volume of business from […]*.[185] The fact that LDC was able to reach a share of [0-5]*% after one year of activity also shows the dynamics of the market.

(225) Customers, or volumes with customers, are lost and won over time by producers on the market for NFC. Bottlers seem to enjoy a certain degree of bargaining power on the NFC market and buy from multiple suppliers, not only from Brazil but also from other countries. They are not strongly dependent on particular producers.

(226) The market investigation, in particular the customers' replies and the parties' internal documents, did not provide evidence supporting the fact that Citrovita would have been a potential entrant on the NFC market. It can therefore be concluded that, absent the proposed concentration, Citrovita would not have acted as a major competitive constraint in such a market.

(227) In light of these facts, the results of the market investigation indicate that Citrovita does not exert a significant constraining influence on the firms present in the NFC market and that there is not a significant likelihood that, absent the merger, Citrovita would grow into an effective competitive force. Consequently, as the first basic condition referred to in recital (216) is not fulfilled, the analysis of the second condition is not necessary.

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[181] See Form CO, pp. 105-106.

[182] See McKinsey report "Growth Avenues"

[183] According to the parties, there are numerous European producers of NFC primarily in Spain and Italy with a market share in excess of 1% with the largest producers being J Garcia Carrion, AMC Grupo Alimentación and Zumos Pascual. See parties' reply to question 18 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 2 February 2011.

[184] Commission Decision of 18 December 2001 in Case No COMP/M.2676 – *Sampo/Varma/Sampo/IF* Holding/JV – OJ C 145, 18.6.2002, paragraph 26.

[185] According to the parties, the volume purchased by […]* accounts for approximately […]*% of the demand for NFC. When looking at the remaining part of the demand, Citrosuco's market share drops significantly. Indeed, Citrosuco's market share of NFC (excluding […]*) would be merely approximately [10-20]*%, which means that approximately [80-90]*% of the market remains contestable.

(228) Hence, the notified concentration is unlikely to significantly impede effective competition in a potential market for the production and wholesale supply of NFC in the EEA.

IV.2.5.5. Conclusion on the market(s) for orange juice

(229) In the light of the above arguments, it is concluded that the notified transaction would not lead to a significant impediment to effective competition in the market for the production and wholesale supply of orange juice in the EEA or, alternatively, in the markets for the production and wholesale supply of FCOJ and of NFC in the EEA.

IV.3. By-Products of Orange Juice Processing

(230) The processing of oranges into juice gives rise to a number of by-products. The importance of these products in volume and value terms is generally relatively limited when compared to the main focus of the orange processors' business, that is to say the production of orange juice.[186] Yet, it is apparent that orange processors are interested in the efficient recovery of by-products and the level of contribution they can make to the overall financial performance of their operations.[187]

(231) There are four main categories or types of by-products concerned by the proposed transaction: (i) orange oil and essences; (ii) orange terpene (or d-limonene); (iii) pulp and (iv) citrus pellets.[188] Each of these categories is dealt with in turn in the following sections.

IV.3.1. Orange oils and essences

(232) Within the broad category of orange oil and essences a number of distinct products can be distinguished. These products arise at different stages of the juice production process. The first of these products is orange essential oil, also known as 'peel oil' as it is found in oil sacs in the flavedo[189] of the orange peel. Orange essential oil is obtained during the fruit extraction process as shown in Diagram 1.

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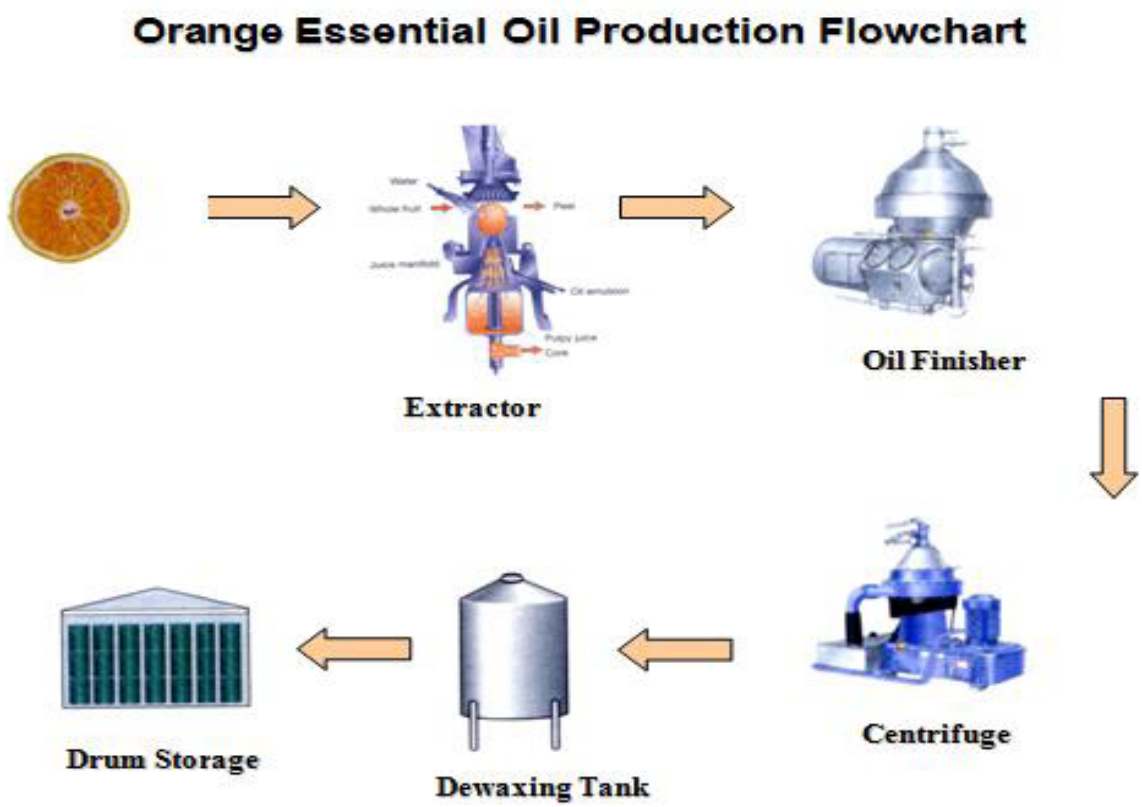
186 Taking orange oil as an example, the parties' 2009 total EEA sales in volume and value terms amounted to only some […]* tons and EUR […]* million respectively in comparison with their combined FCOJ sales only (that is to say not taking into Citrosuco's NFC sales) of more than […]* tons and EUR […]* million. The volume of citrus pellet sales in the EEA at some […]* tons was more significant but the value of these sales only amounted to some EUR […]* million.

187 In this regard, one customer of oils and essences noted that whilst it may have been the case in the past that orange crushers did not pay much attention to the by-products of the juicing process, they now look to maximise revenues throughout the production chain and are aware of the market potential of these products. See agreed non-confidential minutes of a telephone conference with a customer of oils and essences, 22 February 2011.

188 Citrosuco's orange juice processing also results in the production of citric alcohol as a by-product. Citrovita, however, does not produce citric alcohol so there is no overlap between the parties' activities in this regard. Citrosuco has confirmed that its production of citric alcohol is exclusively sold on the Brazilian domestic market. In view of the foregoing, citric alcohol will not be further addressed in this Decision.

189 Citrus fruits are comprised of an outer flavedo layer that contains the exterior fruit colour and oil glands. The white spongy layer under the flavedo is known as the albedo.

Diagram 1:



Source: Form CO, Annex 6.13.

(233) According to the parties, during fruit compression at the extractor machine, a hole is cut in the fruit by the upper of the extractor, enabling the peel to exit the cup through a small ring opening around the cutter. The restricted ring diameter forces the peel to be compressed and scraped as it exits the cup. The expressed peel liquid and scrapings, rich in orange essential oil are then washed with a water spray down a slanted tray in the front of the machine. The resulting emulsion containing 1% to 3% of orange essential oil is taken to a separator centrifuge machine that concentrates the material. The concentrated emulsion is then transferred to a 'polishing' centrifuge machine which has an automatic discharge where the remaining impurities are eliminated. After centrifugation, the oil is taken to a stainless steel tank in order to separate the waste waxes. The tank's temperature must be kept between minus 25^{o} Celsius and minus 5^{o} Celsius to finish the separation of waxes.

