EN

Case No COMP/M.2972 – DSM/Roche Vitamins

Only the English text is available and authentic.

REGULATION (EEC) No 4064/89
MERGER PROCEDURE

Article 8 (2)
Date: 23/07/2003

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 23/07/2003

C(2003)2648 final/COR

PUBLIC VERSION

COMMISSION DECISION

of 23/07/2003

declaring a concentration to be compatible with the common market and the EEA Agreement

(Case No COMP/M.2972 - DSM / Roche Vitamins)

(Only the English text is authentic)

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

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

Having regard to Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings[1], as last amended by Regulation (EC) No 1310/97[2], and in particular Article 8(2) thereof,

Having regard to the Commission's decision of 19 May 2003 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations[3],

Having regard to the final report of the Hearing Officer in this case[4],

WHEREAS:

I. INTRODUCTION

(1) On 31 March 2003, the Commission received a notification pursuant to Article 4 of Regulation (EEC) No 4064/89 ("the Merger Regulation") of a proposed concentration by which the undertaking DSM N.V. ("DSM") would acquire control within the meaning of Article 3 of the Merger Regulation of the whole of the undertaking Roche Vitamins and Fine Chemicals Division ("RV&FC") by way of purchase of shares and assets.

(2) After examination of the notification and a set of undertakings submitted by DSM on 25 April 2003 as amended on 13 May 2003, the Commission concluded, on 19 May 2003, that the notified operation fell within the scope of the Merger Regulation and that it raised serious doubts as to its compatibility with the common market and the EEA Agreement. The Commission therefore decided to initiate proceedings in accordance with Article 6(1)(c) of the Merger Regulation.

(3) On 27 June 2003 a new set of undertakings was submitted by DSM.

(4) On 9 July 2003 a final set of undertakings was submitted by DSM

(5) The Advisory Committee discussed the draft of this Decision on 18 July 2003.

(6) This Decision is adopted pursuant to Article 10(2) of the Merger Regulation. That provision requires decisions taken pursuant to Article 8(2) to be taken as soon as it appears that the serious doubts referred to in Article 6(1)(c) have been removed. This applies in particular where the parties have offered commitments. The revised commitments offered by the parties remove the serious doubts as to the compatibility of the concentration with the common market, so that a conditional Decision pursuant to Article 8(2) and Article 10(2) clearing the concentration may be adopted.

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1 OJ L 395, 30.12.1989, p. 1; corrected version OJ L 257, 21.9.1990, p. 13

2 OJ L 180, 9.7.1997, p. 1.

3 OJ C ...,...200. , p....

4 OJ C ...,...200. , p....

II. THE PARTIES

(7) DSM is incorporated in The Netherlands as a public limited liability company with its corporate seat in Heerlen. DSM has subsidiaries in Europe, the United States and elsewhere in the world and is active in the development and production of a broad range of chemical and life science products including feed enzymes, performance materials and polymers and industrial chemicals.

(8) Roche Holding is the ultimate parent of the Roche group, which consists of three divisions: pharmaceuticals, diagnostics and vitamins and fine chemicals. It is the latter division (RV&FC) which is the subject of the notified transaction.

(9) RV&FC is principally active in the production and sale of vitamins and carotenoids. It is also active in the production and supply of citric acid, premixes, cosmetic ingredients and Poly-Unsaturated Fatty Acids ("PUFA's"). In each of these areas RV&FC is engaged in research and development activities. RV&FC also distributes but does not produce feed enzymes (where it also has research and development activities) and certain vitamins and amino acids.

III. THE OPERATION

(10) The transaction concerns the acquisition by DSM of sole control of RV&FC pursuant to a Share and Asset Purchase Agreement signed on 10 February 2003.

IV. CONCENTRATION

(11) The proposed operation therefore constitutes a concentration within the meaning of Article 3(1(b) of the Merger Regulation.

V. COMMUNITY DIMENSION

(12) The undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5 billion[5] (DSM: EUR 5606 million; RV&FC EUR […]*). They each have an aggregate Community-wide turnover of more than EUR 250 million, (DSM: EUR […]*; RV&FC EUR […]*) but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension within the meaning of Article 1(2) of the Merger Regulation.

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[5] Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25). To the extent that figures include turnover for the period before 1 January 1999, they are calculated on the basis of average ECU exchange rates and translated into EUR on a one-for-one basis.

* 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.

VI. THE RELEVANT MARKETS

(13) The notifying party, DSM, is active in a broad range of product areas. However, the proposed operation only creates overlaps in additives used for the manufacture of animal feed and some additives used in products for human consumption. Among these products, there are only two affected markets, both related to feed enzymes: phytase and non-starch polysaccharide degrading enzymes ("NSP degrading enzymes").

Phytase

Relevant product market

(14) Phosphorus is a vital mineral element in animal nutrition. It plays a major metabolic role and has important physiological functions. An adequate supply of phosphorus in the feed is essential to health and optimal production of livestock. Animals obtain the phosphorus they need from cereals, oilseeds, other vegetal material and inorganic phosphates. More than two thirds of the total phosphorus present in vegetal raw materials occurs in the form of phytate-bound phosphorus. Monogastric animals, such as poultry and pigs, lack the necessary enzymes to release the phosphorus from the phytate. As a result, most of the phosphorus is excreted unused in the faeces and these animals need additional inputs of phosphorus in their vegetable and cereal based diets in order to maintain a proper phosphorus balance.

(15) There are two ways in which the amount of digestible phosphorus in animal feed can be increased, by adding inorganic phosphate or by adding phytase. Inorganic phosphates are minerals which are used as both fertilisers and feed additives. Phytase is an enzyme capable of degrading phytate and thereby liberating the phosphorus. It is available in liquid and dry (granulated or powder) form.

(16) The notifying party estimates that phytase could replace up to 50% of inorganic phosphate in animal feeds, but that it can never entirely replace inorganic phosphate. It submits that all forms of phytase and inorganic phosphate constitute part of the same relevant product market, on the basis that phytase can replace a significant proportion of inorganic phosphate, and prices are similar.

(17) However the Commission's market investigation does not support this claim. It appears that a vast majority of customers do not consider the products to be interchangeable. There are two main reasons for this. In comparison with inorganic phosphates, the use of phytase results in cost savings and reduces environmental pollution.

Inorganic phosphate reduction

(18) The use of phytase in feed can have a number of advantages. The first main advantage is to enable phosphorus in feed to be better digested and thereby reduce the quantity of inorganic phosphate required. Phytase also releases amino acids and other nutrients in the phytate molecule.

(19) The Commission's market investigation confirmed that the use of phytase results in a significant reduction in the amount of inorganic phosphate used in feed. One feed

compounder estimated that 150 grams of liquid phytase can substitute for approximately 7.5 kg of inorganic phosphate per tonne of feed.

Cost savings

(20) The Commission's investigation suggested that the cost of phytase is not the deciding factor but rather the cost savings that may be achieved by the inclusion of phytase in animal feed which, in turn, depends on the relative costs of phytase and mineral phosphate In terms of the overall cost savings in feed production, the addition of phytase is highly significant. One feed compounder estimated the saving from using phytase at one mill to be EUR 0.36 for each tonne.[6]

(21) Prices of DCP are driven by the demand for fertilisers and not the demand for feed, whereas the demand for phytase is driven only by demand for feed.

(22) Prices of phytase have been falling over the last 10 years. According to price development data submitted by the notifying party, the price of Natuphos 5000 (the phytase product of the DSM/BASF alliance) was approximately EUR […]* per kg in 1994. The price dropped steadily from its 1994 level to approximately EUR […]* in 2001.[7] On the other hand, the prices of inorganic phosphate have been steady or have increased slightly. The Commission's market investigation indicated there was little correlation between the prices of DCP and phytase.

(23) Further evidence that phytase and inorganic phosphate constitute separate relevant product markets is provided by the fact that the overwhelming majority of customers responded that they would not stop purchasing phytase and substitute it by inorganic phosphates in response to a price increase of 5-10%. Many customers responded that they would stop purchasing phytase only if it were to increase in price by 25-50%. Several responded that they would stop purchasing phytase if it were to increase in price by 100-300%.

Improvement of the nutritional value

(24) A major benefit of using phytase in feed is that by reducing the quantity of materials which must be added to vegetal raw materials to get an appropriate diet, it increases the quantity of vegetal raw material included in the feed and thereby increases its nutritional value. Using the example given at recital (19) above the addition of 150 grams of liquid phytase per tonne of feed can substitute for approximately 7.5kg of inorganic phosphate. This would mean that 7.35 kg of additional vegetal material may be added to the feed to increase nutritional value. Improving the nutritional value of feed also contributes to cost savings.

