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*Case No*  
*COMP/M.2547-*  
*Bayer / Aventis Crop*  
*Science*

Only the English text is available and authentic.

**REGULATION (EEC) No 4064/89**  
**MERGER PROCEDURE**

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Article 8(2)

Date: 17.04.2002



COMMISSION OF THE EUROPEAN COMMUNITIES

**Brussels, 17 April 2002**  
**SG(2000)D/104916**

C(2002)1462 final

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**COMMISSION DECISION**

**of 12 July 2000**

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

(Case No COMP/M.2547 - Bayer / Aventis Crop Science)

(Only the English text is authentic)

(Text with EEA relevance)

**Commission Decision  
of 17.04.2002**

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

**(Case No COMP/M.2547-Bayer/Aventis Crop Science)**

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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<sup>1</sup>, as last amended by Regulation (EC) No 1310/97<sup>2</sup>, and in particular Article 8(2) thereof,

Having regard to the Commission's decision of 4 December 2001 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations<sup>3</sup>,

Having regard to the final report of the Hearing Officer in this case<sup>4</sup>,

WHEREAS:

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<sup>1</sup> OJ L 395, 30.12.1989, p. 1; corrected version in OJ L 257, 21.9.1990, p. 13.

<sup>2</sup> OJ L 180, 9.7.1997, p. 1.

<sup>3</sup> OJ C ...,...200., p....

<sup>4</sup> OJ C ...,...200., p....

On 29 October 2001 Bayer AG (Bayer) notified the Commission of its intention to acquire all shares in Aventis Crop Science Holding S.A. (ACS), constituting the agrochemical business of Aventis S.A.

- (1) After examination of the notification, the Commission has concluded that the notified operation falls within the scope of Regulation (EEC) No 4064/89 ("the Merger Regulation") and raises serious doubts as to its compatibility with the common market and with the EEA Agreement. Therefore, on 4 December 2001, the Commission decided to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation.
- (2) Following a detailed investigation of the case, the Commission has come to the conclusion that the proposed concentration as notified would indeed create or strengthen dominant positions on a number of markets as a result of which effective competition would be significantly impeded in a substantial part of the common market. However, the commitments entered into by Bayer modify the proposed concentration in such a way that the concentration concerns identified in respect of the concentration are resolved.

## **I. THE PARTIES**

- (3) Bayer is an international public quoted company, which is active in four business segments: healthcare, agricultural business, polymers and chemical business. The *agricultural business segment*, which is relevant for this transaction, comprises the crop protection and the animal health business groups. The crop protection business group develops, produces and markets crop protection products to control plant diseases, pests (insects, other little animals) and weeds in crops. The animal health business group produces a wide range of veterinary medicines and vaccines to maintain the health of life stock and companion animals as well as a variety of grooming products. Other products developed and supplied by the animal health business groups are agents designed to protect food supplies and to control disease vectors.
- (4) ACS is the combination of AgrEvo (the former Hoechst/Schering joint venture), and the Rhône-Poulenc agriculture division and was formed in 1999. ACS comprises four business segments: The *crop protection business* is active in the development, production and marketing of agricultural crop protection agents including herbicides, insecticides, fungicides, plant growth regulators and seed treatments, ACS's *environmental science business* develops, produces and distributes non-agricultural products including household insecticides, industrial weed agents, and products for lawn and garden. The *seed business* is active in the research, production and breeding of field seeds and vegetable seeds. Finally, the *bioscience business* of ACS is active in the development of technologies to enhance plant value using input traits, agronomic traits and output traits.

## II. THE OPERATION

- (5) The transaction involves the acquisition of all shares in the ACS business by Bayer. The proposed concentration gives rise to an acquisition of sole control within the meaning of Article 3(1)(b) of the Merger Regulation.
- (6) Bayer currently ranks seventh of all agrochemical companies in terms of world-wide sales. ACS ranks fourth on the world-wide scale. Together they will become the second largest in the world with a market share of about [20-30]\*%, just behind the largest agrochemical company, Syngenta, but before BASF, Dupont, Dow and Monsanto.

## III. COMMUNITY DIMENSION

- (7) Bayer and ACS have a combined aggregate world-wide turnover in excess of EUR 5 000 million<sup>5</sup> (Bayer: EUR 30 971 million; ACS: EUR 4 034 million). Each of them has a Community-wide turnover in excess of EUR 250 million (Bayer: EUR 10 905 million; ACS: EUR [...] million), 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 and constitutes a cooperation case under the EEA Agreement, pursuant to Article 57 of that Agreement.

## IV. COMPETITIVE ASSESSMENT

### *Introduction*

- (8) The proposed merger will have an impact primarily on the markets of agricultural crop protection products comprising a large variety of products that are designed to protect crops against all forms of damage which might be caused by insects, weeds or fungi.
- (9) The parties have overlapping activities in the following main areas: agricultural insecticides, herbicides, fungicides and seed treatment. Other, smaller areas of overlap include active substances (the actual molecules which have activity against weeds, insects, or diseases), industrial weed control and insecticides for professional pest control.
- (10) Non-agricultural crop protection products for home and garden, small animal ectoparasiticides and household insecticides constitute vertically affected markets.

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<sup>5</sup> 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, p. 25). 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 euro on a one-for-one basis.

### ***Industry driven by R&D competition***

- (11) The crop protection industry is characterised by a few large international companies involved in research and development of new and more effective products and a large number of so-called generic producers without substantial research and development activities. The R&D based companies are currently Syngenta, Aventis, BASF, Bayer, DuPont, Dow and Monsanto.
- (12) The last few years have seen strong consolidation among this group of firms. Dow in 2001 bought the agrochemical business of Rohm & Haas. Syngenta was formed in 2000 by the spin-off of the agrochemical businesses of AstraZeneca and Novartis. BASF in 2000 bought American Cyanamid, the agrochemical business of American Home Product. There are furthermore several Japanese R&D based companies, which however do not have strong positions in Europe but often choose to license their products to companies with strong sales organisations in Europe. Among the generic producers, the largest are Makhteshim Agan and Cheminova.
- (13) It has been argued that the dynamics of the agrochemicals industry results largely from R&D and market access. In the last three years, the industry has suffered a general downward trend which has led to intensified competition in a falling market. Growth has occurred only where major innovative modes of action have been introduced into the market. It has also been argued that the main source of competition in this industry is non-price R&D competition between R&D companies. On the one hand effective research and development allows a firm to exploit the advantages offered by new chemistries and obtain a wide portfolio of new products that can be leveraged to sustain a strong market position across a broad range of markets. For instance combining off-patent products with new patented products into a joint product offering or the development of new mixtures including patented active substances can prolong the life cycle of an off-patent product and limit the competitive constraint of generic companies.
- (14) Moreover, the potential competitive constraint of generic companies is reduced by the fact that off-patent products and active substances may be further protected by patented technical know-how of production. Essential know-how is not accessible and not necessarily transparent from the published patents or scientific literature. This means that the best technology is generally protected significantly longer than the original patent protection period.
- (15) In markets subject to intensive R&D, potential entry cannot be generally expected in the short to medium term, firstly because of the length of time required for development of equally effective substances, and, secondly, due to the costs involved in the development of a product capable of competing with the new or improved one. Market entry by means of innovative products is extremely difficult and resource-intensive. As regards the agricultural crop protection industry, the costs of R&D and registration programs vary widely, but for innovative products, the cost can exceed EUR 100 million and the total time can exceed 10 years. In particular, new product development requires over

a decade for chemical synthesis, laboratory testing, formulation, process development, pilot production, pilot trials, field trials, testing for toxicity, environmental testing, data collection, product registration, and construction of production facilities. Once a product is introduced in the market, several years are often required to gain customer acceptance through demonstrated safety, performance and reliability over a variety of weather conditions. Only R&D based firms seem to have the capabilities and sufficient economic strength to conduct these activities and enter the various European product and geographic markets and/or to expand sales and market share.

- (16) Following the merger, the R&D capabilities of the new entity will be one of the biggest in the industry. Based on third party estimates, the R&D budget of the merged entity will be USD 750 million and, thus, similar to the R&D budget of Syngenta. This will be twice as much as the other R&D companies such as BASF and DuPont. The investigation shows that, in crop protection industry, new product launches are the primary driver of market share growth. The more money a company can afford to invest in R&D, the more new molecules it will discover and can afford to bring to market.
- (17) It has been indicated that the merging of two strong product portfolios leads to a number of immediate opportunities for product development based on new mixtures. In addition to the potential effect of new mixtures in foreclosing generic competitors, such new products could make the commercial opportunities for competing new R&D work less attractive. Third parties have further indicated that the operation would strengthen the parties' position in the pipeline where, before the merger, development of new products would have infringed existing patents. Following the merger, such patent restrictions would disappear and new developments would become possible and be the nucleus of a very strong market position. Finally, third parties have argued that the proposed operation results in the removal of a competitor from the market and could lead also to the reduction of the total R&D potential on the market by reducing the number of research centres.
- (18) In the past the Commission has often seen reasons for concern in the grouping of companies with strengths in R&D and innovation. For the purpose of the present decision, the Commission considers that the parties R&D capabilities and incentives have to be taken into account as regards the potential elimination of future competition in current product markets and future markets. Moreover, where appropriate, the Commission considers it may be necessary to concentrate on the effects of the concentration on R&D competition between the parties and in the overall R&D potential.

#### ***Calculation of market shares***

- (19) In order to assess whether the proposed transaction results in any affected market regarding formulated products including insecticides, herbicides, fungicides and seed treatment products, the parties have provided estimated market shares on the basis of a database called Agrowin, which in turn is based on so-called panel surveys as far as the larger Member States are concerned.

These panel surveys provide for detailed data regarding the plant protection business in various Member States. They are produced by independent market research companies such as Kleffmann, often specialised in particular Member States. In the case of smaller Member States, which are not covered by any panel survey, market share calculations are based upon best estimates of the parties.

- (20) Due to merger activity and internal accounting reasons, the parties have been able to provide reliable market share data only for 1998, 1999 and 2000. The Commission has requested corresponding data also from third parties. The Commission has verified the data provided for by the parties by comparison with data supplied by other market participants.

### ***Re-registration of crop protection products by 2003***

- (21) As part of a Community policy initiative in the environmental field, Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market,<sup>6</sup> as last amended by Commission Directive 2002/18/EC,<sup>7</sup> requires all companies that intend to continue selling their crop protection products to enter into a re-registration process. All manufacturers of agrochemical products are legally obliged to withdraw those products from the market which have not been re-registered. In practice, this means that all those products, which have not been submitted for re-registration, will disappear from the market in 2003. Registration will typically not be sought for a number of older products, since they are typically less environmentally friendly and/or they generate only modest turnover. It has been estimated that some 600 of the 900 existing active ingredients will not be re-registered.
- (22) The ongoing re-registration process will affect the assessment of the case in two ways: Firstly, it has to be taken into consideration that the market shares of today may not be indicative of market positions in the near future. Secondly (this issue being directly related to the first one), as regards the position of the generic companies, the removal of a large number of older and less profitable products in the near future could weaken the position of a number of generic producers. It has effectively been suggested that the re-registration process will hit hard especially on the generic companies as they are typically active in older, off-patent products and in low value market niches. In this respect, it has been suggested that whereas large, R&D based companies can spread the cost of re-registration on a large number of products, generic companies do not have the same possibility. Therefore, it has been argued that the re-registration could increase the cost of the generic producers and the price of older products could consequently rise in the future. It has also been indicated that re-registration is very costly and could have a negative impact also on some of the other, smaller companies active on the market.

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<sup>6</sup> OJ L 230, 19.8.1991, p. 1

<sup>7</sup> OJ L 55, 26.2.2002, p. 29.



### ***Relevant geographic markets***

- (23) The parties have submitted that, due to already visible trends towards standardisation at the European level, the relevant geographic market for all crop protection products is EEA-wide in scope.
- (24) The parties have referred to the effects of Directive 91/414/EEC. According to the parties, the Directive does not only establish a positive Community list of active substances which are deemed in advance to be acceptable for human and animal health and for the environment, but also establishes a system of authorisation by the Member States of different formulations containing active substances listed in the so-called "Annex I" in accordance with requirements laid down in the Directive and according to uniform principles. The parties have also argued that the Directive acknowledges a system of mutual recognition of authorisation by the Member States provided that plant health, agricultural and environmental conditions are comparable in the regions concerned. This system allows the Member States to recognise the registration of a product in the country where it was first introduced. Although the Directive has not yet come into full effect, all companies which want to continue selling specific active ingredients have to enter into a re-registration process. The information which must be provided by the companies under this process must be produced by May 2003. The parties have argued that, even though at present individual screening of products in every Member State is still required, it can be expected that due to the mutual recognition procedure the time for registration procedures will be uniform.
- (25) The Commission found in its Decision in M.1806 - *AstraZeneca/Novartis* that the markets for formulated products and growth regulators had to be considered national in scope. The Commission gave a detailed argumentation for this conclusion. One important reason was that crop protection products must still be registered in a Member State before they may be marketed. Furthermore, distribution is organised on a national basis, with suppliers having in most cases national sales organisations or distributing via the sales organisation of another manufacturer operating in the relevant Member State. Parallel-imported products are seen as difficult to commercialise, among other reasons because brand names and formulations may vary between Member States, because registration fees may be high, and because it may take a long time to register the products.
- (26) The market investigation in this case has confirmed that the reasons given in M.1806 - *AstraZeneca/Novartis* for finding national markets are still largely valid. The investigation has confirmed that differences in biological conditions and treatment patterns of farmers leads to the fact that products may differ from one country to another. The market position of the players varies in different Member States depending e.g. on the fit of the products to the markets' needs and the strength of the sales organisation.
- (27) The markets for crop protection products (insecticides, molluscicides, herbicides, fungicides, seed treatment, professional pest control, small animal

ectoparasiticides and non-agricultural crop protection agents for home and garden) will therefore be assessed on a national basis.

## **A. Agricultural insecticides**

### ***A.1. Relevant product markets***

- (28) Both Bayer and ACS are active in the development, production and distribution of agricultural insecticides. Agricultural insecticides are products designed to control insects that damage cultivated plants, especially food crops.
- (29) In accordance with previous Commission decisions<sup>8</sup>, the parties have proposed to define the insecticides markets on a crop-by-crop basis, rather than on an insect-by-insect basis, because they claim that most insecticides are designed to combat a whole range of insects infecting particular plants. The Commission has found in previous decisions that a breakdown of insecticides by type of plant rather than by insects is appropriate in general. The main reason is that there is only one plant-specific insect that affects a major crop, namely the cornborer affecting maize. For all other main crops a variety of insects infests the plant. Therefore, it was found that most insecticides combat a range of insects.
- (30) In its Decisions in *BASF/American Cyanamid* and *M.1806 - AstraZeneca/Novartis* (Syngenta), the Commission noted that a differentiation could be envisaged between sucking and chewing insects. While the Commission noted in those cases that this describes rather the way of feeding than the mode of action of insecticides, the question of whether such a breakdown is appropriate was left open in both cases.

#### *- Division of insecticides into soil and foliar insecticides*

- (32) The parties have argued that a division should be made between soil and foliar insecticides. In this respect, they have argued that the major concern of the farmer, who is confronted with certain pests, is whether the respective insect problem is above ground or below ground since this determines the kind of product required and the kind of application equipment necessary. According to the parties, the spray equipment used for foliar application normally differs from that required for soil application<sup>9</sup>. Furthermore, the parties have argued that soil and foliar insecticides are, in general, based on different active substances which cannot be substituted for each other. The parties therefore submit that *soil insecticides*, designed to treat soil insects within the soil by applying them on or into the soil, and *foliar insecticides* applied to the crops by spraying, constitute separate markets. The parties submit nevertheless that for a number of crops - e.g. maize, beets and cereals - the farmer has the choice of using soil or foliar

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<sup>8</sup> IV/M.737 - *Ciba Geigy/Sandoz* (Novartis) (OJ L 201, 29.07.1997, p.1) IV/M.1378 - *Hoechst/Rhône-Poulenc* (Aventis) (OJ C 254, 07.09.1999, p.5), IV/M.1806 - *AstraZeneca/Novartis* (Syngenta), M.1932 - *BASF/American Cyanamid*. (OJ C 354, 09.12.2000, p.38)

<sup>9</sup> The only exception is broadcast spray application of a soil insecticide and foliar application to low growing crop, i.e. 1 to 6 leaf cereals.

insecticides and, hence, there is a certain degree of substitution between these two types of products.

*- Division of insecticides into sucking and chewing insects*

- (33) As regards the soil segment, the parties have argued that since there are no sucking pests of any consequence in the soil, differentiation between sucking and chewing pests in soil has no relevance.
- (34) As regards the question whether, in addition to dividing the market by crop and into foliar and soil applications, a further division into sucking and chewing insects should be made in foliar applications, the parties have argued that a division of the market along the lines of different pest groups, and into sucking and chewing insects, is not appropriate.
- (35) More particularly, the parties have submitted that farmers generally purchase products combating groups of harmful insects whose composition may vary by type of plant. The parties have argued that farmers are thus inclined to purchase either products with a broad spectrum of activity, combination products or insecticides with a narrow spectrum which they mix themselves. Hence, the parties have argued, from the farmers' point of view, broad spectrum insecticides and insecticides with a narrow spectrum are substitutable and, thus, a breakdown of markets by type of plant already contains a breakdown of insecticides by the spectrum of pests they are designed to control.
- (36) The parties have furthermore argued that there is no clear separation for the farmer between sucking and chewing insects as he can be confronted with one or the other or both depending upon crop, season and climate. The parties have argued that sucking and chewing insects can occur as foliar pest either individually or together depending on the life cycle of the particular pest, which is influenced by the crop, season and climate. Therefore, the parties have submitted that the farmer is in need of insecticides which are effective against both sucking and chewing insects.
- (37) The parties have also claimed that products belonging to the main insecticides classes, including organophosphates, pyrethroids, carbamates and neonicotinoids, are active against both sucking and chewing insects. The definition of insecticides markets encompassing both sucking and chewing insects is according to the parties supported by the fact that a large number of insecticides are used to combat both sucking and chewing insects. In this respect, the parties have submitted that insecticides of almost all chemical classes (e.g. Deltamethrin, Cyfluthrin, Beta-Cyfluthrin, Cypermethrin, Parathion-Methyl, Carbaryl) are used on both insect pest groups. In this respect, the parties have argued that pyrethroids are used, inter alia, in potatoes against Colorado potato beetle (chewing pests) and aphids (sucking pests) at the same time, whereas organophosphates can be used on some fruits against codling moth (chewing pests) and aphids (sucking pests). The parties have further submitted that even products with a specific efficiency against sucking pests also offer control of chewing pests. Imidacloprid, for example, is according to the parties effective

against white flies and scales (sucking insects) but also controls leaf miners (chewing insects) in citrus fruit.

- (38) Third parties have generally agreed that it is meaningful to divide the relevant market into the soil and the foliar segment. However, as regards the questions whether a further subdivision should be made for sucking and chewing pests, most third parties have disagreed with the parties. While it is broadly agreed that the distinction is not relevant for the soil segment, third parties have argued that, as regards foliar applications, grouping insects and insecticides based on feeding habit is a valid and meaningful categorisation scheme. Some respondents have even suggested that sucking and chewing insects constitute separate markets.
- (39) The investigation shows that while there is a certain relation between insects and crops, in reality, crop groupings are often artificial divisions created by government registration agencies and chemical companies. Registration is based on a particular crop or crop grouping. Chemical companies may pursue registration on certain crops based on the economic value of that crop while not registering on others where efficacy is similar. A company which is able to offer an insecticide with activity against insects occurring in different crops can potentially cover the whole range of crops with this product. Therefore, a breakdown of markets by type of plant would not necessarily reflect the full potential of a compound. While some species are plant specific, most economically important pests occur across many crops. Especially sucking pests such as aphids and white fly are not isolated pests of single host plants but occur on many different crops.
- (40) It has been indicated that farmers are faced with various insect pests occurring on different crops and at different times during a growing season. Each of these different insect pests has to be combated at a given time, i.e. when the pest actually occurs and certain economic thresholds are reached. The exact time of combating the different insect pests during a growing season is not the same for the various insects infesting a certain crop.
- (41) Because insecticides have different residual activity profiles, it is critical that the products are applied at the best time to get effective control of the targeted pest: a late application - which can mean only 2-3 days - can result in substantial crop damage and an application made too early will not result in effective control of the targeted pest either. Consequently, there is only a relatively narrow window for optimal application. Even though it is correct that sucking and chewing insects can occur as foliar pests either individually or together depending upon the life cycle of the particular pest as influenced by the crop and the season, this does not mean that the very short application window for such pests coincides. It is in fact rare that two different insect pests have their optimal application window at the very same time.
- (42) Therefore, if farmers use a broad-spectrum insecticide and apply it once, they will be able to get good control of such pests as are occurring during that application window but they can only benefit from partial additional side effects against other pests. It has therefore been argued that there is no broad-spectrum

insecticide which could result in satisfactory total control of all the various pests that occur during a growing season. It has been submitted that no substitutability exists between narrow and broad spectrum insecticides but substitutability exists between products with activity against key pest to be combated.

- (43) In this respect, it has also been pointed out that the vast majority of insecticides products will only provide good control of either sucking or chewing pests, but not of both of these groups of pests. It has been indicated that even broad-spectrum products are primarily targeted against either sucking or chewing insects. It is therefore not normally true that farmers can use products that control a wide group of insect pests.
- (44) Therefore, it has been submitted that key pests have to be considered and, generally, it is one key pest exceeding economic threshold which triggers a treatment to prevent damage to the crop. Accordingly, the farmer's choice regarding the appropriate insecticide is based upon this key pest of major concern. Two observations underline the importance of key pests: first, registration of insecticides is granted for a specific crops with an indication of the pest spectrum and for the application at a defined point of time with a defined dose rate. This is done in order to address the issue of selectivity, as only key pests occurring at a certain point of time should be combated without harming beneficials. Second, it has been argued that the 80-90% of insecticides only contain one active ingredient with a certain spectrum of activity. It has been argued that the ready-made mixtures with several active ingredients are the exception and are mostly used to overcome resistance or enhance the activity on key pests. It has been further argued that tank-mixing of insecticides by the farmer is not a common practice. In this respect, it has been pointed out that mixing narrow-spectrum products to achieve a broader spectrum of control is normally more expensive than applying various narrow-spectrum products sequentially as the pests occur and reach economic thresholds. The parties themselves have submitted in their reply to the Statement of Objections for herbicides that "a tank mixture is not as easy to handle as a single product" and that the cost is higher. The parties have not provided arguments why the same submission would not apply also to insecticides.

*- Differences between sucking and chewing insects*

- (45) Insects can be classified first into collembola (springtails) and pterygota (winged insects). Pterygota can be further classified into three large sub-groups: blattoid-orthopteroid, hemipteroid and endopterygote. Blattoid-orthopteroid are insects with biting mouth-parts (e.g. cockroaches, termites), hemipteroid are insects with sucking mouth parts and endopterygote are insects which go through a complete metamorphosis and pupate. Hemipteroid are sucking insects and endopterygote are chewing insects.
- (46) The most important sub-class of hemipteroid are hemiptera, which includes most importantly aphids, whitefly and leafhoppers. Endopterygote include most importantly lepidoptera (butterflies and moths) and coleoptera (beetles and weevils). It has been indicated that these three classes of insects - hemipteroid,

lepidoptera and coleoptera - are commercially the most important insecticides in Europe. Aphids and white flies are the most important sucking insects in Europe. The relative size of the hemiptera market (sucking insects) is more or less the same as lepidoptera and coleoptera (chewing insects) put together.

- (47) Sucking insects refer to those insects, which feed on sap and liquid plant components (sap-feeders). Chewing insects tear apart and digest plant components. The different feeding habits of sucking and chewing insects cause a fundamental difference in their physiology: chewing insects need to excrete a lot of solid while sucking insects need to excrete a lot of high sugar content liquid (honeydew). Sucking insects cause damage by transmitting disease, feeding on the plant and causing fungus infection because of honeydew. They reproduce very fast and, as a consequence, can develop resistance quickly.
- (48) Sucking insects are less visible since they do not consume foliage. Chewing pests such as hornworms and cutworms are very visible to the farmer since the damage is completely visible even on cursory inspection. Aphids, whiteflies and others are very small and are often first noticed by the honeydew they deposit than by any overt damage. No preventive warning of infestation to control sucking insects is possible and monitoring generally takes place by looking for infestation. Because sucking insects reproduce very fast, the infestation must be tackled quickly. Sucking insects tend to appear in early season.
- (49) Chewing insects have a long and complex life cycle and consequently they take a longer time to develop resistance. Infestation can often be monitored via adult traps and preventive applications are possible (e.g. the presence of eggs indicates that larvae will soon be infesting the crop). For chewing insects, slower control is possible. Chewing insects can infest the crop at any time.
- (50) One fundamental difference between sucking and chewing insects is where they can be found on a plant. While chewing insects can be found anywhere on the plant, sucking insects are normally found under the leaf. This is because sucking insects suck the plant liquid and there are less plant waxes under the leaf, thereby facilitating sucking.
- (51) As regards the efficiency of insecticides, this means that sucking insects are more difficult to control than chewing insects, which can be found anywhere on the plant: in order to control sucking insects, some contact under the leaf is required. Compounds hitting only the surface of the leaf and not moving are not very effective. What is required is some ability for the compound to move in the plant (systemic properties) or, as a minimum, ability to move from one side of the leaf to the other (translaminar properties). This means that to be effective for sucking insects, the substance must be able to at least to penetrate the leaf. Older chemistries, such as carbamates and organophosphates, have some translaminar function and they are able to move in the plant but generally only to a limited extent. Neonicotinoids, on the other hand, are systemic in the way that if e.g. only part of the plant has been sprayed, the substance will move within the plant and protect the whole plant against sucking insects.

- (52) Third parties have indicated that the division between sucking and chewing insects is made in industry positioning papers and advertising for a particular insecticide. Bayer itself uses the terms sucking pest or sap-feeder to classify a product. In reviewing web sites and advertising for Bayer products, it is apparent that sucking insect control is a key consideration tied to the commercial viability of their products.

*- Division by chemical class*

- (53) As regards the question whether the relevant product market should be defined along the lines of chemical classes, the parties have argued that this is not meaningful. In this respect, the parties have contended that the farmer, who is faced with a certain pest in a given crop, does not select insecticides along the lines of chemical classes but according to the products' price and efficiency on certain insect pests in a given crop.
- (54) The parties have argued that the same type of pest can, in general, be controlled by a number of insecticides belonging to different chemical families. In light of the inter-changeability of different chemistries as regards to their ability to provide an efficient control of certain pests, the definition of sub-markets along the lines of chemical classes is not, according to the parties, appropriate. The same is true, the parties have argued, in cases where a certain crop can be protected most effectively by insecticides of one and the same chemical class.
- (55) Some third parties have argued that the market should be divided according to chemical classes. They have submitted that, generally, insecticidal active ingredients are clustered into chemical classes which usually go hand in hand with a certain mode of action. It has been argued that mode of action and different classes of insecticides are critical for resistance management both in solving the problem when it arises and in avoiding it in the first place.

*- Substitutability between soil and foliar treatments for maize, beets and cereals*

- (56) As regards the parties' submission that for maize, beets and cereals the farmer has the choice of using soil or foliar insecticides, third parties have indicated that the substitutability is generally limited. The parties have corrected their statement and submitted at a later stage of the investigation that the issue is not relevant for cereals.
- (57) Third parties have indicated that in sugarbeets, maize and cereals, the early season sucking pests are mainly controlled through seed treatment and that seed treatment has virtually eliminated any market for control of early sucking pests by foliar application in these crops. At the later growth stage, however, other methods are required to control pests.
- (58) Similarly, some systemic soil insecticides might substitute at least one foliar application. However, foliar pests arising in a later growth period can not be effectively treated with soil insecticides. They still have to be controlled by foliar application.

- (59) It has also been indicated that soil insecticides, which are used to control foliar pests, can not be simply replaced by foliar insecticides. Soil insecticides are often used to protect plants against foliar pests in the early growth period, where the crop is very sensitive to pest attacks. In this early growth period, foliar insecticides do not give sufficient protection, since spraying conditions are not optimal and, therefore, application of foliar insecticides is difficult.
- (60) Therefore, while the market for soil and foliar applications for these crops may be growing smaller as a result of seed treatment or the soil applications may reduce the need for foliar applications, the investigation does not lend support to the parties' argument that soil and foliar applications are substitutable.

### Conclusion

- (61) For the purposes of this decision and following the Commission's practice in this field, the relevant market for insecticides is defined by type of crop and subdivided into foliar and soil insecticides. Special attention has been paid in this decision to the particular strength of the parties in the sucking and chewing insects, which are included in the overall market definition. Special attention has also been paid to neonicotinoids and pyrazoles, which also are included in the overall market definition.

### ***A.2. Competitive assessment***

#### ***Introduction***

- (62) Following the merger, the new entity would hold a particular strong position on the insecticide market, both at the EEA-wide level and also at the national level. A large number of third parties have indicated that the parties' position in insecticides would be significantly strengthened in the near future due to their position in the so called new chemical classes, neonicotinoids<sup>10</sup> and pyrazoles<sup>11</sup>. This strengthened position would take place both in the existing products and also in the future products
- (63) The market investigation shows that there are five key step changes in the insecticides technologies:
- organochlorines in the 1950s
  - organophosphates in the 1960s
  - carbamates in the 1970s
  - pyrethroids in the 1980s
  - neonicotinoids/pyrazoles in the 1990's/2000
- (64) According to the Wood Mackenzie study<sup>12</sup>, in contrast to the other sectors of the agrochemical market, in insecticides fewer chemical classes have been found to

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<sup>10</sup> also referred to as chloronicotinyls

<sup>11</sup> also referred to as phenylpyrazoles

<sup>12</sup> Reference Volume of the Agrochemical Service - Key Agrochemical Product Groups, Agrochemical Service, Update of the Products Section, November 2001.



possess useful activity. The search for other active chemistries produced relatively few successes between the introduction of the synthetic pyrethroids in the mid 1970s and the introduction in the early 1990s of the fiproles, the neonicotinoid derivatives, the pyrroles and the spinosyns. These products offer different modes of action from existing chemistries and hence have improved the options available to the farmer.

- (65) According to the Wood Mackenzie study, recent years have seen a considerable decline in the market for the older insecticides chemistry classes. Sales of organophosphates, carbamates and pyrethroids all peaked in 1995 and over the past few years the average growth rate of each of these categories has been a decline in real terms. The global sales of the older product chemistries such as the organophosphates, carbamates and pyrethroids all declined in 2000. The only positive and strong growth was seen in the new natural based products and neonicotinoids, led by Imidacloprid. Neonicotinoids grew by 8.3% in 2000. The real growth rate of neonicotinoid insecticides was 10.6% in 1995-2000 and it has been estimated as 8.7% in 2000-2005.
- (66) Few categories of insecticides are expected to achieve real growth in the next five years; those that include neonicotinoids, pyrroles and fiproles. Bayer's Imidacloprid has enjoyed significant growth and Imidacloprid is now the leading insecticide world-wide. As well as proving to be a realistic alternative to older insecticide chemistries, Imidacloprid has also created new markets such as stem application and as a component in several seed treatments. This class is expected to grow at high rate. Sales of the pyrazole Fipronil are also growing rapidly. According to the market research company Phillips McDougall, the growth rate of the pyrazole insecticides in 2000-2005 is 8.4%, similar to that of the neonicotinoids. For all the other insecticides chemistry classes, the growth rate is expected to be much slower or even negative.

*- neonicotinoids*

- (67) Neonicotinoids are acetyl choline receptors. They are extremely effective insecticides which act on the central nervous system of insects, blocking the transmission of neural impulses. As a result, the insects stop feeding, become paralysed and die from starvation, dehydration or predation. This novel mode of action and the site of action, which is different from those of carbamates, organophosphates and pyrethroids, makes neonicotinoids suitable for use in resistance management strategies as they also control pests that have developed resistance against conventional insecticides. Neonicotinoids are very effective against aphids and white flies, the commercially most important sucking insects in the EU.
- (68) Bayer has developed successfully the neonicotinoid chemistry and has already commercialised one product, Imidacloprid, which is currently the world's largest selling insecticide and ranks first in sales also in Europe. Bayer is also developing two other neonicotinoids: Thiacloprid and Clothianidin ([...]\*). ACS is developing Acetamiprid ([...]\*). Each of these products will be discussed in the following.

- a) *Imidacloprid*

- (69) Imidacloprid took only 6 years to develop. It has been on the market since 1991 under the trade names Gaucho, Confidor, Admire and Provado. It is sold in over 80 countries for use in over 60 different crops.
- (70) Imidacloprid is an active ingredient with systemic activity. Systemicity means that the substance is active within the plant, as opposed to non-systemic substances which are applied on the plant.
- (71) Imidacloprid can be applied as seed treatment, soil treatment or foliar treatment. As seed treatment, the seed is covered with the active ingredient, which moves to the emerging plant and covers it against pest attacks during the early stages of development. When applied as soil treatment, the active ingredient is transferred from soil into the roots and thence to the leaves with the sap. As seed and soil treatment, Imidacloprid protects crops during the most vulnerable stages of development. Applied as foliar treatment, Imidacloprid protects the plant from insects even with small amounts of active ingredient present in the leaf. It leads to deterrence against feeding and a diminished reproduction rate. Imidacloprid is also used in new areas, such as stem treatment. In stem treatment, Imidacloprid is applied on the trunk of the tree, where the active ingredient is distributed with the ascending sap.
- (72) Imidacloprid is very efficient with a broad spectrum of action. It provides long-lasting protection over a period of several weeks or months primarily against sucking insects such as aphids, leaf hoppers, whiteflies, and some thrips, scale insects, and mealybugs. It is active against some chewing insects, such as various species of coleoptera (beetles like Colorado beetle and weevils), some diptera (flies) and a limited number of lepidoptera (leaf miners). Imidacloprid has no activity against nematodes (soil insects) or mites (sucking insects).
- (73) Imidacloprid has favourable toxicological properties and it is particularly well tolerated by plants. Its systemic action spares beneficial organisms.