(234) The second and third by-products that arise in the juicing process are orange oil phase essence and orange water phase essence. These essences exist in the juice composition and are extracted solely during the processing of fresh juice into FCOJ when excess water is evaporated from the juice. In other words, these two essences do not arise in the production of NFC.

(235) In particular, during the FCOJ concentration process, volatile compounds are extracted from the juice along with the water. They are recovered through a system connected to the evaporator. The components include a small quantity of "essence in aqueous form" (that is, water phase essence) and "essence in oily phase" (that is, oil phase essence). The

two essences have aromas that are characteristic of the fresh juice from which they are extracted.[190]

IV.3.1.1. Relevant product markets

(236) The proposed joint venture would be active in the production and supply of a number of by-products falling within the broad category of orange oils and essences.

(237) The parties initially submitted that these activities are in a segment upstream of the market for production of flavours and fragrances. In this regard, the parties note that in the *EQT/H&R/Dragoco* case the Commission considered that "*flavours as a whole constitute a relevant product market*."[191] In a subsequent decision,[192] the Commission left open the exact product market definition since even on the basis of narrower markets (such as on the basis of flavours for savoury, sweets, dairy, beverages and pharmaceuticals) no competition concerns would arise.

(238) Following the initiation of proceedings, the parties revised their position and submitted that a distinction could be made depending on whether the oils and essences under consideration are used to produce (i) aromas for orange juice or (ii) other aromas.

(239) In the case of aromas for orange juice, the parties note that each product under consideration has its own characteristics and may complement the others.[193] According to the parties, these three by-products are not systematically added back to the juice as the formula of the aroma may change from supplier to supplier and depend upon the customers' requirements. The parties submit that usually FCOJ has a very basic aroma which consists of only folded (that is to say concentrated) or single strength orange oil. Orange oil phase essence may or may not be part of the aroma whilst water phase essence may be added in small quantities upon customer request to enhance freshness. That said, the parties do not consider the fact that the three products complement each other rather than being substitutable between themselves should lead to the identification of distinct markets for each product as this would lead to the existence of small markets which would not properly reflect the economic reality of the oils and essences industry.

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190 According to the parties, the market standard for water phase essence requires a minimum alcohol content of 10% with a maximum of 19%. Within this range, orange water phase essence comprises a complex mixture of aldehydes, esters, ketones and alcohols. These compounds are often referred to as orange 'top notes'. See reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February 2011.

191 Commission Decision of 16 September 2002 in Case No COMP/M.2926 - *EQT/H&R/Dragoco* – OJ C 80, 3.4.2003, paragraph 20. The Commission also concluded in this decision that distinct product markets existed in respect of all fragrance and all aroma chemicals as was the case for the market for fruit juice compounds which it considered to be downstream of the flavours market. Fruit juice compounds were described as being "highly concentrated fruit juice mixes" containing "small quantities of flavours, less than 5% of the final fruit juice compound mix by weight and less than [5-10%] in terms of value."

192 Commission Decision of 21 February 2007 in Case No COMP/M.4507 – *Givaudan/Quest International* - OJ C 65, 21.3.2007, paragraphs 12-13.

193 According to the parties, orange oil is responsible for much of the characteristic flavour of the final juice product with 'peely, heavy and green juice notes' as its main sensory attributes. Orange oil phase essence contributes to a 'floral, fruity, sweet and green flavour' and increases the shelf life of the product whereas orange water phase essence contributes to a 'fruity, fresh aroma and light citrus taste.' See parties' reply to the decision opening proceedings.

(240) As regards the production of other aromas, the parties submit that orange essential oil, orange oil phase essence and orange water phase essence may be partially interchangeable. Moreover, in the parties' view, alternative products to orange essential oil, orange water phase essence and orange oil phase essence exist for a number of customers and end applications. For example, in the case of the cleaning industry which produces detergents and cleaning products with an orange scent, the parties suggest that this scent can be replaced by other scents such as pine, eucalyptus, flowers or other citrus. Consequently, it would not be appropriate, according to the parties, to identify distinct product markets in respect of orange essential oil, orange water phase essence and orange oil phase essence as the relevant product market(s) for these customers and end applications should also include all products which are substitutable[194] and it would only be in the case of the drinks industry, by virtue of Council Directive 2001/112/EC [195], that customers would need natural flavouring components from oranges.

(241) The market investigation in the present case has shown that the orange essential oil, orange oil phase essence and orange water phase essence produced by the parties are used downstream as inputs in the production of a wide range of products in the food and drink industries (including orange juice where they may be added back to FCOJ to enhance its flavour), the cosmetic industry (including fragrances and perfumes) and the cleaning industry (for example detergents and cleaning products with an orange scent).

(242) Contrary to the view of the parties, however, the market investigation has indicated that, for many customers, distinct product markets exist for orange essential oil, orange water phase essence and orange oil phase essence on the grounds that these products are not fully interchangeable and have no alternatives.[196] Flavour and fragrance houses, in particular, have indicated that other natural by-products (such as aromas from other citrus fruits) and artificial or synthetic products do not constitute viable substitutes for orange oil, orange water phase essence and orange water phase essence. Flavour and fragrance houses constitute, as confirmed by the market investigation, the main customers for orange essential oil, orange oil phase essence and orange water phase essence.

(243) Flavour and fragrance houses selling to bottlers of juice have confirmed that oils and essences must be natural or, in terms of the EC fruit juice directive, 'from the named fruit', rather than synthetic. Furthermore, flavour and fragrance houses indicated that customers other than bottlers also have an equally strong preference for natural ingredients rather than synthetic substitutes.

(244) Bottlers and blenders buying directly from orange juice processors have also indicated that oils and essences added back to juice must be 'from the named fruit' according to the requirements of Council Directive 2001/112/EC.[197] It is for this reason that these customers have also confirmed that they would not be able to replace orange oil and

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194 See parties' reply to the decision opening proceedings.

195 See footnote 37.

196 See replies to question 13 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to oil and essence customers.

197 See replies to question 55 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

essences with aromas derived from other types of citrus fruit.[198] Even if such a switch were permissible under current legislation, a number of customers have indicated that aromas from other citrus fruits would change the flavour of their orange juice products and would therefore not be acceptable.[199]

(245) Similarly, competitors responding to the market investigation generally confirmed the lack of alternative products to orange oil and essences which can be used by their customers in the beverage industry and outside the beverage industry in order to achieve the same end results in their products.[200]

(246) In light of the foregoing considerations, it is concluded that it would not be appropriate in the present case to base the competitive assessment of the proposed transaction on relevant product markets that are as broad in scope as those for flavours, fragrances and aromas as considered by the Commission in certain previous cases such as the *EQT/H&R/Dragoco* decision cited by the parties in the notification. Rather, taking into account the results of the market investigation, it is concluded that it is more appropriate to assess the effects of the proposed transaction on narrower product markets limited to natural orange oils and essences. For the purposes of the present decision, however, the question whether distinct relevant product markets exist for each by-product considered in this section of the decision, namely orange essential oil, orange water phase essence and orange oil phase essence or whether the relevant market is broader in scope and encompasses all three products can be left open as this would not alter the competitive assessment.

IV.3.1.2. Relevant geographic markets

(247) The parties submitted, when notifying the proposed transaction, that the market for oils and essences was EEA-wide in scope.[201] Following the initiation of proceedings, however, the parties revised this view and submitted that the geographic market is worldwide in scope. In support of their revised position, the parties note that the products are commodities which are sold internationally. Transport costs are low (approximately 4% of the product value for sales to the EEA) and there are no quotas or non-tariff barriers that would affect imports. In addition, the parties note that their sales of these by-

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198 See replies to question 58 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

199 For example, a major flavour and fragrance house noted that "Other citrus fruits would not provide the same sensory profile as orange oils and essences" whilst a major blender confirmed that "Orange flavors used in juices have to be made out of orange." See replies to question 58 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

200 See for example replies to question 50 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to competitors (small/middle sized exporters of orange juice) regarding the lack of substitutable products for customers in the beverage industry and replies to question 52 of the same request for information for the lack of alternative products for other types of customer.