Handling

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[6] The total raw material cost of the feed per ton in this estimate is €159.38. It should be noted that raw material feed components represent 90 % of the weight and the majority of the cost. Nearly no saving may be achieved on the cost of raw materials since they are commodity products. Therefore, any saving achieved on the residual costs is of primary importance for an industry which operates with high volumes and very low margins (typically 3-4 %).

[7] Prices provided by notifying party of phytase in the European market calculated back to the standard product (Natuphos 5000) containing 5000 units per gram. Form CO page 70-71.

(25) The Commission's market investigation also confirmed that phytase and inorganic phosphate differ significantly in terms of volume, weight and handling. Phytase is generally sold in smaller quantities, for example, sacks or drums of 25 kg, and must be dispensed in small quantities that is to say, in terms of grams per tonne of feed. Inorganic phosphate is delivered in tonnes, stored in silos and is dispensed in large quantities using machinery. Easy handling of phytase also contributes to cost savings.

Environmental benefits / legislation governing phosphates on land

(26) Another important benefit of using phytase in feed is the reduction of excretion of phosphate in animal manure. Although the microbial activity in the soil releases phosphate which can have a beneficial fertilising effect, if present in excess, this can cause pollution of land and ground water. The use of phytase reduces the harmful environmental impact of phosphate from animal manure in areas with intensive livestock production. According to the Commission's market investigation, studies have found that optimising phosphate intake and digestion with phytase reduces the excretion of phosphorus by approximately 30%.

(27) The serious environmental concerns posed by the threat of high phosphate levels in manure has led a number of Member States (for example, France, Netherlands, Belgium and Germany) and regions to enact legislation limiting the level of phosphates to be applied to the land[8]. These are the geographic areas in which livestock is most intensively farmed in Europe.

(28) In addition, the Commission's investigation indicated that the regulatory constraints on the levels of phosphates in feed, in some areas of the EEA such as Germany, mean that the only alternative to using phytase in feed to reduce phosphorus is to decrease animal density.

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[8] **France**: Circulaire du 23 janvier 1996 relative à l'utilisation de nouvelles références de rejet des élevages de porcs ; Arrêté du 29 février 1992 fixant les règles techniques auxquelles doivent satisfaire les élevages de vaches laitières et (ou) mixtes soumis à autorisation au titre de la protection de l'environnement (modifié par les arrêtés du 29 mars 1995 et du 1er juillet 1999) ; Arrêté du 13 juin 1994 fixant les règles techniques auxquelles doivent satisfaire les élevages de volailles et (ou) de gibiers à plumes soumis à autorisation au titre de la protection de l'environnement (modifié par arrêté du 1er juillet 1999) (JO du 23 décembre 1994) ; Loi n° 76-663 du 19 juillet 1976 relative aux installations classées pour la protection de l'environnement; Décret n° 77-1133 du 21 septembre 1977 - Décret pris pour l'application de la loi n° 76-663 du 19 juillet 1976 relative aux installations classées pour la protection de l'environnement ;

Belgium : Convenant betreffende de vaststelling van maximumgehalten aan totaal fosfor in volledige voeders voor varkens en kippen die aangeduid zijn als "laag-fosfor-voeder" ; Ondertekenaars van het convenant "laag-fosfor-voeder" voor varkens;

Germany: Verordnung zur Umsetzung der Richtlinie 80/68/EWG des Rates vom 17. Dezember 1979 über den Schutz des Grundwassers gegen Verschmutzung durch bestimmte gefährliche Stoffe (18. März 1997) ; Düngemittelgesetz (15. November 1977); Verordnung über die Grundsätze der guten fachlichen Praxis beim Düngen (26. Januar 1996); Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Beseitigung von Abfällen (27. September 1994)

The Netherlands: Wet Milieubeheer; Besluit milieueffecten-rapportage; Besluit milieuverslaglegging ; Inrichtingen- en vergunningsbesluit milieubeheer

Liquid and dry

(29) The Commission also considered whether the market should be further segmented into separate markets for liquid and dry phytase. The market investigation indicated that customers considered liquid and dry phytase as functionally substitutable. There is full supply-side substitutability between the dry and liquid form of phytase, the dry form being produced out of the liquid form. Although liquid phytase is more generally used when the pelleting process is undertaken at a higher temperature (>70 degrees centigrade), the Commission's investigation indicated that, with some adjustments by the feed manufacturer, the products could be used for different types of feed. The market investigation also indicated that liquid and dry phytase is similar in terms of price on the basis of equivalent active ingredient. On this basis the Commission considers that it is not necessary to draw a distinction between liquid and dry phytase.

Conclusion

(30) The market investigation has demonstrated that phytase is not a substitute for inorganic phosphate for the following reasons:

(a) phytase lowers costs, as it reduces the additional quantities of inorganic phosphate that must be added to the feed, improves the nutritional value of feed and is easier to handle ;

(b) the use of phytase instead of inorganic phosphate limits the excretion of phosphorus on the soil and thereby allows environmentally constrained farmers to maintain or increase animal density ;

(c) a clear majority of customers stated that they would not stop purchasing phytase even if it were to double or triple in price.

(31) On the basis of the foregoing, the Commission concludes that there is a separate relevant product market for phytase.

Relevant geographic market

(32) The notifying party suggests the relevant geographic product market for phytase is at least EEA-wide on the basis that its phytase production is based at two facilities: one in Seclin, France and another (outsourced) in Kingstree (USA). Phytase is sold from these two plants in more than 70 countries via BASF's worldwide network. The notifying party also notes that the production of Novozymes is based at Kalundborg, Denmark and Franklington, South Carolina (USA) whilst the marketing is handled by inter alia, RV&FC worldwide. In addition, the parties submit there are no substantial differences in the prices of phytase sold by BASF and RV&FC respectively across the EEA. The notifying party submits there are no significant barriers to trade and transport costs constitute a small proportion of sales cost. Based on the example of Natuphos 5000G, the Western European 2003 price ranged from EUR […]* per kg in Austria to EUR […]* per kg in Greece, but the price in the majority of Member States varied insignificantly between EUR […]* and EUR […]* per kg (particularly in those countries along the north west European sea border).

(33) The overwhelming majority of customer and competitor responses to the Commission's market investigation indicated that the market for phytase is EEA-wide. The market investigation indicated that the vast majority of feed enzymes (that is to say,

NSP degrading enzymes and phytase) are sold along the north-western sea border of Europe where the livestock density is highest. The Commission's market investigation indicated that there is a high level of cross-border trade within the EEA, but that customers do not purchase phytase from outside the EEA. Some respondents explained they would not purchase phytase from a distributor outside the EEA because the regulatory regime outside the EEA is different. On the other hand, at the production level, a part of the phytase produced by Fermpro, the US toll manufacturing company that produces phytase for DSM, is transported by DSM to Germany for granulation. On this basis, for the time being, the Commission considers the relevant geographic market is at least EEA-wide at the production level and that the relevant geographic market is EEA-wide at the distribution level.

NSP degrading enzymes

Relevant product market definition

(34) NSPs are important components of all plant material. They are naturally present in the cell walls and are required for the structural integrity of the cells. When an animal consumes the plant material (such as cereals and vegetable protein sources) used in compound animal feeds, they will consume NSP. Poultry and pigs lack the endogenous enzymes necessary in their digestive tracts to degrade NSP. The addition of NSP degrading enzymes to poultry and pig feeds results in an increase in the availability and digestibility of nutrients in the feed which means improvements in feed performance: the animals utilise more effectively the nutrients already present in the feed. To a lesser extent NSP degrading enzymes can contribute to a reduction in environmental pollution (for example, excretion of nitrogen).

(35) There are several types of NSP degrading enzymes, the main ones being xylanase and beta-glucanase. The other NSP degrading enzymes are essentially marginal. Each of these enzymes is active on a particular substrate[9]. The NSP degrading enzymes products contain either one (mono-component) or several (multi-components) of these active substances. Multi-components products can be produced either with a single micro-organism or by blending enzymes produced by different micro-organisms. The notifying party considers there is no reason to differentiate between mono and multi-components or by production method. Customers are only concerned with the enzyme profile and the cost of the finished product. Many of them do not know how the NSP degrading enzymes they purchase are produced.

(36) The notifying party also argues that no distinction should be made between the liquid and dry form of the NSP degrading enzymes since most of the existing NSP degrading enzymes are produced in the two forms. Customers make their choice according to their feed production process and equipment.