-b) *Thiacloprid*

- (74) Like Imidacloprid, Thiacloprid interferes with the transfer of chemical signals within the insect's nervous system. It has systemic action. Thiacloprid targets mainly sucking insects (aphids, white fly, thrips, scales, bugs, mealy bugs, psyllids) but has some control also in the chewing pest segment (weevils, leaf beetles, grubs, leaf miners, codling moth and stemborer). It is said to be more active than Imidacloprid on several pests, especially as regards foliar application, and safer to bees and other pollinating insects. Thiacloprid does not harm beneficial insects and it shows only low toxicity to warm-blooded animals.
- (75) The parties have argued that Thiacloprid [...]\*. Third parties have indicated that Thiacloprid has the benefit that it controls codling moth and related insects in fruits and nuts as well as aphids (sucking insect) while, at the same time, being safe to bees in the flowering period. Bayer has [...]\*

- (76) Bayer has submitted that, [...]\*.
- (77) [...]\*. are the most important crops for Thiacloprid, and the market shares in these crops significant drivers for the value of Thiacloprid. Strategic documents show that Bayer expects the sales in EU to attain EUR [...]\*. million in [...]\*. and EUR [...]\*. million in [...]\*. by 2004. Sales revenues have been forecast also [...]\*, although Bayer has submitted that [...]\*.
- (78) Thiacloprid will be under patent protection in the EU until 2007, [...]\*. Bayer has explained that an extension of patent protection through an SPC is granted when the time period between filing the patent application and the first registration is very long. [...]\*.

*-c) Clothianidin*

- (79) Bayer's Japanese subsidiary Nihon Bayer Agrochem (NBA) and [...]\*. conducted research independently from each other in the field of insecticidally active neonicotinoid compounds in the late 1980s. As a result of such research, NBA found a new group of insecticidally active compounds. [...]\*.
- (80) In [...]\*.
- (81) [...]\*.
- (82) [...]\*.
- (83) [...]\*.
- (84) Clothianidin is active against [...]\*. Bayer has reported that Clothianidin [...]\*. Compared to Imidacloprid, Clothianidin [...]\*.

*- d) Acetamiprid*

- (85) Also ACS is developing neonicotinoids. [Confidential information of ACS]\*.
- (86) [Confidential information of ACS]\*.
- (87) [Confidential information of ACS]\*.
- (88) [Confidential information of ACS]\*.
- (89) Acetamiprid controls [confidential information of ACS]\*. According to the parties, Acetamiprid competes with [...]\*. and will become a significant competitor particularly to Imidacloprid [...]\*. in Europe.
- (90) Third parties have indicated that Acetamiprid is not particularly efficient for seed treatment, as its ability to stay within the plant is limited as compared with Imidacloprid or Clothianidin. It is therefore considered to be suitable for foliar treatment but not for seed treatment. ACS has submitted the registration plans for Acetamiprid to the Commission. [Confidential information of ACS]\*.

- *other neonicotinoids*

- (91) The parties have submitted that a number of other neonicotinoid compounds will be launched in the EEA: Thiamethoxam, Dinotefuran, Flonicamid, AKD-1022 and Nitenpyram. These will be briefly discussed below.

- *a) Thiamethoxam*

- (92) Thiamethoxam is active against sucking, leaf-weeding and soil dwelling insects. Active at low dose rates, the product provides a rapid kill. It can be used as a foliar treatment, soil treatment or as a seed treatment product.
- (93) Third parties have indicated that Thiamethoxam is a very versatile insecticide with the same mode of action as Imidacloprid and the other neonicotinoids. It stays within the plant for a long time and is therefore suitable for seed treatment.
- (94) Syngenta's competitive position was severely restricted over a period of time as a patent dispute with Bayer excluded it effectively from competing on all the main EEA markets. Thiamethoxam is currently registered only in Spain, Finland and Austria for some limited crop uses. Bayer and Syngenta settled this patent dispute on 20 December 2001. According to the agreement between Bayer and Syngenta, the latter will have full and undisputed access to the world market for Thiamethoxam and can launch insecticides based on this active ingredient in every national market.

- *b) Dinotefuran (MTI-466)*

- (95) The parties have claimed that this neonicotinoid product developed by Mitsui has a large spectrum of activity, which should enable it to be used on a broad variety of crops. The market launch of Dinotefuran is expected for Japan in 2003 and in Europe for 2004/2005. The parties have argued that Dinotefuran will become a significant competitor in the near future.
- (96) [Confidential information concerning Dinotefuran]\*.

- *c) Flonicamid (IKI-220)*

- (97) The parties have submitted that Flonicamid is developed by Ishihara in collaboration with FMC. It is expected to be registered in Japan by 2003/2004 and in Europe in 2005/2006. According to the parties, Flonicamid targets mainly aphids, leaf hoppers, thrips and has an excellent systemicity and IPM-fit.
- (98) All third parties have indicated that Flonicamid has a different structure and mode of action from the neonicotinoids and cannot therefore be considered to be a neonicotinoid. Third parties have also indicated that, as a slow acting antifeedant aphicide, Flonicamid is not a competitor to neonicotinoids. Neonicotinoids have a relatively fast action and they are effective against a wide spectrum of homoptera, not just aphids. The antifeedant action means that there is a probability that the aphids will not be affected until after they have

transmitted any viruses to the plant. One of the major impacts of aphid attack in many crops is the virus diseases they transmit.

- d) *AKD-1022*

- (99) The parties have submitted that AKD-1022 is a new neonicotinoid developed by Agro-Kanesho. According to the parties, this product has a fairly large spectrum of activity, which should enable it to be used on a broad variety of crops. However, as according to the parties the development of this product is pending, its competitive effect on the EEA market will not be assessed any further for the purposes of this decision.

- e) *Nitempyram*

- (100) Takeda has developed a neonicotinoid Nitempyram and introduced it in 1996 in Japan for use on rice, fruit, tea and vegetables. Nitempyram has not been launched in the EEA and there are no indications that it will be launched in the near future. Therefore, the competitive effect of Nitempyram on the EEA market will not be assessed any further for the purposes of this decision

- *pyrazoles*

- (101) The pyrazole chemistry is unique to ACS. ACS has two existing molecules in this class, Fipronil and Ethiprole. Fipronil has been commercialised throughout the EEA in several crops and applications. Ethiprole has not been registered in the EEA.
- (102) The parties have argued in their reply to the Statement of Objections that they are not the only ones with pyrazole chemistry. They have submitted that both Mitsubishi Chemical and BASF have pyrazoles in their pipeline. According to the parties, Mitsubishi Chemical is the patent owner of the ETK-I inhibitor Tolfenpyrad (OMI 88) which shows activity on aphids, thrips, white fly, plutella, rust mite and broad mite in fruits and vegetables. The parties have further argued that BASF enjoys patent protection for the active ingredient Chlorfenapyr, which according to the parties is a pyrazole analog uncoupler of oxidative phosphorylation.
- (103) The Commission's investigation, however, shows that although Chlorfenapyr and Tolfenpyrad both contain pyrazoles, they are not pyrazoles. They act at a different site, have a different spectrum and are, in fact, in every way different. These products will therefore not be assessed any further in this decision.
- (104) Third parties have indicated that pyrazoles are the current state of the art insecticides against coleoptera (beetles) and soil born diptera (flies).

- a) *Fipronil*

- (105) The investigation shows that Fipronil is a [confidential information of ACS]\*. Outside agricultural use, it is also effective against [confidential information of ACS]\*. Fipronil is applied most commonly through soil applications and seed

coating, but also through foliar application, and is said to be competing with neonicotinoids for these usages.

- (106) According to the information submitted by the parties, as regards the control of chewing insects, [...]\*. Third parties have, however, indicated that both Fipronil and Imidacloprid are excellent on coleoptera (chewing beetles) and particularly on elateridae (wireworms) which are arguably the most important soil insect group. Both Imidacloprid and Fipronil are also reasonable for the control of the main lepidoptera, agrotis (cut worms), which attach the plant as the first foliage emerges from the ground. For diptera (soil born flies), which are important in a range of cereals and vegetables, third parties have argued that both Imidacloprid and Fipronil show high levels of activity depending on the exact species.
- (107) While Fipronil [confidential information of ACS]\*.
- (108) Third parties have indicated that, as mainly a chewing insect pesticide, Fipronil does not in general compete directly with neonicotinoids for the control of sucking insects. They have indicated that as Fipronil does not move very well within the plant, it does not therefore have the same potential as neonicotinoids. Third parties have however indicated that Fipronil is used for foliar application e.g. against thrips and coleoptera (e.g. Colorado potato beetle). Third parties have further indicated that the effect on competition by combining Imidacloprid and Fipronil in the parties' portfolio is twofold: First, it has been argued that the pest spectrum covered with new chemistries is extended and completed. Both compounds are applicable to a wide range of crops, provide high effectivity and secure control of the key pest and offer a new mode of action capable to break existing resistance against other chemical classes. In this respect, the parties' possibilities to offer technically superior treatment programs would be unique and unmatched by any competitor. Therefore, third parties have argued that combining Imidacloprid's superior sucking pest control with Fipronil's superior chewing pest control would lead to competition concerns. Second, because of the target pest does overlap and the different mode of action of Imidacloprid and Fipronil there are powerful opportunities for resistance management by rotation between both products in those areas, where the two products target the same pest.

- b) *Ethiprole*

- (109) Ethiprole is a [confidential information of ACS]\* fiprol insecticide. Third parties have indicated that Ethiprole is a second generation Fipronil product. [...]\*.
- (110) Ethiprole can be used on [confidential information of ACS]\*. The toxicological profile is said to be better than that of Fipronil's. [...]\*.
- (111) The parties have submitted that [confidential information of ACS]\*. The Commission notes in this respect also that a dormant patent prevents entry and limits competition.

*- c) Acetoprole and Vaniliprole*

- (112) Third parties indicated in the first phase of the investigation that ACS is developing two other compounds in the pyrazoles class: Acetoprole and Vaniliprole. As regards these active ingredients, the parties have submitted that [confidential information of ACS]\*. These products will therefore not be assessed any further in this decision.

*- The parties' other pipeline products*

- (113) In addition to neonicotinoids, Bayer has also other pipeline products which are to be launched on the market in the near future; Methoxyfenozide, Spirodiclofen and Spiromesifen.

*- a) Methoxyfenozide*

- (114) Methoxyfenozide [...]\*.

- (115) According to the parties, Methoxyfenozide [...]\*.

*- b) Spirodiclofen*

- (116) Spirodiclofen [...]\*. An acaricide, Spirodiclofen [...]\*.

- (117) Spirodiclofen [...]\*.

*- c) Spiromesifen*

- (118) Spiromesifen [...]\*.

*- Competitive effects of the parties' portfolio of new chemistries*

- (119) Following the merger, the new entity would have in their product offering four of the six current and future neonicotinoids, which are or will be introduced in the EEA. The parties would have Imidacloprid, Thiacloprid, Clothianidin and Acetamiprid covering, to a varying extent, the whole range of foliar, soil and seed treatment applications. The only effective competitor to these active substances, Syngenta's Thiamethoxam, would remain outside the parties' portfolio. Takeda's Clothianidin will be introduced in the EEA, [confidential information concerning Clothianidin]\*<sup>13</sup>. The Commission also notes that [...]\*. Moreover, the operation would add, in the EEA, the pyrazole Fipronil into Bayer's product offering. No other company has products from this chemical class.
- (120) As regards Syngenta's Thiamethoxam, as will be shown below, the Commission does not consider that Thiamethoxam will be able to offset the market power of the new entity, who will have three neonicotinoids and one pyrazole (and Ethiprole) in their product offering for foliar and soil applications. The parties

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<sup>13</sup> [Confidential information concerning Clothianidin]\*

have argued in their reply to the Statement of Objections that the Commission has not considered the competitive impact of competing neonicotinoids and submitted that "only after two months after the settlement of the patent dispute between Bayer and Syngenta, Thiamethoxam has been registered in Spain, Finland and Austria". While the parties attempt to demonstrate with this example how quickly Thiamethoxam will enter the EEA markets after the patent settlement, the Commission notes that Thiamethoxam was already registered in these Member States before the patent dispute was settled because Imidacloprid is not under patent protection in Spain, Finland and Austria and the patent dispute did not therefore concern these Member States.

- (121) The investigation shows that both neonicotinoids and pyrazoles belong to the fastest growing classes of insecticides, which are expected to grow at the expense of the older chemistries. Therefore, third parties have argued that the parties' position on the insecticide markets, particularly in the sap feeding segment, in all three applications - soil, foliar and seed - will be significantly strengthened in the near future.
- (122) In addition to neonicotinoids and pyrazoles, it has been argued that the parties have also other R&D activities which would strengthen the competitive position of the new entity in insecticides further. In this respect, it has been indicated that ACS has a patent on acetylcholine agonists, which would be complementary to the existing neonicotinoids. According to third parties, also a new nematocide (thienyl pyrazole) could lead to particular strength in soil insect and nematode control when coupled with the top carbamates and organophosphates and a strong technology presence in seed treatment. Finally, it has been argued that ACS is developing isobutylamides, which could be efficient for lepidoptera control. ACS has indicated that [confidential information of ACS]\*.
- (123) The parties have submitted in their reply to the Commission's request for information that neonicotinoids and pyrazoles do not represent the latest chemistry classes in insecticides. They have argued that neonicotinoids have been sold on the market since 1990 and pyrazoles entered the market in 1994. Therefore, the parties argue that both chemical classes are established rather than new chemistry and do not represent the latest technology. New generation insecticides coming onto the markets include according to the parties bezoylhydrazines, tetronic acids, spinosyns and carboxylates.
- (124) Third parties have, however, indicated that although it is true that newer chemistries than those represented by neonicotinoids and pyrazoles have been or will be launched, the newness of these compounds relative to neonicotinoids and pyrazoles is from a commercial point of view not relevant. Neonicotinoids and pyrazoles are said to be commercially far more important than any of the above mentioned chemical classes. The market potential of neonicotinoids and pyrazoles is further increased as they serve as replacement products for those products which will not be re-registered and for older chemistry with resistance problems. Therefore, while a number of products from the older chemistry classes will be re-registered and used also in the future, the overall importance of neonicotinoids and pyrazoles will grow in the future.



- (125) As regards the specific examples the parties have given above, third parties have indicated that bezoylhydrazines are not a new class and that e.g. Diflubenzuron was launched on the markets several years ago. The other new classes mentioned by the parties have a relatively narrow spectrum of application and have a much smaller market potential. They control mainly chewing pests (tetronic acids can only be used to control acaricides). Bezoylhydrazines are mostly sold in the vegetable and pome fruit markets. Bezoylhydrazines only represent a low market share and are destined for niche products since they are slow-acting and active by ingestion only, in other words, they have no contact activity and no systemicity. Carboxylates have mainly ingestion and some contact activity.
- (126) None of the chemical classes mentioned by the parties compete at the same level with the neonicotinoids in the market for control of sucking pests neither as foliar, soil nor seed applications. Neonicotinoids are according to the market investigation the only state of the art insecticides in these markets. None of them compete with Fipronil at the same level either.

*- The parties claim that the transaction will not affect competition*

- (127) The parties have argued that, even if assessing the proposed operation at the national level, the concentration does not give rise to concerns over market dominance in any of the affected markets. The parties' arguments are discussed in the following.

***Substitutable products***

- (128) The parties have argued that the Commission has overestimated the importance of neonicotinoids and pyrazoles. They have argued that, even after the re-registration process, organophosphates, carbamates and pyrethroids will still belong to the leading chemical classes. According to the parties, quite a large number of products belonging particularly to older classes of insecticides will be available on the market after 2003. Due to their pricing, the parties have contended, these products will remain extremely competitive, particularly in comparison to neonicotinoids and pyrazoles.
- (129) The parties have further argued that there are substitutable products for neonicotinoids and pyrazoles in all chemistry classes. The parties have argued that Parathion-Methyl, for example, is used for both sucking and chewing insect control as a foliar spray. Potential replacements for the control of sucking insects are also according to the parties organophosphates (e.g. Acephate, Lambda-Cyhalothrin) offer the same range of biological activity as Bayer's Imidacloprid and could thus entirely substitute any product of the neonicotinoid family. In this respect, the parties have also argued that Imidacloprid is not active against all types of sucking pests but that it is particularly efficient as for the control of homoptera (plant suckers). The parties have argued that Syngenta's Lambda-Cyhalothrin is as efficient as Imidacloprid to control these pests and Dow's Spinosad is more effective on thrips. Chewing insect control can according to the parties be achieved by Spinosad, Indoxacarb and organophosphates.

- (130) The parties have further argued that not all the phased-out products can be replaced either by neonicotinoids or pyrazoles. As regards e.g. organophosphates, the parties have contended that neither Imidacloprid nor Fipronil can cover the entire insect spectrum of broad spectrum organophosphates. The parties have argued that the farmers are not likely to buy two products to replace organophosphates but, instead, they will seek the cheapest and most efficient alternative based on the insect spectrum they want to control.
- (131) The parties have also argued that the submission that neonicotinoids are environmentally friendly is only partially correct. The parties have contended that Imidacloprid, for example, is not safe to bees and therefore cannot be used during the flowering period of crops. [...]\*. The active ingredient Indoxacarb (from DuPont) belonging to the chemical class of Carboxylates, for example, does not have these effects.
- (132) Finally, the parties have argued that as regards for instance Imidacloprid, the investment to be made by the farmer when applying crop protection products consist of the product price and the application costs (tractor, gasoline, water etc.). Thus, even if the product price of a given product per hectare and per treatment might be higher than the price of a substitutable product, the application costs may deviate since the cheaper product has to be applied more often. For this reason, the parties have argued that the overall expenses for the farmer, in these cases, do not deviate substantially and demand-side substitutability between the products in question therefore exists.

*- Third parties' views*

- (133) Third parties have indicated that, already now, it is a fact that more than 55% of the insecticides will disappear. Furthermore, it cannot be expected that a positive Annex 1 decision will be reached for all active substances which are still in the re-registration process. Therefore, it has been argued that the number of active substances may drop below 45%. Considerably fewer active ingredients belonging to the older classes of insecticides will be available in the future. The re-registration process will lead to fewer uses - both as regards crops and pests - for older products. According to Wood Mackenzie, especially organophosphates are currently "under the most stringent reviews" by the US and EU regulatory authorities due to problems associated with their long-term use and chronic toxicity. Organophosphates are together with organochlorines the fastest decreasing chemistry class by 2005 with a negative growth of 8.7% according to Phillips McDougall. With the re-registration process, the older families of technologies will be gradually phased out and the new chemical classes are expected to be the main replacements and increase their share in the overall market.
- (134) Very importantly, the investigation shows that, today, the environmental impact has become a key consideration alongside with better efficacy of the product. While purchase of a broad spectrum insecticide was the norm in previous years, in today's competitive environment the opposite is often true. It has been argued

that Integrated Pest Management (IPM) stresses control of the detrimental pest species with minimal impact to beneficials and other species within the field. In other words, IPM requires farmers to use insecticides which are specifically targeted at a particular insect pest and, thus, to avoid broad-spectrum insecticides. Moreover, IPM requires that those products are applied at such a time when they will provide the best results. IPM aims at avoiding that broad-spectrum insecticides are applied over a long period of time which will result in unacceptable aggregated side effects on non-targeted pests. Because products are specific for different pests, farmers following IPM will always use IPM friendly sucking-pest product against sucking pests and a different, IPM friendly chewing-pest product against chewing pests.

- (135) Third parties have also indicated that as IPM and farming become more complex, more and more farmers are relying on professional crop consultants to help determine which specific pests within the field need control. Regulatory agencies give preference to narrow spectrum reduced risk pesticides. According to third parties, many University studies have been done in the last several years to document the impact of IPM and narrow-spectrum insecticide sprays. Products fitting within this category are touted for this, both by the chemical manufacturer, the scientific community and regulatory agencies.
- (136) In this respect, it is to be noted that higher rates are required e.g. in the case of carbamates and organophosphates as compared to the more recent chemistries. While some 50-75g/hectare is often sufficient for neonicotinoids, 800-1000g/hectare may be required for carbamates and organophosphates. The higher rates required causes problems as regards environmental safety and IPM. There is also a residue problem and the time between the spraying and the harvest affecting the pre harvest interval (PHI) which is the time between which spraying and harvest are permitted. It is also to be noted that the parties have themselves recognised the importance of low-toxic insecticides. They have submitted in their reply to the Statement of Objections that formulations of neonicotinoids and pyrazoles are launched as "low toxicity alternatives to organophosphates".
- (137) For all the foregoing reasons, the investigation shows that the use of broad spectrum insecticides is fast decreasing.
- (138) As regards the parties' submission in their reply to the Statement of Objections that the Commission "gives an unbalanced view of environmental implications" and that Imidacloprid [...]\*, the Commission notes first that third parties have indicated that a number of other compounds on the market are [...]\* toxic to bees and cannot be applied during the flowering period. [...]\*. Second, as regards the parties argument that Imidacloprid has been temporarily suspended from the use in sunflowers, the Commission notes that this measure is limited only to France and that it only applies for seed treatment. Third, the Commission notes that Bayer has itself rebutted the causal relationship between Imidacloprid and the bees' symptoms. In Bayer's website, it is argued that "in numerous controlled experiments Bayer has proven that the alleged relationship cannot be

supported by facts". Therefore, bee toxicity will not be considered in this case any further.

- (139) The investigation shows further that while older insecticides - e.g. organophosphates, carbamates and pyrethroids - have activity against both sucking and chewing insects, newer insecticides are not generally effective against both sap-feeding and chewing insects but are more specialised than their predecessors. Although both neonicotinoids and pyrazoles have some efficacy in both sucking and chewing insects, the neonicotinoid chemistry is targeting primarily sucking insects and the pyrazole chemistry chewing insects.
- (140) The Commission requested competitors to indicate to which of their products customers could switch if the parties raised the prices of their products permanently by 5-10%. The Commission requested competitors to consider products which are substitutable in terms of e.g. mode of action, which are effective in the same crop, which target the same insects or insect groups and which are more or less comparable in terms of price. As regards Imidacloprid, which is the only neonicotinoid on the economically important markets, the results of the investigation clearly show that, apart from other neonicotinoids, there are no viable substitutes for Imidacloprid in the competitor's product portfolios. The same applies for Fipronil.
- (141) Third parties have indicated that neonicotinoids are highly effective and fast, which reduces the risk of disease transmission. Neonicotinoids are also systemic and with broad spectrum activity against sucking insects, i.e. they have applications in a wide range of crops. It has been argued that for combating white flies, neonicotinoids are the only effective insecticides available at present. Other products registered for use on white fly either have problems of efficacy (these are older products where resistance is already present) or speed of kill.
- (142) As regards the parties' argument that pyrethroids are used in potatoes against Colorado potato beetle (chewing) and aphids (sucking) at the same time, it has been indicated that the two pests often have a different application window, meaning that they appear at different times. Moreover, it has been indicated that acceptable control of Colorado potato beetle is achieved only in Western Europe, where the limited side effect of pyrethroids is sufficient to control the pest which is not a real problem. However, in the USA where Colorado potato beetle is a key pest, it has to be treated specifically.
- (143) As regards the parties' example that organophosphates can be used on some fruits against codling moth (chewing) and aphids (sucking), it has been indicated that while organophosphates are used this way in apples, they are applied in specifically timed applications against each pest. It has further been indicated that the organophosphates primarily used against codling moth (e.g. Gusathion) is not the best organophosphate against aphids. On the other hand, other organophosphates such as Vamidothin and Dimethoate are primarily targeted against sucking insects and have no effective control of chewing pests. They are therefore not applied for the control of codling moth.

- (144) As regards the parties argument of overall expenses, a number of third parties have indicated that that a product has a number of parameters and that price is only one factor influencing the buying decision of the farmer. Other parameters are for instance technical performance, image/brand, environmental profile and the service provided either by the dealer or the manufacturer. The farmer associates with a crop protection product certain value for money. As long as this perceived value is in the mind of the farmer fair or competitive, he will not see the need to switch to other products.
- (145) It has been indicated in particular that an important parameter for the end-user is the active ingredient's resistance status and selectivity on beneficials. It has been argued that these considerations result in a constant pressure to move away from older chemistries - carbamates, organophosphates and pyrethroids - and to use the latest introduced compounds with best performance available in order to prevent and overcome resistance as well as to select insecticides with excellent selectivity on beneficials and lowest impact on environment. According to third parties, this pressure is strongly enforced by the authorities via registration of new compounds and re-registration of older compounds and by the demands of the end-consumer.
- (146) It has also been argued that because the farmer cannot, in general, foresee the number of insect attacks on his field and he may therefore opt for applying newer chemistry classes, which offer longer lasting control of insects. In this way, the farmer obtains immediate control as well as a certain degree of preventive control provided by the longer lasting effect of newer insecticide chemistries. When using an older product, it may be that the product does not control the insect attack efficiently and repeated insect infestations increase the overall expenses for the farmer through increased application costs. By way of example, broad spectrum insecticides often cause secondary pest outbreaks, such as aphid blooms in cotton after treatment for chewing insects. The overall expense may thus result being higher with the older chemistries. It has therefore been indicated that demand-side substitutability does not exist between new chemistry products such as Imidacloprid and the older chemistries.
- (147) For all the above reasons, the Commission concludes that there are no effective substitutes for the neonicotinoids and Fipronil in the old chemical classes.

### ***R & D competition***

- (148) The parties have argued that the markets for agricultural products are characterised by intense R&D activity resulting in new products launched onto the market in quick succession.
- (149) In view of the total number of pipeline products under development for the EEA insecticides markets and the fact that it takes some 10 years to launch a new product, the Commission does not agree with the parties that new products are launched in quick succession.
- (150) Third parties have indicated that, compared to previous periods, the major companies are today spending a bigger portion of their sales returns in order to

meet the requests of Directive 91/414 for re-registration of their existing product portfolios. Moreover, many of the new product launches are actually new formulations or combinations of existing active ingredients rather than new active ingredients.

- (151) As discussed above, the dynamics of the agrochemicals industry results largely from R&D and market access. In this respect, the Commission notes that, according to the Phillips McDougall study, Bayer and Aventis have together introduced 39 new pest control products since 1980, compared to 38 introduced by Syngenta. The parties have currently 13 products under development while Syngenta and BASF have 8 products each. All the other competitors have 3 or less products under development.
- (152) Following the merger, the R&D capabilities of the new entity will be one of the biggest in the industry.
- (153) In view of the foregoing and given the parties' successful insecticides pipeline so far, the Commission considers that the new entity will be one of the few companies in a leading position to launch new compounds onto the insecticides market.

#### ***Fluctuating market shares***

- (154) Insecticide usage is directly dependent on intensity and seasonality of insect attacks. Several factors such as climate have an impact on the occurrence of insects. Therefore, the total size of the market varies from one year to the next.
- (155) The parties have argued that market shares fluctuate sharply over time and even a strong market position at a given point of time does not ensure that this position can be maintained in the future.
- (156) As discussed above, the parties have not been able to submit market share data for a longer than a 3-year period for a reliable time series analysis. On the basis of the submitted data, however, the Commission has been able to conclude that market positions are usually kept even though the total market size changes. This has been also confirmed by the investigation.

#### ***Competition from generic companies***

- (157) The parties have argued that all of the parties' products can be substituted by products which have been produced not only by one of the other multinational R&D companies, but by any supplier selling generic products or readily available commodities. The parties have argued that most of Bayer's and ACS's active substances are already off-patent and subject to generic competition. Since generic competitors do not have to invest in research and development, the parties have argued that they enjoy a competitive advantage over multinational suppliers, since they are able to approach wholesalers and retailers in the various Member States with relatively low prices and are thus able to ensure free market access to all customers currently supplied by the parties. The parties have contended that generic companies are able to obtain and to maintain approvals

for off-patent active ingredients with less expenses and very limited data packages compared to the efforts which are requested by the authorities from the original data owner in order to obtain and maintain a national approval. Furthermore, marketing and distribution costs are low since the original products are already on the market and their competitive strength and weaknesses are already known by the customers. The parties have argued that the increasing presence of generic manufacturers has resulted in fierce competition and in an appreciable price decline over the last years in almost every market for crop protection products.

- (158) It has been indicated to the Commission that if the product profiles of a generic product totally match the profile of the parties' product (i.e. the formulation type is identical), a price increase could lead to an increase of sales of existing generic products. However, according to some third parties this is rare in practice. Third parties generally agree that, in such situations, generic companies have had a downward pressure on prices to some extent. Having said this, third parties have indicated that the competition between the R&D producers is the main reason for any price decline. Also, general problems in the agriculture sector and the competition on the dealer level have largely contributed to the pressure on prices.
- (159) The investigation shows that market penetration by generic companies is much more cumbersome than described by the parties. Despite the fact that most of the parties' products are off-patent and thus open to generic competition, it has been argued that the parties generally still have the leading market shares of these products. This, according to generic companies, illustrates that generic companies do not easily take over significant market shares even if they have a more competitive cost structure.
- (160) In this respect, it has been argued that the technical know-how of production is often protected by a series of patents. This means that the best technology is usually protected significantly longer than the original patent protection period. Essential know-how is not accessible and not necessarily transparent from the published patents or scientific literature. Therefore, generic companies often have to develop competitive manufacturing processes for products coming off patent. ACS has submitted in their internal documents that process patents [confidential information of ACS]\*. In addition, while access to raw materials is crucial to process development and production, the original producer may be able to block access to key raw materials by commercial agreements or captive production. In this respect, the Commission notes that the internal documents of ACS show that the company is [confidential information of ACS]\*. In this way the access to active ingredients by third parties could be either blocked or at least controlled. Another reason is to tie up capacity and keep the potential generic producer off the market. Generic companies have also indicated that it may be difficult to obtain production permits for certain raw materials that are under environmental and toxicological concern.
- (161) The investigation also shows that, in some markets, the original producers have a very strong position due to their company name as well as brand recognition at

the distributor and farmer level. Since trademark protection does not expire like patents, generic companies cannot use the original, well-established brand names. It has been argued that products are recognised by brands to a fairly large degree. In these cases, the distributors/farmers require a substantial incentive to switch to less well-known brands supplied by companies not well recognised. ACS's internal documents show that [confidential information of ACS]\*.

- (162) It has also been submitted that the new entity would further limit generic suppliers' access to distribution via the parties. Generic companies do not expect e.g. Bayer to distribute a generic version of a product originally developed by ACS and vice versa. The parties' complementary product portfolio will thus leave less room for generic companies.
- (163) It has been argued that market access by generic producers could be limited by sales of mixture products containing a desired proprietary product, or rebate systems that make purchase of an off-patent product very attractive to the buyer if a desired proprietary product is also purchased. It has been argued that a competitor's large portfolio can make life very difficult for generic suppliers with a narrow product portfolio. In conclusion, a generic supplier typically expects a limited market share and, in a small and sometimes declining market, also a lower profit.
- (164) Finally, it has been argued that because generic suppliers are not able to spread the re-registration costs across a large product portfolio like R&D companies, the prices of the older active substances can be expected to increase as a consequence of the high investment associated with re-registering an off-patent ingredient. Also, those products which will suffer label reductions, will make them less competitive and leave a much narrower market for obtaining the return of investment.
- (165) Therefore, the Commission considers that generic competition is not sufficient to offset the market power of the new entity. As regards particularly Imidacloprid, for the above reasons, the Commission does not consider that generic competitors would be able to offset the market power of the new entity when Imidacloprid patent expires in 2006, contrary to what has been submitted by the parties.

***Products will not be re-registered***

- (166) The parties have argued that a number of Bayer's and ACS's products will not be re-registered according to Council Directive 91/414/EEC and will thus be phased out in 2003 at the latest. Furthermore, the parties have argued that so-called TOX-I products - classified by the WHO as the most toxic active ingredients available as crop protection products - which suffer from the lack of political acceptance and which might not survive re-registration, represent a fairly large proportion of Bayer's and ACS's product portfolio.
- (167) The Commission does not agree with the parties' argument. The fact that a number of the parties' products will not be re-registered is not relevant for determining the competition effects of the case because all the other competitors



- both R&D companies and generic suppliers - will face the same loss of their portfolios. The Commission has received confidential information from the parties' competitors and concludes that all competitors are faced with product losses and label restrictions.

- (168) Therefore, in view of the foregoing, the Commission does not consider that the parties' argument is generally relevant for the assessment of this case.

### ***Third party agreements***

- (169) The parties have argued that part of Bayer's and ACS's turnover in a number of markets is accounted for by the distribution of third party products. Since the third party products will in many cases interfere with the product portfolio of the combined entity, the parties expect that in most cases the supply of these products will be discontinued by the respective supplier.

- (170) While the parties are correct in arguing that the distribution of third party products will probably be affected as a consequence of the merger, the investigation shows that those products which most likely will be withdrawn are those which clearly overlap with the new entity's enhanced product portfolio and which are not expected to be supported by the parties. The parties are expected to review the new entity's product portfolio and replace some products with their own solutions. Some third parties have also argued that the parties' third party portfolio would be largely kept as the new entity would be very strong and thereby attract such products. The investigation shows that a number of third parties would rather be keen in continuing the distribution relationship with the parties but fear that their products will no longer be supported by the parties, given the overlapping product portfolio. Therefore, it may be argued that, overall, the parties' product portfolio will not be affected.

### ***Countervailing bargaining power***

- (171) The parties have argued that customers of agricultural products - wholesalers and agricultural co-operatives - are sophisticated purchasers and exercise substantial countervailing bargaining power and are well aware of the supply sources that are readily available. Therefore, facing this bargaining power, the parties could not raise the prices as a consequence of the merger.
- (172) It has been indicated to the Commission that, in general terms, supply sources are getting less and, hence, choice less available. Strong market position will erode substantially the bargaining power of purchasers. The Commission's investigation shows that the demand side is relatively unconcentrated. It is also to be noted that as regards those markets, where no effective substitutes exist for the parties' products (eg. Imidacloprid and Fipronil), the demand elasticity is very low. Furthermore, customers cannot produce the products in-house nor is inducing a new entry easy (development and registration costs).
- (173) In general terms, most third parties expressing their opinion believe that the new entity would be able to raise prices or keep a high price level compared to the rest of the market in those markets where they enjoy a strong market position.

- (174) Therefore, the Commission does not consider that buying power is relevant for the assessment of this case.