201 Although at paragraph 491 of the Form CO the parties submitted that should by-products be identified as relevant markets, the geographic market would be "at least (emphasis added) of an EEA dimension", they subsequently stated at paragraph 493 of the same document that on the basis of the Commission's findings in the *EQT/H&R/Dragoco* case "the market for oils and essences can be considered as having an EEA-wide dimension."

products to EEA and other worldwide customers are carried out by staff located in Brazil and it therefore not necessary to have a local sales force in each region. Finally, the parties note that prices are correlated across geographic regions worldwide with the most important customers (flavour and fragrance houses) procuring their requirements on a global basis.[202]

(248) The majority of respondents in the market investigation have expressed the view that the relevant geographic market is indeed global, with many highlighting the absence of significant price differences between the various regions of the world.[203] Moreover, flavour and fragrance houses (which, according to the parties, purchase approximately [70-80]*% of the parties' orange oil and essences production) have indicated that they organise procurement of orange oil and essences on a global basis.[204]

(249) For the purposes of the present decision, however, the precise delineation of the relevant geographic market can be left open as the proposed transaction does not raise concerns even on the basis of a narrower market consisting of the EEA only.

IV.3.1.3. Competitive assessment

(250) The parties submit that since by-products are merely accessory activities to their core orange juice business, their combined position on any of the by-product markets would not exceed their position on the orange juice market. In order to assess this argument, the market investigation collated detailed information relating to the typical volumes of by-products produced (or their yield) from the production of FCOJ and NFC respectively.

(251) According to the parties, the production yields of orange oil and essences vary from season to season depending on the quality of the oranges, with climatic conditions (droughts or excess of rain) affecting production yields. The figures provided by the parties to indicate the typical output of by-products per box of oranges during both FCOJ and NFC production (as the case may be) from major orange juice processors in Brazil have been broadly confirmed by competitors.[205] As such, the position of the parties on the juice market is essential for the competitive assessment of the by-product markets.[206]

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[202] See reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011.

[203] See replies to question 5 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to oil and essence customers, to question 48 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers and to question 35 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to competitors (small/middle sized exporters of orange juice).

[204] See replies to question 8 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to oil and essence customers.

[205] The parties have indicated that major FCOJ and NFC producers in Brazil require approximately 8 boxes of oranges to produce 1kg of orange essential oil. According to the parties, 100 boxes are required to produce 1kg of orange oil phase essence during FCOJ production. According to the parties, 40 boxes are required to produce 1kg of orange water phase essence during FCOJ production. The production yield also varies within the season. At the beginning of the Brazilian processing season (June/July) 10 boxes are needed to produce 1kg of orange oil for example. During the months of September, October and November the production yield usually improves to 6-7 boxes/kg. See reply to the Commission's request

(252) Both parties to the proposed transaction produce orange oil essence, orange oil phase essence and orange water phase essence.

(253) When notifying the proposed concentration, the parties submitted that they were not in a position to estimate the size of the total market for sales of natural flavours and fragrances in the EEA which was at that time, in the parties' view, the relevant product market on which the competitive assessment of the proposed transaction should be made. Each party to the proposed concentration therefore provided as a proxy in the notification its estimates of the sales of Brazilian orange juice producers to the EEA of (i) orange oil and essences, (ii) orange oil alone and (iii) essences (water phase and oil phase combined) and share estimates based on this total market size both in volume and value terms. The parties noted however that the total size of the market should be larger and include not only all sales of oils and essences to the EEA but also sales of natural flavours and fragrances. For this reason, they consider that the market shares provided in the Form CO overestimated the parties' actual position on the market.

(254) In the course of the proceedings, the parties provided revised estimates at both an EEA and global level of the size of the total market for each of orange essential oil, orange oil phase essence, orange water phase essence, as well as estimates at both an EEA and global level of the size of the total market for all three orange oils and essences together. The parties also submitted estimates of their own and their major competitors' market shares on each of these possible markets.

(255) Tables 4 and 5 indicate each party's respective estimates of its own shares of sales in the EEA in volume and value terms in 2009 as well as their main competitors" shares for an (i) overall market including orange essential oil, orange oil phase essence and orange water phase essence, and (ii) each of the three orange oils and essences considered separately.

Table 4: Parties' market share estimates for all orange oils and essences in the EEA in 2009

	Orange essential oil, orange oil phase essence and orange water phase essence combined	
	Citrovita's estimates	**Citrosuco's estimates**
Citrovita	[10-20]*%	[20-30]*%
Citrosuco	[20-30]*%	[20-30]*%
Combined	*[40-50]*%*	*[40-50]*%*
Cutrale	[20-30]*%	[20-30]*%
LDC	[10-20]*%	[10-20]*%
Others	[20-30]*%	[10-20]*%

Source: Reply to the Commission's requests for information of 7 February 2011 and 11 March 2011.

for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February 2011. Similar numbers were submitted by the parties' main competitors.

206 An important flavour and fragrance house agreed that in the absence of more detailed market share data for these by-products, a supplier's share on the orange juice market would be a good proxy for its position on the relevant by-product market. See non-confidential minutes of a telephone conference with a customer, 15 December 2010.

Table 5: Parties' market share estimates for each of orange essential oil, orange oil phase essence and orange water phase essence in the EEA in 2009

	Orange essential oil		**Orange oil phase essence**		**Orange water phase essence**	
	Citrovita estimates	**Citrosuco estimates**	**Citrovita estimates**	**Citrosuco estimates**	**Citrovita estimates**	**Citrosuco estimates**
Citrovita	[10-20]*%	[20-30]*%	[5-10]*%	[10-20]*%	[5-10]*%	[0-5]*%
Citrosuco	[20-30]*%	[10-20]*%	*[40-50]*%	[20-30]*%	[60-70]*%	[70-80]*%
Combined	*[40-50]*%*	*[40-50]*%*	*[50-60]*%*	[30-40]*%	[70-80]*%	*[80-90]*%*
Cutrale	[20-30]*%	[30-40]*%	[30-40]*%	[30-40]*%	[10-20]*%	[10-20]*%
LDC	[10-20]*%	[10-20]*%	[5-10]*%	[5-10]*%	[0-5]*%	[0-5]*%
Others	[20-30]*%	[10-20]*%	[10-20]*%	[20-30]*%	[5-10]*%	[5-10]*%

Source: Reply to the Commission's requests for information of 7 February 2011 and 11 March 2011.

(256) On a hypothetical EEA level product market consisting of orange oil, orange oil phase essence and orange water phase essence, the merged entity would, according to the parties, have a market share of approximately [40-50]*% in 2009 with Cutrale having a market share of [20-30]*% and LDC [10-20]*%.

(257) Considering each of these three products separately, the merged entity, according to the parties, would have a 2009 market share between [40-50]*%-[40-50]*% for orange essential oil. Although the merged entity would become the leading supplier of orange oil, it would continue to face competition from companies such as Cutrale (with a market share of [20-30]*%-[30-40]*%) and LDC ([10-20]*%-[10-20]*%) as well as a number of other suppliers.

(258) On the basis of the parties' estimates, the merged entity would have a market share between [30-40]*%-[50-60]*% for orange oil phase essence. This market share estimate reflects in large part Citrosuco's current market presence of [20-30]*%-[40-50]*%. Close to [50-60]*% of Citrosuco's sales of orange oil phase essence are made to one customer who has not expressed any substantiated concerns regarding the impact of the proposed transaction on an EEA market for orange oil phase essence. Although the merged entity would become the leading supplier of orange oil phase essence, it would continue to face competition from companies such as Cutrale (with a market share of [30-40]*%-[30-40]*%), LDC and others.

(259) In the case of orange water phase essence, the merged entity would have a market share between [70-80]*%-[80-90]*% on the basis of the parties' estimates. This market position reflects to a large extent Citrosuco's current market presence which in turn is due to a single large volume contract between the company and one European customer. Indeed, this one customer represents more than 90% of Citrosuco's sales (by volume) in the EEA. Although contacted in the course of the market investigation, this particular customer did not express any specific concerns regarding the impact of the proposed transaction on an EEA market for orange water phase essence.

(260) In turn, on a global basis, the total size of the market for orange essential oil, orange oil phase essence and orange water phase essence in 2009 was in the region of 72 000 to

73 000 tons, according to the parties.[207] On this basis, according to the parties, the merged entity would have a market share of approximately [20-30]*%-[20-30]*% and, using the information submitted by the parties, it would continue to face competition from other suppliers including Cutrale [20-30]*%-[20-30]*%, LDC [10-20]*%-[10-20]*% as well as a number of other smaller producers.