(37) The notifying party argues that no distinction should be made between the type of cereals with which NSP degrading enzymes are associated or the animal species fed by these additives. To support this view they indicate that since most of the monogastric animals cereal diets are based on wheat, NSP degrading enzymes mainly include

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[9] A substrate is a polysaccharide present in cereals. Each NSP degrading enzyme degrades one of these substrates, for examplexylanase degrades arabinoxylans.

xylanase, the most appropriate enzyme to supplement wheat. Some diets associate barley with wheat, but less than 10 % of cereal diets contain more than 30% barley.[10] In these diets, it is recommended to add beta-glucanase to xylanase to optimise efficacy. However, some customers prefer to remain with wheat supplementation and not to switch to a wheat and barley combination. Therefore, xylanase enzymes are the predominant supplementary enzymes. They can be used for all cereals based diets. Xylanase faces competition from other enzymes for some specific types of diet. The notifying party submits that this is not sufficient reason to define separate product markets. It further argues that since most of the NSP degrading enzymes are not species specific, it is inappropriate to distinguish according to animal species.

(38) On this basis, the notifying party submits that all NSP degrading enzymes constitute a single relevant product market.

Different types of diets

(39) Diet composition varies according to the relative prices of wheat and barley. While most of the time this comparison is in favour of wheat and therefore diets are only made of wheat, sometimes and in some regions barley prices are attractive enough to add barley to wheat. In 90 % of the diets, the level of inclusion of barley is below 30%.

(40) The customer responses to the Commission's first phase market investigation were unanimous in the view that it is necessary to distinguish enzymes according to the type of cereal with which they are associated. The market investigation indicated that the response of different cereals varies according to enzyme, since xylanase has little effect on barley and beta-glucanase has little effect on wheat. Most of the suppliers of NSP degrading enzymes indicated that their products were targeting one type of cereal or particular combinations of cereals, namely "wheat", "barley", or "wheat and barley".[11]Therefore it appeared that the product market definition proposed by the notifying party could fail to take into account this product differentiation.

(41) However, the second phase market investigation has revealed that customers follow different strategies when purchasing NSP degrading enzymes. Whereas some of them are looking for products that can be efficiently added to all diets, that is to say, combining xylanase and beta-glucanase, others would prefer to use mainly pure xylanase products and add beta-glucanase products when the level of barley or similar cereals in diets becomes significant. While the main advantages associated with the first strategy is that it is easy to handle and requires low levels of stocking, the second strategy appears to be more cost effective, but requires more nutrition know-how and more handling and stocking equipment. However, neither strategy has significant advantages over the other and the two are equally represented among customers.

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[10] According to the notifying party, under certain market conditions, nutritionists can choose to add barley to wheat based diets. These conditions depend mainly on the relative cost positions of both cereals and occur only occasionally.

[11] Pure barley diets do not exist. Barley products are intended to be added to wheat enzymes in wheat and barley diets.

(42) The second phase market investigation has also indicated that producers and distributors are following different types of strategies with respect to their portfolio of NSP degrading enzymes. Some focus on a single product that can be used for all diets, others develop only pure products specific to each kind of substrate and a third category follows an "in-between" strategy by proposing several combinations of enzymes in order to match several levels of inclusion of barley in diets.

(43) Therefore, when a customers selects NSP degrading enzymes, he will decide on a procurement strategy based on the price and efficacy of a spectrum of products, ranging from pure xylanase products to pure beta-glucanase products and including combinations of the two enzymes. No clear distinction can be drawn between the products within this spectrum and no predominant purchasing strategy can be identified. In addition, there is a high level of correlation between the prices of the different products[12] currently on the market, except for certain products that had been phased out. It is therefore concluded that NSP degrading enzymes should not be distinguished according to the type of diets with which they are associated.

Different types of animal species

(44) The first phase market investigation also indicated that NSP-degrading enzymes could be differentiated according to the animal species for which they are intended. The market investigation indicated for example, that poultry and swine based wheat diets respond more positively to xylanase but that the dose required for the best economic response differs between species. The major supplier of NSP degrading enzymes, Danisco Animal Nutrition ("Danisco"), has three product lines, "poultry", "swine" and "swine and poultry". In addition, some products are registered for certain species only. For example, the DSM/BASF product, 'Natuphos' is only registered for broilers, layers and turkeys. Even if most products can be used for all monogastric animals and therefore could not be classified in a given animal species category, the product market definition proposed by the notifying party fails to take into account this product differentiation. Consequently, alternative product market definitions based on animal species could be considered.

(45) However, the second phase market investigation indicated that, even if there are differences in the efficacy of NSP degrading enzymes on different animal species, there is a high level of homogeneity of the products available for each specie and most of the major products are registered for all animal species, in similar or slightly adapted forms. On this basis, it is concluded that NSP degrading enzymes should not be distinguished according to animal species.

Other characteristics

(46) A large number of replies to the Commission's first phase market investigation indicated that the distinction between mono and multi-components should be considered, however the second phase investigation confirmed that mono and multi

[12] Price correlation was run on price and sales value series over the last five years.

component NSP degrading enzymes compete with each other and that they cannot be separated into distinct relevant product markets.

(47) There is a full supply-side substitution between the dry and liquid form of NSP degrading enzymes, the dry form being produced out of the liquid form. No cost advantage is attached to either of the two forms and customer choice is driven by the way the customer processes feed and its equipment. Therefore, the dry and liquid forms of NSP degrading enzymes should be seen as belonging to the same product market.

(48) Finally, heat stability has been repeatedly mentioned as an important characteristic of NSP degrading enzymes. However, most of the products currently on the market have the same level of heat stability and therefore should not be distinguished according to this characteristic.

(49) It is concluded from the foregoing that all NSP degrading enzymes should be considered as belonging to one single product market.

Geographic Market Definition

(50) The notifying party submits that the scope of the geographic market for NSP-degrading enzymes is at least the EEA on the basis that all the major suppliers of NSP-degrading enzymes operate their respective enzyme businesses out of a few plants from which they distribute their products throughout the EEA. The notifying party observes that the EEA and the US markets are not homogenous. The use of NSP-degrading enzymes is linked to the utilisation of certain types of raw materials. In Europe animal diets are often based on wheat, while in the US they are mostly based on maize, which may require other types of NSP-degrading enzymes. The market investigation confirmed the view of the notifying party. Therefore, for the time being, the Commission considers the geographic market for NSP-degrading enzymes is likely to be EEA-wide at the distribution level, and is at least EEA wide at the production level.

VII. COMPETITIVE ASSESSMENT

Agreements

DSM and BASF Co-operation Agreement

(51) In 1994, DSM entered into exclusive world-wide agreements with BASF for the development, production, marketing, sales and distribution of feed enzymes (NSP degrading enzymes and phytase). The main agreement is a co-operation agreement and a joint development agreement. Under the agreements, DSM carries out production and the major part of research and development, while sales and distribution are done by BASF. All costs and profits are shared on a 50:50 basis and the activities of the parties concerning the objectives of the agreements are co-ordinated jointly by a steering committee consisting of two persons one from each party.

(52) The agreements are exclusive insofar as DSM is obliged to supply the feed enzymes covered by the agreements exclusively to BASF and BASF is obliged to purchase the feed enzymes from DSM. According to the notifying party, the final decision on pricing is taken by BASF. However, the arrangements permit the parties to the agreements to

inspect each other's accounts and to discuss detailed annual plans including matters such as pricing, costs and production volumes with respect to the alliance.

(53) The co-operation agreement stipulates that the results stemming from the research work shall become the exclusive property of the party which performs the research. The performing party is required to grant a royalty free license to use, produce and sell such results at the request of the other party. These agreements have been concluded for a duration of 15 years and will come to an end in 2009.

(54) In conclusion, BASF depends on DSM for its feed enzyme activities.

RV&FC and Novozymes Alliance Agreement

(55) In 1996, RV&FC entered into a non-exclusive agreement with Novozymes, a producer of industrial enzymes, for the distribution of existing enzymes and for the development of new feed enzymes. This agreement was complemented by a new agreement entered into in 2001 under which Novozymes is primarily responsible for process research, product development and production. RV&FC is responsible for new product application (essentially how the product is used), registration, marketing and sales.

(56) Pursuant to the Novozymes/RV&FC agreements, costs and profits are shared on a […]* basis, RV&FC having the […]*. Prices are determined by RV&FC and Novozymes does not have any influence on pricing decisions. These agreements will come to an end in […]*.

(57) Novozymes is heavily dependent on RV&FC for marketing, sales and distribution of its feed enzymes, but also for animal nutrition know how, market understanding and customers relations.

(58) As far as distribution is concerned, these agreements grant RV&FC […]* rights to distribute Novozymes' feed enzyme products outside the EEA, but not within the EEA. […]* Lohmann Animal Health ("Lohmann") also distributes Novozymes' products under its own brand name in the EEA. Lohmann sales territory is limited to France, Austria, Germany, Portugal and Spain. Its sales are only a quarter of those of RV&FC in the EEA and it does not sell any Novozymes products outside the EEA. In addition, the Novozymes/Lohmann agreement is merely a distribution agreement and therefore, does not cover any research and development.

(59) It should be noted that the DSM/BASF and Novozymes/RV&FC agreements cover both phytase and NSP degrading enzymes. These two agreements make Novozymes and BASF heavily dependent on their counterparts for their feed enzyme activities. In addition, the profit sharing and research mechanisms provide for a high level of economic integration.