***Pricing of products***

- (175) The parties have argued that almost all of their products are registered and marketed for a variety of crops. Therefore, the parties have argued, a relatively high market share in a secondary market does not give rise to concerns of market dominance since the prices for the products are determined according to the competitive conditions in the main market, where the product is primarily used or, if the sales accounting for specific products are more or less equally spread among a number of markets, prices are even fixed according to the competitive situation in several markets. Since most of the products are used on various crops and the competitive strength of the combined entity varies in different segments, the manufacturer will neither have the possibility nor the incentive to raise prices for certain products in order to target a distinct market. Since the main markets for the parties' products are highly competitive, the combined entity will not have the possibility of abusive pricing.
- (176) The parties have also argued that price discrimination and abusive pricing cannot be achieved by labelling formulated products separately for each crop. The parties have submitted that the development of a new formulation on the basis of existing active ingredients requires a financial investment of approximately EUR [...]\*, depending on the product involved, it takes about [...]\* years to complete the registration process. Due to the amount of costs incurred and the time necessary to launch new products onto the market, at least each of the R&D companies has the incentive to register its products for the use on as many crops as possible.
- (177) Third parties have confirmed that, for those products that can be used in several crops, the main target crop and/or market or the most important ones together determines the pricing positioning. The investigation has also confirmed that price discrimination towards growers of a particular crop and abusive pricing in secondary crop markets cannot be achieved by developing separate formulations and applying for separate registrations for each crop. The Commission has no evidence that labelling formulated products separately for each crop would be common practice in crop protection industry.

***- Effects of a large product offering***

- (178) EPPO<sup>14</sup> has defined a number of resistance management strategies, including that of alternation of products provided:

*"Alternations (rotations) are only effective if the alternating partner or partners are known to be from different cross-resistance groups and to control the target pest. They work by reducing the exposure and, thus, reducing the*

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<sup>14</sup> Guidelines for the efficacy evaluation of plant protection, PP 1/213(1) - Resistance Risk Analysis

*selection pressure. At the same time, they allow any resistant biotypes that may develop to be controlled by the alternating partner."*

- (179) Insects develop resistance against modes of action throughout time. From a biological standpoint, a broad product portfolio comprising active ingredients with different modes of action will provide better resistance management, because a range of active ingredients with different modes of action can be rotated.
- (180) In this respect, the investigation shows that resistance has developed against a number of older products and that resistance management is one of the reasons why the use of old broad-spectrum products is diminishing. Because the application of a single type of insecticides leads to resistance to the specific mode of action from that chemical class, farmers change the class of insecticides used.
- (181) As a result of the notified operation, the parties would have a broad range of active ingredients with different modes of action. The combined product portfolio comprises all chemical classes. Most importantly, however, the parties would have key active ingredients from the neonicotinoids and pyrazoles chemistry classes. The novelty of the mode of action is important in combating resistance. Insects have not, as yet, developed resistance against Imidacloprid and Fipronil in the EEA. The parties' insecticide portfolio is also important in that it contains products with different modes of action for controlling similar insects.
- (182) Whereas the combination of products allows the distributor the possibility for a one-stop shop for a number of compounds, some third parties have voiced concerns that this could have a negative effect on the competition.
- (183) The merger would lead to a single dominant position in a number of markets through a horizontal overlap both in the foliar and the soil markets. Moreover, third parties have argued that by combining neonicotinoids, Fipronil and Ethiprole with the parties' broad portfolio in other chemical classes - e.g. acaricides, benzoylureas, carbamates, nematicides, organophosphates, organochlorines, pyrethroids - the parties would have access to the by far broadest range of different modes of action in the industry. Contrary to what the parties have argued, they would be the only ones in the market place who could offer a range of neonicotinoids and a pyrazole, thus having the most complete product portfolio on the market in the key chemical classes. While neonicotinoids and the pyrazole Fipronil overlap in some target pests (thrips, Colorado potato beetle), they also complement each other, thus giving the parties a unique position to offer the most efficient products to control both soil and foliar pests (and also the most efficient seed treatment, as will be discussed below).
- (184) Neonicotinoids and Fipronil but also the parties' other good products in the older chemistry classes would give the new entity a unique position in resistance management, where neonicotinoids and Fipronil are likely to be used as the main drivers. This would render the parties' offering *de facto* indispensable, giving

them the power to increase prices and/or exclude competition. As to the latter, the parties could offer spraying programmes consisting of their own products for resistance management purposes. In a programme, products with differing modes of action are substituted one for the other and products rotate in order to control key pests in specific crop segments throughout the course of the growing season. With a large enough portfolio, a company can recommend a rotation program containing only their products.

- (185) Bayer recommends specific spray programmes to the customers to avoid resistance problems. Following the merger, their ability to recommend programs containing only their own products would be significantly enhanced. While the parties have argued that there are no benefits arising from combining or rotating two or three products belonging to the same class, the fact that the parties would have three neonicotinoids against Syngenta's one neonicotinoid would, by definition, give them more opportunities to build their spraying programmes. Third parties have also argued that two or three products are better than a single one because the pest control profile, within the same chemical class, varies with different products. Rotating products may not prevent resistance, but selecting the most appropriate one will help against resistance and enhance efficacy. Moreover, it has been indicated that there is a whole spectrum of resistance (e.g. penetration resistance, metabolic resistance) that an insect may develop. Therefore, even if the insect develops resistance against one neonicotinoid, other neonicotinoid products could still work. There are therefore clear advantages of having several products belonging to the same chemical class in the product portfolio.
- (186) The parties could in addition leverage their strong market position and unique product offering through rebate systems to the distributors. The parties could leverage their strong market position, since both neonicotinoids and Fipronil are products which the distributors must supply. They could offer a discount package deal for their spraying programmes. Competitors could not match this offering, given the higher prices that would have to be paid for the parties' indispensable products on a stand-alone basis. Third parties have indicated that this can exclude competitors' products from entering rotation and, thus, being sold on such markets. The parties could offer also year-end rebates on their total purchases including the proprietary products and commodity products, thereby giving substantial incentive for the wholesaler to also buy the commodity products from the parties. In this respect, it has been indicated that due to the re-registration process, the number of suppliers of the commodity active substances may be reduced. In some cases, this may mean a few or only one supplier. Should the parties be one of such suppliers, this could further strengthen the parties' position.
- (187) Third parties have indicated that the product offering with a number of strong proprietary products could be strengthened by developing new mixtures between proprietary products and commodity products. Such offers could possibly prolong the life cycle of a product which would much more rapidly decline without the supporting effect of a strong technical innovation and create "a second life" for off-patent products under patent protection. ACS submits in

their internal documents that [confidential information of ACS]\*. [...]\*. Combining off-patent products with proprietary products is also to fend off generic competition.

- (188) The parties have argued that since e.g. pyrethroids are off-patent and easily available on the market as generics, it is sufficient for a company to have one neonicotinoid in its product portfolio in order to develop these mixtures. Hence, the parties have argued that the proposed merger will not enhance the possibility of Bayer to combine e.g. Imidacloprid with a pyrethroid since the company could already today develop mixtures of Imidacloprid and its own pyrethroids.
- (189) The Commission considers, however, that by definition two or three neonicotinoids give more opportunities to create combination products than only one. As the parties would have three neonicotinoids in their product offering against only one neonicotinoid by their competitors each, this will give them more possibilities to create combination products as compared to their competitors. The Commission also notes that the parties would be the only ones on the market place with a pyrazole and the potential combination of this product with any off-patent products could not be matched by third parties.
- (190) Therefore, for the foregoing reasons, the Commission considers that the operation as notified would lead to the foreclosure of the market. The Commission notes that the position of generic competitors could be especially affected.

### ***A.3. Market position***

#### ***Introduction***

- (191) In 2000, the global crop insecticides market was valued at USD 8,009 million, a 3% decline from 1999. Insecticides contributed 27.7% of global crop protection chemical sales in 2000. Insecticides constitute the smallest of the three major product segments of agrochemical products, behind herbicides and fungicides.
- (192) The value of the insecticides market in the EEA (excluding molluscicides) amounted to some EUR 900 million in 2000. Foliar insecticides account for about 80% of the total EEA-wide insecticides market.
- (193) Within the insecticides segment, the only EEA-wide markets with a total turnover exceeding EUR 100 million are insecticides for fruits and nuts, insecticides for vegetables, and insecticides for grapes.
- (194) In 2000, the EEA-wide turnover generated by Bayer with insecticides (and the related molluscicides) amounted to EUR [...]\* million; the respective turnover of ACS amounted to EUR [...]\* million. In terms of 1999 figures, the two companies were the global leader in the total sales of insecticides.

***The parties' leading products***

- (195) Bayer is present in the large majority of the crops (e.g. beets, citrus fruits, cotton, fruits/nuts, grapes, hops, ornamental plants, potatoes, tobacco and vegetables) with its best selling product, Imidacloprid, which belongs to the neonicotinoid class. Imidacloprid has been on the market since 1992 under the trade names Gaucho, Confidor, Admire and Provado and it is under patent protection until 2006. In 2000, Imidacloprid accounted for some [...] of Bayer's total insecticides sales in the EEA. Out of some EUR [...] million Imidacloprid total sales in the EEA in 2000, [70-80] % can be allocated to seed treatment, [20-30] % to foliar applications and [0-10] % to soil. Some EUR [...] million can be allocated for foliar and soil application.
- (196) The parties have argued that Imidacloprid is close to maturity and a further significant increase in sales therefore cannot be expected. The parties have argued that Imidacloprid is challenged not only by other neonicotinoids but also by insecticides of other chemical families. The parties have forecast a substantial decline in the sales of Imidacloprid due to the launch of Syngenta's Thiamethoxam.
- (197) The investigation shows that the sales of Imidacloprid have been increasing in every crop and in every Member State steadily since the launch of the product. In their sales forecasts, the parties expect the sales of Imidacloprid to [...]. As regards Syngenta, in light of the investigation, the Commission considers that Syngenta will have to face and established, leading producer of neonicotinoids whose product portfolio will be considerable strengthened with the addition of Acetamiprid and Fipronil (and later with Thiacloprid). The Commission considers it therefore unlikely that Thiamethoxam will become a viable competitor to the merged entity in the near future and take away Imidacloprid sales to the extent the parties have forecast.
- (198) Bayer is about to launch neonicotinoid Thiacloprid [...]. Bayer has argued that [...]. Bayer expects Imidacloprid sales of EUR [...] million in fruits and nuts (foliar segment) in 2004 to be reduced to EUR [...] million in 2006 [...].
- (199) Bayer has argued that [...] while, at the same time, [...]. Bayer has submitted that Imidacloprid [...]. Bayer has submitted that the business rationale behind [...].
- (200) [...].
- (201) The Commission's investigation suggests that Bayer is in the process of transferring part of the Imidacloprid sales into Thiacloprid sales in connection with the patent expiry of Imidacloprid. The transfer is supported by the fact that Thiacloprid [...]. Imidacloprid will come off patent in 2006. The patent expiry of Thiacloprid is [...], but [...]. In any event, in light of the investigation and Bayer's explanations, the Commission considers that the alleged cannibalisation will be limited to some specific crops and situations. In markets, where the parties have a strong market position, the question is irrelevant because the overall sales will remain with the same company. In segments, where

Imidacloprid is not active, e.g. [...]\*, the sales of Thiacloprid can be expected to increase.

- (202) The investigation also suggests that the transfer of part of the Imidacloprid sales to Thiacloprid will work as a safeguard against generic competition upon Imidacloprid's patent expiry. With a new patent-protected product on the market, third parties have indicated that it will make it less attractive for generic companies to launch generic versions of Imidacloprid. This would further strengthen the parties' market position.
- (203) Moreover, with Thiacloprid, Bayer will extend the possibilities for the sales of rotation programmes. As discussed above, two or three neonicotinoids are by definition better than a single one and allows a wider leeway to offer spraying programmes compared to having only one neonicotinoid in the portfolio. Therefore, the combined sales of Imidacloprid and Thiacloprid can be expected to be at least maintained, but most likely to grow in the near future. As regards Imidacloprid, the Commission considers it likely that the sales will continue strong even after the product has lost patent protection due to the strong brand and supplementary patent protection as regards e.g. the manufacturing process.
- (204) Although the parties have argued in their reply to the Statement of Objections that, in terms of sales and market penetration, Fipronil plays "only a minor role" in the European insecticides market, Fipronil is together with Deltamethrin and Aldicarb [confidential information of ACS]\*. Fipronil is marketed under the trade name Regent. Fipronil will be patent protected until [confidential information of ACS]\*.
- (205) The parties have argued that the [confidential information of ACS]\*. The Commission notes, however, that the parties expect the overall sales of Fipronil [confidential information of ACS]\*. Furthermore, Fipronil [confidential information of ACS]\*.
- (206) The parties have insisted throughout the early part of the investigation that the new neonicotinoid Acetamiprid is a competing product. They have argued that the marketing rights of Acetamiprid [confidential information of ACS]\*. The parties have consequently attributed market share of Acetamiprid to third parties in their assessment and market forecast.
- (207) However, [confidential information of ACS]\*. Therefore, following the established practice, the Commission considers that Acetamiprid market share will add to that of the new entity in all those markets, where ACS is currently distributing the active ingredient or will distribute the active ingredient in the near future.

### ***Third party observations***

- (208) Third parties have indicated that the operation would create a dominant player in the insecticides markets. Third parties have indicated in the Commission's investigation that the combined insecticide portfolio of the new entity is particularly strong with examples of every major insecticide class. It has been

submitted to the Commission that whereas, in general terms, there are a number of insecticides effective against chewing insects, there are only few products against sucking insects. It has been argued that the parties would become particularly strong especially in the sucking insects segment. In this respect, the combination of Bayer's neonicotinoids with ACS's Acetamiprid has given rise to a particularly strong, negative reaction. It has similarly been argued that the combination of Bayer's neonicotinoids and ACS's Fipronil would lead to adverse competition effects. In this respect, third parties have argued that the combined strength of the two parties, both in neonicotinoids and pyrazoles, added to the strong established market presence of both companies in older chemistries such as pyrethroids, organophosphates and carbamates, means that the new company will have an unrivalled range of insecticide technologies on offer. It has been indicated that the large combined product offering would lead to a strong position in the resistance management and put competitors, especially generic companies, in a worse position.

- (209) The analysis of the affected markets indicates that a dominant position would be created or strengthened in a number of crops at the national level. These markets are analysed in more detail below.

#### ***General considerations***

- (210) On the overall EEA-wide insecticide market, the parties' combined market share would be [30-40]\*% (Bayer [10-20]\*%; ACS [10-20]\*%) according to their own estimation. Syngenta accounts for [20-30]\*% of the market and BASF [0-10]\*%. According to the parties, a number of international and local generic companies account for a combined market share of [30-40]\*% at the EEA-wide level.
- (211) At the national level, the parties' activities overlap in a large number of crops and Member States. According to the information in the Form CO, there are 63 insecticides markets where the combined market share of the parties is 35% or exceeds this figure.
- (212) Following the investigation, the Commission considers that competition is unlikely to be negatively affected on 31 markets, which were considered to be affected markets in the Notification. The Commission considers that competition concerns are unlikely to arise on these markets for one or more of the following reasons: there is no overlap between the parties' activities either because of misallocation of market share or because the overlap has ceased to exist for other reasons; the market share increment is very small and the structure of the market is unlikely to be affected by the operation; the structure of the market is unlikely to be affected by the operation as the pricing incentives of the parties' products would not be affected; the parties have largely overestimated their market position; and there are strong competitors who are likely to be able to provide effective competition on the market.
- (213) The Commission considers that the transaction would create or strengthen a dominant position in 32 national markets. These markets will be analysed in the following.



*a) Banana insecticides*

- (214) Banana insecticides generate an overall market value at the EEA-wide level of EUR 5 million. At the EEA-wide level, the parties have a combined market share of [40-50]\*% in soil insecticides (Bayer: [20-30]\*%, ACS: [10-20]\*%) and [30-40]\*% in foliar insecticides (Bayer: [30-40]\*%, ACS: [0-10]\*%). In soil insecticides, the largest competitor is FMC with [20-30]\*% of the market. In foliar insecticides, Syngenta has [20-30]\*% of the EEA-wide market. The parties' activities overlap in both foliar and soil insecticides only in Spain. However, competition would be adversely affected only in the soil market.
- (215) Soil insecticides in **Spain** account for the largest part of the EEA-wide banana insecticides market with a market value of EUR [...] million in 2000. On this market, the parties' combined market share according to their own estimation amounts to [40-50]\*% (Bayer: [20-30]\*%, ACS: [10-20]\*%). Based on the information submitted by the parties, Bayer's market share has declined from [30-40]\*% in 1998 to [20-30]\*% in 2000. ACS, on the other hand, has increased its share of the market from [10-20]\*% in 1998 to [10-20]\*% in 2000. The market size has varied to some extent but the trend has been a growing one. The largest competitor according to the parties is FMC ([20-30]\*%) while DuPont accounts for [0-10]\*% of the market. Generic companies together have [20-30]\*% market share.
- (216) [Confidential information concerning the market position of the competitors]\*.
- (217) Bayer sells mainly the Fenamiphos-based product Nemacur. Fenamiphos is an organophosphate. ACS generates about [70-80]\*% of its turnover in the Spanish soil insecticides market with its organophosphate Ethoprophos (sold under the brands Mocap and Sanimul). The other ACS substance is a carbamate Aldicarb (Temik). Both substances are off-patent.
- (218) The parties have argued that competition concerns would not arise on this market. The parties have submitted that [...]\*. The parties have therefore argued that their combined market share is expected to decrease to [30-40]\*% in 2004.
- (219) The parties have further argued that their products used for the protection of bananas are also applied to other crops. Fenamiphos is also used on vegetables, citrus fruits and tobacco whereas Ethoprophos is applied to potatoes, vegetables and tobacco. Aldicarb is also used on citrus fruit, cotton, potatoes, tobacco and fruits and nuts. The parties have argued that only [0-10]\*% of the turnover generated with Temik can be allocated to bananas. Thus, the parties have contended that insecticides used for the protection of bananas are not priced particularly according to the competitive situation on the banana market and any price discrimination towards growers of bananas is impossible.
- (220) The Commission notes first that there is no evidence that [...]\*. Furthermore, the Commission notes that Bayer generates [50-60]\*% of its Fenamiphos turnover (almost EUR [...] million) and ACS [40-50]\*% of the turnover of Ethoprophos (EUR [...] million) in bananas. The sales in the other segments are far less for both products. Therefore, following the parties' argumentation, the Commission

concludes that the prices of both products are largely based on the banana soil market. The two products together account for more than [40-50]\*% of the parties' present market share and are thus considered as their most important products on this market.

- (221) The Commission notes that the parties' combined market share is almost twice as high as that of the closest competitor. The Commission considers that the transaction leads to a structural change of the market and could have an appreciable affect on the parties' pricing decisions. The Commission notes further that ACS has been able to increase its market share in the past few years. [Confidential information concerning the product launches of the competitors]\*.
- (222) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for bananas in Spain.

*b) Beets insecticides*

- (223) The total market for beets insecticides in the EEA was EUR 34.4 million in 2000. Soil insecticides accounted for roughly EUR [...] million and foliar insecticides EUR [...] million of this market.
- (224) At the EEA-wide level, the parties would become the leading supplier of beets insecticides. In soil applications, their combined market share is [50-60]\*% (Bayer: [10-20]\*%, ACS: [40-50]\*%) and in foliar applications [30-40]\*% (Bayer: [20-30]\*%, ACS: [10-20]\*%). Syngenta is the largest competitor in both segments, with [10-20]\*% of the soil applications and [20-30]\*% in the foliar segment. Other competitors (BASF, Du Pont, Dow, FMC) have very small market shares at the EEA-wide level.

*- Beets foliar insecticides*

- (225) In the market for foliar insecticides for beets, the parties market share exceeds 40% in France ([40-50]\*%) and Greece ([70-80]\*%).
- (226) The **French** market for foliar insecticides is the largest in the EEA, amounting to EUR [...] million in 2000. On this market, the parties' combined market share is according to their own estimate [40-50]\*% (Bayer: [20-30]\*%, ACS: [10-20]\*%). The market share of the parties has been in the region of [40-50]\*% and [50-60]\*% for the past three years. The competitors' market shares have been more or less stable over the same period of time. The parties have submitted that BASF is the largest competitor with [20-30]\*% of the market, followed by Syngenta ([20-30]\*%). Local and generic companies are said to account for the remaining [0-10]\*% of the market. The parties' market share would be [50-60]\*% in sucking insects.
- (227) [Confidential information concerning the market position of the competitors]\*. The Commission therefore considers that the parties' market position is likely to be somewhere [above 40]\*%.

- (228) Bayer attains [...] turnover with Enduro EC, which is a mixture of the active ingredients Oxydemeton-Methyl and pyrethroid Beta-Cyfluthrin. Oxydemeton-Methyl is an organophosphate and Beta-Cyfluthrin is a pyrethroid. Enduro EC accounts for [20-30]\*% of the total sales on this market. Bayer also sells the pyrethroid Cyfluthrin. ACS sells mainly pyrethroid Deltamethrin and Endosulfan, mostly as mixed formulations with other active ingredients. Endosulfan, which currently accounts for [0-10]\*% of the sales in this market, has only been re-registered for cotton and tomatoes and will thus not be used on beets after 2003. Out of this reason, the parties expect ACS's market share to decline to [10-20]\*% and estimate, that the combined market share of the parties would be only [30-40]\*% by 2004.
- (229) The parties' forecast of the drop in their market share is based on the assumption that all other competitors will retain their product portfolios. As discussed above, this is not the case and the re-registration will affect also the competitors.
- (230) It has been indicated in the market investigation that Deltamethrin and Beta-Cyfluthrin are similar products and that combining these two would guarantee the new entity a strong position in pyrethroids. The parties would have also a third pyrethroid in the portfolio, Cyfluthrin. Third parties have indicated that Deltamethrin is the best pyrethroid on the market in terms of broad spectrum of activity. Only low dosages are required and, compared to competing products, it is cheap. Beta-Cyfluthrin has similar activity but is more expensive. While the parties have forecast [...] sales of these two products, the sales are expected to [...]\*.
- (231) The parties have argued that Beta-Cyfluthrin and Deltamethrin target the same pests in the French beets market and are not complementary to each other. The parties have further argued that these products belong to the same chemical class and cannot be used simultaneously in a rotational program for resistance management. The parties have argued that there is no reason why the combination of two products belonging to the same chemical class targeting the same pests could strengthen the parties' position in the market. The Commission however considers in line with the above that while resistance may develop against one pyrethroid, it does not necessarily develop in the other. The parties would have three pyrethroids in their product offering which gives the parties better possibilities to offer spraying programmes and discount packages to the customers compared to their competitors, who have only one pyrethroid in their portfolio.
- (232) [Confidential information concerning the product launches of the competitors]\*.
- (233) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for beets in France.
- (234) In 2000, the **Greek** market accounted for EUR [...] million. It has slightly increased from 1998 (EUR [...] million). The parties' combined market share amounts to [70-80]\*% (Bayer: [0-10]\*%, ACS: [60-70]\*%) according to their own estimation. The largest competitor in this market, BASF, accounts presently

[10-20]\*% of the market while Syngenta has only [0-10]\*%. The parties have projected that their combined market share would drop only slightly to [60-70]\*% by 2004. In sucking insects, the parties have estimated their market share as [60-70]\*%. In chewing insects, their market share would be [90-100]\*%.

- (235) ACS's most important products on this market are Deltamethrin (Decis) and Endosulfan (Thiodan). Deltamethrin accounts for [30-40]\*% of the total market Endosulfan attributes currently [20-30]\*% of ACS's market share. The parties have indicated that [...]\*. Bayer sells several products, including Fethion (Lebaycid CD), Cyfluthrin (Baythroid EC) and third party products Parathion-Methyl (Folidol M-EC) and Azinphos-Methyl (Gusathion M EC).
- (236) The prices of Deltamethrin and Endosulfan are largely decided in the Greek [...] market, where the parties have [40-50]\*% of the market. As discussed below, the Commission considers that the parties would become dominant on this market. Deltamethrin is also used in the fruits and nuts market, where the parties would become dominant. Therefore, given this and in view of the parties' high market share and the absence of strong competitors, the Commission considers that the parties could raise the price of these products without provoking a competitive reaction.
- (237) The parties have submitted that [...]\*. [Confidential information concerning the product launches of the competitors]\*.
- (238) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for beets in Greece.

*- Beets soil insecticides*

- (239) As regards beets insecticides for soil application, the parties have very high combined market shares in three Member States: Belgium ([80-90]\*%), France ([70-80]\*%), and the UK ([70-80]\*%). In Italy, the parties would account for [40-50]\*% of the market.
- (240) The **Belgian** market was estimated at some EUR [...] million in 2000. On this market, the parties' combined market position would be according to their own estimation [80-90]\*% (Bayer: [0-10]\*%, ACS: [80-90]\*%). The market share of each company has remained relatively stable for the past three years. Of the other large producers, Syngenta has de minimis sales in Belgium in this market. Generic competitors account for [10-20]\*% of the market. In their reply to the Commission's Statement of Objections, the parties have corrected their market share estimation. They have submitted that a third-party product, Force, based on the active ingredient Tefluthrin, was by mistake allocated to the soil market; it is in fact used in seed treatment applications. This would bring Bayer's market share down to [0-10]\*% and the combined market share to [70-80]\*%.
- (241) [Confidential information concerning the market position of the competitors]\*. Therefore, the Commission considers that the parties' estimate of their high market position is correct.

- (242) More than [90-100]\*% of ACS's market share is achieved with Regent Plus which is a mixture formulation of the active substances pyrazole Fipronil and the carbamate Aldicarb. The remaining [0-10]\*% of ACS's sales are generated with Fipronil (Syllit). Both of ACS's products are used to [90-100]\*% in beets and, therefore, the pricing of the products is determined on this market. Bayer generates more than [90-100]\*% of its sales with the carbamate Carbofuran (Curaterr GR), which is a third party product supplied by FMC. The parties have projected their combined market share to increase to [90-100]\*% by 2004 [confidential information of ACS]\*.
- (243) The parties have submitted that the proposed transaction does not restrict effective competition on this market. They have submitted that even though Fipronil is under patent protection until [confidential information of ACS]\*, competing organophosphates and carbamates are perfect substitutes for Fipronil-based insecticides. The parties have also contended that [...]\*. Finally, the parties have argued that because Curaterr has its main market in vegetables ([40-50]\*% of the generated turnover) and that since the parties' combined market share in the market for vegetable insecticides only amounts to [20-30]\*%, there is no possibility for abusive pricing of Curaterr in Belgium.
- (244) As concerns Fipronil, [confidential information of ACS]\*. In light of the investigation, the Commission does not consider older chemistry classes such as organophosphates and carbamates substitutable for Fipronil. As discussed above, the trend is to move away from older, more toxic chemistries.
- (245) The Commission notes further that there are no indications that [...]\*. In view of the fact that [...]\*, the Commission considers that the parties are likely to defend [...]\* vigorously. The Integrated Gross Margins of [...]\* are mostly in the region of [confidential information of ACS]\* in different Member States. [...]\* [confidential information of ACS]\*.
- (246) As regards the parties argument that Curaterr GR is used mainly in vegetables, the Commission notes that in the market data submitted for soil application for maize, it is indicated that [50-60]\*% of the sales of Curaterr GR are generated in beets and only [0-10]\*% in vegetables. The sales of Curaterr GR in vegetables amount to EUR [...]\*, in beets EUR [...]\* and in maize EUR [...]\*. Given that the combined sales of Curaterr GR in beets and maize are higher than in vegetables and in view of the fact that Bayer has [40-50]\*% of the soil insecticides market for maize, the Commission considers that the resulting market position in beets could have an effect on the pricing incentives of Curaterr GR.
- (247) The parties have submitted [...]\*. The parties have argued that Syngenta will launch Fosthiazate onto this market. [Confidential information concerning the product launches of the competitors]\*.
- (248) For all the above reasons, and given specifically the high market share and the fact that the operation would bring together the largest R&D competitors on this market, the Commission has reached the conclusion that the proposed

transaction will create or strengthen a dominant position on the market for soil insecticides for beets in Belgium.

- (249) **France** is the largest single market in the EEA for beets insecticides. Insecticides for soil application account for slightly less than [40-50%]\* of the total French market and, in 2000, accounted for EUR [...] million. The total market decreased by almost [30-40]\*% in 2001, from EUR [...] million. During this period, the parties more or less maintained their market position. The parties have estimated that the total market will decrease further still by 2004.
- (250) On this market, the parties' combined market share amounts to [70-80]\*% (Bayer: [0-10]\*%, ACS: [70-80]\*%) according to their own estimation in the notification. Other competitors on this market are very small and comprise of local and generic manufacturers. Competitors have estimated that the parties' market position is stronger, closer to [90-100]\*% of the market. In their reply to the Commission's Statement of Objections, the parties have explained that the third-party product, Force, based on the active ingredient Tefluthrin, has by mistake been allocated to the soil market, and it is in fact used in seed treatment applications. According to the parties, therefore, Bayer's market share is reduced to [0-10]\*% and the combined market share of the parties to [70-80]\*%.
- (251) [Confidential information concerning the market position of the competitors]\*.
- (252) ACS generates almost all of its turnover with a carbamate Aldicarb (Temik), which is the largest product on this market with [60-70]\*% of the total sales. ACS sells on the market also a formulation combining Aldicarb and Fipronil (Cardinal/Trident). [70-80]\*% of the turnover of Aldicarb is generated in this market, showing that the price of Aldicarb is determined on this market. ACS has also some limited sales of the third party product Carbofuran (Stelon) supplied by [...]\*.
- (253) Bayer generates almost all of its turnover with active substances produced by third party suppliers and the carbamate Carbofuran (Carbofuran MF, [...]\*) .
- (254) The parties have argued that despite their high market share, the transaction does not lead to any adverse competition effects. In particular, the parties have argued that third-party suppliers are likely to discontinue supplying their products to Bayer upon completion of the merger. The parties have further argued that prices for Bayer's Carbofuran cannot be raised anti-competitively as the price is determined in the competitive market for [...] insecticides. Moreover, the parties have argued that Carbofuran has suffered a considerable decline in sales prices over the last years. According to the parties, this is mainly due to the fact that the product is subject to vigorous competition from generic suppliers. Since Carbofuran will be defended in the re-registration process by [...]\*, the parties have argued that generic competition is expected to increase in the future. Finally, the parties have argued that Otsuka is likely to launch carbamates Benfuracarb and Alanycarb on the market in 2002/2003.
- (255) The Commission notes first that there is no evidence that any of the third party supply agreements will be discontinued. The Commission also notes that the

parties have forecast to maintain their market position by 2004 at a high level ([60-70]\*%). As regards Carbofuran, the Commission notes in light of the investigation that there has been a general price decline in the European crop protection industry and that this is caused by the general difficulties faced by the agricultural industry rather than by generic competition.

- (256) Concerning the pricing of Carbofuran, the Commission notes that Bayer generates [80-90]\*% of its market share on this market with products, which are only sold in this market and where the pricing decisions are taken on this market. Therefore, the pricing of Carbofuran is not relevant in assessing the competition effects of the merger. The Commission considers that the dominant position, which will be achieved after the merger, is likely to change the pricing incentives of these other products.
- (257) The Commission considers that the operation will lead to a substantial structural change of the market by combining the two major R&D companies. This position will be further reinforced by [confidential information of ACS]<sup>15</sup>. [Confidential information concerning the product launches of the competitors]\*. The Commission has no information about the alleged product launches of carbamates Benfuracarb and Alanycarb. In any event, the Commission does not consider it likely that these products, which represent old chemistry classes the use of which will decrease gradually in the EEA, will be able to offset the strong position of the parties, given especially that [confidential information of ACS]\*.
- (258) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for beets in France.
- (259) The total market for soil insecticides for beets in the **UK** amounted to EUR [...] million in 2000. The market has fallen by some [40-50]\*% from 1998, when the total market amounted to EUR [...] million. The parties have largely maintained their market position throughout this period.
- (260) According to their own estimation, the parties' combined market share amounts to [70-80]\*% (Bayer: [0-10]\*%, ACS: [60-70]\*%), a position they expect to maintain also in the near future. Du Pont is the largest competitor with [10-20]\*% of the market. Syngenta has [0-10]\*% of the market.
- (261) The Commission has verified the sales figures of third parties. [Confidential information concerning the market position of the competitors]\*. The parties' market share could therefore be even higher than [70-80]\*%.
- (262) All of ACS's sales are derived from Aldicarb (sold under the brand name Temik), whereas Bayer's only product in the UK is Carbofuran (sold as Yaltox GR).

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<sup>15</sup> [confidential information of ACS]\*

- (263) The parties have argued that no competition concerns would arise on the market. They have contended that since Bayer adds only a relatively small percentage to the market share of ACS, the transaction will not lead to a significant change of the current market structure. This according to the parties is even more true since Bayer's only product Carbofuran is a third party product supplied by [...]\*. As regards Aldicarb, the parties have argued that despite ACS's market share of [60-70]\*%, the prices for Aldicarb have constantly decreased in the UK market over the last years. The parties have argued that since Aldicarb is already off-patent and subject to generic competition, all circumstances suggest that this price decrease will continue in the future. Furthermore, the sales volume of Aldicarb in beets only accounts for only [10-20]\*% of the total sales of this product in the UK. The main market for Aldicarb is potatoes ([80-90]\*% of sales) and therefore prices are determined on the potato market rather than on the beet market. The parties have further argued that competitors would use any attempt by the combined entity to raise prices to extend their sales and their market shares and that, despite their small market presence, competitors are able to countervail the market position of the newly merged entity. Finally, the parties have contended that Otsuka is expected to launch its new carbamate products Benfuracarb and Alanycarb in 2002 and 2003 respectively, and these will compete with the parties' products.
- (264) The Commission notes, first, that considering ACS's already strong position and [confidential information concerning the market position of the competitors]\* of other competitors on the market the operation will lead to a substantial change in the market structure. The Commission does not consider that the competitors are in a position to offset the market power of the new entity. The Commission has no evidence that the supply relationship with [...]\* will be discontinued. As regards the price decrease of Aldicarb, the Commission notes in line of the assessment above that there has been a general price decline in the European crop protection industry which has been caused by the general difficulties faced by the agricultural industry rather than by generic competition. The Commission also notes that ACS has a strong position in the potato market ([50-60]\*%), where the price of Aldicarb is determined. As Aldicarb is sold only in potatoes and beets in the UK, the Commission considers that following the creations of a dominant position in beets, this could change the pricing incentives of Aldicarb. Finally, the Commission has no information about the alleged product launches of carbamates Benfuracarb and Alanycarb. In any event, the Commission considers it unlikely that these products, which represent old chemistry classes the use of which will decrease gradually in the EEA, will be able to offset the strong position of the parties, at least in the near future.
- (265) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for beets in the UK.
- (266) In **Italy**, the total market size has been more or less stable and was EUR [...] million in 2000. The market is expected to increase to EUR [...] million by 2004.