(261) According to the parties, the total size of the market for orange essential oil in 2009 on a global basis was in the region of 57 000 to 59 000 tons.[208] On this basis, according to the parties, the merged entity would have a market share of approximately [20-30]*%-[20-30]*% which is of itself not of a level to raise competition concerns. The merged entity would continue to face competition from other suppliers including Cutrale [20-30]*%-[20-30]*%, LDC [10-20]*% [209] as well as a number of other smaller producers located inter alia in Brazil, the United States, the EEA, Mexico and South Africa.

(262) The parties have estimated the total size of the market for orange oil phase essence in 2009 on a global basis to be in the region of 3 500 to 4 500 tons.[210] On this basis, according to the parties, the merged entity would have a market share of approximately [20-30]*%-[30-40]*%. The merged entity would continue to face competition from other suppliers including Cutrale [20-30]*%-[20-30]*%, LDC [10-20]*%-[10-20]*% as well as a number of other smaller producers.

(263) Finally, turning to the case of orange water phase essence, the parties have estimated the total size of the market in 2009 on a global basis to be in the region of 10 000 to 11 000 tons.[211] On this basis, according to the parties, the merged entity would have a market share of approximately [30-40]*%-[30-40]*%. Again, the merged entity would continue to face competition from other suppliers including Cutrale [20-30]*%-[20-30]*%, LDC [10-20]*%-[10-20]*% as well as a number of other smaller producers.

(264) The market investigation has demonstrated that most customers of orange essential oil, orange oil phase essence and orange water phase essence do not expect the proposed transaction to lead to a reduction in the quantity of the products supplied to the market. Some respondents to the market investigation have stated that since by-product production is driven by the number of oranges processed into juice, the proposed transaction will only impact quantities of by-products (including orange essential oil, orange oil phase essence and orange water phase essence) available on the market if it

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[207] Citrovita estimates global sales to have been […]* tons in 2009. Citrosuco's estimate is […]* tons. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

[208] Citrovita estimates global sales to have been […]* tons in 2009. Citrosuco's estimate is […]* tons. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

[209] Citrovita estimates global sales to have been […]* tons in 2009. Citrosuco's estimate is […]* tons. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

[210] Citrovita estimates global sales to have been […]* tons in 2009. Citrosuco's estimate is […]* tons. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

[211] Citrovita estimates global sales to have been […]* tons in 2009. Citrosuco's estimate is […]* tons. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

negatively impacts orange processing.[212] This implies that the markets for orange essential oil, orange oil phase essence and orange water phase essence depend on the number of oranges that are processed into juice, thereby confirming the close link between the production of juice and the co-production of by-products. Consequently, if the merged entity were to attempt to raise prices and/or reduce output of these by-products after the proposed transaction, it would face a reaction from competitors that would be very similar to that which would occur if it were to attempt to implement an anticompetitive strategy on the orange juice markets as described in Section IV.2.5.

(265) In addition the market investigation has confirmed that there are no important differences in terms of product quality or other characteristics between the by-products produced by the parties to the proposed transaction and those of their competitors. This would imply that switching between suppliers is relatively easy.[213]

IV.3.1.4. Conclusion

(266) In light of the considerations outlined in the Section IV.3.1.3., it is concluded that the notified concentration will not lead to a significant impediment to effective competition either in respect of the overall market for the supply of orange essential oil, orange oil phase essence and orange water phase essence or each product should distinct relevant product markets be considered.

IV.3.2. Orange terpene (d-limonene)

(267) A distinct by-product within the broad category of oils and essences is orange terpene (or d-limonene). According to the notification, orange terpene is obtained during the manufacturing process of citrus pellets (which is described in Section IV.3.4) from the press liquor which is obtained when the waste products of the juicing process are passed through the peel presses before being concentrated in an evaporator. The resulting colourless liquid, which has a subtle citric aroma, is stored in tanks at the processing plant before being transported either in bulk or in drums to marine terminals for export. Contrary to orange oil and essences, orange terpene is not added back to orange juices and blends but has a wide range of applications in other industries including the production of cleaning products, resins, solvents and fragrances.[214]

(268) The market investigation has shown that in addition to being recovered from press liquor in an evaporator, orange terpene can also be obtained from the distillation of orange oil (or peel oil). This is not surprising given that the major component of orange oil is d-limonene. These two types of orange terpene (that is to say technical grade d-limonene derived from press liquor and food grade d-limonene from the distillation of orange oil), however, have different purity levels and properties that influence their suitability for certain end applications.

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[212] In this regard the market investigation has indicated that any new entry into the by-product markets is expected to occur only as a result of entry by the same entrant into the orange juice market.

[213] See replies to question 9 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 25 November 2010 addressed to oils and essences customers.

[214] According to the parties, 10 boxes are required to produce 1kg of orange terpene. The production yield is the same whether FCOJ or NFC is produced. See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 January 2011.

IV.3.2.1. Relevant product market

(269) Following the initiation of proceedings, the parties provided additional information relating to food grade and technical grade d-limonene and their uses.[215] According to the parties, food grade d-limonene has a d-limonene content above 97% making it a product of higher purity than technical grade d-limonene, which usually has a d-limonene content below 96%. At the same time, food grade d-limonene has a maximum aldehyde content of 0.8% whereas that of technical d-limonene varies from 0.2% to 1.2%. Finally, according to the parties, food grade d-limonene has a fresher orange odour than technical grade which depending on the application may be considered to have a burnt odour.

(270) In terms of applications, the parties submit that technical grade d-limonene can be used in the cleaning industry (as a cleaner for hands, floors, oven hoods and electronics etc); the pharmaceutical industry (in medicines, medical care products etc): as well as in the production of resins, adhesives and paints. The parties submit that food grade d-limonene can also be used in the cleaning industry as well as in some personal care products and solvents. In any event, the parties submit that there is no single application in which either food grade or technical grade d-limonene cannot be replaced by another substitutable product.

(271) In the case of the aforementioned applications using food grade d-limonene, the parties submit that the latter can be replaced by terpenes from other citrus fruits such as lemons, limes, tangerines and grapefruit. Consequently, the parties submit that the relevant product market should be considered as the market for the wholesale of all such terpenes. In the case of those applications using technical grade d-limonene, the parties submit that it can typically be substituted by products derived from soya, pine, eucalyptus and petroleum. As such, the parties consider that the relevant product market should be that for the wholesale of food grade d-limonene and its substitutable products.

(272) The market investigation has broadly confirmed the relevance of the distinction between food grade and technical grade d-limonene in light of their method of production and end uses. At the same time, many respondents have highlighted that a one-way substitution exists between the two types in the sense that food grade d-limonene can replace technical grade d-limonene in all applications but the same does not apply in the other direction.

(273) The results of the market investigation relating to the degree to which d-limonene (whether food grade or technical grade) can be replaced by other products are somewhat less conclusive. Although the market investigation has confirmed the parties' submission that d-limonene can be replaced in certain important end applications such as resin production by products derived from pine trees, other customers, most notably those in the flavour and fragrance industry, stated that no alternatives exist for their particular needs.

(274) For the purposes of the present decision, however, the question whether an additional segmentation within orange terpene (that is to say between food grade and technical grade d-limonene) can be left open as it would not alter the competitive assessment.

[215] See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 January 2011.

Likewise, the precise scope of the relevant market for orange terpene can be left open as the proposed transaction would not raise concerns under any plausible market definition.

IV.3.2.2. Relevant geographic market

(275) The parties submitted when notifying the proposed transaction that the market for orange terpene is EEA wide. Following the initiation of proceedings, however, the parties revised this view and submitted that the geographic market is worldwide in scope for many of the reasons previously mentioned with respect to orange oil and essences [see recital (247)].[216]

(276) The majority of respondents in the market investigation have expressed the view that the relevant geographic market is indeed global with many highlighting the absence of significant price differences between the various regions of the world.[217]

(277) As the proposed concentration does not raise concerns, however, even on the basis of a narrower market consisting of the EEA only, the precise delineation of the relevant geographic market can be left open.

IV.3.2.3. Competitive assessment

(278) Both parties to the proposed transaction produce technical grade d-limonene. Neither party produces food grade d-limonene although Citrovita does sell very minor quantities of food grade d-limonene that it obtains via a toll manufacturing arrangement with two third parties.[218] Given the absence of an overlap between the merging parties' activities in food grade d-limonene, the remainder of this section focuses only on technical grade d-limonene.

(279) When notifying the proposed concentration, the parties submitted that they were not in a position to estimate the size of the total market for the sale of technical grade d-limonene in the EEA. Each party to the proposed concentration therefore provided in the notification its estimates of the sales of Brazilian orange juice producers of technical grade d-limonene to the EEA and share estimates based on this total market size both in volume and value terms. The parties noted however at the time that the total size of the market should be larger and include sales of technical grade d-

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216 See reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011.