(60) As a result of the concentration between DSM and RV&FC a structural link will be created between the DSM/BASF and the RV&FC/Novozymes alliances leading to overlaps at both the levels of production and the distribution.

Phytase

(61) Historically, competition in the market for phytase has taken place between the RV&FC/Novozymes and the DSM/BASF alliances. According to the notifying party, at

the production level, Novozymes and DSM have market shares of [30 - 40]*% and [60 - 70]*% respectively[13]. The only other producer of phytase currently active in the EEA is AB Enzymes, which had a share of only [0 - 10]*% of the total EEA production in 2002.

(62) At the distribution level, BASF, DSM's exclusive distributor, represented [60 - 70]*% of the sales recorded in the EEA in 2002, while RV & FC represented [20 - 30]*% of the market. This market share is lower than Novozymes' share of production because Lohmann distributes Novozymes' phytase in some countries and represented [0 - 10]*% of the market. AB Enzymes had [0 - 10]*% of the distribution market, the same as its share of production. As a result of the creation of a structural link between the DSM/BASF and RV&FC/Novozymes alliances the proposed operation will give rise to a combined market share of the two alliances, post-operation, of [90 - 100]*% of the production and [80 - 90]*% of the sales of phytase in the EEA, based on 2002 figures.

(63) The positions held by DSM, Novozymes, BASF and Roche are unlikely to be contested by AB Enzymes.[14] The market investigation has revealed that the AB Enzymes phytase product is perceived by customers and competitors as a lower quality product. In particular, the AB Enzymes product does not offer a sufficient level of heat stability and has received Community regulatory approval for only a limited number of species. [15] Even if AB Enzymes were to extend its sales to other species, which would only be possible once it has obtained Community approval (for which no deadline is foreseen), it is unlikely that its overall proportion of sales would significantly impact on the competitive position of DSM, Novozymes, BASF and RV&FC.

(64) In addition to AB Enzymes, competition could theoretically come from new entrants. Danisco has just obtained approval from the Federal Drug Administration of

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[13] All the market shares mentioned at the production level are EEA wide market shares. Market shares on a wider relevant geographic market would not be significantly different.

[14] AB Enzymes received regulatory approval and launched its phytase product, Phyzyme, in the EEA in July 2001.

[15] All enzymes intended for use as feed additives follow a procedure of pre-market authorisation in the Community. Since 1970 there has been a Community-wide system of authorisation based on the concept of the positive list, that is to say, only the additives on the list may be used. Council Directive 70/524/EEC of 23 November 1970 concerning additives in feedingstuffs (OJ L 270, 14.12.1970, p.1.), as last amended by Regulation (EC) No 1756/2002 (OJ L 265, 3.10.2002, p.1 contains the positive list including vitamins for use as feed additives. No additive may be placed on the market if it is not approved by the Commission and Member States. The assessment is carried out by the Scientific Committee for Animal Nutrition ('SCAN') and Member State experts. After first evaluation by a Rapporteur Member State, a dossier is submitted to the Commission and to the other Member States for a centralised pan-European approval. Council Directive 87/153/EEC of 16 February 1987 fixing guidelines for the assessment of additives in animal nutrition (OJ L 208, 11/8/1994, p.5), as last amended by Commission Directive 2001/79/EC of 17 September 2001 amending Council Directive 87/153/EEC fixing guidelines for the assessment of additives in animal nutrition (OJ L267, 6/10/2001, p.1) sets out the applicable guidelines for the assessment of additives in animal nutrition. Registration is required for the pipeline strain, the species for which it is intended, and any variations on the strain. The production plants intended for production of the phytase product also require approval. At present, the regulatory approval process takes at least 24-36 months. The scientific safety assessment carried out by SCAN will from mid 2003 be carried out by the European Food Safety Authority ("EFSA"), a new independent Community body taking over the functions of a number of scientific committees previously established by the Commission. In the medium term the scientific assessment is expected to be more efficient with EFSA but for the dossiers at present in the pipeline it is difficult to forecast the impact of the transition to the new body.

the United States for a new phytase product, Phyzyme XP. However this product will not obtain Community approval before 2005 and therefore Danisco will not enter the EEA market with Phyzyme XP for at least two years. The market investigation also disclosed that certain companies are developing phytase by expression in plants. In particular, one company is currently engaged in the research and development of new enzymes and their production in plants. This company's plans to make phytase in green plants are currently theoretical and a product launch is not foreseen in the Community before 2006. The development of such plants depends on both technical advances and a Community regulatory climate that allows genetically modified plants to be grown. The necessary technology will not reach a commercial stage for at least three to five years. Additionally the economics of production in green plants remain to be determined. Another impediment to the manufacture of feed enzymes in green plants for Europe is the de facto moratorium on genetically modified crops in the Community. Therefore, the Commission considers that new market entry does not appear likely for at least two to five years.

(65) The Commission notes that the proposed transaction has the effect of putting DSM in a unique position through its involvement in both alliances. The Commission considers that post-operation, DSM will have the ability and the incentives to bring about an increase in phytase prices and reduce innovation and research and development of both alliances.

(66) Given that DSM is at the centre of both alliances, it will be in a position post transaction to weaken either or both of its partners, Novozymes and BASF. For example, DSM would have the ability to pursue the two following strategies. In the RV&FC/Novozymes alliance, RV&FC determines the prices. DSM, via its link with RV&FC, would have access to the prices of the RV&FC/Novozymes alliance. DSM would therefore be in a position to increase the price of the RV&FC/Novozymes' product in order to promote the DSM/BASF co-operation to the disadvantage of the RV&FC/Novozymes. On the other hand, DSM may influence but not determine the prices of the DSM/BASF alliance and performs research and development. DSM's incentives to innovate for RV&FC's competitor, post-concentration, BASF would be reduced following the operation if DSM decides it wishes to concentrate its efforts on the RV&FC/Novozymes alliance.

(67) As noted at paragraph (22) above, phytase prices have been declining since 1994. Competition has historically taken place between the RV&FC/Novozymes and DSM/BASF alliance. The notified operation therefore, removes the competition that has previously taken place between these two alliances and which has been responsible for the decline in price. The Commission considers that the combination of the two alliances leads to very high market shares at the levels of production and of sales, and would enable DSM or the two alliances post-concentration to be in a position to engage in any of the above strategies which could lead to a reduction in innovation and/or increase in prices to the detriment of consumers.

Conclusion as to competitive assessment of phytase market

(68) The strong positions held by DSM, Novozymes, BASF and Roche, the high degree of interdependence between the parties to the alliances, and the absence of a credible competitive counterweight in the short to medium term lead the Commission to consider that the proposed operation raises serious concerns as to the creation or strengthening of

a dominant position on the market for phytase. Therefore the Commission has serious doubts as to the compatibility of the proposed transaction with the common market.

NSP degrading enzymes

(69) In addition to NSP degrading enzymes of Novozymes, RV&FC distributes another NSP-degrading enzyme produced by Iogen of Canada. The main competitors of DSM and Novozymes for the production of NSP-degrading enzymes in the EEA are Danisco and Genencor. Danisco holds 42.7% of Genencor's shares and distributes NSP-degrading enzymes produced by Genencor. For its NSP-degrading enzyme activities, Danisco relies partly on Genencor. Conversely, Genencor is highly dependent on Danisco for the distribution of its NSP degrading enzymes, since more than 75% of its sales are achieved through Danisco. The Commission considers the large shareholding of Danisco in Genencor is likely to lead to an alignment of their economic interests. In addition, the two companies are largely interdependent in this sector. Therefore, the Commission regards the market shares of Genecor and Danisco as cumulative at the production level for the purpose of this decision.

(70) Genencor NSP degrading enzymes are also sold by Adisseo with whom Genencor has certain agreements that will tend to align their economic incentives. As a consequence, it seems that Adisseo should be seen as being part of the Danisco/Genencor grouping in relation to their NSP degrading enzymes.

(71) Under the market definition proposed by the notifying party, at the production level, DSM and Novozymes have market shares of [0 - 10]*% and [20 - 30]*% respectively. Their main competitor is Danisco, which produces [40 - 50]*%, [0 - 10]*% itself and a further [30 - 40]*% through Genencor. These two groups face the competition from smaller producers with market shares below [0 - 5]*%.

(72) As far as the distribution of NSP degrading enzymes is concerned, Danisco holds [30 - 40]*% of the NSP-degrading enzymes distribution market in the EEA in 2002, Adisseo [0 - 10]*% and BASF [0 - 10]*% of the market. Novozymes products are distributed by Lohmann and RV&FC, which have respectively [0 - 10]*% and [20 - 30]*% of the market. At the distribution level, the parties would have a [30 - 40]*% market share (DSM/BASF [0 - 10]*% and Novozymes/RV&FC [20 - 30]*%) to be compared to the [40 - 50]*% held by Danisco and Adisseo.