- (267) The parties' combined market share amounts to [40-50]\*% (Bayer: [10-20]\*%, ACS: [20-30]\*%) according to their own estimation. The parties have submitted that Syngenta has [10-20]\*% of the market. The parties have contended that there is a large number of local and generic companies, accounting for a combined market share of [30-40]\*%.
- (268) [Confidential information concerning the market position of the competitors]\*.
- (269) ACS generates all of its sales with Fipronil, marketed under the brand Regent. Bayer's market share is mainly achieved with the third party carbamate Carbosulfan (Marshall GR). Bayer sells altogether [...] products on this market and Bayer's own products include Cyfluthrin and Methiocarb.
- (270) Fipronil [confidential information of ACS]\*. Fipronil has succeeded to increase its share from [0-10]\*% in 1998 to [20-30]\*% in 2000 and the parties expect it to increase further to [30-40]\*% by 2004. The parties have estimated that their combined market share would exceed [50-60]\*% by 2004.
- (271) The parties have argued that no competition concerns would arise on this market as Cyfluthrin and Methiocarb have their main use in other crops and are thus priced according to the competitive situation in other markets. The parties have also argued that a number of local and generic companies accounting for a combined market share of far more than [30-40]\*% can easily respond to any anti-competitive behaviour of the newly merged entity. In addition to Syngenta's sales of Fosthiazate, these competitors offer a broad range of products, including organophosphates and carbamates, which the parties argue are equally effective as ACS's Fipronil-based Regent and Bayer's products. As in the French and in the UK market, Otsuka is expected to launch its new carbamate products Benfuracarb and Alanycarb in 2002 and 2003 respectively. The parties have argued that both products are fully substitutable for the parties' products.
- (272) The Commission notes first that Bayer's strongest product Carbosulfan which, according to the information available to the Commission, is the biggest single product on the market after Fipronil, is used mainly in this crop ([50-60]\*%). Therefore, the price of Carbosulfan is largely determined in this market. The dominant position which will be created on this market may give incentives for the parties to raise the price of Carbosulfan. The Commission also notes that three other Bayer's products are mainly used in this market. In view of the small size of all the other players on the market, the Commission does not consider that they could offset the market power of the new entity.
- (273) Moreover, the Commission does not consider that, in light of the investigation, organophosphates and carbamates can challenge the position of Fipronil. In this respect, the alleged launch of two carbamates will not, in the Commission's view, have any appreciable effect on the market in the near future, given in particular that they will have to compete with the two leading products. The market position of the parties' will be further strengthened [confidential information of ACS]\*.

- (274) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for beets in Italy.

*c) Cereal insecticides*

*- Introduction*

- (275) In COMP/M.1806 - *AstraZeneca/Novartis*, the Commission found that despite the fact that various insects attack cereal crops, aphids are the major pests by far. Therefore, the cereal insecticides market can be considered an aphid market. Aphids are foliar insects and they are among the most important sucking insects.
- (276) The Commission also said in the decision COMP/M.1806 - *AstraZeneca/Novartis* (Para 422) in its assessment of the cereals markets that the market share of pyrethroids is likely to further increase since insecticides based on the two other main chemical classes, organophosphates and carbamates, face regulatory threat as concerns the registration process. The Commission also noted in that decision that, in the EEA, Lambda-Cyhalothrin is the number one pyrethroid, ahead of Deltamethrin (Aventis), Cypermethrin and Tau-Fluvalinate.
- (277) According to the parties, neonicotinoids are not very successful in cereal markets. The parties have said that the pricing of neonicotinoids such as Imidacloprid is based on [...]\*, therefore, these products are economically unattractive to cereal farmers who are traditionally looking for a cheap knock-down<sup>16</sup> product for aphids. This, according to the parties, is particularly the case in the southern European cereal markets of Greece, Italy and Portugal where cereal farming is less economically viable than the northern European countries, e.g. Germany and France. The parties have submitted that [...]\*. The parties have argued that cereal farmers wait for aphids to appear before spraying and they are therefore keen to see a very quick knock-down effect. According to the parties, the only reason why neonicotinoids are of interest to a small proportion of cereal farmers is because of their relative safety in comparison to older products and/or because certain areas have predictable aphid outbreaks which make prophylactic spraying possible. The parties have contended nevertheless that these consumers account only for limited sales.
- (278) Third parties have generally agreed that the cereal foliar market is essentially a pyrethroid market and that older products are still used efficiently. It has been argued that the main reason for this is that limited movement of the active substance is required within the plant following foliar spray as, because of the morphology of the plant, an overspray will contact any homoptera (aphids) present on the ear as they are in an exposed situation. Pyrethroids are therefore said to be good for controlling insects in cereals and they are cheap and movement in the cereal plant is not essential.

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<sup>16</sup> Knock-down agents generally have effects in seconds.

- (279) Foliar treatments in cereals occur in the Autumn and Spring for winter planted cereals, or in the Spring and Summer for Spring planted cereals. It has been indicated that, for Winter cereals, a seed treatment with neonicotinoids ensures much greater protection than any foliar application and will control aphid attacks in the Autumn. The reason why it is important to control aphids at this time is because they transmit viruses which will damage the cereals over the winter period. Foliar applications are then made in Spring to kill aphids which attack the ears as they are developing. Third parties have indicated that most foliar sprays today are either pyrethroids, organophosphates or carbamates. The most popular are pyrethroids, or mixtures of pyrethroids with an organophosphate or carbamate. It has been indicated that neonicotinoids are not the best products for foliar sprays because they are more expensive, and pest resistance would result if a foliar spray with a neonicotinoid followed a seed treatment with a neonicotinoid.
- (280) For Spring cereals, the seed treatment is made more to control wireworms and soil pests, and it has been said that neonicotinoids are not the ideal products. As for winter cereals, the foliar applications are predominantly pyrethroids, organophosphates or carbamates. However, it has been argued that there would be less likelihood of resistance being built-up using a foliar neonicotinoid spray. For applications at the earing stage, it has been argued that neonicotinoids will progressively gain market share because of their fast action.

*- Market position*

- (281) With a market value of EUR 59.9 million, the overall market for cereal insecticides is one of the largest insecticides markets in the EEA. The foliar segment accounts for EUR [...] million and the soil segment only EUR [...] million.
- (282) The parties have overlapping activities predominantly in the foliar insecticides segment. No affected markets arise in the soil applications segment. At the EEA-wide level, the parties' combined position in foliar applications is [30-40]\*% (Bayer: [10-20]\*%, ACS: [10-20]\*%) and in soil applications [20-30]\*% (with only [0-10]\*% increment of market share from ACS). Syngenta is the market leader in soil applications with [30-40]\*% of the market. In foliar insecticides, Dow is the largest competitor with [10-20]\*% of the market, followed by Syngenta ([10-20]\*%).
- (283) Following the operation, the parties would attain high market shares in Italy ([50-60]\*%) and Portugal ([90-100]\*%).
- (284) In **Italy**, the total market grew from EUR [...] million (1998) to EUR [...] million in 2000. The parties expect the market to grow somewhat in the near future. The parties' combined market share is [50-60]\*% (Bayer: [0-10]\*%, ACS: [40-50]\*%) according to their own estimation. While Bayer's market share fell from [10-20]\*% in 1998 to [0-10]\*% in 2000, ACS managed to

increase its market share from [10-20]\*% in 1998 to [40-50]\*% in 2000<sup>17</sup>. The parties have submitted that Syngenta is the main competitor with a market share of [20-30]\*%. The parties argue that generic suppliers account for a combined market share of [20-30]\*%. The parties would have [50-60]\*% of the sucking insects segment.

- (285) [Confidential information concerning the market position of the competitors]\*.
- (286) ACS derives its turnover almost exclusively from pyrethroid Deltamethrin ([40-50]\*% of the market share), sold under brand names Decis, Decis D, Decis Quick and Best. Bayer's organophosphate Oxydemeton-Methyl (Metasystox-R EC) accounts currently for [0-10]\*% of market share. Bayer is also selling pyrethroid Cyfluthrin (Baythroid EC) and neonicotinoid Imidacloprid. The sales of both Cyfluthrin and Imidacloprid account for less than [0-10]\*% of the market each.
- (287) The parties have argued that all of their products have their main markets in other crops. Oxydemeton-Methyl is mainly used on fruits and nuts, where the parties combined market share is [30-40]\*%. Only [10-20]\*% of the turnover generated with Deltamethrin under the brand Decis can be allocated to cereals as the product is also used on vegetables, ornamentals, oil and protein crops and maize. Out of this reason, the parties have argued that prices of these products are not determined by the competitive situation in the market for cereal insecticides but rather in other markets. The parties have also argued that since Deltamethrin is off-patent and subject to intense competition from generic products and other pyrethroids, the parties expect sales of Deltamethrin to decrease rapidly after 2004. The parties have argued that there are many generic forms of Deltamethrin on the market and that competition from generic pyrethroids has been intense with downward pressure on prices.
- (288) The Commission notes that as regards the sales of Deltamethrin (Decis), following the merger, about [40-50]\*% of the sales of Deltamethrin will be generated in [...] where the parties would become dominant following the merger. After the operation, almost [50-60]\*% of the sales of Deltamethrin would be generated in crops where the parties become dominant. Therefore, the Commission considers that the operation leads to a structural change of the market and the strong position achieved in the cereals market could further influence the pricing decisions of Deltamethrin in the future. Moreover, it has been indicated that two good pyrethroids - Deltamethrin and Cyfluthrin - would be marketed by the same company. It therefore appears unlikely that Syngenta's pyrethroid Lambda-Cyhalothrin (Karate) would be able to offset the market power of the new entity. Third parties have also indicated that the new entity could enter the cereal foliar market and especially in Spring cereals with a combination product of a neonicotinoid and Deltamethrin. According to third

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<sup>17</sup> The parties provided on 18 January 2002 corrected sales figures for ACS. These figures show that ACS sales in this market in 1999 were Euro [...] instead of Euro [...], as indicated in the market share information submitted in the notification. The parties have not, however, adjusted their estimate of the total market size, which would explain the very high ACS market share in 1999.

parties, such a mixture would be able to compete on cost grounds, and it would be an opportunity to diversify the range away from mixtures of pyrethroids in combination with organophosphates or carbamates.

- (289) As to the parties' argument that Deltamethrin is off-patent and subject to intense competition from generic products and other pyrethroids, third parties have indicated that the declining price levels in Europe have not been caused in the first place by generic competition. The Commission also notes that, despite the parties' argument of vigorous price competition and generic Deltamethrin, ACS is the market leader and has managed to maintain a very high profit margin on Deltamethrin in Italy, [confidential information of ACS]\*. ACS produces Deltamethrin in [...] and, according to third parties, have a cost advantage on the market. The Commission noted that the parties expect their combined market share to increase to [50-60]\*% by 2004, with Deltamethrin expected to more or less maintain its sales levels. The internal ACS papers also show that [confidential information of ACS]\*. Given this and in view of the fact that re-registration will wipe out a large number of products that today compete with Deltamethrin, it does not appear feasible that the sales of this old but very strong product will decrease as rapidly as the parties claim.
- (290) [...]\*. [Confidential information concerning the product launches of the competitors]\*.
- (291) The Commission considers that, in light of the investigation, it is likely that the parties will be able to maintain their high market share in the near future. The parties have argued in their reply to the Commission's Statement of Objections that neonicotinoids do not play any significant role in cereals because of their high price and that the performance of Deltamethrin on aphids would not be improved significantly by mixing it with Imidacloprid. The Commission however considers that, as has been indicated by third parties, neonicotinoids could become more important on this market in the future. Moreover, one of the reasons for creating combination products according to ACS is that they increase the cost of entry for competitors. In addition, the two pyrethroids in combination with Imidacloprid could also form an interesting package for resistance management purposes. No other market participant can offer a similar package. Therefore, as discussed above, the operation could lead to the foreclosure of competitors from the market.
- (292) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for cereals in Italy.
- (293) With a market volume of EUR [...] million, the **Portuguese** market for foliar insecticides used on cereals is very small. It has grown slightly over the past three years. On this market, the parties have jointly [90-100]\*% of the market (Bayer: [50-60]\*%, ACS: [30-40]\*%). Bayer's market share has fallen from [90-100]\*% in 1998. ACS has increased its market share from [0-10]\*% to the present [30-40]\*%. The parties have indicated that Syngenta has [0-10]\*% of the market. The parties would have [90-100]\*% in the sucking insects segment.

- (294) [Confidential information concerning the market position of the competitors]\*.
- (295) Bayer derives all of its turnover in this market from its organophosphate Oxydemeton-Methyl (Metasystox-R EC). ACS's only product is an organophosphate Dimethoate (Dafenil), which is a third party product supplied by [...]\*.
- (296) The parties have argued that competition concerns would not arise on this market. The parties have submitted that the products sold for the protection of cereals have their main use on other crops and are thus priced according to the competitive structure of these other markets. The cereal market respectively accounts for less than [0-10]\*% of ACS's sales of Dimethoate and of Bayer's sales of Oxydemeton-Methyl in Portugal. The parties have argued that both products are mainly used in the fruits and nuts market, where the parties have a combined market shares of [40-50]\*%.
- (297) While the parties have argued that they do not have any incentive to determine prices anti-competitively in the market for cereal insecticides, the Commission considers, first, that the parties would become dominant in the fruits and nuts market. Second, following the merger, the parties would become dominant in all the other markets, where the two product are used ([...]\*). Given this, the Commission considers that the parties would be in a position to raise the price of their products.
- (298) The parties have also argued that competition concerns would not arise because Bayer's market share has substantially decreased for the last years. The Commission notes, however, that the parties expect Bayer's market share to increase [90-100]\*% by 2004. The parties have explained that this estimate is based on the assumption that [...]\* will not continue supplying the new entity with Dimethoate and, therefore, in the smaller market Bayer's market share would increase even though its sales are not expected to increase to a significant extent. However, as at present there is no evidence that the supply of Dimethoate will be discontinued, the Commission assumes that the overlap will persist after the operation.
- (299) The parties have also argued that Bayer's product Oxydemeton-Methyl will be re-registered by United Phosphorus and will therefore become subject to generic competition. The Commission considers, however, that in view of the very high market share of the parties on this market, a generic product is not considered to be able to counter balance the parties' ability to raise prices on this market, especially as United Phosphorus will be a new entrant onto this market.
- (300) [...]\*. [Confidential information concerning the product launches of the competitors]\*.
- (301) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for cereals in Portugal.

*d) Citrus fruit insecticides*

- (302) Citrus fruit only grow in four countries within the EEA: Greece, Italy, Portugal and Spain. The parties have contended that main focus of the products which are suitable for the protection of citrus fruit against insect attacks is on foliar treatment. With a market value of EUR [...] million, the segment for foliar insecticides accounts for approximately [90-100]\*% of the total market for citrus insecticides.
- (303) At the EEA-wide level, the parties would account for [30-40]\*% of the soil insecticides market for citrus fruit (Bayer: [0-10]\*%, ACS: [20-30]\*%). The leader in this segment is FMC with [40-50]\*% of the market. In foliar treatment, the parties would account for [10-20]\*% of the total market (Bayer: [10-20]\*%, ACS: [0-10]\*%). Syngenta accounts for [30-40]\*% of the market.
- (304) At the national level, the parties would attain a relatively strong combined market position in Portugal for foliar applications. The total market value for **Portugal** was EUR [...] million in 2000. The market is expected to grow in the near future. The parties' combined market share is according to their own estimate [40-50]\*% (Bayer: [30-40]\*%, ACS: [0-10]\*%). Due to the increased sales of Imidacloprid, Bayer's market share has been growing steadily. Syngenta is the only other R&D company on the market. The parties have estimated that Syngenta's market share is [20-30]\*%. The parties have submitted that generic suppliers account for a combined market share of [30-40]\*% and they have provided information which supports this argument.
- (305) [Confidential information concerning the market position of the competitors]\* and the large number of generic products, the parties' estimate of their market position would therefore appear to be largely correct.
- (306) If considering sucking insects separately, the parties have submitted their market share as [30-40]\*%. In chewing insects, the parties have estimated their market position as [40-50]\*%.
- (307) Bayer sells on this market most importantly Imidacloprid, which is sold under the brand Confidor. The sales of Imidacloprid have grown steadily and are expected to grow by some [10-20]\*% by 2004. Imidacloprid is the best selling product on the market, accounting alone [10-20]\*% of market share.
- (308) The parties have argued that Syngenta's Abamectin has a broader pest spectrum than Imidacloprid and is thus more successful on the market. However, the parties have submitted that although Abamectin is an acaricide and is registered only for leafminers in the Portuguese market, farmers can induce from the label that Abamectin can control also mites if used at apple application rates. The Commission's investigation shows, however, that Abamectin controls mites on apple but that these mites are not pests on citrus. In any event, the off-label use of pesticides is illegal. As to Bayer's claim that Abamectin is more successful on the market, [confidential sales data concerning Syngenta's product Abamectin]\*. Therefore, it is not correct to argue that Abamectin has been more successful on this market.

- (309) Bayer sells also Omethoate (Folimat SL), Fenthion (Lebaycid EC) and Flufenoxuron (Cascade EC, [...]\*)). The parties have submitted that Omethoate will not be re-registered in Europe. ACS sells only third party products, the most important of which are Chlorpyrifos (Lorvek, [...]\*) and Butocarboxim (Drawin, [...]\*)).
- (310) The parties have submitted that they expect their combined market share to fall to [20-30]\*% by 2004, because Omethoate will not be re-registered and because the parties expect the supply of third party products to ACS to be discontinued. The parties have also argued that [...]\*. Finally, the parties have further argued that they will face strong competition from two new acaricides: Sumitomo's Etoxazole and Sankyo's Milbemectin. The parties have argued that these two products will provide strong competition against the parties products and contribute to the increase of the market share of other competitors from [30-40]\*% to [40-50]\*% by 2004.
- (311) The Commission considers it unlikely that the parties' market share will drop to [20-30]\*%. First, there is no evidence that the third-party supply contracts to ACS will be discontinued. Second, according to Bayer's conservative estimate, the sales of Imidacloprid are expected to grow by [10-20]\* percentage points by 2004. [...]\*
- (312) As regards Etoxazole and Milbemectin, the investigation shows that, as acaricides, neither product will be able to compete with Imidacloprid for the control of sucking insects. Moreover, acaricides have a very narrow spectrum of activity and control principally mites. Given that the parties have argued that Bayer's Spirodiclofen will mainly be used for mite control and, therefore, will not be able to gain substantial market share, the Commission considers that the same assessment must apply also to Etoxazole and Milbemectin, which control mites.
- (313) The Commission further notes that the parties are planning to launch [...]\*
- (314) [Confidential information concerning the product launches of the competitors]\*. As discussed above, the market investigation has further suggested that combining two neonicotinoids in the same portfolio will strengthen the parties' product offering considerably as they would be able to offer spraying programmes for resistance management which none of the competitors can match.
- (315) The Commission also considers that [...]\* will further enhance the parties' overall market position. [Confidential information concerning the product launches of the competitors]\*. As regards [...]\*, the Commission has taken into account in its assessment the relatively short product life of acaricides. The investigation shows that there is generally a high resistance potential within mite populations, leading to a potentially relatively short life cycle for acaricides. Therefore, no competition concerns are likely to arise specifically in acaricides.



- (316) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for citrus fruit in Portugal.

*e) Cotton insecticides*

- (317) Cotton is cultivated in only two countries within the EEA, Greece and Spain. The value of the European market is EUR 32.1 million. The parties would account for [20-30]\*% of the foliar applications segment at the EEA-wide level (Bayer: [0-10]\*%, ACS: [20-30]\*%) and only [0-10]\*% of the soil applications (Bayer: [0-10]\*%, ACS: [0-10]\*%). In the foliar segment, the parties would become the market leader while the largest competitor Syngenta has only [10-20]\*% of this market. In soil applications, BASF is the largest player ([30-40]\*%), followed by FMC ([20-30]\*%).
- (318) The Commission considers that competition concerns could arise on the **Greek** market for foliar applications, where the parties' combined market share amounts to [40-50]\*% (ACS: [30-40]\*%, Bayer: [10-20]\*%) according to their own estimate. BASF is the largest competitor with [10-20]\*% market share. Syngenta has [0-10]\*%, Dow [0-10]\*% and Du Pont [0-10]\*% of the market. The parties have submitted that local and generic competitors account for [20-30]\*% of the market. The parties have estimated that their market position in the sucking insects segment would be [60-70]\*%.
- (319) The Commission has verified the market position of the main players on the basis of the confidential sales figures obtained. [Confidential information concerning the market position of the competitors]\*. On the basis of a conservative estimate that generic producers account for [10-20]\*% of the total market, the parties' combined market share would be [40-50]\*%. On the assumption that generic supplies have [20-30]\*% of the market, the parties' market share would be [40-50]\*%. Under both these assumptions, [Confidential information concerning the market position of the competitors]\*. Furthermore, the Commission notes that ACS has already launched Acetamiprid on this market in 2001. Given the recent launch, the Commission has no information about the sales of Acetamiprid. In any event, these sales have not been reflected in the parties' estimate of their market position, which could be higher than submitted.
- (320) ACS sells Deltamethrin (Decis), Thiodicarb (Larvin), Endosulfan (Thiodan), Triazophos (Hostathion) and the third party product Propargite (Omite, supplied by [...]\*). ACS has also submitted that it has launched Acetamiprid in this market in 2001. Triazophos will not be re-registered. Bayer sells ten products, including Imidacloprid (Confidor SL), on this market. Bayer's products Disulfoton (Disyston GR) and Omethoate (Folimat SL) have not been re-registered. Mainly due to the non-registration of some of the products, the parties expect their market share to decrease to [20-30]\*% by 2004. The three products which will be removed from the market account currently for [0-10]\*% of the parties combined sales.

- (321) The parties have argued that the transaction does not raise competition concerns on this market. They have argued that Imidacloprid does not have its main market in cotton, and is used mainly in other crops, namely [...]\*. Thus, pricing of this product is not determined in the cotton market. The parties have further argued that since prices for Imidacloprid are relatively high compared to other products used for the production of cotton, the product has not been able to gain more than [0-10]\*% market share in 2000. [...]\*. Finally, the parties have argued that their market position will be challenged by pipeline products which will be launched by their competitors. In particular, the parties have argued that Indoxacarb and Spinosad are more effective in combating lepidoptera and safer from an environmental point of view than Deltamethrin and that the sales of the latter will decline in the near future.
- (322) The investigation shows, first of all, that Imidacloprid is, overall, a leading product for sucking insects control whose importance is likely to increase in the future. Both the phasing out of older products and increasing environmental safety requirements are expected to boost the sales of insecticides representing new chemistries in the future.
- (323) [...]\*.
- (324) The investigation shows that a number of new products will be launched on this market in the near future. [Confidential information concerning the product launches of the competitors]\*. The Commission notes that ACS has already launched Acetamiprid on this market in the course of 2001, thus adding to the parties' already existing neonicotinoid Imidacloprid. [...]\*.
- (325) As concerns chewing insects, the Commission considers in light of the investigation that [confidential information concerning a competing pipeline product]\* will be able to provide competition in this pest segment in the near future.
- (326) As concerns sucking pests, the Commission considers that, [confidential information concerning a competing pipeline product]\*, [...]\* will strengthen considerably the parties' position in this segment. Bayer has submitted that [...]\*. The Commission considers, however, that potential cannibalisation has no relevance in this case as the sales would remain within the same company. The Commission also considers that the launch of [...]\* new neonicotinoids would give the parties a unique position to offer spraying programmes for resistance management. The Commission therefore considers that, overall, it is very likely that the parties' market position would be further enhanced as a consequence of their strong neonicotinoid portfolio.
- (327) As regards the parties' contention that a large number of generic suppliers is active on the Greek market, the Commission notes on the basis of the information submitted by the parties that there are registrations by other companies only for six of the parties' products. The Commission has, however, no information whether all these products are sold actively on the market. There are no registrations for generic Imidacloprid and the Commission has no

evidence that any third party is in the process of developing generic Imidacloprid either.

- (328) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for cotton in Greece.

*f) Fruits and nuts insecticides*

- (329) With a total market value of EUR 203 million, the market for fruits and nuts insecticides is by far the biggest market for agricultural insecticides in the EEA. With an aggregate turnover of EUR [...]\*, foliar insecticides constitute the biggest segment of fruits and nuts insecticides, accounting for [90-100]\*% of the total market.
- (330) Bayer and ACS are each active in both foliar and soil applications. In the EEA-wide foliar segment, their combined position amounts to [30-40]\*% (Bayer: [20-30]\*%, ACS: [10-20]\*%). Syngenta has [10-20]\*% of this market. In the EEA-wide soil applications, the parties' combined market share is [70-80]\*% deriving mainly from Bayer's activities ([70-80]\*%). All competitors have market shares around [0-10]\*% and below.
- (331) At the national level, the parties activities overlap only in foliar insecticides. The parties' would command high market shares in the following Member States: Belgium ([50-60]\*%), Denmark ([50-60]\*%), Germany ([70-80]\*%), Greece ([40-50]\*%) and Portugal ([40-50]\*%).
- (332) The **Belgian** market totalled EUR [...] million in 2000. It is expected to fall slightly by 2004. According to their own estimation, the parties' combined market share on this market amounts to [50-60]\*% (Bayer: [20-30]\*%, ACS: [20-30]\*%). This market position has been more or less stable for the past three years. The most important competitors are Syngenta ([20-30]\*%), BASF ([0-10]\*%), and Dow ([0-10]\*%). The parties have estimated that their combined market share in the sucking insects segment is [...] and in the chewing insects segment [40-50]\*%.
- (333) The Commission has verified the market shares against the confidential sales figures obtained from competitors. [Confidential information concerning the market position of the competitors]\*. Therefore, the parties' estimate for their market share seems to be largely correct.
- (334) Bayer's most important products on this market are Imidacloprid (Confidor), organotin Azocyclotin (Peropal, [...]\* and Tebufenpyrad (Masai, [...]\*). Bayer also sells pyrethroid Cyfluthrin (Baythroid). ACS's leading product is amidine Amitraz (Mitac) and the leading third party products are [...] Diflubenzulor (Dimlin) and Dow's benzoylhydrazine Tebufenozide (Mimic, [...]\*). ACS also sells pyrethroid Deltamethrin (Decis, Decis Quick).
- (335) Both Bayer and ACS generate about third of their respective turnovers in this market with third party products. The parties expect that, following the

transaction, their distribution of some of these third party products will be discontinued, thereby leading to a reduction of market share to [40-50]\*%. The parties have also argued that Dow's market share will increase due to the introduction of Spinosad, since this product will be used by farmers to control codling moth. The parties have also argued that the anticipated registration of Sumitomo's Etoxazole and Sankyo's product Milbemectin will lead to a further reduction of their market share. Furthermore, the parties have argued that the demand side in Belgium is quite concentrated, with the ten largest distributors accounting for about [60-70]\*% of the total sales in Belgium and the biggest distributor accounts for [50-60]\*% of total sales in this product segment. The parties have argued that the customers have sufficient alternative supply sources readily available. Thus, even upon completion of the transaction, the parties have argued that the Belgian market remains unconcentrated.

- (336) As the parties have not provided any evidence that supply contracts will be withdrawn, the Commission assumes for the purpose of this assessment that the supply contracts will continue.
- (337) The Commission's investigations show that new products will be launched on this market in the near future. [Confidential information concerning a competing pipeline product]\*. The Commission has no information about Etoxazole and Milbemectin. However, in view of the fact that [...]\*, the Commission considers that it will be able to defend its market position in this market segment. Due to the relatively short life cycle of the products in this pest segment, however, no competition concerns are likely to arise in acaricides.
- (338) The parties' market position in sucking insects would be significantly strengthened in the future. Bayer is already on the market with Imidacloprid [...]\*.
- (339) [...]\*.
- (340) The Commission considers it unlikely that the parties' market share would decrease in the near future to the level estimated by the parties. In the sucking insects segment, the parties' existing sucking insects portfolio will be reinforced [...]\*. [Confidential information concerning a competing pipeline product]\*. The Commission considers further that potential cannibalisation will have no relevance for the assessment of the case as the overall sales will remain within the same company.
- (341) The Commission notes further that the operation could lead to the strengthening of the parties' position also in the chewing insects segment. While the competing new products will be targeting the chewing insects segment, [...]\*, the Commission considers that the combination of the parties' existing product portfolios [...]\* could lead to the creation of a dominant position in chewing pests.
- (342) The Commission considers that the parties' position could be strengthened in both sucking and chewing pest segments due to the resulting strong position in resistance management. The parties have submitted that, although it is true that

insects attacking fruits and nuts in particular tend to develop resistance against products in relatively short time and the rotation of chemistries with different modes of action is the cornerstone of an integrated resistance management program, they have argued that it is not true that they could provide for a better resistance management than most of their competitors. According to the parties, a successful resistance management program must be composed of at least two or three different products with different modes of action used in rotation on a given crop. The parties have argued that not only the combined entity but most of other companies active in the agro-chemical business offer a sufficient range of effective products and modes of action that can be used in rotation to guarantee an integrated resistance management.

- (343) The investigation in this case shows that the operation would create a particularly powerful entity as regards the resistance management. The parties would be the only company on the market with two neonicotinoids. These would allow an efficient rotation of products with different modes of action and thus combating resistance development and also extending product life cycle. [...] could be used for rotation both in sucking and chewing insects segments. None of the competitors have neonicotinoids in their portfolio and would therefore not be able to match the parties' product range. The Commission further considers that, in view of this, countervailing buying power does not have any relevance for the assessment of the case, as the distributors would have to take the neonicotinoids from the parties.
- (344) For all the above reasons, given the strong, present market position of the combined company and in view of the parties' future product launches, the Commission does not consider that competing product launches are sufficient to restrain the market power of the new entity. Therefore, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for fruits and nuts in Belgium.
- (345) In **Denmark**, the total market value amounted to EUR [...] million in 2000. The market has decreased slightly from EUR [...] million but is expected to remain at the current level. The parties' combined market share amounts to [50-60]\*% (Bayer: [40-50]\*%, ACS [0-10]\*%) according to their own estimation. Syngenta is the largest competitor with [20-30]\*% of the market.
- (346) [Confidential information concerning the market position of the competitors]\*.
- (347) Bayer's market share is entirely based on products supplied by [...]\*. Bayer sells organophosphate Malathion (Maladan) and thiazolidinone Hexythiazox (Nissorun). ACS sells amidine Amitraz (Mitac), organophosphate Phosalone (Zolone), tetrazine Clofentezine (Apollo) and benzoylurea Diflubenzuron (Dimlin). Due to the fact that ACS divested its product Chlofentezine to [...]\* earlier this year, ACS's market share is expected to decrease by about [0-10]\*% over the next years. With the introduction of Syngenta's Thiamethoxam, the parties expect their market share to fall to [40-50]\*% in the near future. The

parties have estimated their combined market share as [50-60]\*% in the sucking insects segment and [40-50]\*% in chewing pests.

- (348) [...]\*. [Confidential information concerning the product launches of the competitors]\*.
- (349) The parties have argued that Danish customers exercise countervailing buying power, as the three Danish distributors account for [90-100]\*% of the total sales in Denmark. The Commission does not consider that the argument has relevance, because it is unlikely that the three distributors purchase insecticides together. Also the other reasons given above concerning buying power apply in this case. Moreover, with the largest competitor far behind, the Commission assumes that the parties could raise their prices, given that Bayer's products are only used in this crop and two out of three of the remaining ACS's products are either used in this crop or sold on markets where ACS has [90-100]\*% market share.
- (350) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for fruits and nuts in Denmark.
- (351) In **Germany**, the total market value of EUR [...] million is expected to decrease by EUR [...] million by 2004. The parties' combined market share on this market is [70-80]\*% (Bayer: [40-50]\*%, ACS: [30-40]\*%) according to their own estimation. Bayer has traditionally been fairly strong on this market ([30-40]\*% of the market in 1998 and [30-40]\*% in 1999). According to the parties, Syngenta and BASF are the largest competitors with [10-20]\*% and [0-10]\*% of the market each. The parties have estimated that their combined market position is [70-80]\*% in sucking pests.
- (352) [Confidential information concerning the market position of the competitors]\*.
- (353) Bayer derives more than half of its turnover with organophosphate Oxydemeton-M (Metasystor-R and Metasystor-R-Spezial). It also sells nine other products, including Imidacloprid. ACS's product portfolio is comprised of the third party products benzoylhyradzine Tebufenozide (Mimic), Fenpyroximate (Kiron) and benzoylurea Diflubenzuron (Dimlin).
- (354) The parties have submitted that, despite their high market share, no competition concerns will arise. They have argued that their market position will deteriorate in the future due to the phasing out of products and discontinuance of third party products. They have further submitted that the expected registration of the new competing products Spinosad (Dow) and Indoxacarb (Du Pont) will affect the German market in the future. They have contended that Oxydemeton-Methyl will also be produced as a generic product by United Phosphorus and, thus, a second supplier of this product will become available to the farmer. The parties have also argued that because insecticides need to be applied during the flowering period of trees, bee-toxicity is thus a key factor for the success of a certain product in this market. The parties have argued that Indoxacarb is less detrimental to bees and other beneficial insects and they expect this product to

gain market shares to the disadvantage of Oxydemeton-Methyl. The parties expect nevertheless their combined market position to remain at the relatively high level (at [50-60]\*%) by 2004. Finally, the parties have argued that German customers exercise strong countervailing bargaining power; 10 largest distributors account for more than [90-100]\*% of the total sales of agricultural products

- (355) As regards the parties' submission that they will lose market share due to losing third party products, they have not provided evidence of any third party agreements which will be terminated. Clofentezine has been divested to [...] in 2001 but, in 2000, it contributed only [0-10]\*% of ACS's market share.
- (356) Concerning the fact that Oxydemeton-Methyl will also be produced as a generic product by United Phosphorus, the Commission notes that it will take some time before the sales of this product will take off. Moreover, in light of the investigation, it is feasible that the sales of Oxydemeton-Methyl as an organophosphate will decrease in the future due to its toxicity. On the other hand, it is feasible to expect the sales of newer products, such as Imidacloprid, to increase (also forecast by the parties) and replace those of Oxydemeton-Methyl due to the better safety profile of these products. The investigation shows that organophosphates are not expected to increase sales in the future.
- (357) [Confidential information concerning the product launches of the competitors]\*. Apart from [confidential information concerning a competing pipeline product]\*, all these products are effective in chewing insects and have no appreciable effect in sucking insects.
- (358) At the same time, the Commission considers that the parties will strengthen their combined position due to [...]\*. [Confidential information concerning a pipeline product]\*.
- (359) The Commission considers that, for essentially the same reasons as in the foliar insecticides market for fruits and nuts in Belgium, the parties' position will be enhanced [...] both in the sucking and the chewing insects segments. As regards [confidential information concerning a competing pipeline product]\*, the Commission considers that [confidential information concerning the market potential of a competing pipeline product]\*.
- (360) In addition, as concerns the parties' argument that Indoxacarb is less detrimental to bees and other beneficial insects, the Commission notes that Indoxacarb will only be effective against chewing insects. In sucking insects, [...]\*
- (361) As regards the parties argument that German customers exercise strong countervailing bargaining power, The Commission is not aware of any customer attaining alone significant sales in the German agricultural market. Neither has the Commission any evidence that these customers engage in joint purchase schemes or other similar measures to enhance their negotiation power vis-à-vis the parties. Finally, none of the competitors have neonicotinoids in their portfolio and would therefore not be able to match the parties' portfolio. Therefore, demand elasticity is low. Moreover, customers cannot start producing

products in-house nor can they easily induce a new entry on the market. In view of this, the Commission considers that countervailing buying power does not have any relevance for the assessment of the case.