217 See replies to question 5 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to oil and essence customers. IFEAT (the International Federation of Essential Oils and Aroma Trades) also confirmed that the market for orange terpene is *'a global one with the price levels being similar throughout the world*.' See agreed non-confidential minutes of a telephone conference with IFEAT, 9 February 2011.

218 This toll manufacturing agreement is with […]* and […]*. These two companies receive raw materials, namely orange essential oil and orange oil phase essence that they then further process to produce an aroma product that Citrovita receives in return and adds back to its FCOJ. The distillation of the orange essential oil also gives rise to a quantity of food grade d'limonene that Citrovita receives back and then sells on the market. Citrovita has submitted that the volume of food grade d'limonene it has to sell is marginal (less than 5%) when compared to its production of technical grade d'limonene.

limonene from all origins and that consequently result the market shares provided in the Form CO overestimated the parties' actual position on the market.

(280) Following the notification of the proposed concentration, the parties provided revised estimates of the size of the total market for technical grade d-limonene at both an EEA and global level together with estimates of their own and their major competitors' market shares. On the basis of the parties' estimates, the merged entity would have a share of [30-40]*%-[40-50]*% of technical grade d-limonene sales in the EEA in volume and value terms. Although the merged entity would therefore become the leading supplier of technical grade d-limonene in the EEA it would continue to face competition from companies such as Cutrale and LDC each with a market share according to the parties' estimates in the region of [20-30]*%-[20-30]*%. In addition the market investigation has confirmed that there are no important differences in terms of product quality or other characteristics between the orange terpene produced by the parties to the proposed transaction and that produced by their competitors, which suggests that it is relatively easy for customers to switch suppliers.[219]

Table 6: Parties' market share estimates for orange terpene (technical grade d-limonene) in the EEA in 2009

	Citrovita's estimates	**Citrosuco's estimates**
Citrovita	[20-30]*%	[20-30]*%
Citrosuco	[5-10]*%	[10-20]*%
Combined	**[30-40]*%**	**[40-50]*%**
Cutrale	[20-30]*%	[20-30]*%
LDC	[20-30]*%	[20-30]*%
Others	[20-30]*%	[10-20]*%

Reply to the Commission's requests for information of 7 February 2011 and 11 March 2011.

(281) On a global basis, the total size of the market for technical grade d-limonene in 2009 was, according to the parties, in the region of 42-49 000 tons.[220] On that basis, according to the parties, the merged entity would have a market share of [20-30]*%-[20-30]*% which is itself not of a level to raise competition concerns. The merged entity would continue to face competition from other suppliers including Cutrale [20-30]*%-[20-30]*%, LDC [10-20]*% as well as a number of other smaller producers.

(282) The market investigation has demonstrated that most customers of technical grade d-limonene do not expect the proposed transaction to lead to a reduction in the quantity of the product supplied to the market. A number of customers have also underlined that the quantity of technical grade d-limonene on the market depends on the number of oranges that are processed into juice, thereby confirming the close link between the production of juice and the co-production of by-products. Consequently, if the merged entity were to attempt to raise orange terpene prices and/or reduce output after the

[219] See replies to question 9 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 25 November 2010 addressed to oils and essences customers.

[220] Citrovita estimates global sales of technical grade d'limonene in 2009 to have been […]* tons. Citrosuco's estimate is […]* tons. See reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

transaction, it would face a reaction from competitors that would be very similar to that which would occur if it were to attempt to implement an anti-competitive strategy on the orange juice markets as described in Section IV.2.5.

IV.3.2.4. Conclusion

(283) In light of the considerations outlined in the Section IV.3.2.3. and the lack of concerns expressed by the parties' customers contacted during the market investigation in relation to the potential effects of the proposed transaction on the production and supply of technical grade d-limonene, it is concluded that the notified concentration will not lead to a significant impediment to effective competition either in respect of the overall market for the supply of orange terpene (d-limonene) or its potential sub-segments of food grade and technical grade d-limonene.

IV.3.3. Pulp

(284) Another by-product of the juicing process is citrus pulp (which is sometimes also referred to as 'orange cells' or 'pulp cells'). Each party to the proposed transaction produces citrus pulp. According to the parties, some customers prefer the juice to contain this pulp. For these customers, pulp is re-added to the juice at a later stage.[221] The part of the pulp which is not re-added is sold separately. The primary use for pulp is blending with juice (FCOJ or NFC) and blends, in order to add texture and body to the product. As the parties have noted, the addition of pulp to the juice gives it a 'higher freshness aspect' that is appreciated by some end consumers.[222]

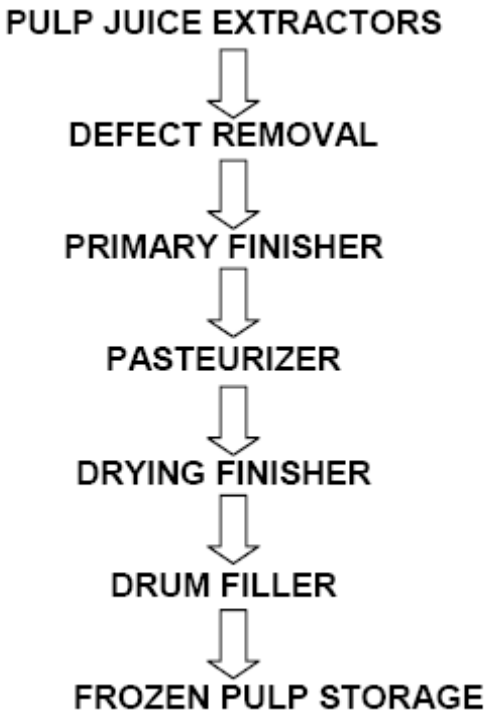
(285) After the oranges have passed through the juice extractors, the pulpy juice (about 50% of the fruit) is filtered by primary finishers that separate juice from pulp. The juice stream is further filtered by centrifugation. The pulp stream containing pieces of ruptured juice sacs and segment walls may then go to pulp recovery or to pulp washing. According to the parties, the production of frozen pulp cells depends on the demand from the market as well as the capacity of the processing plants.

(286) In the case of pulp recovery, the juice from the extractor is passed through a system that removes defects where undesirable pulp components, such as seed and rag, are removed. The clean pulp stream is then concentrated in a primary finisher. As can be seen in Diagram 2, the product is then pasteurised and cooled prior to packing in 200 litre metallic drums for storage below minus 18^{o} Celsius. Provided the storage conditions are respected, the product has a shelf life of 24 months.

[221] For sales in the EEA, the addition of pulp to the juice takes place at the parties' terminals (in Antwerp and Ghent). See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 7 February 2011.

[222] Form CO, pp. 78-79. According to the parties, pulp cells that are added back to the juice in this way can be distinguished from so-called 'bottom pulp' which is an intrinsic part of the juice (8%-12%) and not added back to the juice. See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 January 2011.

Diagram 2: Stages of pulp production



Source: Form CO, p. 79.

(287) If the pulp fraction is not recovered for commercial sale, pulp from the final juice finishers and filters can be washed with water (hence the name pulp wash) to recover 'juice soluble'. According to the parties, juice soluble is a juice that cannot be separated from the pulp during the mechanical extraction process. The pulp expelled from the primary and secondary finishers contains in the neighbourhood of 80% juice. This juice soluble can be recovered by washing and refinishing the pulp several times and may, legislation permitting, be blended with juice prior to the concentration process. The parties note that the relevant legislation in force in the EEA permits the 'in-line' addition of pulp wash to the juice stream prior to concentration. Such addition is not permitted, however, in the case of direct juice or NFC.[223] According to the parties, whenever frozen pulp cells are not being produced, the pulp is automatically washed and filtered several times before the residues are sent to the feed mill for the production of citrus pellets (see Section IV.3.4 on citrus pellets).

IV.3.3.1. Relevant product market

(288) The parties submit that, to their knowledge, there are no Commission decisions addressing market definitions in this sector. For the purposes of the present case, the parties propose that the relevant market should be that of pulp sold to third parties.

[223] The relevant legislation in question is Council Directive 2001/112/EC of 20 December 2001, cited in footnote 37. See parties' reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 January 2011.