(73) The Commission considers that single dominance issues in NSP-degrading enzymes are unlikely to arise because Danisco and the companies associated with it will have a stronger position at both the production and the distribution level than the group made of DSM/BASF/RV&FC/Novozymes.

(74) Since the two market leaders will have market shares of, respectively, [40 - 50]*% and around [30 - 40]*%, while the third largest competitor with [0 - 10]*% market share will be eliminated, the question of collective dominance has been examined.

(75) The notifying party claims that such a scenario is unlikely as the market is not transparent and NSP-degrading enzyme products are not homogeneous. According to the notifying party, prices are privately negotiated with a large number of customers. Although there are only a few pre-mixers in the EEA, there are more than 500 feed compounders and integrators who purchase feed enzymes. As a consequence, distributors do not know the prices of their competitors and therefore monitoring is

practically impossible. The notifying party also points to the existence of levels of excess production and distribution capacity that would jeopardise attempts at co-ordination.

(76) The Commission's market investigation has largely confirmed that monitoring prices and quantities on the NSP-degrading enzymes market is extremely difficult. Prices are privately negotiated once or twice a year on average and therefore only general but no precise price information can be derived from the tender negotiations. One distributor of NSP degrading enzymes indicated that "the only way to get detailed market price information is to ask customers, who will mostly only give an indication or are not always truthful, since they are trying to negotiate a better price". The demand is fragmented both horizontally given the high number of feed compounders in the EEA, and vertically since NSP degrading enzymes are sold to premixers, feed compounders and integrators. Therefore gathering relevant information on quantities sold is very difficult, if not impossible. A tacit customer or geographic sharing of the market is not possible either, since the customer base is heterogeneous and operates on several levels (pre-mixers, compounders and integrators). Some of these customers sell feed enzymes at different levels over a large geographic area. Finally, product ranges vary widely across producers and distributors which implies that one product of a given producer/distributor cannot generally be directly compared with one product of another producer/distributor but rather with several products whose performances are close, but not identical, to the product mentioned. Therefore, the Commission considers that the transaction, in its present form, does not give rise to concerns as to the creation of a collective dominant position on the market for NSP degrading enzymes.

(77) On the basis of the foregoing, the proposed concentration would not give rise to competitive concerns on the NSP degrading markets.

VIII. COMMITMENTS PROPOSED BY THE NOTIFYING PARTY

(78) On 9 July 2003 the notified party submitted a revised set of undertakings (hereinafter referred to as "undertakings" or "commitments") in accordance with Article 8(2) of the Merger Regulation, for the purpose of achieving clearance of the concentration. The commitments are set out in the Annex to this Decision and form an integral part of it.

(79) The Commission is of the view that that the commitments submitted on 9 July 2003 address and resolve in a satisfactory manner the competition concerns raised by the concentration.

Summary of the Commitments offered by the notifying party

(80) The notifying party has proposed a termination of the DSM/BASF Alliance in feed enzymes and the divestment of DSM's feed enzymes business under the DSM/BASF Alliance (namely, the feed enzymes phytase, NSP-degrading enzymes and α-amylase) and has undertaken to suspend the implementation of the concentration between DSM and RV&FC unless and until they have entered into a final agreement terminating the DSM/BASF Alliance and final sale and license agreements for the sale of the divested

business and the Commission has approved the terms of the agreements and the purchaser.

Transfer and license of technology and intellectual property

(81) The notifying party commits to the transfer and license of all feed enzymes technology and intellectual property.

(82) First, DSM commits to transfer to the purchaser the ownership of any form of intellectual property rights related to the production or development of phytase, NSP-degrading enzymes and α-amylase including, but not limited to, patents, know how and trademarks. This transfer is subject to the rights of Novozymes under its respective license agreements with DSM and a license back to DSM to the extent necessary to develop, make, have made, use and sell products outside the field of feed enzymes.

(83) Furthermore, DSM commits to grant the purchaser an irrevocable, exclusive royalty-free license under the background technology[16] to develop, make, have made, use and sell phytase, NSP-degrading enzymes and α-amylase. This license will be non-exclusive to develop, make, have made, use and sell other feed enzymes.

(84) Finally, DSM undertakes to divest feed enzymes biological materials such a strains and markers which are used in the development and production of phytase, NSP-degrading enzymes and α-amylase.

Transfer or completion of R&D projects

(85) As regards the existing research and development projects for feed enzymes, DSM commits to transfer these to the purchaser or, at the purchaser's request and upon the Commission's prior approval, to complete one specific R&D project on behalf of the purchaser. The purchaser will have the ownership of the results of the R&D projects.

Transfer of production

(86) DSM undertakes to provide the purchaser during a period of up to […]* with all necessary technical assistance in order to enable the purchaser to set up its own production of feed enzymes. To ensure that the purchaser has a secure source of supply, DSM will supply the purchaser, upon its request, under a cost-plus toll manufacturing arrangement for a transitional period of up to […]*. Upon request of the purchaser, and upon prior approval of the Commission, such toll manufacturing agreement may be extended beyond a transitional period.

(87) In addition, DSM commits to sell to the purchaser, at its request, or to a third party designated by the purchaser […]*.

(88) DSM/RV&FC also undertakes that for a period of […]* from the closing date of the divested business or for a period of […]* from the date of the termination of the RV&FC/Novozymes Alliance, whichever is shorter, to abstain from activities in the

[16] The background technology is shared between all enzyme applications (feed and others) and consists in the expression of enzymes in micro-organisms

field of development and production of phytase, NSP-degrading enzymes and α-amylase other than on basis of the existing RV&FC/Novozymes Alliance.

(89) Finally, the commitments put in place several hold-separate obligations including the instalment of firewalls to prevent the flow of information between the DSM employees responsible for phytase toll manufacturing and R&D and the DSM key employees previously involved in the divested business and the RV&FC employees who are involved in the sale of these products for the duration of the transitional period. The commitment also foresees the appointment of a hold-separate manager and a monitoring trustee. Furthermore, DSM will offer incentives to DSM key employees involved in the production and R&D of feed enzymes for the purchaser and will offer incentives to DSM key employees to accept employment with the purchaser when offered.

Assessment of the Commitments offered by the notifying party

(90) The remedy proposed by the notifying party will terminate the DSM/BASF alliance and divest DSM's feed enzymes business to a suitable purchaser in order to ensure that DSM's current activities in feed enzymes (phytase, NSP-degrading enzymes and α-amylase) cease entirely and to create an independent, viable and effective competitor. This creation of an independent, viable and effective competitor is critical as the only other supplier, Novozymes/RV&FC (and DSM post-transaction), on the market would, in the event of the failure of the purchaser to provide effective competition, be left without any significant competition and competition would hence not be restored. In view of the fact that the development, production, sales and distribution of phytase have been until now intrinsically linked to that of the other existing feed enzymes, NSP-degrading enzymes and α-amylase, (see paragraphs 49-58 above), any remedy addressing competition concerns on the market for phytase cannot be limited to phytase alone but should also include these other feed enzymes.

(91) The remedies as proposed contain all elements necessary for a suitable purchaser to establish itself as an independent, viable and effective competitor in feed enzymes including phytase. The market investigation of the Commission has indicated that the inaccessibility of intellectual property rights has been the major barrier to successful entry into the phytase market. Under the proposed commitments the purchaser would acquire all intellectual property rights related to phytase, NSP-degrading enzymes and α-amylase (α-amylase was included, by DSM, in the package to be divested on the basis of industrial and commercial considerations) and would receive an exclusive license to use background technology to develop, make, have made, use and sell these and would hence have access to all necessary intellectual property to produce and sell phytase, NSP-degrading enzymes and α-amylase. The latter point has been supported by the Commission's market test of the proposed commitments. The Commission's market test has also largely confirmed that feed enzymes technology can be transferred successfully and has been successfully transferred in the past.

(92) Research and development is also important in the field of feed enzymes and all existing feed enzymes R&D projects will be transferred to the purchaser. The market test has indicated that, although there are inevitably risks involved in technology transfer, a suitable purchaser would be able to complete this transfer successfully and that there have been successful transfers of R&D projects in the field of feed enzymes in the past. The market test also indicated that any completion of an ongoing R&D project by DSM would be undesirable and that an outright transfer would be preferable. Therefore, the Commission considers that the ability to complete this R&D project

independently from DSM is of great importance to become a viable and competitive force.