- (362) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for fruits and nuts in Germany.
- (363) The **Greek** market for fruits/nuts foliar application is after Italy and France the largest in the EEA. The total market amounted to EUR [...] million in 2000 and it is expected to fall to some EUR [...] million by 2004.
- (364) On this market, the parties' combined market share amounts to [40-50]\*% (Bayer: [30-40]\*%, ACS: [0-10]\*%), a position which has remained relatively unchanged for the past three years. The largest competitors are Syngenta ([10-20]\*%), BASF ([0-10]\*%), and Dow ([0-10]\*%). According to the parties, [30-40]\*% of the market is supplied by local and generic competitors. The parties have estimated that their market position in chewing insects is [40-50]\*% and in sucking insects [30-40]\*%.
- (365) [Confidential information concerning the market position of the competitors]\*. On the basis of these figures, it would appear that the parties' market share would be around [40-50]\*%, although it must be noted that the parties' sales figures do not reflect the sales of Acetamiprid, which was launched in peach in 2001. In the sucking insects segments, given this and that [confidential information concerning the sales of a competitor]\*, the parties' position in sucking pests is likely to be significantly higher than what they have estimated.
- (366) The parties' product portfolio on this market is extensive: Bayer sells altogether [...] products and ACS 13 products. Bayer generates some half of its sales with Fenthion-based products (sold under the brands Lebaycid and Lebaycid-Minister). ACS's main products are Amitraz, Phosalone and Deltamethrin. The parties have argued that these products are all off-patent and subject to generic competition. The parties expect that sales of Fenthion will decline due to problems with re-registration. Therefore, the parties submit that their combined market share will most likely drop to [30-40]\*% in 2004. The parties have estimated that all the other competitors would increase their market share.
- (367) The Commission notes that there are three other registrations for Amitraz, two for Phosalone and one for Deltamethrin on this market. The Commission has however no information whether all these products are sold actively on the market<sup>18</sup>. Bayer sells its neonicotinoid Imidacloprid on this market. However, the parties have argued that Imidacloprid neither has nor will have any importance on the Greek market for fruits and nuts insecticides (Imidacloprid accounts currently [0-10]\*% of the total sales on the market). The parties have submitted that the product will not play a key role in this market, since it is not registered for olives, which represent [90-100]\*% of the Greek fruits and nuts

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<sup>18</sup> In this respect, the Commission notes that [...]\*



market. [...]\*. All the other products in the parties' portfolio have been registered for olives.

- (368) As noted above, ACS launched the new neonicotinoid Acetamiprid for peach already in 2001. [...]\*. [Confidential information concerning a pipeline product]\*. [...]\*. [Confidential information concerning the product launches of the competitors]\*.
- (369) The Commission considers that as regards olives, provided that [...]\* will provide competition. As regards the other segments of the fruits and nuts market, the Commission notes that the parties already strong position will be further strengthened by [...]\*. The Commission considers that, for essentially the same reasons as in the foliar insecticides market for fruits and nuts in Belgium, the parties' position will be enhanced [...]\* both in the sucking and the chewing insects segments. In its assessment, the Commission has taken note of the fact that [confidential information concerning the product launches of the competitors]\*. However, as the parties will have [...]\* neonicotinoids in their product portfolio, the Commission considers that competitors could not offset the parties' market power.
- (370) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the overall market for foliar insecticides for fruits and nuts in Greece.
- (371) In **Portugal**, a market of EUR [...]\* million market value, the parties' combined market share amounts to [40-50]\*% (Bayer: [10-20]\*%, ACS: [20-30]\*%) according to their own estimate. Syngenta is the largest competitor ([10-20]\*%) while local and generic suppliers account for a combined market share of [40-50]\*%. The parties have estimated their market share as [40-50]\*% in the sucking insects segment and [40-50]\*% in chewing insects.
- (372) [Confidential information concerning the market position of the competitors]\*.
- (373) As in Greece, the parties sell a large number of products on this market: Bayer 10 and ACS 14. Bayer's most important products on this market are Imidacloprid (Confidor) and Fenthion (Lebacyd). ACS sells a large number of products, including Amitraz (Mitac), Endosulfan (Thiodan), Phosalone (Zolone) and Deltamethrin (Decis). Both parties distribute several third party products. Half of the parties' market share derives from products which are used either largely or only in this crop, thereby suggesting that pricing decisions are mainly taken on this crop.
- (374) The parties have estimated that while Bayer would increase its market share to [20-30]\*%, the combined market position of the new entity would deteriorate to only [30-40]\*%. The parties have argued that the market share will decrease because ACS's Clofentezine has been divested to [...]\* and [...]\*. In 2000, these products accounted for [0-10]\*% of ACS's market share. The parties have also argued that the market share will decrease because of discontinuance of supply of third party products. Finally, the parties have argued that their market share will decrease as competitors will launch new products on the market.

- (375) The parties have not provided any evidence that any of the third party products will be discontinued. At the later stage of the proceedings, the parties have corrected their statement on Endosulfan and submitted that Endosulfan will, after all, be registered for all the fruits and nuts it is registered for today. As regards new product launches, the Commission notes that [confidential information concerning the product launches of the competitors]\*. As regards the parties' submission that new acaricides Etoxazole and Milbemectin will be registered, the Commission has not been able to verify this information.
- (376) [...]\*, [confidential information of ACS]\*, [...]\*. The Commission considers that, for essentially the same reasons as in the foliar insecticides market for fruits and nuts in Belgium, the parties' position will be enhanced by [...]\* both in the sucking and the chewing insects segments. In its assessment of sucking pests, the Commission has taken note of the fact that [confidential information concerning the product launches of the competitors]\*. [...]\* [confidential information concerning a competitor]\*, the Commission considers that competitors could not offset the parties' market power in the near future.
- (377) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for fruits and nuts in Portugal.

*g) Grapes insecticides*

- (378) The total EEA-wide market in grapes amounted to EUR 116 million in 2000, comprising almost entirely of foliar insecticides (only EUR [...]\* million is accounted for by soil insecticides). In the EEA-wide foliar segment, the parties' combined market share is [20-30]\*% (Bayer: [10-20]\*%, ACS: [10-20]\*%), followed by BASF ([20-30]\*%) and Syngenta ([10-20]\*%) as the largest competitors. As regards the EEA-wide soil insecticides segment, the parties would be the clear EEA-wide market leader with [50-60]\*% (Bayer: [30-40]\*%, ACS: [20-30]\*%).
- (379) In the foliar segment, the parties would attain a relatively high market share in Germany ([50-60]\*%).
- (380) As regards **Germany**, the total market amounted to EUR [...]\* million in 2000. The market is expected to fall to EUR [...]\* million by 2004. The parties' combined market share is according to their own estimate [50-60]\*% (Bayer: [40-50]\*%, ACS: [10-20]\*%). On this market, Bayer has traditionally had a strong market position with [40-50]\*% of the market in 1998, [30-40]\*% in 1999 and [40-50]\*% in 2000. ACS's market share has varied between [20-30]\*% and the present [10-20]\*%. The largest competitors are BASF ([10-20]\*%) and Syngenta ([10-20]\*%).
- (381) [Confidential information concerning the market position of the competitors]\*.
- (382) The parties have estimated that their market share in sucking insects is [50-60]\*% and that in chewing insects [50-60]\*%. However, [confidential

information concerning the market position of the competitors]\*, these market shares are likely to be higher.

- (383) Bayer generates [90-100]\*% of its sales with third party products Parathion-Ethyl and Parathion-Methyl, neither of which will be re-registered. The parties argue that this would result in a substantial decrease of Bayer's market share. The parties also argue that the deterioration of Bayer's market position will be further enhanced by the introduction of new competing products Spinosad (Dow) and Indoxacarb (DuPont). The parties have submitted therefore that Bayer's market share will decrease to only [0-10]\*% and the combined market position of the parties to [10-20]\*% by 2004.
- (384) The Commission notes that [confidential information concerning the product launches of the competitors]\*. [...]\*. The Commission agrees with the parties that the parties' market share could go down in the near future due to the fact that Bayer's most important products will not be re-registered. Given also the competing product launches, the Commission considers it unlikely that the parties would be able to maintain a dominant market position in the near future. For the purposes of this decision, however, the Commission notes that the overlap and high market share will persist at least until 2003 but, due to the possibility to extend the sales period by up to 18 months, might persist even longer.
- (385) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for grapes in Germany.

*h) Ornamental plants insecticides*

- (386) The total market value for ornamental and flower insecticides was EUR 24 million in 2000. On this EEA-wide market, the parties would become the market leader with [30-40]\*% market share (Bayer: [20-30]\*%, ACS: [10-20]\*%). The largest competitor is Syngenta ([30-40]\*%), followed by BASF ([10-20]\*%) and Du Pont ([0-10]\*%). The foliar applications is the larger of the two segments (EUR [...] million). On this market, the parties would have [20-30]\*% (Bayer: [10-20]\*%, ACS: [10-20]\*%). The parties would become the strongest competitor in terms of market share in soil applications with [80-90]\*% (Bayer: [40-50]\*%, ACS: [30-40]\*%).
- (387) No competition concerns would arise in foliar applications. As regards soil applications, the parties would become the strongest player in Italy ([90-100]\*%).
- (388) In **Italy**, where the total market was EUR 0.5 million in 2000, the parties would have [90-100]\*% of the market (Bayer: [10-20]\*%, ACS: [70-80]\*%) according to their own estimation. The parties expect to maintain this market position also in the near future. Syngenta and Du Pont each have market shares around [0-10]\*%.

- (389) [Confidential information concerning the market position of the competitors]\*. The market position of the parties therefore appears to be closer to [70-80]\*% [confidential information concerning the market position of the competitors]\*.
- (390) On this market, ACS sells only Aldicarb, marketed under the brand Temik. Bayer generates more than [70-80]\*% of its turnover with Fenamiphos, sold under the brand name Nemacur GR.
- (391) The parties have argued that their combined market share does not enable them to determine the prices of its products according to the competitive situation in the ornamental market. ACS generates all of its turnover in this market with Aldicarb, marketed under the brand Temik. Only [30-40]\*% of the turnover generated with this product in Italy can be allocated to the market for ornamental insecticides while the product is also used in potatoes, vegetables, tobacco and other crops. Likewise, the parties have argued that Bayer's main product, Fenamiphos, has its main market in vegetables rather than in flowers and ornamentals. The parties have argued further that Syngenta has recently launched its new product Fosthiazate onto the Italian market for ornamental insecticides. The parties have therefore estimated Syngenta's market share to increase to [20-30]\*%.
- (392) The Commission notes that the total sales of Aldicarb were EUR [...] in ornamental insecticides, while they were EUR [...] in potatoes, [...] in vegetables and EUR [...] in tobacco. As will be discussed below, the parties' market share is considerably higher in vegetables (almost [90-100]\*% of the reported sales) than what they have estimated. Therefore, given that the sales of Aldicarb in ornamentals and vegetables represent almost [70-80]\*% of all sales, the strong market position in ornamentals is likely to have an effect on the pricing decisions. The Commission therefore considers that the transaction will lead to an appreciable change of market structure.
- (393) [Confidential information concerning the product launches of the competitors]\*. The parties would still retain their dominant position in chewing pests, which are the main soil dwelling pests.
- (394) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for ornamental plants in Italy.

*i) Potato insecticides*

- (395) The EEA market for potato insecticides was EUR 55.4 million in 2000. Soil and foliar insecticides each account for about half of the turnover.
- (396) The parties would become the market leader in the overall EEA-wide market ([50-60]\*%), followed most importantly by Syngenta ([10-20]\*%), Du Pont ([10-20]\*%) and BASF ([0-10]\*%). The parties would be the strongest player also in soil and foliar applications: in soil applications, they would account for [60-70]\*% of the market (Bayer: [0-10]\*%, ACS: [50-60]\*%). On this market, Du Pont is the largest competitor with [20-30]\*%. In foliar applications, the

parties would account for [40-50]\*% of the market (Bayer: [20-30]\*%, ACS:[10-20]\*%), followed by Syngenta ([30-40]\*%) and BASF ([0-10]\*%).

*- foliar insecticides*

- (397) In foliar applications, the parties would reach high combined market shares in Portugal ([60-70]\*%) and Spain ([40-50]\*%). The total market in **Portugal** was about EUR [...] million. The parties' combined market share is according to their own estimate [60-70]\*% (Bayer: [40-50]\*%, ACS: [20-30]\*%). At present, leading competitors include Syngenta ([10-20]\*%), BASF ([0-10]\*%) and a number of generic companies, accounting for a combined market share of [20-30]\*%.
- (398) [Confidential information concerning the market position of the competitors]\*.
- (399) The parties have submitted that all their products on this market are targeted against chewing insects. As regards the chewing insects segment, the parties have estimated their market position to be [60-70]\*%. [Confidential information concerning the sales of a competitor]\*.
- (400) Bayer generates about [70-80]\*% of its turnover in this market with *Bacillus Thuringenses* which is a third party product supplied by [...] and marketed under the brand name Biotrata. Bayer's second main product in the foliar segment is Azinphos-Methyl (Gusathion-M), supplied to Bayer by [...]\*. Bayer also sells on this market Imidacloprid (Confidor) and Beta-Cyfluthrin. ACS generates most of its sales with Deltamethrin sold in mixtures with other active ingredients and as a straight product. ACS also sells Lindane (supplied by [...]\*), Chlorfenvinphos (supplied by [...]\*) and Chlorpyrifos (supplied by Dow). Lindane and Chlorfenvinphon, accounting for about [30-40%]\* of ACS's sales on this market, will not be re-registered. The parties have estimated that their market share will fall to [50-60]\*% by 2004.
- (401) The parties have argued that no competition concerns would arise on this market. They claim that Deltamethrin is subject to competition from generics and from other pyrethroids, including Syngenta's Lambda-Cyhalothrin and BASF's Alpha-Cypermethrin. They have, however, not projected any notable market share increase for these products and, as indicated above, expect their own market position to remain strong also in the near future.
- (402) The parties have contended that Bayer's neonicotinoid Imidacloprid will face vigorous competition from Nippon Soda's Acetamiprid. ACS, who will distribute Acetamiprid, has indicated that [confidential information of ACS]\*. The parties have submitted that Du Pont will launch its product Indoxacarb in the Portuguese market by 2002. [Confidential information concerning the product launches of the competitors]\*.
- (403) As concerns the sucking insects segment, [confidential information concerning a competing pipeline product]\*. As regards chewing insects, the Commission considers that the parties position will remain strong also in the near future. Most particularly, the operation would bring together the parties' pyrethroids:

Deltamethrin and Beta-Cyfluthrin. Third parties have suggested that these could be used successfully in rotation programs. In view that Imidacloprid controls also some chewing insects, the combination of the three products would strengthen the parties' position in the chewing insects segment.

- (404) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for potatoes in the Portugal.
- (405) Finally, in **Spain** (total market value EUR [...] million), the parties' combined market share is [40-50]\*% (Bayer: [20-30]\*%, ACS: [10-20]\*%) according to their own estimation. Syngenta accounts for [20-30]\*% of the market and BASF [0-10]\*%. A number of generic suppliers account for a combined market share of [20-30]\*%. The parties have provided information to support this.
- (406) [Confidential information concerning the market position of the competitors]\*. Under this assumption, the Commission considers that the parties' market share is likely to be slightly higher than what they have estimated, around [40-50]\*% [confidential information concerning the market position of the competitors]\*.
- (407) The parties have estimated that their market position in sucking insects would be [50-60]\*% and in chewing insects [30-40]\*%. [Confidential information concerning the sales of a competitor]\*. On the basis of the foregoing, the Commission considers that the parties' market position as estimated by them appears to be correct.
- (408) The parties are present in this market mainly with their new generation insecticides: ACS generates its turnover mainly with Fipronil (Regent), which corresponds to [50-60%]\* of ACS's market share on this market, and Bayer with Imidacloprid (Confidor), generating [20-30]\*% of Bayer's market share of [20-30]\*%.
- (409) The parties have argued that, even upon completion of the transaction, the Spanish market remains competitive, with a number of international and national suppliers active on the market. The parties have argued that a large number of local and generic suppliers sell a range of products which are equally effective as the products of Bayer and ACS. Therefore, the parties have argued that in the case that the combined entity were to attempt to increase prices compared to those of the competing suppliers, it would immediately lose its market shares to the smaller suppliers.
- (410) The Commission considers that, at present, the parties have the most powerful insecticides on the market which can be expected to increase sales in the near future. As concerns Imidacloprid, the Commission considers that Imidacloprid is already commanding premium prices across the EEA and is, overall, the leading insecticide in the EEA. The parties can therefore price the product regardless of competition in all the EEA markets. As regards Fipronil, the Commission notes that Fipronil is used almost solely in this market in Spain and, therefore, the pricing will be largely determined on this market, where the parties will have a commanding position.

- (411) As noted above, third parties have indicated that by combining Imidacloprid and Fipronil in the parties' portfolio, the pest spectrum covered with new chemistries is extended and completed. Both compounds provide high effectivity and secure control of the key pest (Colorado potato beetle) and offer a new mode of action capable to break existing resistance against other chemical classes. In this respect, the parties' possibilities to offer technically superior treatment programs would be unique and unmatched by any competitor. In addition, because of the target pest overlap and the different mode of action of Imidacloprid and Fipronil there are powerful opportunities for resistance management by rotation between both products.
- (412) The investigation shows that there are no effective substitutes for either Imidacloprid or Fipronil and, therefore, the Commission does not consider that the generic products which represent the older chemistry classes, will provide effective competition against the parties products either at present or in the near future.
- (413) The parties have argued that Imidacloprid will face strong competition from the introduction of Nippon Soda's Acetamiprid. With regard to Acetamiprid, the parties further expect competition not only from the co-distributor of the product appointed by Nippon Soda, but also from generic Acetamiprid which is already on the market, and from Syngenta's Thiamethoxam. According to the parties, both factors would make any attempt of the new entity to raise prices for Acetamiprid anti-competitively unsuccessful. According to the parties, Acetamiprid and generic forms of the product will also compete with Fipronil and Imidacloprid. Sales of Fipronil [confidential information of ACS]\*.
- (414) [Confidential information concerning the product launches of the competitors]\*.
- (415) The parties have provided information according to which Chinese generic Acetamiprid is illegally smuggled from Morocco to Spain. In view of the illegal status of these supplies and given the uncertainty related to such supplies, the Commission does not consider that such supplies will provide efficient competition on the market. [...] \* [confidential information of ACS]\*.
- (416) The transaction will combine two leading chemistries on the market, Imidacloprid and Fipronil. In addition, the operation will bring together strong pyrethroids Cyfluthrin, Beta-Cyfluthrin and Deltamethrin. None of the competitors can match this unique product offering which will give the parties new possibilities for offering competitive spraying programmes for resistance management.
- (417) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for potatoes in Spain.

*- soil insecticides*

- (418) As regards soil insecticides for potatoes, the parties would attain very strong market shares in Greece ([60-70]\*%) and Portugal ([70-80]\*%).

- (419) The **Greek** total market was EUR [...] million in 2000. The parties' combined market share amounts to [60-70]\*% (Bayer: [10-20]\*%, ACS: [50-60]\*%) according to their own estimation. Syngenta ([10-20]\*%), DuPont ([0-10]\*%) and BASF ([0-10]\*%) are the largest competitors.
- (420) [Confidential information concerning the market position of the competitors]\*. The Commission considers on the basis of these figures that the market position of the parties is between [60-70]\*% and [70-80]\*%.
- (421) ACS generates its turnover predominantly with its products Aldicarb and Ethoprophos. Bayer generates most of its turnover in the potato segment in Greece with Fenamiphos and Carbofuran (supplied to Bayer by [...]\*).
- (422) The parties have argued that the proposed transaction will not result in a dominant market position of the newly merged entity. The parties have submitted that due to the divestment of Chlormephos to [...]\*, ACS's sales will decline. Another ACS product, [...]\*. As a result, the parties have argued, the sales of this product will decline by more than [50-60]\*% (from present [20-30]\*% to [10-20]\*%). The parties have also argued that Syngenta is launching Fosthiazate onto the Greek market. The parties have estimated Syngenta's market share to reach [20-30]\*% at peak sales of said product. Finally, competition is expected from FMC's Cadusaphos, which is said to be very effective for the control of nematodes. For these reasons, the parties expect their market share to decline to [40-50]\*%.
- (423) As regards the parties' submission that Syngenta and FMC will launch new products onto the market, [confidential information concerning a competing product]\*. The Commission notes that Fosthiazate is an organophosphate and the use of the products from this chemical class is expected to decrease in the future. In addition, [confidential information of ACS]\* the parties will be able to largely defend their market position in the near future.
- (424) For the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for potatoes in Greece.
- (425) In **Portugal**, the market value was EUR [...] million in 2000. The combined market share of the parties amounts to [70-80]\*% (Bayer: [60-70]\*%, ACS: [10-20]\*%) according to their own estimation. Local suppliers account for the rest of the market, some [20-30]\*%.
- (426) [Confidential information concerning the product launches of the competitors]\*.
- (427) ACS's market share is derived from Chlormephos (marketed under the brand Dotan) and the third party product Carbofuran. Bayer's turnover is generated with Fenamiphos (sold under the brand name Namacur).
- (428) ACS's Chlormephos has been divested to [...]\*. The parties have submitted that Carbofuran has been supplied to ACS by [...]\*. The parties expect [...]\* to discontinue the supply of Carbofuran. The parties have argued further that



Fenamiphos is expected to be challenged by the introduction of Syngenta's Fosthiazate and FMC's Cadusafos. The parties have forecast their market share to decrease to [30-40]\*% by 2004. Finally, the parties have argued that [60-70]\*% of the turnover generated with Carbofuran in the Portuguese market can be allocated to maize. In the market for maize insecticides, the parties' combined market share only amounts to [0-10]\*%. For this reason, the parties have argued that the price for Carbofuran-based product Furadan is determined in a market that is highly competitive and any discrimination or abusive pricing towards growers of potatoes would not be successful.

- (429) The parties have not provided any evidence that the supply of Carbofuran will be discontinued. The Commission also notes that as regards the pricing of Carbofuran, the parties current sales in maize are only EUR [...] while they are EUR [...] in potatoes. Even though the conditions of competition differ on these two markets, the Commission considers that the almost equal sales in the potatoes market has an effect on the pricing of the product. Following the transaction, the parties could have an incentive to increase the price on the basis of the strong position in the potato market and generate higher sales revenues there.
- (430) As regards competing product launches, [confidential information concerning a competing product]\*. The Commission considers that the parties will be able to maintain their market share at a high level considering that [confidential information of ACS]\*. In the absence of strong competing products, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for potatoes in Portugal.

*j) Rice insecticides*

- (431) With an EEA-wide turnover of only EUR 4.1 million, the market for rice insecticides is small. EUR [...] million of the total market was generated by foliar insecticides. On the total EEA-wide market, the parties would have [30-40]\*% market share (Bayer: [0-10]\*%, ACS: [30-40]\*%). They would have [40-50]\*% in the foliar segment (Bayer: [0-10]\*%, ACS: [30-40]\*%) but in the soil applications the parties' market presence would be below [0-10]\*%. All the other multinational companies have market shares below [0-10]\*% in all segments.
- (432) Sales of rice insecticides are generated only in four Member States, namely Greece, Italy, Portugal and Spain. The parties' activities overlap only in Greece and Portugal. Competition would be negatively affected in Portugal.
- (433) As in Greece, with a market value of only EUR [...] million, the **Portuguese** market for foliar insecticides to be used on rice is also extremely small. The parties' are the only producers of rice foliar insecticides on this market (Bayer: [10-20]\*%, ACS: [80-90]\*%).
- (434) [Confidential information concerning the sales of the competitors]\*.

- (435) Bayer generates all its sales with Metasystox-R, a formulated product based on the active ingredient Oxydemeton-Methyl. The parties have argued that Oxydemeton-Methyl will be subject to generic competition by United Phosphorus. ACS sells only one product, Chlorfenvinphos, which is supplied by BASF. Chlorfenvinphos will not be re-registered. Out of this reason, the parties expect the market share of the combined entity to be less than [20-30]\*% in 2004.
- (436) The Commission concludes that while the market share of the parties will most likely decrease drastically due to the phasing out of Oxydemeton-Methyl, they will retain their dominant market position at least until 2003. [Confidential information concerning the product launches of the competitors]\*.
- (437) For the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for rice in Portugal.

*k) Tobacco insecticides*

- (438) The overall EEA-wide market for tobacco insecticides amounted to EUR 13.7 million in 2000. On this market, the parties would become the clear market leader in both the overall market and also in the foliar and soil segments. The parties market share in the total market is [50-60]\*% (Bayer: [40-50]\*%, ACS: [0-10]\*%), followed by BASF ([10-20]\*%) and Syngenta ([0-10]\*%). In the foliar segment, their market share is [60-70]\*%, with a small overlap from ACS ([0-10]\*%). All other competitors have market shares below [10-20]\*%. In soil applications, the market share of the parties is [30-40]\*% (Bayer: [20-30]\*%, ACS: [10-20]\*%). BASF is the strongest competitor with [20-30]\*%.
- (439) Bayer's products are mainly based on the active ingredients Imidacloprid, Methamidophos and Fenamiphos. ACS's main product is Deltamethrin.

*- foliar insecticides*

- (440) In the foliar applications, the parties would attain relatively strong market positions in Greece ([50-60]\*%) and Italy ([60-70]\*%).
- (441) **Greece** is the largest single market for tobacco foliar insecticides (market value EUR [...] million in 2000). On this market, the parties' combined market share amounts to [50-60]\*% (Bayer: [50-60]\*%, ACS: [0-10]\*%). Syngenta ([10-20]\*%) and BASF ([0-10]\*%) are the largest multinational competitors. Local companies account for a combined market share of more than [20-30]\*%.
- (442) [Confidential information concerning the market position of the competitors]\*. The market position of the parties as estimated by themselves appears to be correct. [Confidential information concerning the market position of the competitors]\*.

- (443) The parties have indicated that they have no sales in the chewing insects segment and that their market position in the sucking insects segment would be [40-50]\*%. [Confidential assessment of the sales of the competitors]\* the Commission considers that it is likely that the market position of the parties is not materially different in the sucking and chewing insects segments than what it is on the overall market.
- (444) Bayer's main product on this market is Imidacloprid (Confidor), which accounts for [40-50]\*% of the market share on this market. Bayer also supplies most importantly Methamidophos (Tamaron), [...] by [...]\*. ACS is supplying also Methamidophos ([...]\*) and launched in 2001 Acetamiprid on this market. These sales are not reflected in the parties' market share estimates.
- (445) The parties have argued that since ACS adds only a very small percentage to Bayer's market share, the proposed concentration does not lead to any change in the current market structure. In this respect, the parties have contended that the supply agreement of Methamidophos will most likely be terminated after completion of the merger and that Methamidophos is in the process of being withdrawn from the market. The parties have also argued that Imidacloprid is only covered by a process patent which is easy to circumvent by applying a different production method, thereby suggesting generic competition. Finally, the parties have argued that they will face strong competition from the introduction of Nippon Soda's Acetamiprid. As a result, the parties have forecast their combined market share to decrease to [40-50]\*% in 2004.
- (446) The Commission notes that Methamidophos has been notified for re-registration. The parties have not provided any proof that the supply agreement of Methamidophos will be discontinued.
- (447) As regards the parties' assertion that it is easy to circumvent a process patent, the investigation shows that this is not the case and reduced patent protection does not automatically result in new entry by a generic producer. The Commission has no evidence that any generic company is developing a generic form of Imidacloprid to be launched on this market.
- (448) The Commission agrees with the parties that the addition of ACS's [0-10]\*% of the market share generated by Methamidophos does not in all likelihood have any appreciable effect on the present market structure, where Bayer has been able to price Imidacloprid so far independently from other market participants. The Commission considers, however, that combining Imidacloprid and Acetamiprid would significantly strengthen the parties' existing market position.
- (449) [Confidential information concerning the product launches of the competitors]\*. Moreover, in light of the investigation, the combination of two neonicotinoids and pyrethroids Cyfluthrin and Beta-Cyfluthrin would create a unique product portfolio for resistance management purposes.
- (450) For the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for tobacco in Greece.

- (451) The **Italian** market for foliar insecticides in tobacco totalled EUR [...] million in 2000. The parties' combined market share is [60-70]\*% (Bayer: [60-70]\*%, ACS: [0-10]\*%) according to their own estimations. The market share of Syngenta is [10-20]\*%, BASF [0-10]\*% and local suppliers [10-20]\*%.
- (452) [Confidential information concerning the market position of the competitors]\*. Therefore, the parties' estimate of their high market share appears to be correct. The parties have estimated that their market position in sucking insects would be [70-80]\*%.
- (453) Bayer's main product on this market is Imidacloprid (Confidor SL), corresponding to [50-60]\*% of the market share. ACS's products are Deltamethrin (Decis, Decis D, Decis Quick and Best) and Heptenophos (Hostaquick) Heptenophos, which generates currently less than [0-10]\*% of ACS's market share, [...]\*.
- (454) The parties have argued that their combined market share does not give rise to concerns over market dominance. The parties have argued that their combined market share is expected to decrease to about [40-50]\*% by 2004. They have further argued that ACS's market share will decline further to only [0-10]\*% and that the transaction will not result in any substantial changes of the current market structure.
- (455) The Commission considers that, despite the relatively small increment of present market share, the transactions would lead to a structural change of the market. In particular, the Commission notes that [confidential information of ACS [...]]\* would put the parties in a unique position vis-à-vis other competitors on the market. Following the parties' reply to the Statement of Objections, the Commission has taken into consideration that only [0-10]\*% of all Deltamethrin sold in Italy is used on this market. The Commission has further taken into account that also Imidacloprid is used only to a very minor extent on this market ([0-10]\*% of all sales). Therefore, the Commission considers that the prices of both of the products are determined on other markets. As it is unlikely that the pricing decisions of the products will be affected by the transaction, the Commission considers that the structural change on the market will therefore derive from [confidential information of ACS]\*.
- (456) None of the third parties have any neonicotinoids in their portfolio and could not match this offer. This could weaken the position of the competitors and make potential new entry more difficult. [Confidential information concerning the product launches of the competitors]\*.
- (457) For the above reasons, the Commission has reached the conclusion that, in view of the [confidential information of ACS]\*, the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for tobacco in Italy.

- *soil insecticides*

- (458) As regards soil applications in **Spain**, the total market amounted to EUR [...] million. The combined market share of the parties is [70-80]\*% (Bayer: [20-30]\*%; ACS: [40-50]\*%) according to their own estimate. FMC is the largest competitor with [10-20]\*% of the market, the remaining competitors have market shares below [0-10]\*% each.
- (459) [Confidential information concerning the market position of the competitors]\*. The parties' high market share therefore appears to be confirmed.
- (460) Bayer's main product on this market is Fenamiphos (Nemacur). ACS sells Aldicarb (Temik) and Ethoprophos (Mocap).
- (461) The parties have argued that all products sold by the parties in the Spanish market for soil insecticides used on tobacco have their main use in other crops. The parties have contended that only [10-20]\*% of all Fenamiphos sales are generated in the tobacco segment and that the product is mainly applied on bananas and vegetables. In both markets, the parties have submitted that they have significantly lower market shares. Aldicarb is mainly used on citrus fruit, but other applications include cotton, potatoes, fruits and nuts and bananas. In all these markets, the parties have submitted that they have much lower market shares. Thus, the parties have argued that it would not be possible for the combined entity to either price-discriminate specifically towards growers of tobacco or generally increase the prices of their products anti-competitively. The parties have also argued that Syngenta will launch Fosthiazate onto this market, thereby increasing competition.
- (462) The Commission notes that Fenamiphos generates higher sales in bananas (almost EUR [...] million) and vegetables (EUR [...] million), as compared to tobacco (EUR [...] million). However, given that the parties would reach a dominant position in bananas following the merger and considering that the largest part of the sales are generated in this market, the Commission considers it not unlikely that a strong position also in tobacco could give incentives to increase the price of the product.
- (463) As regards Aldicarb, the Commission notes that the sales of this product are the highest in citrus (EUR [...] million) and in tobacco (EUR [...] million). In bananas, cotton, potato, the sales are some EUR [...] in each segment. As above, the Commission considers that, following the strong market position in tobacco and bananas, the parties could find incentives to increase the price of Aldicarb for soil applications and generate more income in the two segments, which account for a large chunk of all sales of Aldicarb for soil applications.
- (464) [Confidential information concerning the product launches of the competitors]\*.
- (465) For the foregoing reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for tobacco in Spain.