(289) Respondents in the market investigation have generally confirmed that a distinct relevant product market exists with respect to pulp with one respondent noting that no substitutable products exist and that pulp "*is the natural way to "create" mouthfeeling*."[224] Other bottlers have also stressed the importance of pulp to the final juice product in terms of the texture it brings to the beverage and the way in which it gives the customer the sensation he is drinking a freshly squeezed juice.[225] Given the results of the market investigation concerning the lack of any substitutable products to pulp, it has been concluded for the purposes of the present decision that pulp constitutes a distinct relevant product market.

IV.3.3.2. Relevant geographic market

(290) The parties submit that citrus pulp is a commodity that is traded internationally. As such, the parties consider that the scope of the relevant geographic markets is worldwide even though transportation costs account for a higher percentage of the overall product cost than is the case for orange oil and essences.[226]

(291) The market investigation has not given any indication that the price of pulp would vary between the various Contracting Parties to the EEA Agreement. This would suggest that the market for pulp, like the markets for the supply of ingredients to the food industry and the market for fruit at the import/production level as considered in previous Commission decisions, is EEA-wide in scope.[227] Such a conclusion would also be in line with the finding reached with regard to the geographic scope of the market for orange juice.

(292) Data on citrus pulp trade flows obtained during the course of the market investigation indicate that in addition to imports into the EEA of citrus pulp from Brazil, there are also non-negligible imports into the EEA of citrus pulp originating in the United States.[228] Whilst this fact of itself does not necessarily lead to the conclusion that the market for pulp is broader than the EEA, it does lend support to the parties' submission in the Form CO that the product is indeed traded on an international basis. At the same time, the majority of respondents in the market investigation have

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[224] See replies to question 13 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 1 February 2011 addressed to oil and essence customers.

[225] See replies to question 51 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

[226] See reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 11 March 2011.

[227] See Commission Decision of in Case No COMP/M.4323 - *Arla/Ingman Foods* - (for food ingredients), OJ C 24, 2.2.2007; Commission Decision of 8 February 2008 in Case No COMP/M.4896 - *CVC Capital Partners/Katope International* – OJ C 87, 8.4.2008 and Commission Decision of 30 May 2006 in Case No COMP/M.4216 - *CVC/Bocchi/De Weide Blik* - (for fruit), OJ C 151, 29.6.2006.

[228] Citrosuco has noted that Florida and Brazil have different crop periods due to the fact that they are located in the northern and southern hemisphere respectively meaning that Florida pulp cells are produced in the Brazil off season. As such, the two productions complement each other from a logistical and supply chain point of view meaning that customers can be supplied with pulp cells of both origins because this helps bring efficiencies to Citrosuco's supply chain of pulp cells to Europe. See Citrosuco's reply to the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 7 February 2011.

indicated that the price of pulp (as for other by-products) does not vary significantly between the EEA and the rest of the world which would suggest that the scope of the relevant geographic market for pulp could indeed be global.[229]

(293) As the proposed concentration does not raise concerns, however, under any plausible alternative geographic market definition, the precise delineation of the relevant geographic market can be left open for the purposes of the present Decision.

IV.3.3.3. Competitive assessment

(294) Citrosuco produces pulp at its plants in Brazil as well as in the United States.[230] Citrovita produces pulp at two of its three orange processing plants in Brazil.[231]

(295) The market investigation has confirmed that the main customers in the EEA for pulp are bottlers and blenders of orange juice. At the same time, however, the market investigation has shown that there is no clear pattern to the manner in which these customers choose to have the pulp they buy supplied. For example, while some customers purchase it together with the juice, others purchase it separately. Moreover, customers such as bottlers and blenders may purchase pulp from suppliers other than their main juice supplier.

(296) When notifying the proposed concentration, the parties submitted that they were not in a position to estimate the size of the total market for the sale of pulp in the EEA. At the same time, although they suggested that the scope of the relevant geographic market could be broader than the EEA, they did not provide any information in support of this claim. Each party to the proposed concentration therefore provided in the notification its estimates of the sales of Brazilian orange juice producers of pulp to the EEA and share estimates based on this total market size both in volume and value terms. The parties noted however at the time that the total size of the market should be larger and include sales of pulp from all origins and that consequently result the market shares provided in the Form CO overestimated the parties' actual position on the market.

(297) In the course of the proceedings, the parties provided revised estimates of the size of the total market for pulp at both the EEA and global level together with estimates of their own and their major competitors' market shares. On the basis of the parties' estimates, the merged entity would have a share of [20-30]*% of pulp sales in the

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[229] See replies to question 48 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 31 January 2011 addressed to orange juice customers.

[230] Citrosuco estimates its pulp production capacity in Brazil to be […]* tons and […]* tons in the United States.

[231] Citrovita has a pulp plant installed at its orange processing facilities in Matão and Araras with a combined maximum theoretical capacity for pulp recovery of […]* tons per season. Citrovita does not have any equipment installed to recover pulp in its Catanduva plant as the volume of orange cells produced at its two other plants is sufficient for its commercial needs. Citrovita estimates that it would cost in the region of EUR […]* million to install a pulp recovery plant with an annual production capacity of 15 000 tons but has no plans to do so as demand is rather limited. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 18 January and 11 March 2011.

EEA in volume and value terms.[232] This would be second to the largest supplier LDC with a share of [50-60]*%-[60-70]*% but ahead of Cutrale with [5-10]*%-[10-20]*%. Other suppliers, including those in the EEA, would have a share in the region of 10%.

Table 7: Parties' market share estimates for pulp in the EEA in 2009

	Citrovita's estimates	**Citrosuco's estimates**
Citrovita	[5-10]*%	[5-10]*%
Citrosuco	[10-20]*%	[10-20]*%
Combined	**[20-30]*%**	**[20-30]*%**
Cutrale	[10-20]*%	[5-10]*%
LDC	[50-60]*%	[60-70]*%
Others	[5-10]*%	[10-20]*%

Source: Reply to the Commission's requests for information of 7 February 2011 and 11 March 2011.

(298) On a global basis, the total size of the market for pulp in 2009 was, according to the parties, in the region of 200 000-300 000 tons.[233] On this basis, according to the parties, the merged entity would have a market share of [10-20]*%-[20-30]*% which is itself not of a level to raise competition concerns. The merged entity would continue to face competition from other suppliers of pulp including Cutrale [20-30]*%-[20-30]*%, LDC [10-20]*%- [10-20]*% and other smaller producers including some located in the EEA.

(299) The market investigation has demonstrated that most pulp customers do not expect the proposed transaction will result in a reduction in the quantity of pulp supplied to the market. Several of these customers have also noted that the quantity of pulp on the market depends on the number of oranges that are processed into juice, thereby confirming the close link between the production of juice and the co-production of by-products such as pulp. Consequently, if the merged entity were to attempt to raise pulp prices and/or reduce output after the transaction, it would face a reaction from competitors that would be very similar to that which would occur if it were to attempt to implement an anti-competitive strategy on the orange juice markets as described in Section IV.2.5. In addition the market investigation has confirmed that there are no important differences in terms of product quality or other characteristics between the pulp produced by the parties to the proposed transaction and that produced by their competitors, which suggests that it is relatively easy for customers to switch suppliers.[234]

[232] Each party has assumed that their competitors' prices are similar so the share estimates provided by each party do not vary in percentage terms whether the calculations are based on volumes or values.

[233] Citrovita estimates global sales of pulp in 2009 to have been […]* tons. Citrosuco's estimate is […]* tons. See reply to the Commission's requests for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 17 February and 11 March 2011.

[234] See replies to question 9 of the Commission's request for information pursuant to Article 11 of Council Regulation (EC) No 139/2004 of 25 November 2010 addressed to oils and essences customers.

IV.3.3.4. Conclusion

(300) In light of the considerations outlined in Section IV.3.3.3. and the lack of concerns expressed by the parties' customers contacted during the market investigation in relation to the potential effects of the proposed transaction on the production and supply of citrus pulp, it is concluded that the notified concentration will not lead to a significant impediment to effective competition in respect of the market for the supply of citrus pulp.