(93) In order to allow the purchaser to start its own production, the commitments provide for assistance by DSM in establishing this production and provides for the possibility of toll manufacturing for a transitional period if requested by the purchaser. Furthermore, if requested by the purchaser, DSM commits […]*. The commitments do not include the divestment of any (feed) enzyme fermentation production assets and therefore access to independent production capacity is important for the purchaser to become an independent, viable and competitive force. This has been confirmed by the market test. In addition the market test indicated that any continued toll manufacturing by DSM beyond a transitional period would be undesirable. If the purchaser has sufficient access to independent (feed) enzyme production capacity, the Commission considers that toll manufacturing by DSM for parts of the purchaser's requirements beyond a transitional period is unlikely to create competition problems. Any such toll manufacturing after a transitional period would be subject to the Commission's prior approval. The market investigation and market test have identified several potential or actual (feed) enzyme producers. The market test has further confirmed that there has been successful transfer of feed enzyme production in the past.

(94) As the transferability and viability of the divested business and hence the restoration of effective competition on the market depend to a large extent on the identity of the purchaser, the notifying party has undertaken to suspend the implementation of the concentration between DSM and RV&FC unless and until they have entered into a final agreement terminating the DSM/BASF Alliance and final sale and license agreements for the sale of the divested business and the Commission has approved the terms of the agreements and the purchaser.

(95) The Commission considers that, in order to ensure the immediate restoration of effective competition and to be approved by the Commission, the purchaser must be viable and independent of and unconnected to DSM/RV&FC. It must have the financial resources, proven expertise and incentive to maintain and develop the Divested Business as a viable and competitive force in competition with DSM/RV&FC and other competitors. It must not be likely to create, in the light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed. In its assessment of the purchaser the Commission will take into account the market characteristics and structure.

IX. CONCLUSION

(96) It must accordingly be concluded that the commitments as proposed by the notifying party modify the notified concentration to such an extent that the serious doubts of the Commission as to the compatibility of that concentration with the common market are removed. The concentration should, therefore, be declared compatible with the common market pursuant to Article 8(2) of the Merger Regulation and with the EEA Agreement

pursuant to Article 57 thereof, subject to compliance with the commitments set out in the Annex.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby DSM N.V. acquires sole control of Roche Vitamins and Fine Chemicals Division within the meaning of Article 3(1)(b) of Regulation (EEC) No 4064/89 is declared compatible with the common market and with the EEA Agreement.

Article 2

Article 1 is subject to compliance with the conditions set out in sections B, C (except paragraphs 23 and 24), D and E of the Annex.

Article 3

Article 1 is subject to compliance with the obligations set out in paragraphs 23 and 24 of section C, and sections F (Monitoring Trustee) and G (The Review Clause) of the Annex

Article 4

This decision is addressed to:

DSM N.V.
Het Overloon 1
NL - 6401 JH Heerlen

Done at Brussels, 23/07/2003

For the Commission

Mario MONTI
Member of the Commission

Non-Confidential version

9 July 2003

By fax: +32 2 296 4301
European Commission – Merger Task Force

DG Competition

Rue Joseph II 70 Jozef-II straat

Case M. 2972 - DSM/Roche

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Articles 8(2) and 10(2) of Council Regulation (EEC) No. 4064/89 as amended (the "***Merger Regulation***"), Koninklijke DSM N.V. ("***DSM***") hereby provides the following Commitments (the "***Commitments***") in order to enable the European Commission (the "***Commission***") to declare the acquisition by DSM of Roche's Vitamins and Fine Chemicals division ("***RV&FC***") compatible with the common market and the EEA Agreement by its decision pursuant to Article 8(2) of the Merger Regulation (the "***Decision***").

The Commitments shall take effect upon the date of adoption of the Decision.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Community law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EEC) No 4064/89 and under Commission Regulation (EC) No 447/98.

Section A. Definitions

For the purpose of the Commitments, the following expressions shall have the following meaning:

Affiliated Undertakings: undertakings controlled by DSM/RV&FC and/or by the ultimate parents of DSM/RV&FC, whereby the notion of control shall be interpreted

pursuant to Article 3 Merger Regulation and in the light of the Commission Notice on the concept of concentration under Council Regulation (EEC) No 4064/89.

The **Background Technology**: existing and pending patents, trade secrets, research materials, technical information, inventions, test data, know-how, product efficacy and safety data, which cover elements of the production process of Feed Enzymes at the Effective Date but are not Feed Enzymes specific.

BASF: BASF Aktiengesellschaft, a company organized and existing under the laws of the Federal Republic of Germany, having its principal office at 67056 Ludwigshafen, Federal Republic of Germany.

The **Closing Date**: the date of the transfer of the legal title of the Divestment Business to the Purchaser.

Cost plus terms: terms agreed between DSM and the Purchaser for the toll manufacture by DSM as set out in these Commitments to cover all of DSM's costs and expenses directly or indirectly related to their manufacture and supply plus an overhead of no more than [confidential]* %.

Divestment Period: the period within which DSM can propose a Purchaser for the Divestment Business.

Divestment Business: the business as defined in Section B and the Schedule that DSM commits to divest within the time period provided for in Section D. For the purposes of Section C-F, the term "Divestment" shall include not only strict divestments, but also all licenses that are included in these Commitments and the term "divestiture" shall also be construed to mean "entering into the license" and "entering into the toll manufacture agreement", as appropriate.

The **DSM/BASF Alliance**: the collaboration between DSM's subsidiary DSM Food Specialities B.V. ("***DFS***"), formerly called Gist-Brocades BSD B.V., and BASF, in the area of research, production, formulation, registration, marketing, distribution and sales of Feed Enzymes, as set out in the Cooperation Agreement and the Distribution Agreement and certain ancillary agreements (together: the "***DSM/BASF Alliance Agreements***") entered into on 16 August 1994.

The **Effective Date**: the date of adoption of the Decision.
The **Feed Enzymes**: any kind of enzyme produced or under development by the DSM/BASF Alliance (including phytase, non-starch polysaccharide (NSP) degrading enzymes and α-amylase) which can be used, where applicable after completion of the R&D Projects, in any kind of animal nutrition with the exception of enzymes as silage additives for green forages.

Feed Enzymes Materials: all strains, plasmids, vectors, markers, DNA constructs, intermediate production hosts and constructs of other materials used to clone, modify or express the gene of interest and any other biological materials, to the extent such materials are used for the development and production of Feed Enzymes.

The **Granulation Unit**: the unit at the Seclin plant facility that is used to granulate Feed Enzymes.

The **Hold Separate Manager**: the person appointed by DSM for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Intellectual Property Rights: any form of intellectual property relating to the research, development, manufacture, sale or use of Feed Enzymes at the Effective Date, including but not limited to, existing and pending patents, trademarks, domain names, copyright, trade secrets, research materials, technical information, inventions, test data, know-how, product efficacy and safety data, but excluding Background Technology.

The **Key Employees**: all Personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in the Schedule.

The **Know-How**: the recipes, protocols and other proprietary know-how used by or available to DSM at the Effective Date for the Divestment Business.

The **Monitoring Trustee**: one or more than one natural or legal person, independent from DSM, RV&FC and BASF, who has or have been approved by the Commission and appointed by DSM, and who has or have the duty to monitor DSM's compliance with the conditions and obligations attached to the Decision .

Novozymes: Novozymes A/S, a company organised and existing under the laws of Denmark (the legal successor of Novo Nordisk A/S).

Personnel: all personnel currently employed by the Divestment Business, including staff seconded to the Divestment Business and shared personnel.

The **Phytase License Agreement**: The Phytase License Agreement, dated 2 January 2002, between DFS and Novozymes, pursuant to which DFS has granted Novozymes certain licenses relating to patents covering phytase, and has agreed not to assert certain patents, in connection with the settlement of certain disputes pursuant to the Phytase Settlement Agreement.

The **Phytase Settlement Agreement**: the Phytase Settlement Agreement, dated 2 January 2002, between DFS and Novozymes, providing for the settlement of certain litigation and administrative proceedings relating to the infringement and/or validity of certain patents covering phytase.

Registration Data Package: data relating to Feed Enzymes submitted to an administrative authority with the aim to obtain a registration, including without limitation technical information on the Feed Enzymes products' fermentation and manufacture, residues, efficacy, occupational health and safety and environmental effects.

Registration Rights: all rights to market a Feed Enzymes product, which are derived from their registration including any rights under pending registrations.

The **R&D Projects**: the research and development projects performed by DSM pursuant to the DSM/BASF Alliance Agreements.

The **Results**: any and all data, know-how, biological materials, instructions and other information stemming from the R&D Projects, or any past research project performed by DSM for the DSM/BASF Alliance.

The **RV&FC/Novozymes Alliance**: the collaboration between RV&FC and Novozymes in the area of research, production, formulation, registration, marketing, distribution and sales of enzyme products for animal feed, as set out in the Alliance Agreement entered into on May 27/June 8 2000.

The **Transition Period**: the [confidential]* year period following the Closing Date.