*l) Vegetable insecticides*

- (466) Insecticides for vegetables constitute one the largest insecticides markets in the EEA. In 2000, the total EEA-wide market amounted to EUR 149.6 million. Following the operation, the parties would become the leading company in both the overall EEA-wide market and also in the foliar and soil segments. In the overall market, the parties would have [40-50]\*% market share (Bayer: [20-30]\*%, ACS: [20-30]\*%), followed by the largest competitor Syngenta (22%).
- (467) The foliar segment accounted for the bulk of the turnover in the overall market: EUR [...] million. On this market, the parties would have [40-50]\*% market share (Bayer: [20-30]\*%, ACS: [20-30]\*%). Syngenta is the largest competitor with [20-30]\*% of the market. As regards soil applications, the parties would have [40-50]\*% of the market (Bayer: [20-30]\*%, ACS: [20-30]\*%). The largest competitor in this segment is Du Pont ([10-20]\*%), followed by Syngenta ([10-20]\*%).

*- foliar insecticides*

- (468) The parties would attain very high market shares at the national level in the foliar segment in France ([70-80]\*%), Portugal ([80-90]\*%), Spain ([40-50]\*%) and Italy ([30-40]\*%). As concerns the market situation in France, the Commission found in case M.1806-*AstraZeneca/Novartis* that Syngenta would attain dominant position of the French market for vegetable insecticides for foliar application. Consequently, Syngenta agreed to grant an exclusive licence for Pirimicarb. [Confidential information about the licensee]\*.
- (469) The **French** market for foliar applications amounted to EUR [...] million in 2000. The parties' combined market share on this market is [70-80]\*% (Bayer: [10-20]\*%, ACS: [60-70]\*%) according to their own estimation in the Notification. The largest competitor is Syngenta ([10-20]\*%) and generic companies have a combined market share of [0-10]\*%.
- (470) [Confidential information concerning the market position of the competitors]\*. The parties have indicated that their market position in sucking insects would be [60-70]\*%.
- (471) Both parties sell several products on this market. Bayer generates most of its sales with Imidacloprid (sold under the brand Confidor), which accounts [10-20]\*% of the market. The main products sold by ACS for combating foliar insects are Deltamethrin (Decis), Phosalone (Zolone) and the third party product Parathion-Ethyl (Pacol), [...]\*.
- (472) The parties have submitted that a number of new products will be launched on the market: Syngenta's Thiamethoxam and Pymetrozine, Dow's Spinosad and Du Pont's Indoxacarb. The parties have submitted that, given the new competing products and the loss of several of their products in the re-registration process, their combined market share will decrease to [40-50]\*% by 2004.
- (473) [Confidential information concerning the product launches of the competitors]\*, none of the new products will be able to compete with neonicotinoids in the sucking insects segment.

- (474) [...]\*. [confidential information of ACS]\*. Imidacloprid is registered in lettuce, melons and cauliflower.
- (475) [...]\*.
- (476) The Commission considers, however, that with the sales of Imidacloprid which have been forecast to increase, the parties will significantly strengthen their position in this market by adding [...]\*. neonicotinoids into their portfolio. The parties would be the only ones with such a strong portfolio. [...]\*, the sales will remain within the same group. Moreover, the parties would, unlike the others, be able to offer an extensive portfolio of the leading chemistries for IPM programmes for rotation. Therefore, the sales of the parties' all neonicotinoids are likely to increase. Moreover, they could combine this portfolio with their older chemistries for the same purpose. The parties' portfolio consists of a leading pyrethroid (Deltamethrin) and a number of other products from different chemical classes. None of the third parties would be able to match the parties' product offer [confidential assessment concerning a competing pipeline product]\*.
- (477) For the foregoing reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for vegetables in France.
- (478) **Portugal** (market value EUR 2.9 million) is one of the smallest markets for vegetable insecticides. The parties' combined market share in that market amounts to [80-90]\*% (Bayer: [20-30]\*%, ACS: [60-70]\*%) according to their own estimate. Syngenta is the only multinational competitor on the market with [0-10]\*% market share. Generic suppliers account for a combined market share of [10-20]\*%.
- (479) [Confidential information concerning the market position of the competitors]\*. On this market, the parties' market share is some [60-70]\*%. [Confidential information concerning the market position of the competitors]\*.
- (480) The parties have estimated that their market share in sucking pests would be [80-90]\*% and in chewing pests [70-80]\*%. [Confidential information concerning the market position of the competitors]\*.
- (481) Bayer's main product on the market is Imidacloprid (Confidor). Bayer sells also pyrethroid Beta-Cyfluthrin (Bulldock SC) and three other products. ACS sells most importantly Deltamethrin (Decis) and Endosulfan (Thiodan). It has also nine other products on the market.
- (482) The parties have argued that, despite the high market share of the combined entity, the proposed transaction will not lead to a dominant market position. They have argued that due to the introduction of Du Pont's Indoxacarb and Dow's Spinosad, the parties' combined market share is expected to decline. The parties have also argued that most of the supply agreements with third parties will be discontinued upon completion of the notified transaction. The parties have further contended that ACS's Formetanate, accounting for [0-10]\*%

market share in 2000, has been divested to [...]\*, and re-registration of [...]\*. As a result, the parties have submitted that their combined sales will decrease by more than [10-20]\*% in the immediate future. Finally, the parties have submitted [...]\*.

- (483) The Commission has no evidence that any of the parties' supply agreements will be discontinued in the future. As regards Endosulfan, the parties have corrected their statement on Endosulfan at a later stage of the proceedings and submitted that Endosulfan will be registered for [...]\*.
- (484) As regards competing pipeline products, the Commission has verified that [confidential information concerning the product launches of the competitors]\* [...]\* and in the light of the investigation, the Commission considers that the new, competing product launches are likely to maintain competition in the chewing insecticides segment.
- (485) As regards the sucking insects segments, the Commission notes that [...]\*. [Confidential information of ACS]\*.<sup>19</sup>
- (486) [Confidential information concerning a competing pipeline product]\* the Commission notes that [...]\* where [confidential information concerning a competing pipeline product]\* has been submitted for registration in Portugal is more limited than that of [...]\*. As the parties themselves have pointed out, in all European countries vegetable farmers usually grow a range of vegetable types. The farmers therefore need to protect several kinds of vegetables. To serve best the needs of the ultimate customer and to be successful on the market, it is in the crop protection companies' own interest to market products that can be used on several vegetable crops. In view of this, the Commission considers that with already one strong neonicotinoid in the portfolio, the addition of [...]\* with a broader crop spectrum will strengthen the parties' market position in the sucking pests segment considerably.
- (487) For largely the same reasons as concern the French market, the Commission concerns that the high market share of the parties can be maintained also in the future. More particularly, the parties would be the only ones with [...]\* neonicotinoids, allowing the marketing of IPM programmes unmatched by competitors. Also, the combination of neonicotinoids with Deltamethrin, Beta-Cyfluthrin and products from other chemistry classes will allow the parties to offer unique IPM programmes for rotation and resistance management. The possibility to offer these products in attractive packages will affect negatively the market position of competitors, who cannot match the parties' offer. Market entry will also become more difficult.
- (488) As regards the parties' submission that in the Portuguese vegetable markets, [...]\*, the Commission notes that the effect will be limited and, in any event, the overall sales will remain within the same company.

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<sup>19</sup> [...]\*.



- (489) For the foregoing reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for vegetables in Portugal.
- (490) The **Spanish** market amounted to EUR [...] million in 2000. The combined market share of the parties is [40-50]\*% (Bayer: [10-20]\*%, ACS: [20-30]\*%) according to their own estimation. The leading competitor is Syngenta with a market share of [30-40]\*%. Generic suppliers account for a combined market share of [20-30]\*%.
- (491) [Confidential information concerning the market position of the competitors]\*. The parties' market share could thus be somewhat higher than what they have estimated.
- (492) The parties have estimated that their market position in sucking insects is [50-60]\*%. However, as [confidential information concerning the sales of a competitor]\* and the parties' generate [80-90]\*% of their market share in sucking pests, the Commission considers that the parties' market position in sucking insects could be higher.
- (493) Bayer generates most of its turnover in Spain with Imidacloprid ([10-20]\*% of Bayer's market share of [10-20]\*%), marketed under the brand Confidor. Bayer also sells pyrethroids Cyfluthrin (Baythroid SL) and Beta-Cyfluthrin (Bulldog SD), and a large number of other products ([...]\*).
- (494) Also ACS sells a large number of products on this market: [...]\*. ACS's products include pyrethroids Deltamethrin, Acrinathrin and Cypermethrin. ACS also sells Fipronil on this market, which has a relatively small market share. ACS generated in 2000 about [20-30]\*% of its turnover with Formetanate (Dicarzol), which has been divested to [...]\*, thus resulting in a decrease of ACS's market share (in 2000, the product accounted for [0-10]\*% of ACS's 2000 market share).
- (495) The parties have argued that their combined market share will fall drastically in the near future due to phasing out of several products, discontinuance of third party products and due to the divestment of Formetanate. The parties have also submitted that [...]\*. For these reasons and because the parties expect Dow and Du Pont to enter the Spanish market with their new products Spinosad and Indoxacarb, the parties expect their combined market share to decline to [20-30]\*% in 2004.
- (496) The Commission notes first that the parties have not supplied evidence that the distribution of any of the third party products will be discontinued. As to the argument regarding phasing out products from the parties' portfolio, the Commission notes that the re-registration will affect also all the competitors. Finally, [...]\*.
- (497) As regards new product launches, the Commission has verified that [confidential information concerning the product launches of the competitors]\* will target also

the sucking pests. [Confidential information concerning a competing pipeline product]\*.

- (498) [...] <sup>20</sup>. [Confidential information of ACS]\*. Imidacloprid is registered in [...]\*. [Confidential information of ACS]\*.
- (499) As Bayer will have [...] <sup>\*</sup> neonicotinoids in its portfolio, the market position of the parties will be significantly strengthened for the same reasons as in the French and Portuguese markets.
- (500) For the foregoing reasons, notwithstanding the fact that [confidential information concerning the market position of a competitor]\*, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for vegetables in Spain.
- (501) The confidential sales data obtained during the investigation show that a dominant position would also be created in **Italy**. The Italian market amounted to EUR [...] <sup>\*</sup> million in 2000. On this market, the parties have submitted that they have [30-40] <sup>\*</sup>% market share (Bayer: [20-30] <sup>\*</sup>%, ACS: [10-20] <sup>\*</sup>%). The parties have estimated that Syngenta is the largest competitor with [20-30] <sup>\*</sup>% of the market and BASF has [0-10] <sup>\*</sup>%. The parties have contended that a large number of generic suppliers, accounting for a combined market share of [20-30] <sup>\*</sup>%. The parties have estimated that their market position in sucking pests is somewhat higher, [40-50] <sup>\*</sup>%.
- (502) [Confidential information concerning the market position of the competitors]\*.
- (503) Bayer sells altogether [...] <sup>\*</sup> products. Bayer generates most of its turnover with Imidacloprid sold under the brand name Confidor. Bayer's second best product is pyrethroid Cyfluthrin (Baythroid EW). ACS's main product on this market is Deltamethrin. ACS also sells pyrethroid Acrinathrin and amidine Amitraz and some other products.
- (504) The Commission considers that the transaction will lead to a creation of a dominant position in Italy for the same reasons as in France, Portugal and Spain. [...] <sup>\*</sup> [confidential information of ACS]\*. Imidacloprid has already a strong position and, in combination with [...] <sup>\*</sup>, it will strengthen the parties position both on the overall market and in the sucking insects segment. Combinations of neonicotinoids and other chemical classes, most notably pyrethroids, will give the parties a unique position in resistance management. None of the new competing product launches will be able to offset the market power of the new company.
- (505) For the foregoing reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for foliar insecticides for vegetables in Italy.

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<sup>20</sup> [...] <sup>\*</sup>.

- *soil insecticides*

- (506) The parties would achieve high market shares in the soil applications in Greece ([40-50]\*%), and Portugal ([70-80]\*%).
- (507) In **Greece** (total market value EUR [...] \* million), the parties' combined market share amounts to [40-50]\*% (Bayer: [30-40]\*%, ACS: [0-10]\*%). Leading competitors are DuPont ([20-30]\*%), Syngenta ([10-20]\*%) and BASF ([10-20]\*%).
- (508) [Confidential information concerning the market position of a competitor]\*. On the basis of the total registered sales on this market, the parties' market position would be [70-80]\*% [confidential information concerning the market position of a competitor]\*.
- (509) Bayer generates most of its turnover with Fenamiphos (Nemacur). Imidacloprid, which is only used in this crop, generates on this market only de minimis sales. ACS is active on this market with its product Ethoprophos (Mocap).
- (510) The parties have submitted that, [...]\*. Finally, the parties have argued that their position will further be weakened by the introduction of Syngenta's Fosthiazate on the market. As a result, the parties have argued that their combined market share will decrease to [30-40]\*% in 2004 and that the Greek market for vegetable soil insecticides remains unconcentrated.
- (511) The Commission notes first that it has no evidence that [...]\*. The Commission further notes that [confidential information concerning the product launches of the competitors]\*.
- (512) Finally, the Commission considers that the operation will strengthen the incentives to raise the price of the parties' products. Namely, Fenamiphos accounts for the large majority of Bayer's sales on this market (EUR [...] \* million) and also in the potato market (EUR [...] \* million). Ethoprophos is ACS's only product on this market. In the potato market where it is mostly used, it accounts for about [40-50]\*% of ACS's sales on that market ([...] \* million). Following the operation, the Commission considers that parties' combined high sales in both the vegetables and the potato markets and the high market share attained on these markets as a result of this operation could lead to an increase of the price of the two products.
- (513) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for vegetables in Greece.
- (514) Finally, in **Portugal** (market value EUR [...] \* million), the parties' market share is [70-80]\*% (Bayer: [30-40]\*%, ACS: [40-50]\*%) according to their own estimation. Generic suppliers account for the remaining part of the market ([20-30]\*%).

- (515) [Confidential information concerning the market position of competitors]\*. Even if assuming strong generic competition ([20-30]\*%), the parties' market position would be at least around [60-70]\*%.
- (516) Bayer generates all of its turnover with Fenamiphos (Nemacur). ACS is active on this market with Ethoprophos (Mocap).
- (517) The parties have argued that the sales of Ethoprophos are likely to decrease in the next years. Bayer's sales of Fenamiphos will also decline due to competition from less toxic products. The parties have also submitted that Syngenta will enter the market with Fosthiazate. Finally, the parties have argued that generic competitors are expected to strengthen their presence in the future and increasing their market share.
- (518) The Commission notes that all products on the market represent older chemistries, including Syngenta's Fosthiazate [confidential information concerning a competing product]\*. Therefore, the Commission does not believe that especially generic producers would take the sales from the parties.
- (519) For all the above reasons, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the market for soil insecticides for vegetables in Portugal.

*Future launches of Acetamiprid*

- (520) The Commission notes that the registration plans concerning Acetamiprid [...]\*

General conclusion on insecticides

- (521) The investigation shows that a dominant position would be created in a number of markets through a horizontal overlap, both in the foliar and the soil markets. Following the operation, the parties would have a wide range of products representing older chemistries. In addition, the transaction would add to the Bayer's product offering ACS's neonicotinoid Acetamiprid and pyrazole Fipronil (and Ethiprole). Both products would strengthen and extend Bayer's existing portfolio of new chemistries. The parties would have by far the widest range of neonicotinoids and they would be the only ones with the pyrazole chemistry. They would have by far the strongest product range in the latest chemistries to treat insecticides from seed treatment to soil and foliar application.
- (522) The parties could leverage their market power via resistance management programmes and discount structures to distributors, who would have to stock the parties' neonicotinoids and Fipronil. No competitor could match this product offer. The transaction could therefore lead to price increases and foreclosing the market from competitors, especially generic competitors.
- (523) Therefore, the Commission considers that the operation as notified would create or strengthen a dominant position

- (524) - in foliar insecticides for beets (France and Greece), cereals (Italy and Portugal), citrus fruit (Portugal), cotton (Greece), fruits and nuts (Belgium, Denmark, Germany, Greece and Portugal), grapes (Germany), potatoes (Portugal and Spain), rice (Portugal), tobacco (Greece and Italy) and vegetables (France, Portugal, Spain and Italy); and
- (525) - in soil insecticides for bananas (Spain), beets (Belgium, France, the UK and Italy), ornamental plants (Italy), potatoes (Greece and Portugal), tobacco (Spain) and vegetables (Greece and Portugal).

## **B. Molluscicides**

### ***B.1 Relevant product markets***

- (526) Both Bayer and ACS are active in the production and sale of molluscicides (slug pellets), which are products designed to combat snails and other types of molluscs. Molluscicides generally consist of chemically treated baits which are spread onto the soil.
- (527) Molluscicides cannot be substituted by other insecticides and, therefore, form a separate product market. The market investigation has confirmed that a breakdown of molluscicides by type of crop is not appropriate since the formulation of molluscicides does not vary according to the plants affected.
- (528) Currently there are three main active ingredients registered in the EEA for the control of molluscs: Metaldehyde, Methiocarb, and Thiodicarb. A fourth type of molluscicide based on the active ingredient Fe(3)Phoospaat, which is under patent protection, has been launched in the Netherlands, Denmark, and Germany, and is under registration in Sweden, Italy, Belgium and France.
- (529) Metaldehyde, which is the older active ingredient, has a paralysing mode of action on molluscs and is produced by the Swiss-based company Lonza. Fe(3)Phoospaat, which is produced by the German firm Neudorff GMBH, acts in a way similar to Metaldehyde. Methiocarb and Thiodicarb, by contrast, act as stomach poisons and are produced by Bayer and ACS, respectively. All these active ingredients, except Fe(3)Phoospaat, are off-patent since a number of years. It should be noted that, unlike Bayer and ACS, Lonza does not manufacture molluscicides, but it simply sells the active ingredient Metaldehyde in various Member States to a number of formulators who manufacture the final product under their own brands.
- (530) Molluscicides based on all the above active ingredients appear to belong to the same product market. However, the investigation has shown that Bayer's and ACS's products appear much more efficacious in areas with particularly wet conditions, and that their price is often much higher than the price of Metaldehyde-based molluscicides.

### ***B.2 Competitive assessment***

#### ***a) Market conditions***

- (531) The parties have high combined market shares in the following countries: Belgium (Bayer: [10-20]\*%, ACS: [80-90]\*%) France (Bayer: [20-30]\*%, ACS: [10-20]\*%), Portugal (Bayer: [70-80]\*%, ACS: [0-10]\*%), the UK (Bayer: [30-40]\*%, ACS: [0-10]\*%), Ireland (Bayer: [90-100]\*%, ACS: [10-20]\*%) and the Netherlands (Bayer: [60-70]\*%, ACS: [20-30]\*%). In the Netherlands, however, Bayer has no longer a registration for the use of Methiocarb in molluscicides, and it will therefore discontinue sales of its molluscicides by [...] at the latest. Thus, in the Netherlands no competition concerns arise as there would be no horizontal overlap resulting from the proposed transaction. Similarly, in France, no competition concerns arise from the proposed transaction as the company De Sangosse is the market leader, with a market share of about [...] mostly achieved with its Metaldehyde-based product Metarex RG.
- (532) Bayer is the only firm active in Sweden, Finland, Iceland, with a market share of 100%, while ACS is the only firm active in Norway. In Norway, however, no competition concerns arise from the proposed transaction, as ACS's monopolistic position is due to that fact that national legislation has banned molluscicides based on both Methiocarb and Metaldehyde since a number of years.
- (533) In the remaining EEA countries no competition concerns arise for the following reasons. In Austria Bayer achieved only a [0-10]\*% market share in 2000, while ACS started to sell molluscicides only in 2001 in very limited quantities. In Denmark, although Bayer achieved a [50-60]\*% market share in the year 2000, ACS is not active. In Germany the parties have a low combined market share, as Bayer achieved in 2000 a market share of [20-30]\*% while ACS achieved a market share of only [0-10]\*%. In Greece Bayer is not active and ACS's sales of molluscicides have been discontinued in 2000. In Italy the parties have a low combined market share, as Bayer achieved in 2000 a market share of [20-30]\*% while ACS achieved a market share of only [0-10]\*%. Finally, in Spain ACS is not active and Bayer's market share in 2000 was of only [10-20]\*%.
- (534) The investigation has shown that besides Bayer's Methiocarb-based molluscicide (sold under the brand Mesorul) and ACS's Thiodicarb-based molluscicide (sold under the brand Skipper), the remaining market shares in the various EEA Member States, except for France, are divided among a fragmented number of national independent manufacturers that, based on the active ingredient supplied by Lonza, produce more economic, and often less efficacious, local brands of Metaldehyde-based molluscicides. Only in the Netherlands, Germany, and Denmark, some market shares are achieved by local formulators of Fe(3)Phoospaat-based molluscicides.
- (535) Historically, Metaldehyde based molluscicides have not had the same rain fastness as Bayer's and ACS's Methiocarb and Thiodicarb based products. Although in certain national markets some local formulators have optimised the degree of rain fastness of Metaldehyde-based molluscicides, each formulator uses his own recipe and therefore rain fastness may vary from country to country depending on the type of formulation and the manufacturing process. In countries with particularly wet conditions but very small market size in terms of

molluscicide usage, Metaldehyde-based molluscicides did not have any significant penetration.

- (536) Market entry by means of molluscicides based on new active ingredients is extremely difficult and resource-intensive. The costs of R&D and EU registration can exceed EUR 100 million and the take up to 10 years. A new type of molluscicide based on the active ingredient Fe(3)Phoospaat has been recently launched in the Netherlands, Germany and Denmark. Registration is underway in Sweden, Italy, Belgium, and France. No molluscicides based on new active ingredients are expected to be launched on the market for the next four years.
- (537) Contrary to the parties' submissions, the investigation has shown that neither Bayer nor ACS are concretely faced with generic competition as regards Methiocarb or Thiodicarb molluscicides. Although Methiocarb and Thiodicarb are off-patent since a number of years, in fact, there are only two Asian generic producers worldwide of such active ingredients: Ningbo Agro-Star Industrial, a Chinese generic producer of Methiocarb, and Ceryung (formerly Jin Heung Fine Chemical), a Korean generic producer of Thiodicarb. None of these companies, however, currently supply these active ingredients in Europe.
- (538) Moreover, during the investigation, the parties admitted that the European market for molluscicides is not attractive for Asian generic producers because such market is subject to extreme variations, it is unlikely to grow significantly in the future and it is a commodity market on which margins are too low. The parties explained that, as the summer weather pattern is the critical factor, it is impossible to reliably forecast the size of the market more than about two months in advance and that, since any producer of molluscicides has to be prepared to carry large stock levels possibly for several years, this is not the type of market that appeals to generic producers.

*b) National markets raising competition concerns*

- (539) In the light of the above and for the reasons set out below, the proposed transaction would lead to the creation or strengthening of a dominant position in the following national markets for molluscicides: the UK, Belgium, Ireland, Portugal, Sweden, Finland and Iceland.
- (540) In the **United Kingdom**, the parties' combined market share in 2000 amounted to [40-50]\*% (Bayer [30-40]\*%, ACS [0-10]\*%). Bayer would become the market leader in the UK market for molluscicides upon completion of the transaction. The parties argue that Lonza would remain the market leader with a market share of about [50-60]\*%. As explained above, however, Lonza is not a producer of molluscicides, but only a producer of Metaldehyde, which it supplies to national independent manufacturers of Metaldehyde-based molluscicides such as: De Sangosse, Luxan, Chiltern Farm Chemicals, Doff Poortland, and Clartex, with estimated markets shares of [10-20]\*%, [0-10]\*%, [0-10]\*%, [0-10]\*%, and [0-10]\*%, respectively. After the transaction, therefore, Bayer will be confronted only with a fragmented number of small UK formulators often of lower quality molluscicides, rather than with a strong competitor as the parties have submitted.

- (541) Moreover, it must be noted that Bayer's and ACS's products are the top quality molluscicides sold in the UK market. According to the parties' estimates, in fact, the price of Bayer's and ACS's molluscicides in the UK is of about [...]\*/ha and [Confidential information of ACS]\*, respectively, i.e. more than [60-70]\*% higher than the price of the low quality Metaldehyde-based molluscicides sold in the UK ( [...]\*/ha). The only top quality Metaldehyde-based molluscicide appears to be De Sangosse's Metarex.
- (542) The high price difference between Bayer's and ACS's molluscicides and Metaldehyde-based molluscicides is explained by the fact that in areas or periods of the year characterised by wet weather conditions, the use rate of Metaldehyde-based molluscicides is on average more than double than the use rate of Bayer's or ACS's products. A consistent number of farmers, therefore, are inclined to purchase Bayer's and ACS's products at a higher price rather than products that, although being cheaper at first sight, result in practice more expansive because of their higher use rate.
- (543) Currently, a certain degree of competition in the top quality segment of molluscicides in the UK is guaranteed by the competition between the products of Bayer, ACS, and De Sangosse. After the implementation of the proposed transaction, however, most of this competition would be eliminated. The only alternative to the merged entity in the top quality segment of molluscicides would remain De Sangosse, with an estimated market share of only [10-20]\*% compared to the estimated [40-50]\*% of the merged entity. Thus, if after the transaction Bayer decided to increase the price of two of the three top quality molluscicides and most established brands in the UK (Mesurol and Skipper), not enough competitive pressure from the remaining top quality brand (Metarex) or from the lower quality Metaldehyde molluscicides would prevent it from doing so.
- (544) This concern is further confirmed by the parties' admission that ACS's and Bayer's products have properties differentiating them from those of their competitors, and that price is only one aspect taken into consideration by the end-user when deciding which product to use.
- (545) The parties also argue that the concentration of the demand-side in the UK guarantees that the proposed transaction will not result in the creation of a dominant market position for the newly merged entity because the ten largest distributors in the UK account for about [90-100]\*% of the total sales in the UK market and exercise substantial countervailing bargaining power. The fact remains, however, that a considerable number of British end-users of molluscicides are ready to pay for Bayer and ACS's products a price [60-70]\*% higher than for the lower quality of Metaldehyde-based molluscicides, and that they would very likely continue to buy these products even if their price increased further as a result of the proposed merger.
- (546) In the light of the above, therefore, the Commission has come to the conclusion that transaction would lead to the creation or strengthening of a dominant position in the UK market for molluscicides.



- (547) In **Belgium**, the parties' combined market share amounted in 2000 to about [90-100]\*% (Bayer: [10-20]\*%, ACS: [80-90]\*%) and the parties expect to maintain their market position at this level during the next three years. Metaldehyde-based molluscicides account for less than [0-10]\*% of the Belgian market. A new type of active ingredient with molluscicide properties, Fe(3)Phoospaat, is currently under registration in Belgium. However, it is uncertain when the registration procedure will be completed and whether it will be successful.
- (548) The parties submit that the transaction does not restrict competition on the Belgian market since the products sold by Bayer and ACS are already off-patent and new companies could easily enter the Belgian market with generic products if the combined entity attempted to increase prices anti-competitively. As explained above, however, there are only two Asian producers of generic Methiocarb and Thiodicarb, which are not active in Europe and which would very likely not enter this market after the proposed transaction. Their entry in the Belgium market would be even more unlikely, given the relatively small size of this market and the significant market position of the parties.
- (549) The parties further submit that the fact that Neudorff is entering the Belgian market clearly shows that it can be attractive to launch a competing product even on small markets such as Belgium, and that therefore potential competition from Asian producers must therefore not be disregarded as unlikely. The Commission notes, however, that Neudorff is attempting to enter the market with a product based on a new type of active ingredient (Fe(3)Phoospaat), which if successful would differentiate itself from those already established on the market. Asian producers, on the contrary, could not count on the same product differentiation to launch their products on the European market.
- (550) The parties also submit that Lonza is already active in the Belgian market and that, as the leading supplier of molluscicides in the EEA, would be capable of expanding its activities in Belgium to respond to any anti-competitive behaviour of the combined entity. As explained above, however, Lonza is not a producer of molluscicides, but only a producer of Metaldehyde, which it supplies to national independent manufacturers of Metaldehyde-based molluscicides.
- (551) In Belgium the rain fastness of molluscicides is of essential importance. Bayer and ACS's molluscicides have a particularly high degree of rain fastness. Formulators of Metaldehyde-based molluscicides in Belgium did not manage to reach the same level of rain fastness.
- (552) The parties estimate that in Belgium the average gross/net price to trade of top quality Metaldehyde molluscicides is of about EUR [...]\*/ha while that of Bayer's and ACS's molluscicides is of about [...]\*/ha and [Confidential information of ACS]\*, respectively. However, due to the weather conditions, the use rate of Metaldehyde-based molluscicides is on average more than double than the use rate of Bayer's or ACS's products. End-users, therefore, are rather inclined to pay more for Bayer's and ACS's products rather than for a product that, although being cheaper at first sight, results in practice more expensive because of its higher use rate.

- (553) This has been confirmed by a Belgian wholesaler of molluscicides, who clearly stated that Bayer's and ACS's molluscicides are not substitutable with Metaldehyde-based molluscicides, and that in case of a permanent price increase between 5 to 10% of Bayer's and ACS's products, the number of end-users that would switch to Metaldehyde-based molluscicides would be marginal. Two wholesalers stated that the three products are substitutable, but one explained that customers' choice depends on the resistance of the product to rain, and that customers would still purchase Bayer's and ACS's products even in case of a price increase because they have a higher resistance to rain.
- (554) In the light of the above, the Commission has come to the conclusion that the proposed transaction would eliminate, at least in the short term, the only real competitor of Bayer in the Belgian market for molluscicides, leading to the creation or strengthening of a dominant position in such a market.
- (555) In **Ireland**, the parties' combined market share in the year 2000 was of about [90-100]\*% (Bayer [80-90]\*%, ACS [10-20]\*%) and the parties expect to maintain their market position at this level during the next three years. Metaldehyde-based molluscicides account for [0-10]\*% of the Irish market.
- (556) The parties submit that third companies could easily enter the market. In this respect, the parties have explained that ACS did not have any activity in the Irish market in 1998 and 1999 and achieved [10-20]\*% market share in 2000. However, no third companies are expected to enter the Irish market with molluscicides based on Metaldehyde molluscicides or on other active ingredients.
- (557) As in Belgium, also in Ireland the rain fastness of molluscicides is of essential importance. The resistance of Bayer's and ACS's molluscicides to weather conditions has not been equalled by local formulators of Metaldehyde-based molluscicides. All the four wholesalers who submitted comments during the investigation confirmed that Metaldehyde-based molluscicides are not as efficacious as Bayer's Methiocarb-based molluscicides, and that they would continue to purchase Bayer's and ACS's products also in case of a price increase of 5-10%. A wholesaler stated that Bayer's Methiocarb-based molluscicide is not substitutable by Metaldehyde-based molluscicides for use on crops such as sugar beet where Bayer's product is used to control slugs and leather jackets larvae. Only one wholesaler stated that, in case of such a price increase, it would consider to use alternative insecticides in conjunction with Metaldehyde. Two wholesalers expressed concerns that the proposed transaction might lead to a price increase of Bayer's and ACS's molluscicides.
- (558) The parties also submit that they could face competition from generic suppliers in the future. As explained above, however, there are only two Asian producers of generic Methiocarb and Thiodicarb, which are not active in Europe and which would very likely not enter this market after the proposed transaction. Their entry in the Irish market would be even more unlikely, given the relatively small size of this market and the significant market position of the parties.

- (559) In the light of the above, the Commission has come to the conclusion that the proposed transaction would remove from the Irish market for molluscicides the only effective competitor of Bayer, leading to the creation or strengthening of a dominant position in such a market.
- (560) In **Portugal**, the parties' combined market share in the year 2000 was of about [70-80]\*% (Bayer [70-80]\*%, ACS [0-10]\*%) and the parties expect to maintain their market position at this level during the next three years. The remaining market share is divided between two main local formulators of Metaldehyde-based molluscicides (Agroquisa, with about [0-10]\*% market share, and Permutadora, with about [20-30]\*%) and other small local formulators.
- (561) The parties submit that the proposed transaction will not affect competition in the Portuguese market for molluscicides because ACS adds only a small percentage to Bayer's market share. However, the market investigation has shown that only ACS's Thiodicarb-based molluscicide is considered as efficacious as Bayer's Methiocarb-based molluscicide in the Portuguese market. Three out of four wholesalers stated that in case of a permanent price increase of 5-10% of these two products most end-users would not switch to Metaldehyde-based molluscicides. One of these wholesalers explained that the price of Bayer's molluscicide is already higher than the price of Metaldehyde-based molluscicides. Two wholesalers expressed concerns that the proposed transaction might lead to a price increase of Bayer's and ACS's molluscicides.
- (562) The parties further submit that Lonza or other generic suppliers might enter the market in case of an anticompetitive price increase of the merged entity's products. As explained above, however, Lonza is not a producer of molluscicides, as it simply supplies Metaldehyde to local formulators of molluscicides. With regard generic competition, it has already been explained above that there are only two Asian producers of generic Methiocarb and Thiodicarb, which are not active in Europe and which would very likely not enter this market after the proposed transaction. Their entry in the Portuguese market would be even more unlikely, given the relatively small size of this market.
- (563) In the light of the above, the Commission has come to the conclusion that the proposed transaction would remove from the Portuguese market for molluscicides the only effective competitor of Bayer, leading to the creation or strengthening of a dominant position in such a market.
- (564) In **Sweden, Finland and Iceland**, Bayer is the [...] with a market share of [90-100]\*%. The proposed transaction would remove a strong potential competitor that, given the climatic conditions of these countries, would be able to enter these markets with a product as efficacious as Bayer's product.
- (565) With regard to Finland, the parties submit that Lonza or generic suppliers could enter the market easily. Lonza, however, is not a molluscicide producer, and in any event it could not supply Metaldehyde to local formulators in Finland because in such a country Metaldehyde-based molluscicides have been banned since a number of years. With regard to generic suppliers, as it has been

explained above, Asian producers would not have any incentive to enter these markets given their relative small size.