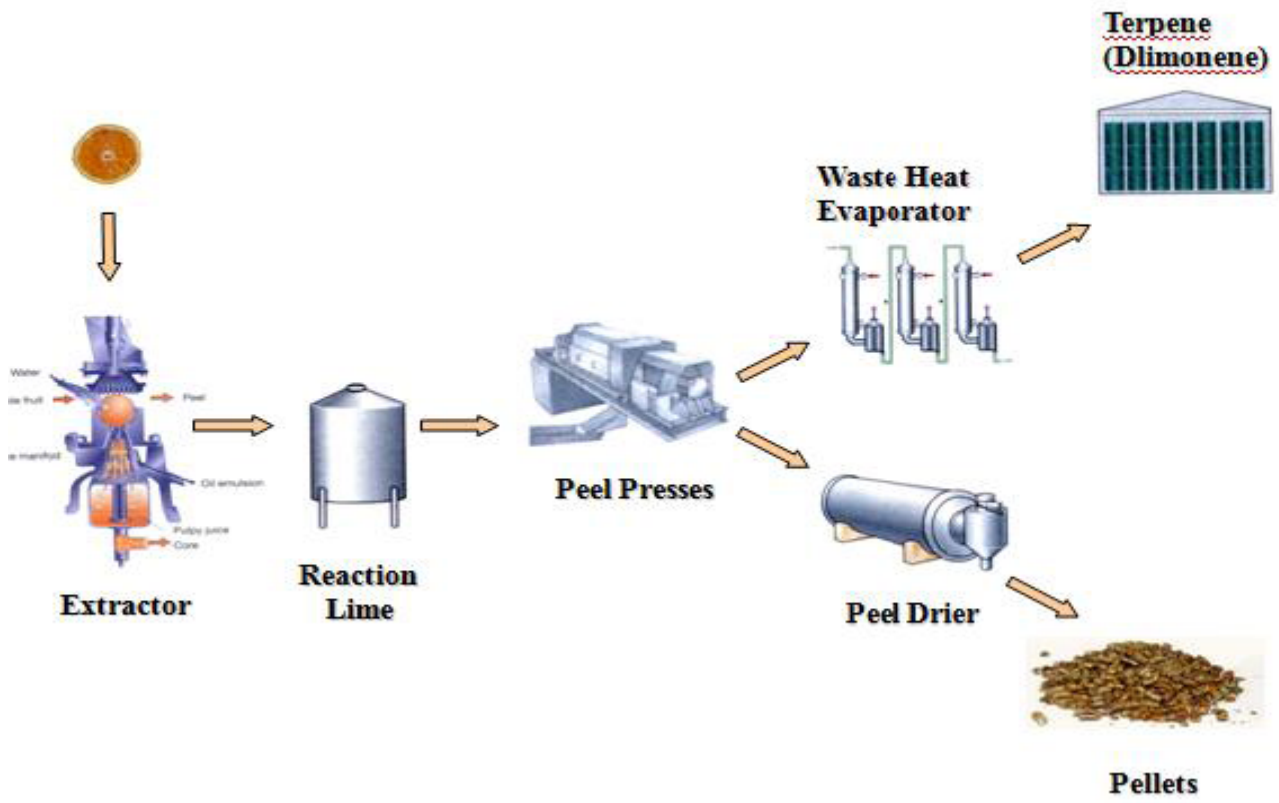
IV.3.4. Citrus pellets

(301) Citrus pellets, which are used as animal feed, are produced using the rejected peel, pulp and seeds from the juicing process. This peel and membrane residue from the juice extractors is the primary waste fraction from processing, amounting to approximately 40%-50% of the wet fruit mass.[235] Due to the large volumes of waste products generated by the juicing process, the production of citrus pellets takes place in the same processing plants used for juice processing.

(302) The process begins with the addition of a suitable binder such as molasses, fat or colloidal clays to the waste peel, pulp and seeds. The composition is then crushed and passed through a reactor where the ingredients are mixed. This reaction, which takes place with the addition of lime, results in the liberation of water from the mixture. The resulting mixture then passes through a peel press. This pressing process gives rise to a press liquid or liquor which is then concentrated in an evaporator to give rise to citrus terpene. The solid residue from the peel presses (also known as 'press cake') then undergoes a drying process at temperatures ranging from 80° Celsius to 100° Celsius in a cylindrical rotating dryer. After drying, the composition is pressed under high pressure in pelletizing machines or pelletizers before being cooled and stored in sealed, metallic silos ready for commercialisation.[236]

[235] *Handbook of citrus by-products and processing technology*, 1999, Robert J Braddock, p. 135.

[236] Form CO, p. 71.



Source: Form CO, Annex 6.12

IV.3.4.1. Relevant product market

(303) The parties submit that the relevant product market in the present case is the market for animal feed in general and cite a previous decision of the Commission (*Cargill/Agribrands*) where the merging parties' view in that instance that the relevant product market ought to be considered as "*all animal feed products, without the need for further distinction*" was supported by the market investigation.[237]

(304) The Commission has however considered animal feed markets in several decisions subsequent to the *Cargill/Agribrands* decision. In *CVC/PAI Europe/Provimi* and *Nutreco/BASF*, for example, the Commission found evidence of several narrower product markets within the broad category of animal feed.[238]

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237 Commission Decision of 19 February 2001 in Case No COMP/M.2271 - *Cargill/Agribrands* – OJ C 74, 7.3.2001.

238 In Commission Decision of 28 October 2002 in Case No COMP/M.2956 - *CVC/PAI Europe/Provimi* – OJ C 300, 4.12.2002, the Commission described animal feed (also known as 'compound' or 'complete feed') as consisting of two main ingredients: agricultural raw materials (mainly grains) and premix (i.e. feed additives) which contain feed additives of a higher nutritional value than agricultural raw materials. The Commission considered separate markets at the downstream level (i.e. for complete/compound animal feed) for fish feed and pet feed but ultimately left the issue open for the purposes of the decision.

(305) The market investigation in the present case has indicated that citrus pellets are fed almost exclusively to beef and dairy cattle typically as a part of a coarse blend (with one or two other feedstuffs) or as an ingredient in a compound feed. Citrus pellets do not appear to be suitable for feeding, at least in significant quantities, to other ruminants or animals, because of their high fibre content. This could indicate that a segmentation of the overall animal feed market according to the type of animal for which a feedstuff is suitable could be appropriate.

(306) At the same time, however, the market investigation has also shown that citrus pellets can be easily replaced in cattle rations by a number of other feedstuffs such as soya hulls and sugar beet pulp. This would suggest that citrus pellets do not constitute a relevant product market in their own right but rather form part of a broader market together with these other feedstuffs. For the purposes of the present case, however, there is no need to conclude as to the precise definition of the relevant product market since it does not affect the results of the competitive assessment of the notified operation.

IV.3.4.2. Relevant geographic market

(307) The parties submit that citrus pellets are a commodity and are traded internationally. Consequently they consider the scope of the relevant geographic markets is worldwide.

(308) Previous decisions concerning agricultural commodities have indicated the markets to be at least EEA-wide in scope.[239] In the present case, the market investigation has indicated that citrus pellets are indeed traded on an international basis and that there are no tariffs or other barriers that would hinder either their importation into the EEA or subsequent distribution between Member States. For the purposes of the present decision, however, the precise scope of the relevant geographic can be left open as it would not alter the competitive assessment.

IV.3.4.3. Competitive assessment

(309) The market investigation has indicated that citrus pellets are fed predominantly (though not exclusively) to beef and diary cattle typically as a part of a coarse blend (with one or two other feedstuffs) or as an ingredient in a compound feed. Citrus pellets do not appear to be suitable for feeding, at least in significant quantities to other ruminants or animals, because of their high fibre content which cattle can digest in their rumen (that is, first stomach).

(310) Citrus pellets do not store well for long periods and are typically commercialised within the crop period and consumed in less than six months from their date of

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In Commission Decision of 25 September 2007 in Case No COMP/4617 - *Nutreco/BASF* – OJ C 277, 20.11.2007, when discussing the market definition for animal mixes, the Commission considered separate product markets for basemixes and premixes in line with the conclusions reached in Commission Decision of 29 July 2003 in Case No COMP/M.3177 - *BASF/Glon-Sanders/JV* – OJ C 241, 8.10.2003. The market investigation also showed indications that separate markets may exist in respect of mixes for pet food and mixes for fish feed although the precise market definition for animal feed mixes was ultimately left open.

239 See for example Commission Decision of 3 February 1999 in Case No IV/M.1376 - *Cargill/Continental Grain* – OJ C 52, 23.2.1999.

production. The market investigation has shown that when the main Brazilian orange harvest comes to an end, typically at the end of the calendar year, citrus pellet customers in the EEA source pellets from the United States (Florida) which, being in the northern hemisphere, has a different harvest period to that of Brazil.