Section B. Divestment Commitments

1. Divestiture of Feed Enzymes business

1. In order to restore effective competition, DSM commits to terminate, or procure the termination of the DSM/BASF Alliance Agreements, and to divest the whole of its Feed Enzymes business under the DSM/BASF Alliance to a purchaser approved by the Commission in accordance with the criteria set out in Section E, which could include BASF (hereinafter "***Purchaser***"), including all related Intellectual Property Rights, Feed Enzymes Materials, Registration Data Packages, Registration Rights, R&D Projects, the Results and all related agreements and documentation relating to Feed Enzymes. DSM commits that the proposed concentration between DSM and RV&FC shall not be implemented unless and until DSM has entered into a final agreement terminating the DSM/BASF Alliance and final sale and license agreements for the sale of the Divestment Business and the Commission has approved the terms of the agreements and the Purchaser in accordance with Section E.

2. DSM commits not to terminate or procure the termination of the DSM/BASF Alliance Agreements until DSM has entered into final sale and license agreements for the sale of the Divestment Business to the Purchaser and commits to ensure the continued operation of the DSM/BASF Alliance Agreements on similar terms until that time, subject to the hold-separate obligations as set out in these Commitments.

3. The divestment referred to in paragraph 1 above shall be subject to the rights of Novozymes under the Phytase License Agreement and the Phytase Settlement Agreement. In addition, the Purchaser will grant DSM a royalty-free license to the Intellectual Property Rights to the extent necessary to develop, make, have made, use and sell products outside the field of feed enzymes, upon terms subject to the Commission's prior approval.

4. DSM commits to grant the Purchaser a worldwide irrevocable, royalty-free exclusive (even to DSM) license to the Background Technology (including the right to

sublicense third parties producing or developing for the Purchaser), to develop, make, have made, use and sell Feed Enzymes, upon terms subject to the Commission's prior approval. This license will be non-exclusive to develop, make, have made, use and sell feed enzymes.

5. DSM commits to divest, upon the Purchaser's request, to the Purchaser (or to a third party designated by the Purchaser), the Granulation Unit, including, if so requested, the transfer of employees who operate such unit, at any time before or at the end of the Transition Period.

6. DSM commits to assist the Purchaser (or up to two third parties designated by the Purchaser), during a period not exceeding [confidential]* years from the Closing Date, by making available the services of Key Employees as well as manufacturing and product technology, methods and practices, and otherwise using its best efforts, to enable the Purchaser (or the third parties designated by the Purchaser) to establish a production of Feed Enzymes.

7. To the extent DSM does not obtain the consent of a third party contractor to transfer a third party contract to the Purchaser or the Purchaser does not want these contracts transferred, DSM will terminate the respective agreements and assist, if requested, the Purchaser in concluding a new agreement.

8. DSM commits to transfer to the Purchaser or to a third party designated by the Purchaser the R&D Projects. To accomplish the transfer of these Projects, DSM will transfer to the Purchaser (or to the third party designated by the Purchaser) all the Results. DFS also shall make available to the Purchaser (or the third party designated by the Purchaser) the services of the Key Employees, information and any other support to the extent reasonably necessary to enable the Purchaser (or the third party designated by the Purchaser) to continue the R&D Projects.

9. If so requested by the Purchaser, and upon prior approval by the Commission, DSM commits to use its best efforts to complete the R&D Project [confidential]* on behalf of the Purchaser. In that event DSM will, to the extent practicable, dedicate the Key Employees to this Project and will give this Project reasonable priority over other DSM R&D projects in the allocation of equipment at DSM's R&D facilities in Delft and Seclin and will ensure the ring-fencing of this R&D Project to be completed for the Purchaser from the rest of the activities of DSM/RV&FC and will take all necessary measures to this end. If the R&D Project [confidential]* is continued by DSM on behalf of the Purchaser, the Purchaser will become the owner of the Results of this R&D Project.

10. The DSM employees who will be involved in the toll manufacture of Feed Enzymes for the Purchaser and, if requested by the Purchaser, the completion of the R&D Project [confidential]*, including the Key Employees, will be located at the DSM plant in Seclin or at DSM's research facility in Delft. The RV&FC employees who are involved in the sale of Feed Enzymes will not be located at either one of these locations. Under the supervision of the Monitoring Trustee, DSM will implement stringent firewalls within the company for the duration of the Transition Period or the

end of the toll manufacturing or R&D Projects, whatever may be longer, to prevent the flow of any information between the DSM employees involved in the toll manufacture of Feed Enzymes and the R&D Projects for the Purchaser, including the Key Employees, on the one hand, and the RV&FC employees who are involved in the sale of feed enzymes, on the other hand.

11. DSM will grant the Purchaser and Novozymes audit rights to ensure that the firewalls mentioned in the previous paragraph are observed.

12. In order to maintain the structural effect of the Commitments, DSM commits not to acquire direct or indirect influence over the whole or part of the Divestment Business, for a period of ten (10) years after the Effective Date, unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the whole or part of the Divestment Business is no longer necessary to render the proposed concentration compatible with the common market.

2. Non-compete

13. For a period of [confidential]* years from the Closing Date or for a period of [confidential]* years from the date of the termination of the RV&FC/Novozymes Alliance, whichever is shorter, DSM/RV&FC commits to abstain from carrying on or seeking any business, or from taking any action that would facilitate the same, in respect of developing and producing Feed Enzymes or Feed Enzymes products other than on the basis of the existing RV&FC/Novozymes Alliance.

3. Toll Manufacturing Agreement

14. If requested by the Purchaser, DSM will enter into a toll manufacturing agreement with the Purchaser which terms require the prior approval of the Commission, so as to allow the Purchaser to set up its own production of Feed Enzymes or the sourcing of Feed Enzymes from third parties. The term of this toll manufacturing agreement shall be for up to [confidential]* years on a Cost Plus Terms basis from the Closing Date. To this end the Purchaser will grant DSM a non-exclusive license to the Intellectual Property Rights to the extent necessary for DSM to be able to manufacture Feed Enzymes for the Purchaser under the toll manufacturing agreement. However, DSM acknowledges that the Commission, at the reasoned request of the Purchaser which shall be made no later than six (6) months before the expiration of the existing toll manufacturing agreement, may require DSM to toll manufacture for the Purchaser for an extended duration in the event that this is necessary to provide the Purchaser with a secure and economically viable source of supply of Feed Enzymes. Such extended toll manufacturing agreement between DSM and the Purchaser shall be negotiated at market price on an arm's length commercial basis and will require the prior approval of the Commission.

Section C. Related commitments

Preservation of Viability, Marketability and Competitiveness

15. DSM undertakes to preserve the full economic viability, marketability and competitiveness of the Divestment Business from the Effective Date until the Closing Date, in accordance with good business practice, and to minimise as far as possible any risk of loss of competitive potential of the Divestment Business. In particular DSM undertakes:

    (a) not to carry out any act upon its own authority that might have a significant adverse impact on the economic value or the competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;

    (b) to make available sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans;

    (c) to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Employees to remain with the Divestment Business.

Hold-separate obligations of DSM

16. DSM commits, from the Effective Date until the Closing Date, to keep the Divestment Business separate from the businesses it is retaining and to ensure that Key Employees of the Divestment Business – including the Hold Separate Manager – have no involvement in any business retained and vice versa. DSM shall also ensure that the Personnel does not report to any individual outside the Divestment Business.

17. Until the Closing Date, DSM shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the businesses retained by DSM/RV&FC. DSM shall appoint a Hold Separate Manager who shall be responsible for the management of the Divestment Business, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by the DSM/RV&FC.

Ring-fencing

18. DSM will implement all necessary measures to ensure that it does not after the Closing Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business. If DSM requires any information that it considers necessary for the toll manufacture of Feed Enzymes, the transfer of production of Feed Enzymes or the transfer or completion of the R&D Projects for the Purchaser, it will submit a

reasoned request to the Monitoring Trustee, who will decide on this request in consultation with the Commission.

Incentives for DSM employees

19. DSM will offer the Hold Separate Manager and the Key Employees involved in the production of Feed Enzymes annual financial incentives in the amount of [confidential]* % of their salaries for satisfying the Purchaser's supply requirements under the toll manufacturing agreement.

20. DSM will offer the Hold Separate Manager and the Key Employees involved in the R&D Project [confidential]* annual financial incentives during the period that they are working on this R&D Project at the request of the Purchaser in the amount of [confidential]* % of their annual salaries for completing this Project to the Purchaser's satisfaction.

21. DSM will offer the Key Employees financial incentives in the amount of [confidential]* % of their annual salaries to accept employment if offered by the Purchaser or by a third party performing production of Feed Enzymes or R&D work in collaboration with the Purchaser, provided such employment offer is made no later than the expiry of the Transition Period or the termination of the toll manufacture agreement, whichever is the earlier.