- (566) A new type of active ingredient with molluscicide properties produced by Neudorff, Fe(3)Phoospaat, is currently under registration in Sweden. However, it is uncertain when the registration procedure will be completed and whether it will be successful.
- (567) The parties further submit that ACS [...]\*, the Commission holds the view that the proposed transaction would remove a realistic potential competitor from the national markets for molluscicides of Sweden, Finland and Iceland.
- (568) The parties submit that if it is uncertain that the new Fe(3)Phoospaat-based molluscicide will successfully enter the Swedish market, it is inconsistent to argue that ACS would be a potential competitor, since ACS's product is not even under registration in Sweden, Norway and Iceland. The Commission notes, however, not only that ACS's product is already registered in most national markets, but that it has also shown to be able to penetrate rapidly into new national markets, as the parties claim to have happened in Ireland.
- (569) In the light of the above the Commission has come to the conclusion that the proposed transaction would lead to the strengthening of Bayer's dominant position also in the following national markets for molluscicides: Sweden, Finland and Iceland.

#### General conclusion on molluscicides

- (570) In the light of the above, the Commission has come to the conclusion that the proposed transaction would lead to the creation or strengthening of a dominant position in the following national markets for molluscicides: the UK, Belgium, Ireland, Portugal, Sweden, Finland and Iceland.

### **C. Herbicides**

- (571) Both Bayer and ACS are active in the development and production of herbicides. Herbicides are crop protection products, which prevent or reduce weed competition in a crop and are thus capable of replacing or reducing manual and mechanical weeding.
- (572) Bayer estimates that the value of the herbicides market in the EEA amounted to EUR 2070 million in 2000.

#### ***C.1. Relevant product markets***

- (573) The parties in principle follow the approach to product market definition taken by the Commission in M.1806 - *AstraZeneca/ Novartis*.
- (574) A first distinction is drawn between selective herbicides and non-selective herbicides. Non-selective herbicides are crop protection agents designed to clear fields of weeds after the harvest of one crop and prior to the sowing of the next.

They are effective against many types of plants, including cultivated crops, which they would kill if applied to them. In contrast, selective herbicides are designed to kill only the weeds and to leave intact the crop to which they are applied. From the point of view of the farmer, the type of crop on which a selective herbicide is used is the most important factor in determining product substitutability. The parties therefore submit that selective herbicides, which protect different types of crops constitute for most crops separate relevant product markets.

- (575) With respect to the perennial crops fruits and nuts, citrus fruits and grapes, however, non-selective herbicides and so-called semitotal herbicides are also used to control weeds without damaging the crops. Thus, with regard to the said crop segments selective herbicides and non-selective herbicides are competing with each other. The parties therefore submit that with regard to these crops, a further distinction between selective and non-selective herbicides is inappropriate. Whether citrus fruit constitutes a separate product market from fruits and nuts can be left open in this case because the competitive assessment would not change.
- (576) In previous merger decisions, the Commission held that for some crops the active substances contained in the herbicide product formulations are mainly effective against weeds within one of the two principle categories of weeds: broadleaf weeds and grasses. As specific types of crops are mostly affected by "mixed weed populations" comprising both grasses and broadleaf weeds, there is a need for treatments that kill both types of weeds. Two options are available to the farmer: either he purchases a number of herbicides with specific selectivity and mixes them in accordance with the types of weeds that appear, or he can buy a ready-made product that contains the desired mixture of active substances for grass control and broadleaf weed control. Some products are active against both types of weed and are referred to as "broad-spectrum" herbicides.
- (577) Broadleaf weed herbicides are not direct substitutes for herbicides used for control of grasses (graminicides), and vice-versa. The farmer who is faced with harmful grass weeds in his crop fields needs to use herbicides, which are capable of controlling these particular weeds and vice versa. The same arguments apply, *mutatis mutandis*, for the control of broadleaf weeds. However, the Commission noted in previous decisions that the two complementary market segments are linked through the presence of broad-spectrum herbicides. For a number of herbicides, the market investigation conducted by the Commission in M.1806 - *AstraZeneca/Novartis* indicated that broad spectrum herbicides effectively derive a substantial part of their sales values both from their capacity to control grass weeds and from the capacity to control broadleaf weeds. As a result of the so-called chain of substitution effect, an effective competitive pressure exists in markets where broad-spectrum herbicides can be used to replace graminicides and broad leaf herbicides. This is due to the fact that neither the supplier of broad spectrum herbicides nor manufacturers offering graminicides or broadleaf herbicides as part of their product portfolio can increase prices without facing the risk that their customers will switch to other products.

- (578) For these reasons, the parties submit that with regard to cereals, maize, rice, and potatoes a distinction between broad leaf herbicides and graminicides is inappropriate. In all these segments, broad-spectrum herbicides derive a substantial part of their sales values both from their capacity to control grass weeds and from their capacity to control broadleaf weeds. This approach differs from that of the Commission's approach in M.1806 - *AstraZeneca/Novartis*, where a distinction between broad leaf herbicides and graminicides was made also with respect to potatoes, as well as for vegetables, beets, oil seeds and soybeans.
- (579) In M.1806 - *AstraZeneca/Novartis* the Commission furthermore considered a distinction between early application products (pre-sowing or pre-emergence herbicides) and late application products (post-emergence herbicides). As these types of herbicides are used to treat the same types of weeds and display the same degree of effectiveness, the farmer has, before sowing at least, a certain degree of flexibility in choosing the time of application. As time goes by and weed problems occur in the crop fields, pre-sowing herbicides or even pre-emergence herbicides are no longer substitutes for post-emergence herbicides. However, in most cases, at least in the early stage of application of herbicides, pre-emergence herbicides and post-emergence herbicides are substitutable for each other.
- (580) In light of the role of broad-spectrum products and the sufficient degree of substitutability between pre- and post-emergence applications, the Commission in M.1806 - *AstraZeneca/Novartis* considered the markets for cereal, maize and rice herbicides as the relevant product markets. With respect to the herbicide markets for potatoes, vegetables, sugar beets, soybean and oil seeds the Commission, however, distinguished further between pre- emergence herbicides and post-emergence graminicides and identified a separate product market for post-emergence graminicides. Following the market investigation in the present case this approach seems to be still correct, although with respect to cereal herbicides the importance of the grass control segment is growing in light of increasing resistance problems of so-called problem grasses (in particular black grass, rye grass and wild oat).
- (581) Several market participants are of the opinion that barley forms a separate product market in cereal herbicides, since many cereal herbicides cannot be used on this crop. However, it can be left open in the present case whether barley herbicides form a separate product market since the assessment would not change.

## **C.2. Assessment**

- (582) At the national level, the parties' activities overlap in a large number of crops and Member States. According to the information in the Form CO, there are 44 affected markets in herbicides where the combined market share of the parties is 35% or more. Of these markets, the parties have a market share exceeding 40% in 39 markets and more than 50% in 26 markets.

- (583) Following the investigation, the Commission considers that competition is unlikely to be negatively affected on 53 affected markets out of 80 in total, for one or more of the following reasons:
- (584) The combined market share of the parties is low; there is no overlap between the parties' activities either because of misallocation of market share or because the overlap has ceased to exist in the meantime (e.g. distribution agreement for third party products cancelled); the market share increment is very small and the structure of the market is unlikely to be affected by the operation; the structure of the market is unlikely to be affected by the operation as the pricing incentives of the parties' products would not be affected (product mainly priced to other crops); the parties have largely overestimated their market position; there are strong competitors who are likely to be able to provide effective competition on the market; new product introductions by competitors are likely to provide strong competition to the parties' products in the near future.
- (585) For the reasons set out below the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position in the herbicide markets for six crops: Beets, cereals, maize, potatoes, vegetables and cotton harvest aids.

#### **Beets herbicides markets**

- (586) In 2000, the EEA-wide market in beet herbicides was approximately EUR 225.4 million. The most important national beet herbicide markets are Germany ([...]\*), France ([...]\*), and Italy ([...]\*). The parties estimate that they would have [50-60]\*% (Bayer [20-30]\*%, ACS [20-30]\*%) of an overall EEA beet herbicides markets, ahead of BASF ([0-10]\*%) and DuPont ([0-10]\*%). On a national basis the combined market share of the parties would be as follows:<sup>21</sup>

<b>Member State</b>	<b>Bayer</b>	<b>ACS</b>	<b>Combined</b>
Austria	[30-40]*%	[0-10]*%	[40-50]*%
Belgium	[10-20]*%	[20-30]*%	[40-50]*%
Denmark	[30-40]*%	[10-20]*%	[50-60]*%
Finland	[30-40]*%	[20-30]*%	[50-60]*%
France	[10-20]*%	[30-40]*%	[40-50]*%
Germany	[20-30]*%	[30-40]*%	[60-70]*%
Greece	[20-30]*%	[20-30]*%	[40-50]*%
Ireland	[20-30]*%	[10-20]*%	[40-50]*%
Italy	[10-20]*%	[20-30]*%	[40-50]*%
Netherlands	[30-40]*%	[30-40]*%	[60-70]*%

<sup>21</sup> Source: Parties' estimation

Spain	[10-20]*%	[20-30]*%	[40-50]*%
Sweden	[50-60]*%	[10-20]*%	[70-80]*%
UK	[10-20]*%	[10-20]*%	[30-40]*%

- (587) In M.1806-AstraZeneca/Novartis the Commission had identified a separate market for post-emergence graminicides. However, there are no competition concerns in this market in the present case. In the remaining three segments of the market for beets herbicides, i.e. broad leaf pre- and post- emergence as well as pre-emergence herbicides, which together constitute the residual beets herbicides market, the parties would have a combined market share in the EEA of [50-60]\*%. On a national level, market shares would vary between [40-50]\*% in Belgium and [70-80]\*% in Sweden. The high market shares in the overall market are derived from the parties strength in the segment of post-emergence broadleaf herbicides. The market for post-emergence broad leaf herbicides is by far the biggest segment of the overall EEA beet herbicides market, accounting for EUR 163.9 million or 73%. The parties estimate that they would have [50-60]\*% of this segment on an EEA-level. On a national basis, the market share of the parties varies between [40-50]\*% in the United Kingdom and [70-80]\*% in Portugal. The merged entity would become by far the leading supplier in all Member States but Luxembourg for which no data exists. Based on the sales projections of the parties the situation in 2004 essentially remains the same. In only 4 countries the parties forecast a combined market share of less than [40-50]\*%, which will, however, still be between [30-40]\*% and [40-50]\*%.
- (588) The parties put forward a number of reasons why, despite these high market shares, no concerns of dominance should arise as a result of the proposed transaction. Their main argument is that all four active substances used in these markets are off-patent, resulting in strong competition from generic suppliers. However, as will be shown, control of this market is less driven by the active ingredient side but rather by the control of different formulation types via formulation patents.
- (589) In all Member States, except Spain and Sweden, where Bayer also sells third party products, Bayer generates [...] sales in this market with Metamitron sold under the brand name Goltix. Metamitron is a pre- and post- emergence cross-spectrum herbicide with a better profile in broadleaf weeds. Metamitron was first introduced 1975 and is off-patent since 1993. It belongs to the chemical class of Triazines. This chemical class is a rather old class, first introduced in 1956, and has commodity status since the vast majority of its products are off-patent. Sales of products of this class have been in decline since 1996.<sup>22</sup> However, the decline of Goltix has been less than [...]\*. Its sales trend is reported as being globally stable.<sup>23</sup> Bayer aims to stabilize Goltix with new formulations such as Goltix WG 90, which it started selling in the main European countries in 2001 and which enjoys registration data protection, and new mixtures such as Metamitron and Triflusaluron.

<sup>22</sup> Phillips McDougall- AgriService, Products Section 2000, p.53.

<sup>23</sup> Wood Mackenzie, Agrochemical Service, Market Studies: Crops, 2001, p.156



- (590) ACS's active ingredients used for the formulation of post-emergence broad leaf herbicides are Desmedipham, Ethofumesate and Phenmedipham. Phenmedipham and closely related Desmedipham were introduced in 1968. Both active ingredients belong to the chemical class of carbamates and are the bestselling products in this class. Although sales of this class are expected to decline by 3% each year until 2005, Phenmedipham is expected to maintain its market share.<sup>24</sup> These active ingredients are sold as mixtures and as straight formulations mostly under the brand Betanal. As with Bayer, all of ACS's active ingredients are off patent. Consequently, the parties argue, generic suppliers would increasingly gain market shares at the expense of Bayer and ACS.
- (591) The development of pre-mixtures with existing compounds remains an important feature in this market. For instance, ACS has launched mixtures such as Betanal Progress OF with all its three active ingredients in 1997. ACS has a formulation patent for Betanal Progress. ACS is going to launch several new premixes of its three products, all as extensions of the Betanal family (i.e. Betanal expert), in almost every single Member State. In addition there will be new mixtures with Bayer's Metamitron, including a fourway mixture (Betanal Quattro). This strategy allows the parties to extend patent protection by formulation and trademark protection. It is a successful defence strategy against generic competition. A similar effect of extended protection after the expiry of the patent for the active ingredient is caused by the protection of data under the copyright laws. ACS is the only data holder for Desmedipham and has a task force for Phenmedipham with [...] and for Ethofumesate with [...]. Bayer enjoys data protection for the whole Goltix family worth several million Euro until [...].
- (592) Moreover, many of the generic competitors do not produce the product themselves. ACS supplies its products to, among others, FCS, United Phosphorus, Griffin and Sipcam. This creates a dependency of these generic suppliers and allows ACS to realize economies of scale unmatched by any other producer. [...].
- (593) Furthermore, maintaining a registration is costly, the distribution of the herbicides needs a sales network and the financial resources of most generic suppliers are rather limited. Moreover, some of the generic suppliers depend for their products on the parties for formulation patents. [...].<sup>25</sup>
- (594) The parties have submitted projections for their markets shares in 2004 which are substantially lower than the figures for 2000. ACS forecasts a [...] trend until 2003, and a [...] in 2004. Bayer forecasts a rather substantial decline in the EEA until 2004, although, on a world-wide basis, sales are forecast to be stable. However, the combined market share in the EEA remains still very high. This will be the case despite, as the parties mention, recommendations by official and non-governmental advisors, including governmental organizations, to use generic products having more or less the same properties as the branded original product.

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<sup>24</sup> Phillips McDougall- AgriService, Products Section 2000, p. 83

<sup>25</sup> [...].

- (595) Another argument by the parties concerns the development of the price. The parties claim that their products have suffered an essential price decrease (a decrease of up to [...] of the end-user price of Bayer products and a decrease of up to [...] of the end-user price of ACS products). However, a price reduction does not necessarily mean that also the margins have suffered, due to, for instance, a more efficient production. [...] <sup>26</sup>.
- (596) With regard to the French market the parties argue that most of the sales of ACS stem from the sale of third party products, including [...] Metamitron and BASF's Chloridazon. However, even if ACS gets its products from third parties, ACS has a margin of maneuver in terms of the price/cost margin of the final product which in fact does allow it to compete against Bayer. Moreover, the fact that the new entity would sell a product containing an active ingredient owned by [...], the [...] competitor in this market, creates a structural link which could give rise to additional competition concerns.
- (597) Lastly, the parties claim that in Denmark and Sweden the demand side is highly concentrated. In Denmark, three customers account for [90-100]% of the parties' sales. In Sweden the top four customers have [90-100]% of the parties' sales. However, with a market share of [50-60]% in Denmark and [70-80]% in Sweden there is a certain imbalance in bargaining power. Moreover, both Denmark and Sweden are relatively small markets which are of lesser interest to Bayer and ACS than to the customers.
- (598) Respondents to the Commission's market investigation voiced concern about the control of the parties over the four most important molecules and the best-known brands in this market in one hand and especially the possibility to freely combine all 4 broad leaf herbicides. According to these market participants, for a sufficient weed control in sugar beets, all 4 active ingredients need to be combined in a sequence of treatments. Bayer and ACS recommend mixtures of at least 3 of the 4 active substances. Thus, mixtures of Ethofumesate, Phenmedipham, Desmedipham and Metamitron in various combinations have become the standard across the EU.
- (599) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position for herbicides in sugar beets (other than post-emergence graminicides) in all Member States.

### **Cereal Herbicides**

- (600) The market for cereal herbicides is (in terms of value) the largest market for selective herbicides. In 2000, the EEA-wide turnover in cereal herbicides was approximately EUR 826 million. The parties estimate that they would have [30-40]% (Bayer [0-10]%, ACS [30-40]%) of an overall EEA cereal herbicides markets, ahead of Syngenta with [10-20]%. The parties forecast for their market share in 2004 is [30-40]% (Bayer [0-10]%, ACS [30-40]%), ahead of Syngenta with [10-20]%.

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<sup>26</sup> [...]\*

- (601) The parties' combined market share in **Belgium** is [40-50]\*% (Bayer [0-10]\*%, ACS [30-40]\*%). Leading competitors include Dow ([10-20]\*%), DuPont ([0-10]\*%), Syngenta ([10-20]\*%) and BASF ([0-10]\*%). Bayer's sales in 2000 were derived exclusively from distributing products from third parties, including ACS. However, Bayer will replace sales of third party products completely until 2004 and introduce its new own products accounting for [0-10]\*% of the market. The parties expect to increase their market share to [40-50]\*% in 2004.
- (602) In **Germany** the parties' combined market share is [50-60]\*% (Bayer [0-10]\*%, ACS [50-60]\*%). The main competitors are BASF ([10-20]\*%), DuPont ([10-20]\*%), Dow ([0-10]\*%) and Syngenta ([0-10]\*%). Bayer generated about [60-70]\*% of its turnover in the German market with its own product Herold, which is a mixture of Flufenacet and ACS' active ingredient Diflufenican. The remaining [40-50]\*% of Bayer's turnover in this market are to be attributed to third party products, one of which supplied by DOW will be discontinued as a consequence of the proposed merger. However, Bayer plans to replace all third party products with own products and to keep its [0-10]\*% share of the market in 2004.
- (603) In **Sweden**, the parties' combined market share accounts for [60-70]\*% (Bayer: [30-40]\*%, ACS: [20-30]\*%). Other multinational R&D companies include BASF ([10-20]\*%), Monsanto ([0-10]\*%), Dow ([0-10]\*%), Syngenta ([0-10]\*%) and DuPont ([0-10]\*%). Bayer does not sell own cereal herbicides in Sweden, but generates all of its turnover with third party products distributed by its subsidiary Gullviks, a wholesaler. Gullviks is one of the three leading wholesalers in Sweden, accounting jointly for [90-100]\*% of the demand. The parties claim, that, since Bayer owns Gullviks, the other leading distributors would have the incentive to concentrate on the product portfolio of the parties' competitors in order to compete more efficiently on the distribution level. However, the parties forecast to have a market share of [70-80]\*% in 2004, an increase of [0-10]\* percentage points. The increase is in part due to Bayer introducing its own new product Propoxycarbazon which is expected to account for [10-20]\*% of the market. As a result, [40-50]\*% of the market would be controlled by products owned by the parties. In their reply to the Statement of Objections and a further submission, Bayer showed some evidence that [...]\*. Therefore, the market share of Propoxycarbazon will be significantly less than [...]\* originally projected (based on a marketing already in 2002). However the combined market share would be still beyond 60%, even if Propoxycarbazon will not [...]\*.
- (604) The high market shares in these countries can be explained by the parties' particular strength in the segment for grass control (graminicides plus broad spectrum). There are only a few pure graminicides in the market. However, after the proposed concentration Bayer would control two, Fenoxaprop, which is still patent protected, and Flufenacet. The third major graminicide, Clodinafop, is owned by Syngenta. In combination with their strong portfolio of broad spectrum herbicides which also control grass weeds the parties would have the following market shares in this segment in 2000: Belgium [50-60]\*% (Bayer [0-10]\*%, ACS [50-60]\*%), France [40-50]\*% (Bayer [0-10]\*%, ACS [30-40]\*%),

Germany [60-70]\*% (Bayer [0-10]\*%, ACS [60-70]\*%), the Netherlands [60-70]\*% (no overlap), Sweden [70-80]\*% (Bayer [20-30]\*%, ACS [40-50]\*%).

- (605) The combined market shares of the parties in the segment for grass control are forecast by the parties to further increase. With the introduction of the new graminicide Propoxycarbazone by Bayer and the new active ingredient Mesosulfuron by ACS, which, although not a pure graminicide, will be extremely efficient against the problem grass black grass, the merged entity will have the broadest and most modern grass control portfolio, including also Flufenacet, Fenoxaprop, Diclofop and Isoproturon in various mixtures. As a result the projected market shares in 2004 would, with the exception of Germany, where the market share remains stable at [60-70]\*%, increase to [60-70]\*% (Bayer [10-20]\*%, ACS [50-60]\*%) in Belgium, [40-50]\*% in France (Bayer [0-10]\*%, ACS [40-50]\*%) and [70-80]\*% in the Netherlands (Bayer [0-10]\*%, ACS [60-70]\*%).
- (606) The increase of the market share of the parties in both the grass control segment and the overall market can be attributed to the new products both parties have recently launched or are in the process of launching. Bayer's success is based on two new products, which are both excellent in grass control. Flufenacet mixed with Diflufenican (brand name Herold) is the older of the two, but has still growth potential and patent protection until 2009. Bayer plans to increase its sales of Flufenacet in cereals by [...] until 2004. Bayer's latest molecule Propoxycarbazone (MKH 6561, brand name Attribut) has patent protection [...]\*. Propoxycarbazone is an ALS-inhibitor which offers an alternative mode of action for winter wheat, -rye and -triticale, but not barley. [...]\*. By way of example, Bayer forecasts a market share of [0-10]\*% for both products in Belgium in 2004 (both had [0-10]\*% in 2000). A third new product developed by Bayer and sold in Northern America, Flucarbazone, however, will not be marketed in the EEA.
- (607) ACS has two new active ingredients. Iodosulfuron has already been launched in some Member States. It is sold straight, [...]\*, patent protection [...]\*), [...]\*, patent protection [...]\*) and the latest new active ingredient Mesosulfuron, patent protected [...]\*. Both Iodosulfuron and Mesosulfuron are broad spectrum herbicides with grass control activity. Mesosulfuron (04 H) is advertised by ACS as representing a new standard of blackgrass control, the grass weed with probably the most troublesome resistance in Europe. The parties forecast a market share within two to three years after launch of between [10-20]\*% in Sweden and [10-20]\*% in Belgium.
- (608) In addition ACS will launch new mixtures of [...]\*. In Germany ACS will premix [...] with [...] and Bromoxynil [...]\*. Although a rather old compound, Bromoxynil still has some interesting characteristics such as no weed resistance. It is off-patent since the mid eighties. However, ACS owns a patent on this mix. Since the market share of the parties in Belgium, Germany and Sweden increases until 2004, these new mix products do not only replace older chemistry, as the parties claim, but help to strengthen their position.

- (609) The parties would have not only the largest portfolio of active ingredients in the market for cereal herbicides, but also the best molecules for the control of grass, in particular pure graminicides, but also broad spectrum. The merged entity would not only have Flufenacet which is cell division inhibitor, but also all three leading modes of action against grass weeds in its portfolio, and in each group a or the leading molecule: the PS-II inhibitors (Isoproturon), the "ACC-ase" mode of action (Fenoxaprop) and the "ALS" mode of action (Iodosulfuron, Mesosulfuron and Propoxycarbazone). This has been confirmed by several market participants which have pointed out that the three new products, which are all active against grass weeds, would strengthen the dominant position the parties enjoy already today.
- (610) In their reply to the statement of objections the parties claim that in particular with regard to Iodosulfuron, Mesosulfuron and Propoxycarbazone there will be internal cannibalisation, since all these three new products have the same mode of action (ALS). However, the effect of any such internal competition has not been quantified by the parties. Moreover, for resistance management not only the mode of action but also the chemical class is important. Bayer's Propoxycarbazone belongs to another chemical class than Iodosulfuron and Mesosulfuron.
- (611) The only other company with a new product in the pipeline is BASF. However, its new active ingredient Tritosulfuron is a broadleaf herbicide. Moreover, it will be introduced as from 2003 onwards only, and, according to BASF's business plan, achieve its highest market share in Germany in 2004 with [...]%; [...]\*. BASF has recently introduced a new active ingredient Picolinafen. Picolinafen is a post-emergence broadleaf herbicide with the same mode of action as Diflufenican. However, Diflufenican can also be applied pre-emergence. Diflufenican is, therefore, more versatile which is also reflected in the fact that there are already more than 30 mixtures of Diflufenican. [...]\*.<sup>27</sup> It is, therefore, unlikely that the new Picolinafen will be able to make significant inroads into the market for cereal herbicides. BASF estimates to get [...]% [...]\* the German market in 2004 with Picolinafen and premixes of Picolinafen based on its own portfolio. The parties themselves forecast a stable or even lower market share of BASF in Belgium, France, Germany or Sweden in 2004.
- (612) The parties claim that with regard to grass weed control DuPont's Flupyralsulfuron (brand name Lexus) has enormous potential. However, Flupyralsulfuron is only active against one grass, black grass (*alopecurus myosuroides*). The key advantage of Lexus is that it has activity in resistant black grass situations. However, the timing of Lexus' application on black grass is narrower than competing products because it needs to be applied when the black grass is small (2-3 leaves) while fop's can be applied during a much broader time window. Moreover, the new Mesosulfuron by ACS is expected to have equally good efficacy on black grass as Flupyralsulfuron. There are other products such as the fop's (Topik from Syngenta and Puma from ACS) which

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<sup>27</sup> Flufenacet in cereals in Europe, Chart 7 Submission by Bayer dated 10.1.2002 in response to the Commission questionnaire of 14.12.2001

have both a higher level of efficacy and broader grass control. Lexus is further limited since it cannot be applied on barley.

- (613) Monsanto introduced a new sulfonylurea in 1998. Sulfosulfuron is sold under the brand name Monitor and is a compound owned by Takeda which has patent protection until at least 2007. Monitor is a foliar and residual herbicide, formulated as water-dispersible granule containing 80% (W/W) of Sulfosulfuron. Monitor is recommended for use as a spring post emergence treatment in all varieties of wheat. It is mostly a graminicide even if it does control some broadleaf weeds. Since it is confined to wheat its market share will at peak, according to Monsanto's business plans, not be more than [...] %\* on an EEA level.
- (614) The parties claim that the proposed transaction will not lead to competitive concerns in any of the above markets. Bayer's position is relatively weak, reflected in market shares of below [0-10] %\* and often below [0-10] %\*. However, total market shares are high in Belgium, Germany and Sweden. ACS's Diflufenican has been the best-selling active ingredient in cereal herbicides over the last years, accounting for a turnover of approximately EUR [...] \* million in Europe. Although patent protection for Diflufenican has expired in 2001, its market position is unlikely to erode quickly, since it is not sold straight but always in mixtures in the EU. Therefore, even if Makhteshim Agan and other generic competitors will be able to register and market Diflufenican in 2004, like any other generic producer it would have to find mixing partners. Some of the more recent Diflufenican mixtures, however, are patent protected until 2004 (Flurtamone, ACS) or even 2009 (Flufenacet, Bayer).
- (615) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the markets for cereal herbicides in Belgium, Germany and Sweden.

### **Maize herbicides**

- (616) The overall market value of the European maize herbicide market is EUR 361.3 million. Within the EEA, three countries account for roughly [80-90] %\* of the sales of maize herbicides: France (EUR [...] \*), Germany (EUR [...] \*) and Italy (EUR [...] \*). The parties estimate that they would have [20-30] %\* (Bayer [10-20] %\*, ACS [...] %\*) of the overall EEA maize herbicides markets, ahead of Syngenta with [20-30] %\*, BASF ([10-20] %\*), Monsanto ([0-10] %\*), Du Pont ([0-10] %) and Dow ([0-10] %\*). The parties estimate their market share to increase to [20-30] %\* in 2004. In a later submission this figure was corrected to 24% due to lower sales of its new product MaisTer (see below).
- (617) The proposed transaction would lead to two affected markets in which the parties would have high market shares in 2000. In **Belgium** the parties' combined market share amounts to [50-60] %\* (Bayer: [40-50] %\*, ACS: [0-10] %\*). Main competitor is BASF with a market share of [20-30] %\*. Belchim, the exclusive distributor of the Japanese companies MC and ISK in Belgium, accounts for approximately [0-10] %\*. The high market share is derived to a large extend from the sale of Bayer's Sulcotrione, which accounts for [30-40] %\*

of the total market. ACS derived most of its market share ([0-10]\*%) by distributing Bropyr, a Syngenta product. In the meantime this distribution contract has been terminated. The only other product by ACS is Isoxaflutole (brand name Merlin). The parties estimated to account for [60-70]\*% of the Belgian market in 2004. In a later submission this figure was corrected to [30-40]\*%. This dramatic decrease in market share as opposed to 2000 is, according to the parties, due to a loss of sales of [...] and less favourable sales of [...].

- (618) In the **Netherlands**, the parties' combined market share amounts to [50-60]\*% (Bayer: [40-50]\*%, ACS: [10-60]\*%). Syngenta's market share is [20-30]\*%. Bayer sells only Sulcotrione, whereas ACS is left with Isoxaflutole (brand name Merlin), after the termination of the distribution contract with Syngenta for Bropyr. Bropyr accounted for [10-20]\*% of the market in 2000. The parties estimated to account for [60-70]\*% in 2004. In a later submission this figure was corrected to [30-40]\*%. The reason cited for this decrease from [50-60]\*% in 2000 to only [30-40]\*% in 2004 is that the market share of [...] will go down from [40-50]\*% to only [10-20]\*%. As in Belgium the main reason for the loss of sales of Bayer's Sulcotrione is the introduction of a similar, but, according to Bayer, superior product by Syngenta, called Mesotrione. Moreover, Bayer claims that its product, Sulcotrione, is subject to two regulatory restrictions in the Netherlands which puts it at a disadvantage vis-à-vis Mesotrione. The Dutch authorities limit the use of active substances to 1000g per ha. Since Sulcotrione needs a higher dose rate in the Netherlands than Mesotrione (300g vs 100g), Sulcotrione cannot be used as often as Mesotrione. Secondly, Sulcotrione must not be used on soil which has a pH-value in excess of 6. According to Bayer, this excludes the use of Sulcotrione in 20-30% of the Dutch maize acreage.
- (619) However, on the acreage where Sulcotrione cannot be used the two products are not in competition. Therefore, sales of Mesotrione in that area cannot affect the position of Sulcotrione. In their reply to the SO Bayer claims that in the Netherlands customer applicators and not the farmers themselves apply herbicides to get the maize field weed free. Since these servicemen treat large areas they would use the product which is applicable everywhere, i.e. Syngenta's Callisto. However, no quantification of the effect of such a change by these customer applicators has been provided.
- (620) The 1000g restriction would still allow for three applications of Sulcotrione at full rate, i.e. 300 g/ha. However, as the parties acknowledge themselves, farmers usually apply maize herbicides in one time, and as a tank mixture of 2-3 products. If used in mixtures the full rate of Mikado is normally reduced. There is, therefore, no potential with either product to reach the 1000 g/ha in a normal season.
- (621) The parties claim, that Bayer's product Sulcotrione (brand name Mikado), which has been acquired by Bayer from Syngenta in 2000, could be fully substituted by Syngenta's new product Mesotrione (brand name Callisto). Thus, in the parties' opinion, it can be expected that Syngenta will be able to strengthen its market position with the foreseen launch of Callisto in all those member states where it is going to be registered, notably in Belgium and the Netherlands. They forecast

that Syngenta will be able to achieve a market share which is at least as high as the market share of the combined entity in 2004.

- (622) Mesotrione and Sulcotrione belong both to the same Triketone chemistry and are therefore competitors in the same submarket. Owing to the fact that both products have been developed from the same chemical origin, the biological product profiles are very similar. Bayer claims that Mesotrione has a better efficacy on most weeds. Although, in general, Sulcotrione often gives superior control of grass weeds and Mesotrione gives better control of some broad leaf weeds, there does not seem to be a real gap in performance between the two. Moreover, as a consequence of the proposed takeover, Bayer will have access to ACS's herbicides (Foramsulfuron, Iodosulfuron, Isoxaflutole and Bromoxynil) which will provide for ample possibilities of mixtures with Sulcotrione to give it broad leaf weed control at least equal to Callisto.
- (623) Given that Syngenta's product has been launched only in 2001, mixtures are in an early stage of development and will not be marketed before 2004. Therefore, it seems unlikely that Callisto will be able to cause such a dramatic decrease of the sales of Sulcotrione. The parties themselves forecast for Syngenta an increase from 8% to 15% in Belgium and from 27% 34% in the Netherlands which would not be enough to compensate for the enormous loss of Bayer's Sulcotrione. However, the introduction by Syngenta of a very similar product with an almost identical activity will have a constraining effect on Bayer in terms of pricing.
- (624) Furthermore, the parties' claim, that BASF is developing a new product. However, BASF's new product Tritosulfuron will be launched in 2003 and will not achieve major sales outside Germany. Its market share in 2004 in Belgium and the Netherlands will be below [...]%. The parties also claim, that BASF is re-registering s-Dimethenamid which would further increase BASF's market share. However, according to BASF, s-Dimethenamid is only replacing the existing Dimethenamid, a necessary step to improve its ecological profile. In addition, BASF has distribution rights to Nicosulfuron, another patent protected Sulfonyurea belonging to the Japanese company ISK, but only for some Member States. ACS had distribution rights for the three Member States France, Portugal and Spain, which have been withdrawn by ISK with effect as of summer 2002.
- (625) As mentioned by several market participants, also ACS will launch new products. ACS will launch Foramsulfuron straight and mixtures of Foramsulfuron from 2002 onwards. [...] to come to market is a combination of Foramsulfuron and Iodosulfuron (brand name MaisTer). The new product is a broad spectrum post-emergence maize herbicide which has an impressive spectrum. According to ACS it will be able to control 45 different weeds with an efficacy grade of more than 90% and 10 more with a degree between 80% and 90%.<sup>28</sup> A specific strength of the new product is its safener technology based on Isoxadifen-ethyl, which allows the product to be used in [...] maize varieties.