(311) According to the parties, the total annual production of citrus pellets in Brazil is between 1 million and 1.4 million tonnes. Of this figure, approximately 600 000 tonnes is exported to Europe from the port of Santos with the balance being sold on the domestic market, although this proportion, as well as the overall volume of production, can vary from year to year depending for example on the quantity of oranges processed.[240]

(312) The parties' main European customers of citrus pellets are large trading companies such as […]*, which are specialised in sourcing and supplying various agricultural commodities to manufacturers of animal compound feed.

(313) When notifying the proposed concentration, the parties submitted that they were not in a position to estimate the size of the total market for the sale of citrus pellets in the EEA. At the same time, although they suggested that the scope of the relevant geographic market could be broader than the EEA, they did not provide any information in support of this claim. Each party to the proposed concentration therefore provided in the notification its estimates of the sales of Brazilian orange juice producers of citrus pellets to the EEA and share estimates based on this total market size both in volume and value terms. The parties noted however at the time that the total size of the market should be larger and include sales of citrus pellets from all origins and that consequently result the market shares provided in the Form CO overestimated the parties' actual position on the market.

(314) Following the notification of the proposed concentration, the parties provided revised estimates of the size of the total market for citrus pellets at both an EEA and global level together with estimates of their own and their major competitors' market shares. On the basis of these estimates, the merged entity would have a share of [30-40]*%-[40-50]*% of citrus pellet sales in the EEA in volume and value terms.[241] This would be second to the largest supplier Cutrale with a share of [50-60]*%-[50-60]*% but ahead of LDC with [5-10]*%-[5-10]*%.

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[240] The figure of 600 000 tons was also mentioned by one respondent in the market investigation. This respondent also noted that the volume of citrus pellets imported into the EEA from Brazil has fallen over the past decade from a figure of more than one million tons in the past as reforms to the European Union's Common Agricultural Policy have made grain prices in the Union more competitive and therefore more attractive to European consumers. See agreed non-confidential minutes of telephone conference with Toepfer International, 29 November 2010.

The Grain and Feed Trade Association (GAFTA) also provided data on the volume of imports of citrus pellets from Brazil, which in its view, are reported within the CN code 23 08 00 40. These data show imports from Brazil under this code amounted to 620 000 tons in 2009.

[241] Each party has assumed that their competitors' prices are similar so the share estimates provided by each party do not vary in percentage terms whether the calculations are based on volumes or values.

Table 8: Parties' market share estimates for citrus pellets in the EEA in 2009

Volume (tonnes)	**Citrovita's estimates**		**Citrosuco's estimates**	
Citrovita	[…]*	[10-20]*%	[…]*	[10-20]*%
Citrosuco	[…]*	[20-30]*%	[…]*	[20-30]*%
Combined	[…]*	**[30-40]*%**	[…]*	**[40-50]*%**
Cutrale	[…]*	[50-60]*%	[…]*	[50-60]*%
LDC	[…]*	[5-10]*%	[…]*	[5-10]*%
Other origins (excluding Brazil)	[…]*	[5-10]*%	[…]*	[0-5]*%
Total	[…]*		[…]*	

Reply to the Commission's request for information of 7 February 2011 and 11 March 2011.

(315) On a global basis, the total size of the market for citrus pellets in 2009 was in the region of 2.2 million tons, according to the parties.[242] On this basis, according to the parties, the merged entity would have a market share of approximately [20-30]*%-[20-30]*%. The merged entity would continue to face competition from other important suppliers such as Cutrale [20-30]*%-[20-30]*% and LDC [10-20]*% each of which has citrus pellet production capacity in Brazil and the United States.

(316) The market investigation has confirmed, in any event, that citrus pellets compete against a number of other feedstuffs for inclusion in cattle rations including soya hulls, sugar beet pulp pellets and palm pellets. Respondents have confirmed that the price of citrus pellets has to remain competitive vis-à-vis competing feedstuffs otherwise downstream customers are able to switch to these alternatives. In this regard, the market investigation has shown that downstream customers such as compound feed producers are able to switch from citrus pellets to other feedstuffs relatively easily and at minimal cost as they can vary the mix of their ingredients to achieve a particular final product. Indeed, the market investigation indicated that these customers have sophisticated computer programmes which enable them to select the most keenly priced raw materials to achieve a particle feed standard.

(317) The finding reached in the preceding recital would support the preliminary conclusion that the relevant product market is broader than citrus pellets considered in isolation insofar as it would also comprise a number of other feedstuffs. This in turn would mean that the merged entity's position on the relevant market would be significantly lower than its position based solely on sales of citrus pellets since the merged entity is not active in the supply of the feedstuffs that are substitutes to citrus pellets.

(318) Data obtained during the market investigation relating to the consumption of animal feedstuffs in the Union indicate that the volume of citrus pellets consumed is not significant when compared to some of the alternative feedstuffs against which such pellets compete. For example, taking sugar beet pulp pellets as a comparator, the data indicate that the volume of citrus pellets consumed (900 000 tons) is less than one fifth of the volume of sugar beet pulp pellets consumed (4 950 000 tons).[243]

[242] Citrovita estimates global sales of citrus pellets in 2009 to have been […]* tons. Citrosuco's estimate is […]* tons. Reply to the Commission's requests for information of 17 February and 11 March 2011.

[243] See Toepfer International Market Review, February 2010, p. 11.

Consequently, extending the relevant product market to cover only these two products (citrus pellets and sugar beet pulp pellets) would have the effect of significantly reducing the parties' combined market position.[244]

(319) As noted in recital (309), citrus pellets are predominantly fed to cattle, typically as a constituent of a compound feed. Information was therefore sought in the market investigation as to the size of the Union market for compound feed for cattle and the relative importance of citrus pellets as a raw material input in its production (or their 'inclusion rate').

(320) According to one industry source, the volume of compound feed production for cattle in the Union in recent years has been in the region of 36 million tonnes.[245] As the volume of citrus pellets has been estimated by various sources to be in the region of one million tonnes, they make up less than 3% in volume terms of compound feed production for cattle. On the basis of this calculation, it is evident that the inclusion rate of citrus pellets in the production of compound feed for cattle in the Union is relatively low. In a similar fashion, it can be shown using the parties' own data of their combined sales of citrus pellets in the EEA in 2009 (less than […]* tons), that their share of a hypothetical market of compound feed for cattle would be less than [0-5]*%.

IV.3.4.4. Conclusion

(321) In light of the considerations outlined in Section IV.3.4.3. and the lack of concerns expressed by the parties' customers contacted during the market investigation in relation to the potential effects of the proposed transaction on the production and supply of citrus pellets, it is concluded that the notified concentration will not lead to a significant impediment to effective competition in respect of the market for the supply of citrus pellets.

IV.3.5. Conclusion on by-products

(322) On the basis of the foregoing, it is concluded that the notified concentration will not lead to a significant impediment to effective competition in respect of the different markets for the by-products that arise from the processing of oranges into juice.

V. CONCLUSION

(323) It is accordingly concluded that the notified operation will not significantly impede effective competition in the internal market or in a substantial part of it.

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[244] On the basis of the data provided by the parties and the Toepfer International Market Review, the merged entity would have a share of less than 5% in volume terms of a relevant market consisting of citrus pellets and sugar beet pulp pellets. The appropriateness of using sugar beet pulp pellets as a comparator was also confirmed by the Grain and Feed Trade Association (GAFTA) which noted that citrus pellets are similar in digestible fibre levels energy and fermenting sugar to sugar beet pulp pellets though lower in protein. GAFTA also highlighted wheat bran and soya hulls as competing products.

[245] See Toepfer International Market Review, February 2010, p. 5. Another respondent in the market investigation also estimated total cattle feed production to be in the region of 35-40 million tons.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Votorantim and Fischer would acquire joint control over the newly created joint venture through the merger of their respective subsidiaries Citrovita and Citrosuco, within the meaning of Article 3(1)(b) and 3(4) of the Merger Regulation, is hereby declared compatible with the internal market and the functioning of the EEA Agreement.

Article 2

This decision is addressed to:

FISCHER S/A
Com. Ind. e Agricultura
Rua João Pessoa, 305, Centro
Matao, 15990-902
SP-Brazil

and

VOTORANTIM INDUSTRIAL SA
Rua Amauri, n°255, 13° andar
São Paulo, SP
Brazil

Done at Brussels, 4.5.2011

For the Commission

(signed)
Joaquín ALMUNIA
Vice-President

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