Due Diligence

22. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, DSM shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:

    (a) provide to potential purchasers sufficient information as regards the Divestment Business;
    (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

23. DSM shall submit written reports in the English language on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than ten (10) days after the end of every month following the Effective Date (or otherwise at the Commission's request).

24. DSM/RV&FC shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of an information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section D. The Divestment Procedure

1. The Divestment Period

25. DSM commits to divest or to procure the divestiture of the Divestment Business to a Purchaser and to enter into final sale and license agreements and related agreements with such Purchaser in accordance with Section E within three (3) months from the Effective Date. The final binding sale and license agreements and the agreement terminating the DSM/BASF Alliance shall be conditional upon the Commission's prior approval.

2. Closing

26. DSM shall be deemed to have complied with these Commitments if, within the Divestment Period, it has entered into a binding agreement terminating the DSM/BASF Alliance and binding agreements for the sale/licensing of the Divestment Business in accordance with Section E, provided that the Closing Date takes place within three (3) months after the conclusion of the respective agreements.

Section E. The Purchaser

27. In order to ensure the immediate restoration of effective competition, the Purchaser, in order to be approved by the Commission, must:

    (i) be independent of and unconnected to the DSM/RV&FC;

    (ii) have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and competitive force in competition with DSM/RV&FC and other competitors; and

    (iii) neither be likely to create, in the light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business (the before-mentioned criteria for the purchaser hereafter the "***Purchaser Requirements***").

28. The final binding sale and license agreements and related agreements shall be conditional on the Commission's approval. When DSM has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. DSM must be able to demonstrate to the Commission that the purchaser meets the Purchaser Requirements and that the Divestment Business is being sold in a manner consistent with the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Requirements and that the Divestment Business is being sold in a manner consistent with the Commitments.

Section E. Monitoring Trustee

I. Appointment Procedure

29. DSM shall appoint a Monitoring Trustee, subject to the prior approval of the Commission as referred to in paragraph 31. The Monitoring Trustee shall be independent of DSM/RV&FC and BASF, possess the necessary qualifications to carry out its mandate, for example as consultant or auditor, and shall neither have nor become exposed to a conflict of interest. The Monitoring Trustee shall be remunerated by DSM in a way that does not impede the independent and effective fulfilment of its mandate.

Proposal by DSM

30. No later than one week after the Effective Date, DSM shall submit a list of one or more persons whom DSM proposes to appoint as Monitoring Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the Monitoring Trustee fulfils the requirements set out in paragraph 29 and shall include:

    (i) the full terms of the proposed mandate, which shall be drawn up in accordance with the Commission Standard Trustee Mandate and shall include all provisions necessary to enable the Monitoring Trustee to fulfil its duties under these Commitments;

    (ii) the outline of a work plan which describes how the Monitoring Trustee intends to carry out its assigned tasks.

Approval or rejection by the Commission

31. The Commission shall have the discretion to approve or reject the proposed Monitoring Trustee and to approve the proposed mandate subject to any modifications it deems necessary for the Monitoring Trustee to fulfil its obligations. If only one name is approved, DSM shall appoint or cause to be appointed, the individual or institution concerned as Monitoring Trustee. If more than one name is approved, DSM shall be free to choose the Monitoring Trustee to be appointed from among the names approved. The Monitoring Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by DSM

32. If all the proposed Monitoring Trustees are rejected, DSM shall submit the names of at least two more individuals or institutions within one week of being informed of the

rejection, in accordance with the requirements set out in paragraph 29 for approval in accordance with paragraph 31.

Monitoring Trustee nominated by the Commission

33. If all further proposed Monitoring Trustees are rejected by the Commission, the Commission shall nominate a Monitoring Trustee, whom DSM shall appoint, or cause to be appointed, in accordance with a mandate approved by the Commission.

II. Functions of the Monitoring Trustee

34. The Monitoring Trustee shall assume its specified duties in order to ensure compliance with these Commitments. The Commission may, on its own initiative or at the request of the Monitoring Trustee or DSM, give any orders or instructions to the Monitoring Trustee in order to ensure compliance with these Commitments.

Duties and obligations of the Monitoring Trustee

35. Following its appointment, the Monitoring Trustee shall:

(i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.

(ii) oversee the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by DSM/RV&FC with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:

(a) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the business retained by DSM/RV&FC, in accordance with paragraphs 15, 16 and 17 of the Commitments;

(b) supervise the management of the Divestment Business as a distinct and saleable entity, in accordance with paragraph 17 of the Commitments;

(c) in consultation with DSM/RV&FC, determine all necessary measures to ensure that DSM/RV&FC does not after the Effective Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business, in particular decide on the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business, and decide whether such information may be disclosed to DSM/RV&FC as the disclosure is reasonably necessary to allow DSM/RV&FC to carry out the divestiture or as the disclosure is required by law;

(d) monitor the splitting of assets and between the Divestment Business and DSM or Affiliated Undertakings;

(e) monitor the keeping separate of the toll manufacture of the Feed Enzymes and the completion of the R&D Project [confidential]* by DSM (if requested by the Purchaser) and Key Employees from the sale of feed enzymes by RV&FC and the implementation of firewalls by DSM for this purpose, in accordance with paragraph 10 of these Commitments;

(f) in consultation with DSM, approve the identification of the Key Employees and supervise the offering of financial incentives to the Key Employees and the Hold Separate Manager.

(ii) assume the other functions assigned to the Monitoring Trustee under these Commitments;

(iii) propose to DSM such measures as the Monitoring Trustee considers necessary to ensure DSM's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;

(iv) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process, potential purchasers receive sufficient information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and that potential purchasers are granted reasonable access to the Personnel;

(v) provide to the Commission, sending DSM a non-confidential copy at the same time, a written report within fifteen (15) days after the end of every month. The report shall cover the operation and management of the Divestment Business so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers. In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission, sending DSM a non-confidential copy at the same time, if it concludes on reasonable grounds that DSM is failing to comply with these Commitments.

III. Duties and obligations of DSM

36. DSM shall provide the Monitoring Trustee with all such assistance and information, including copies of all relevant documents, as the Monitoring Trustee may reasonably require to perform its tasks. The Monitoring Trustee shall have full and complete access to any of DSM's or the Divestment Business' books, records, documents, personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and DSM and the Divestment Business shall provide the Monitoring Trustee upon request with copies of any document. DSM shall make available to the Monitoring Trustee one or more than one offices on its premises and shall be available for meetings in order to provide the Monitoring Trustee with all information necessary for the performance of its tasks.

37. DSM shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. DSM shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. DSM shall inform the Monitoring Trustee of possible purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.

38. DSM shall indemnify the Monitoring Trustee and its employees and agents (each an "***Indemnified Party"***) and hold each Indemnified Party harmless against, and shall agree that an Indemnified Party shall have no liability to DSM for any liabilities arising out of the performance of the Monitoring Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Monitoring Trustee, its employees, agents or advisors.

39. At the expense of DSM, the Monitoring Trustee may appoint advisors, subject to DSM's approval (this approval not to be unreasonably withheld or delayed), if the Monitoring Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the mandate, provided that any fees and other expenses incurred by the Monitoring Trustee are reasonable. Should DSM refuse to approve the advisors proposed by the Monitoring Trustee, the Commission may approve the appointment of such advisors instead, after having heard DSM. Only the Monitoring Trustee shall be entitled to issue instructions to the advisors. Paragraph 38 shall apply *mutatis mutandis* to the advisors.

IV. Replacement, discharge and reappointment of the Monitoring Trustee

40. If the Monitoring Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Monitoring Trustee to a conflict of interest:

(i) the Commission may, after hearing the Monitoring Trustee, require DSM to replace the Monitoring Trustee; or

(ii) DSM, with the prior approval of the Commission, may replace the Monitoring Trustee.

41. If the Monitoring Trustee is removed in accordance with paragraph 40, the Monitoring Trustee may be required to continue in its function until a new Monitoring Trustee is in place to whom the Monitoring Trustee has effected a full hand over of all relevant information. The new Monitoring Trustee shall be appointed in accordance with the procedure referred to in paragraphs 29 through 33.

42. Besides the removal in accordance with paragraph 40, the Monitoring Trustee shall cease to act as Monitoring Trustee only after the Commission has discharged it from its duties after all the Commitments which the Monitoring Trustee has to monitor have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the Commitments might not have been fully and properly implemented.

Section F. The Review Clause

43. The Commission may, where appropriate, in response to a request from DSM showing good cause and accompanied by a report from the Monitoring Trustee:

(i) grant an extension of the time periods foreseen in the Commitments, or

(ii) waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.

Where DSM seeks an extension of a time period, it shall submit a request to the Commission not later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall DSM be entitled to request an extension within the last month of any period.

Duly authorised for and on behalf of Koninklijke DSM N.V.:

P. Glazener

Schedule

[confidential]*