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<sup>28</sup> MaisTer, Technisches Produktprofil, Aventis Crop Science Deutschland, 2001, p.15



- (626) It should also be borne in mind that ACS has two other own molecules which are patent protected. Isoxaflutole is a broad spectrum maize herbicide, which belongs to the new class of herbicides referred to as Isoxazoles, and has patent protection until [...]\*. It is sold either straight or in mixtures with, among others, Aclonifen. ACS forecast an increase in sales for Isoxaflutole in both Belgium and the Netherlands until 2004 [...]\*. Bromoxynil is a rather old compound but has still some interesting characteristics such as no weed resistance. It is off-patent since the mid eighties. However, ACS owns a patent on a mix until up to [...]\*.
- (627) Besides Sulcotrione Bayer's maize herbicide portfolio is mainly based on Flufenacet. Flufenacet has still growth potential. It is a pre- and early post-emergence graminicide used as a basis for mixtures. Bayer's two main mixtures of Flufenacet are Flufenacet with Metosulam ("Terano", patent protection until [...]\*) and Atrazine ("Aspect", patent protection until [...]\*). Bayer will introduce Aspect also in Belgium. Bayer claims that a ban on Atrazine in Europe would reduce sales of Aspect. However, Aspect is not marketed in the Netherlands. Moreover, ACS (and other competitors with good broadleaf maize herbicides) may benefit from a ban on Atrazine in Europe. Any such gains by ACS could at least compensate any loss in the sale of Bayer's Aspect. This is supported by [...]\*.
- (628) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create a dominant position in the markets for maize herbicides in Belgium and the Netherlands.

#### Potato herbicides

- (629) The parties' estimate of the overall market value of the European potato herbicide market is EUR 77 million. The four most important national potato herbicide markets are Germany ([...]\*), France ([...]\*), the United Kingdom ([...]\*), and the Netherlands ([...]\*).
- (630) The parties estimate that they would have [20-30]\*% (Bayer [10-20]\*%, ACS [0-10]\*%) of an overall EEA potato herbicides markets, behind Syngenta with [30-40]\*% and ahead of BASF ([10-20]\*%) and Du Pont ([0-10]\*%). In **Greece** the parties would have [50-60]\*% (Bayer [30-40]\*%, ACS [20-30]\*%), in **Portugal** [40-50]\*% (Bayer [30-40]\*%, ACS [10-20]\*%) and in **Sweden** [70-80]\*% (Bayer [60-70]\*%, ACS [0-10]\*%) of the market.
- (631) If split into pre- and post- emergence herbicides, an overlap occurs only in pre-emergence herbicides since ACS is not active in post-emergence potato herbicides. The high market shares in the overall potato herbicide market is mostly derived from the parties' strong position in pre-emergence herbicides. The parties would become the market leader in this segment with market shares of [50-60]\*% and more in the following Member States: Finland ([50-60]\*%), Greece ([50-60]\*%), Italy ([50-60]\*%), Portugal ([50-60]\*%) and Sweden ([80-90]\*%). In all of these markets the overlap is more than [10-20]\*%. Moreover, the market shares in this segment are forecast to remain above [50-60]\*% in the year 2004 in Finland ([50-60]\*%), in Greece ([50-60]\*%), Italy ([50-60]\*%) and

Sweden ([70-80]\*%) and to reach [50-60]\*% in the Netherlands and [40-50]\*% in **Spain**. Only in Portugal the forecast is a decrease to [30-40]\*%.

- (632) Bayer has two main own products in the market for potato herbicides. Flufenacet is a graminicide, Metribuzin a broad spectrum herbicide which can be used both pre- and post emergence. Metribuzin, sold under the brand name Sencor, is off-patent and faces generic competition, among others by FCS in Germany. However, Bayer has recently introduced a mixture of Metribuzin with Flufenacet under the brand names Artist, Bastille and Cadou, which enjoys patent protection until 2009. This product [...]\*. For Germany, for instance, Bayer forecasts a market share of [10-20]\*% in 2004, only three years after its introduction. [...]\* the combined market share of the parties in the overall market for potato herbicides up in Italy and Spain. In Italy the parties' forecast for their combined market share of [40-50]\*% (Bayer [30-40]\*%, ACS [10-20]\*%) in 2004, up from [30-40]\*% in 2000. In Spain the figure will be [40-50]\*% (Bayer [30-40]\*%, ACS [0-10]\*%), up from [30-40]\*% in 2000.
- (633) In a later submission Bayer claimed that the new mixture Flufenacet/Metribuzin is subject to variety and use restrictions and has very limited efficacy in areas of low humidity. As a consequence, the new patented mixture would not provide the parties with a strong extension of their portfolio. However, the parties would have more than [40-50]\*% of the market in 2004 in Greece and Sweden even without the new mixture. In Spain the reduced sales forecast would, according to the parties, lead to [40-50]\*% in the segment for pre-emergence herbicides and [30-40]\*% in the overall market in 2004. Moreover, Bayer will launch Metosulam in potatoes in 2004, which would further increase the position of Bayer.
- (634) ACS has two main own products, Linuron and Aclonifen. Both are pre-emergence broadleaf herbicides. Like Bayer's product Metribuzin both Linuron and Aclonifen are off-patent. Both Bayer's product Metribuzin and ACS's product Linuron have lost considerably in terms of sales and even more than the chemical class as a whole during the period 1995-2000; Aclonifen, on the other hand, was able to outperform its class.<sup>29</sup> Moreover, ACS is the sole notifier for re-registration of Aclonifen in 2004, and has also [...]\* the base chemical Trichlorobenzene. Therefore, despite being off-patent, the merged entity would be in a position to control two of the most important products in the market for potato herbicides exclusively.
- (635) All of these countries have in common that they are very small markets with an overall market value of below [...]\*. Thus, according to the parties, these markets are only secondary markets and pricing of the products supplied into these markets is done in other geographical markets and in other crop segments in which the active substances could also be used, most notably in vegetables. This is, according to the parties, true for Bayer's main product Metribuzin, sold under the brand name Sencor, which is also used as a post emergence herbicide and as a vegetable herbicide. A similar reasoning applies, in the opinion of the

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<sup>29</sup> Phillips McDougall- AgriService, Products Section 2000, pp. 51, 75 and 103.

parties, to the products sold by ACS. Both Linuron sold under the brand name Afalon and Aclonifen (Challenge) are mainly used on vegetables and are thus priced according to the competitive situation in the vegetable market.

- (636) This reasoning holds only true with regard to Italy, Finland and the Netherlands. In Italy, Bayer sells more than five times as much Metribuzin in vegetables than in potatoes. The combined market share of the parties in the Italian market for vegetable herbicides is only [10-20]\*%. In Finland, ACS prices its two products Linuron and Aclonifen towards vegetables where it sells considerably more than in potatoes but has only [20-30]\*% of the market. A similar situation arises in the Netherlands, where ACS has only [20-30]\*% of the vegetable herbicides market and Bayer is not active.
- (637) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create a dominant position in the markets for potato herbicides in Greece, Portugal, Spain and Sweden.

### **Vegetable herbicides**

- (638) The parties' estimate of the overall market value of the European vegetable herbicide market is EUR 105.8 million. The three most important national vegetable herbicides markets are France ([...]\*), the United Kingdom ([...]\* and Spain ([...]\*).
- (639) The parties estimate that they would have [30-40]\*% (Bayer [0-10]\*%, ACS [20-30]\*%) of an overall EEA vegetable herbicides markets, ahead of BASF ([20-30]\*%), Syngenta ([10-20]\*%) and Dow ([0-10]\*%). On a national basis the combined market share of the parties would be [40-50]\*% in Greece (Bayer [10-20]\*%, ACS [30-40]\*%), [50-60]\*% in Portugal (Bayer [20-30]\*%, ACS [30-40]\*%) and [40-50]\*% in Sweden (Bayer [10-20]\*%, ACS [30-40]\*%). Those high market share are mirroring the parties strength in the subsegment of pre-emergence broadleaf herbicides.
- (640) With a market value of [...]\*, pre-emergence broad leaf herbicides is the most important segment of the overall market for vegetable herbicides. With a market value of [...]\*, the **Greek** market for pre-emergence broad leaf herbicides is relatively small. The parties' combined market share amounts to [40-50]\*% (Bayer: [0-10]\*%, ACS: [30-40]\*%). In **Portugal**, the parties' combined market share amounts to [70-80]\*% (Bayer: [30-40]\*%, ACS: [40-50]\*%). BASF accounts for [10-20]\*%, Dow for [0-10]\*% and Syngenta for [0-10]\*% of the market. The Parties' estimate their combined market share will decrease, but still be as high as to [50-60]\*% in 2004. With a market value of only [...]\*, the **Swedish** market is one of the smallest national markets. The parties' combined market share amounts to [60-70]\*% (Bayer: [20-30]\*%, ACS: [40-50]\*%). Bayer sells only one product in this market, Propyzamide (Kerb) from Dow. Competitors include BASF ([0-10]\*%), Dow ([0-10]\*%), Syngenta ([0-10]\*%), and a number of national companies, accounting for a combined market share of [10-20]\*%.

- (641) Bayer has only very limited activities in the market for vegetable herbicides, accounting for a market share of [0-10]\*% of the EEA-wide market. Bayer has only one own product, Metribuzin, which is marketed under the brand name Sencor. Metribuzin is off-patent. All other products are third party products. Thus, the parties claim, a large part of Bayer's market share in the market for vegetable herbicides is controlled by third party suppliers. However, for some of these third-party products Bayer has a longterm exclusive contract, which means it is Bayer which controls the product.
- (642) The parties claim that most of the active ingredients used for the formulation of herbicides for vegetables are off-patent, so that generic competition is prevalent in almost all national markets. However, ACS's main product Aclonifen is off-patent and still a very successful product. In France it has [10-20]\*%, in Germany, one of the five most important markets in terms of size even [20-30]\*% of the market. ACS is the only company which has notified Aclonifen for re-registration. Moreover, it has [...] the base chemical Trichlorobenzene. Therefore, there will not be generic competition for this product.
- (643) Furthermore, the parties claim that the market for vegetable herbicides includes a large variety of products which, with the exception of some old commodity-type products, are predominantly used on other crops, such as cereals and potatoes. The fact that the same products are used on several crops could mean that it would be difficult for Bayer and ACS to price-discriminate towards growers of vegetables. However, none of the parties own products is used in cereals, and the use of Aclonifen in sunflowers in Greece is less than its use in vegetables. As concerns potatoes the parties would become dominant also in the market for potato herbicides in exactly the same three countries Greece, Portugal and Sweden. The only case in which this argument holds is the product Dinitramine ("Cobex"), which ACS distributes for Wacker Chemie in Greece. Dinitramine is predominantly used in cotton where the parties would not become dominant. Moreover, Dinitramine will lose registration for use in vegetables after 2003. Therefore, the proposed transaction would not lead to a dominant position in Greece.

#### ***Conclusion on vegetable herbicides***

- (644) For all the above reasons the Commission has reached the conclusion that the proposed transaction will create a dominant position in the overall markets for vegetable herbicides in Portugal and Sweden.

#### **Cotton harvest aids**

- (645) Cotton harvest aids comprise a group of products which are designed to simplify harvesting. As to their specific field of application and their chemical properties, harvest aid products are to be divided into three different product groups. The first group consists of defoliants which make harvesting easier by killing the leaves without negatively affecting the crop itself. Secondly, there are boll openers which serve the purpose of opening the bolls of all cotton plants simultaneously, and finally, the third group of harvest aid products is made up of regrowth inhibitors which prevent the regrowth of weeds after e.g. unexpected

rain. Since, in contrast to selective herbicides, cotton harvest aids are not designed to prevent or reduce weeds affecting plant growth and development but rather to simplify harvesting, they constitute a product market which is separate from herbicides.

- (646) Greece and Spain are the only countries where both parties are active. In **Greece**, the Parties' combined market share is [80-90]\*% (Bayer: [10-20]\*%, ACS: [60-70]\*%). In **Spain**, the Parties' combined market share amounts to [90-100]\*% (Bayer: [10-20]\*%, ACS: [80-90]\*%). Bayer generates all of its turnover with the Tribufos-based product DEF which can be used only as a pure cotton defoliant. According to the parties, the active ingredient Tribufos will not be re-registered pursuant to Council Directive 91/414/EEC so that the product will be phased out in 2003 at the latest. ACS sells Dropp 50 WP which consists of Thidiazuron and the Ethephon and Cylanilide based product Finish. Dropp 50 WP is used both as a regrowth inhibitor and as a defoliant. There is, therefore, an overlap for cotton defoliants, although most likely not on a lasting basis.
- (647) Respondents to the market investigation have confirmed that customers have practically no alternatives to the parties' products in cotton defoliants. There is only one new product entering this market. FMC is going to register its herbicide Carfentrazone as a cotton defoliant. FMC's product is a real herbicide that kills the plant. Dropp and DEF, on the other hand, have a hormonal mode of action (hormonal defoliant). The important consequence is that cotton, a perennial crop, starts growing again after treatment with a herbicide if whether conditions are right (i.e. moisture), staining the white fibres during harvest, something that a hormonal killer does not do. FMC plans to launch its product in Spain in 2002 and in Greece in 2003. It expects to have a market share of [...%]\* in Spain and [...%]\* in Greece in 2004. This would reduce the position of the parties in 2002 and 2003, the two last years where, according to Bayer, there will be an overlap, to levels of still beyond [70-80]\*%.
- (648) Consequently, the Commission has reached the conclusion that the proposed transaction will create a dominant position on the markets for cotton defoliants in Greece and Spain.

#### General conclusion on herbicides

In herbicides, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position in the markets for beets herbicides (other than post-emergence graminicides) in the whole of the EU, for cereal herbicides in Belgium, Germany and Sweden, for maize herbicides in Belgium and the Netherlands, for potato herbicides in Greece, Portugal, Spain and Sweden, in vegetable herbicides in Portugal and Sweden and for cotton defoliants in Greece and Spain.

#### **D. Agricultural fungicides**

- (649) Both Bayer and ACS are active in the development and production of fungicides. Fungicides are used to prevent deterioration of plants and plant products through fungi and moulds prior to and after harvesting. Fungicides are

agents used to control plant diseases caused in particular by fungi. The diseases attacking a crop will vary according to the variety planted in that year, the weather conditions and the husbandry of the crop. The crop variety will determine the susceptibility of the crop to attack by a range of diseases such as powdery mildew, rust, septoria or eyespot. The weather conditions will influence the type and the intensity of the attack. Husbandry of a crop can diminish the risk that certain diseases will develop. For instance, proper crop rotation or ploughing of the field reduces the risks of certain diseases.

- (650) As a consequence of these complexities it is usual for a farmer to use a programme of sprays which will be adjusted in its intensity and in the types of active ingredient used depending on local weather conditions and disease susceptibility of the crop. This choice may be influenced by distributors, technical experts and Member State officials who have a detailed knowledge of diseases and their epidemiology and of the best fungicides to control these diseases depending on predicted outbreaks (protective control) or the presence of disease in the crop (curative control).
- (651) If there is a range of diseases present and a single active ingredient does not control this range, a farmer will either tank-mix a number of single active products, or use a pre-formulated product containing a mixture of a number of active substances. As the disease spectrum alters throughout the season in response to changing weather conditions, the products will be altered to suit the prevailing disease conditions.
- (652) The farmer, often based on advice from local experts and recommendations from bodies such as the Fungicide Resistance Action Committee ("FRAC"), will also try to prevent the onset of resistance to particular active ingredients by alternating between and/or combining active substances of different chemical classes throughout the season if the same disease is present for a long period and multiple applications are required. In some cases, resistance to some active classes will already be present in the local disease population and the farmer will need to use active substances which are still effective against that particular disease population.
- (653) Many make a distinction between, on the one hand, "systemic" fungicides and, on the other hand, "contact" or "non-systemic" fungicides. Although the definitions of these concepts do not seem to be universally agreed upon, the general sense of the concepts is reasonably well accepted. Systemic fungicides "move" within the plant, while contact fungicides stay on the surface of the plant, where it has been sprayed. Systemic fungicides are thus able to reach pathogens dwelling within the leaf tissue, where contact fungicides are unable to act. Generally speaking, most systemic products therefore exhibit curative activities, whereas contact products are mainly used as protectants ("preventive") before infection occurs. Protectants are usually located in the lower price segments, whereas systemic products usually reach higher prices due to their more reliable post-infection activity. Contact fungicides are mostly older (often non-organic) off-patent chemistry being sold by many competitors. Systemic fungicides are more often the domain of the R&D based companies. The two

types of fungicides are often used together for purposes of resistance management. However, the analysis of the competitive effect of the proposed transaction is particularly focused on the segment of the newer, mostly systemic, fungicides.

- (654) The parties estimate that the value of the fungicides market in the EEA amounted to EUR 2246 million in 2000. The turnover generated by Bayer in the EU in the fungicides market was in 2000 EUR [...]\*; the respective turnover of ACS amounted to EUR [...]\*.

#### ***D.1. Relevant product markets***

- (655) The parties follow the approach to product market definition taken by the Commission in M.1806 - *AstraZeneca/Novartis*, which was that an assessment of the fungicide sector by crop is an appropriate starting point, since the various plants display differing (albeit partly overlapping) disease patterns. However, the market investigation in M.1806 - *AstraZeneca/Novartis* showed that it could also be considered to divide the markets by reference to a particular disease. The market investigation in the present case has generally confirmed that an assessment crop-by-crop is an appropriate starting point. Many respondents also stress the importance of considering the various diseases when analysing the competitive impact of the transaction in the fungicides segment. However, in most markets it is, for the purpose of the present Decision, not necessary to divide the markets further by disease.
- (656) The one exception from this conclusion is grapes fungicides. In M.1806 - *AstraZeneca/Novartis*, the Commission concluded that the market for grape fungicides had to be assessed separately from other fungicides applied to fruits and nuts, and split along the lines of the major grape diseases. Fungicides for downy mildew, powdery mildew and grey mould/botrytis had to be considered as separate product markets. In the present case the parties follow this market definition in the notification. Most respondents to the Commission's market investigation support the approach of dividing grape fungicides into these three different product markets. The Commission therefore follows the market definition from M.1806 - *AstraZeneca/Novartis* and considers that separate markets exist for products for control of downy mildew, powdery mildew and botrytis in grapes.
- (657) In M.1806 - *AstraZeneca/Novartis*, the Commission also found strong indications that there was a separate market for strobilurin-based cereal fungicides. Strobilurins refer to formulated products containing an active substance of the strobilurin chemical class. Strobilurins were introduced in 1996 and can be used on a wide range of crops world-wide. In Europe, strobilurins have been introduced primarily for the protection of cereal crops and grapes. ACS is not active in the production of strobilurin-based fungicides and is not expected to launch strobilurin-based fungicides within the next years. Bayer has recently acquired the "Flint" strobilurin-line from Novartis (as a result of the commitments in M.1806 - *AstraZeneca/Novartis*). However, due to the fact that strobilurin-based fungicides marketed by Bayer are still in the process of

registration in most EU-Member States, Bayer's market position in this market segment is still relatively weak compared to its most important competitors, BASF and Syngenta. The parties therefore submit that it can be left open whether strobilurins form a separate product market.

- (658) Since the overlap in this case is entirely in the segment of non-strobilurin fungicides, the question for the purposes of market definition in this case is whether non-strobilurin fungicides form a separate relevant market or are part of an overall market for cereal fungicides. However, the only national market in which competition concerns are identified on any market definition is Italy, where according to the parties, only non-strobilurin based fungicides are sold. Therefore, for the purposes of this Decision, it does not have to be decided whether non-strobilurins constitute a separate product market.
- (659) Regarding fruits and nuts, a number of respondents to the Commission's market investigation have submitted that a separate market for strawberry fungicides should be considered in Sweden. These respondents argue that the parties have the only fungicides registered for a number of diseases on strawberries in Sweden. The parties have not provided evidence that there indeed are other products registered as strawberry fungicides in Sweden. The Commission will therefore assess strawberry fungicides as a separate relevant product market in Sweden.

## ***D.2. Competitive assessment***

### *General considerations*

- (660) At the national level, the parties' activities overlap in a large number of crops and Member States. According to the information in the notification, there are 69 affected fungicides markets. Following the investigation, the Commission considers that the transaction would create or strengthen a dominant position in 19 national markets. These markets will be analysed in detail below.
- (661) In the other affected markets, the Commission considers that no competition problems arise. The Commission has in each of these markets reached this conclusion for one or more of the following reasons:
- (662) The combined market share of the parties is low; there is no overlap between the parties' activities either because of misallocation of market share or because the overlap has ceased to exist for other reasons; the market share increment is very small and the structure of the market is unlikely to be affected by the operation; the structure of the market is unlikely to be affected by the operation as the pricing incentives of the parties' products would not be affected; the parties have largely overestimated their market position; there are strong competitors who are likely to be able to provide effective competition on the market; new product introductions by competitors are likely to provide strong competition to the parties' products in the near future.
- (663) The Commission's analysis in the markets where competition concerns are found is as follows:



*a) Cereal fungicides*

- (664) In M.1806 - *AstraZeneca/Novartis* the Commission described the various diseases attacking cereals and the active ingredients used to control them. Most of this description is still relevant.
- (665) Wheat and barley are the two most important cereal crops. They account for about 87% of the total area cultivated with cereals in the EU and for about 95% of cereal fungicides consumption. The main diseases in wheat are eyespot, powdery mildew, brown rust, yellow rust, septoria leaf spot or blotch, septoria leaf and glume blotch and fusarium head blight. The main diseases in barley are eyespot, powdery mildew, brown rust, net blotch and leaf blotch or scald.
- (666) Each active substance has a typical activity vis-à-vis a particular disease in a cereal crop, and this will influence the farmer's choice. The activity of a substance relates to the efficacy with which it can prevent and/or cure the disease and the duration of the protection (for curative substances this relates to the maximum period during which the disease is already present in the crop but can still be cured by the fungicide; for protective substances this relates to the maximum period of remaining protection). Other factors that are taken into account are the potential of the product to be mixed by the farmer with other products containing other active substances in his spraying tank.
- (667) The active substances currently used as cereal fungicides belong mainly to three different chemical classes. The morpholines are the oldest of these classes, introduced in 1969, and mainly active against powdery mildew and, for this reason, still part of modern mixture products. They have some curative effect. In 1976 active substances of the triazole chemical class were introduced. There are around 15 active substances of this class currently on the market, with some being introduced only in recent years. Their main strength is with septoria, rusts and fusarium. The most recent chemical class, the strobilurins, introduced in 1996, combines a broad spectrum (powdery mildew, rusts, septoria) with yield increase. In addition to these three classes, there are some other active substances, the most important being Cyprodinil to treat eyespot, and Quinoxifen, the most effective substance against powdery mildew.
- (668) Due to their superior activities, strobilurin-based fungicides are increasingly replacing non-strobilurin based fungicides. According to Bayer's estimate, in 2000 the overall sales in the EEA in the strobilurin segment amounted to EUR 443.4 million; at the same time the market value of the non-strobilurin fungicides market was EUR 451.4 million. In 2004, according to the parties' estimates, the strobilurin segment will amount to EUR 558.5 million, whereas sales in the non-strobilurin segment are expected to decrease to EUR 350.4 million. ACS is not active in the production of strobilurin-based fungicides and is not expected to launch strobilurin-based fungicides within the next years. On a market for strobilurins market there would therefore be no overlap between the activities of the parties.

*- An overall cereal fungicides market*

- (669) On the overall cereal fungicide markets (strobilurin and non-strobilurin-based), the transaction will, according to the parties, only result in a combined market share of more than 25% in one national market, Italy. Since the sales of the parties in this country are purely non-strobilurin based, the competitive impact of the transaction will be analysed on the assumption of a market for non-strobilurin based fungicides for cereals, and the overall cereal fungicides market will not be further assessed.

*- A market for non-strobilurin based cereal fungicides*

- (670) The parties submit that their combined EEA-wide market share would be [20-30]\*% (Bayer [10-20]\*%, ACS [10-20]\*%). Syngenta would have [30-40]\*%, BASF [20-30]\*%, DuPont [0-10]\*% and Dow [0-10]\*%. The most important active ingredients sold by the parties are Tebuconazole and Spiroxamine (Bayer) and Fluquinconazole, Brumoconazole and Prochloraz (ACS). These active ingredients are sold either straight or in mixtures with other active ingredients. Tebuconazole, Fluquinconazole, Brumoconazole and Prochloraz are all triazoles, while Spiroxamine is a morpholine-like product with a good effect on powdery mildew.
- (671) Several market participants have indicated that Bayer has a new triazole under development, which is claimed to have very good activity on a range of diseases including eyespot and fusarium. According to the Commission's decision in M.1806 - *AstraZeneca/Novartis*, ACS's Prochloraz is the existing triazole with the best activity on eyespot with ACS's Bromuconazole in joint second place.
- (672) It should, however, be taken into account that there seems to be consensus that the by far best-selling non-strobilurin fungicides in cereals in BASF's triazole Epoxiconazole. According to one market participant Epoxiconazole alone accounts for 48% of total EU sales of triazoles in cereals. According to this source, Bayer's Tebuconazole, which is the world's best-selling triazole overall (for all crops), is number two in the EU cereals market with around 16%. The same source estimates the total sales of the triazoles of the parties to account for around 27% of the EU market. There are no indications that the new triazole from Bayer will be sufficiently successful that the new entity can in a general way seriously challenge BASF's leadership within the triazole segment. Furthermore, it has to be remember that the non-strobilurin market is constantly under pressure from the strobilurins, which are partly replacing them in most markets. As the market investigation has confirmed that the parties in most Member States do not have market shares (or market share additions) at levels that would normally be considered worrying, the remaining concerns are confined to one Member State, Italy, which also happens to be one of the Member States in which the parties consider that there are no sales of strobilurins. A strong market position in the non-strobilurin market in Italy is therefore more worrying than it would have been in markets where strobilurins are advancing.
- (673) In **Italy**, the parties estimate that their combined market share amounts to [30-40]\*% (Bayer [10-20]\*%, ACS [10-20]\*%) with Syngenta ([30-40]\*%), BASF

([10-20]\*%) and DuPont ([0-10]\*%) the leading competitors. The market investigation has not confirmed the parties' market share estimates. The combined market share of the parties is likely to be close to [50-60]\*%.<sup>30</sup> It has also showed that the parties' market share would be considerably bigger than that of any other market participant.

- (674) Bayer sells the active ingredients Triadimenol, under the brand name Bayfidan, Triadimenol mixed with Tebuconazole, under the brand name Matador, and Tebuconazole under the brand name Folicur. ACS sells mainly the product Stanza with the active ingredients Prochloraz and Fenpropimorph.
- (675) Italy is peculiar in that fungicides for cereals are a rather small market. There is not the same use of fungicides on cereals as is the case in Northern Europe. Cultivation is done on a more extensive basis than in Northern Europe; as a result yields are significantly less. The warmer climate results in less disease pressure; hence the fungicide market is not so significant. This means that there are fewer products available in Italy than in, for instance, the much larger French market. Because of the extensive nature of much of the area, cost control is of paramount importance to Italian cereal producers, hence high value new introductions are not so readily accepted as in other West European cereal markets. Most market participants agree that Italy is a non-strobilurin market. It has been suggested that the main cereal in Italy is durum wheat, in which the most important disease is fusarium, and that neither strobilurins nor BASF best-selling triazole, Epoxiconazole, have effect on this disease. This helps explain why expensive products like strobilurins are basically not used in Italy and why it seems that BASF has not registered Epoxiconazole nor its strobilurin Krexomim Methyl for cereals in Italy.<sup>31</sup> There seems to be no major product introductions planned for the near future in this market. The picture of the parties having the major products and a very large market share is therefore likely to persist.
- (676) Combining the fact that the parties combined are considerably larger than their closest competitors and the lack of new strong competition in the near future, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for cereal fungicides in Italy.

*b) Fruits and nuts fungicides*

- (677) The parties submit that the fruits and nuts market encompasses a relatively broad range of products, including in particular older commodity type products such as copper products and dithiocarbamates (Mancozeb, Ziram and Thiram). They argue that there are a high number of generic suppliers, especially in the major fruit producing countries (Spain, Italy and France), that can easily substitute the parties' products and respond to any anticompetitive behaviour of the leading

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<sup>30</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>31</sup> However, on the other hand, it does seem that Syngenta's strobilurin product Amistar (Azoxytrobilin) is registered for use on cereals, as well as for rice and sugar beet. [Business secrets: Deleted confidential Syngenta information.]\*

suppliers. The parties argue that it cannot be expected that those commodity type products can be fully replaced by new strobilurin-based products or other innovative chemistry. For the purpose of reducing the risk of resistance development, the treatment of fruits and nuts with strobilurin-based fungicides and other specifically acting products will, according to the parties, have to be limited. Hence, the parties argue that even the introduction of new products like strobilurin-based fungicides (Trifloxystrobin from Bayer or Pyraclostrobin from BASF) will have only limited effects on the fruits and nuts market.

- (678) With respect to the position of generic manufacturers, respondents agree that the older commodity type products will not be fully replaced by newer products. However, it is also argued that the older products cannot "easily substitute" the parties' products. As argued by one respondent, why would the parties spend millions of dollars on research to discover new products, if they are not substantially different from the existing ones, and especially different from the old commodities? It is, however, true that there is a widespread use of older commodity type products in Southern Europe. In Northern Europe this is not true to the same extent, and the parties in fact have a very strong combined market position in several of countries in Northern Europe.
- (679) Furthermore, respondents to the Commission's market investigation argue that the parties' position will be strengthened in the near future with the introduction of Bayer's Flint (Trifloxystrobin) product. Together with the available products of the parties, Scala (Pyrimethanil), Vision (Pyrimethanil and Fluquinconazole), Folicur (Tebuconazole) and Euparen (Dicholfluanid), the parties' position will be strengthened. It is also argued that Bayer's newly developed botryticide Teldor (Fenhexamid) is still in the process of market penetration and supports the market presence of the parties. A unique selling point of the Teldor is said to be the extremely short pre-harvest interval of zero to three days only in various fruit crops. This large number of fungicides represents a broad portfolio with different modes of action. Trifloxystrobin is a strobilurine type fungicide, Pyrimethanil belongs to the group of anilinopyrimidines, Fluquinconazole and Tebuconazole are triazoles and Dicholfluanid is an isocyclic compound. Furthermore, Bayer's Bayleton (Triadimefon) as a specific product used against powdery mildews in pome fruit complements the position of the parties. It is argued that the parties would have by far the strongest product portfolio and that these products have a number of different modes of action, which will enable the parties to implement very effectively anti-resistance tools in the fruit fungicides market.
- (680) In their Reply to the Statement of Objections, the parties agree that Flint and Teldor still have the potential to grow in the market for fruits and nuts fungicides. They argue, however, that [...]\*. Likewise, they argue that [...]\*. They furthermore argue that ACS's product Scala is already facing strong competition from the introduction of Syngenta's product Chorus (based on the active ingredient Cyprodinil) and BASF's Kresoxim-based products sold under the brands Discus, Strobby, Alliage and Candit. In addition, the parties do not expect Flint and Teldor to compensate entirely for losses the parties will suffer due to the introduction of generic Tebuconazole by Makhteshim and generic Pyrimethanil by Makhteshim and Chimac. The parties further argue that Bayer's

Dichlofluanid-based product Euparen will not be re-registered according to Council Directive 91/414/EEC, and the replacement product Euparen M (based on Tolyfluanid) is not expected to compensate entirely for the decrease in sales, since it can be expected that the "gap" will be filled by other products during the interim period between the phasing out of Euparen and the introduction of Euparen M. In addition, BASF is expected to launch a very competitive broad-spectrum mixture product BAS 516 (BAS510 + BAS500). The parties finally argue that BASF and Syngenta both have or will have similar or even broader and more complementary portfolios than the combined entity, including strobilurins (both), triazoles (Syngenta: Hexaco, Difenoco, Penconazole), anilinopyrimidines (Syngenta: Cyprodinil), specific protectants (BASF: Dithianon), Phenylpyrroles (Syngenta: Fludioxonil) and new, innovative modes of action such as SDIs (BASF: BAS510). Neither Bayer nor ACS are in the position to offer Phenylpyrroles or SDIs. The parties therefore argue that they are already facing vigorous competition on the fruits and nuts markets, and that competition will become even stronger due to the introduction of new products by BASF and innovative new modes of action by Syngenta and BASF. The parties argue that the Commission has not taken into account "at all" the market situation in its assessment of the different markets in the Statement of Objections.

- (681) The Commission cannot agree to these arguments. For instance, it investigated in the Statement of Objections claims made by the parties as to the effects of new product introductions, whether by generic producers or by research based competitors with new active ingredients. On the basis of information from competitors as to where and when they would introduce new products and their expectations for the sales of such products, the Commission's conclusion, for each of the markets for which competitive concerns were raised in the Statement of Objection, was that the effect of new introductions was not sufficient to seriously challenge the strong combined market position held by the parties. [...]\*, the Commission notes that Teldor has already achieved significant success in some of the markets in which it has been introduced. For instance, according to the parties' data, Teldor achieved a market share of [20-30]\*% in Denmark in its first year of sales in that country. [...]\*, it should in this respect be noted that the BASF product BAS 500, which the parties claim will be an important new product in fruits and nuts, is also a strobilurin. The parties have provided material from BASF, which among other topics discusses resistance management. BASF recommends alternating the use of BAS 500 with other fungicides from other active ingredient classes. [...]\*.
- (682) The transaction will lead to a considerable overlap, even on an EEA-wide market, where the parties estimate that they would have [30-40]\*% (Bayer [20-30]\*%, ACS [10-20]\*%) with leading competitors being BASF ([10-20]\*%), Syngenta ([10-20]\*%), DuPont ([0-10]\*%) and Dow ([0-10]\*%). At a national level, the parties will have a strong position in several countries, in particular in Denmark, France and Germany.
- (683) In **Denmark** the parties in the notification estimated that their combined market share amounted to [40-50]\*% (Bayer: [40-50]\*%, ACS: [0-10]\*%) with leading

competitors being Dow ([30-40]\*%) and Syngenta ([10-20]\*%).<sup>32</sup> The parties have in their Reply to the Statement of Objections corrected some misallocations of sales of the product Scala and now argue that the parties have a combined market share of [50-60]\*%. This also logically means that the parties' estimates of market shares of competitors must be lower than those quoted above.

- (684) Bayer's products are, in order of importance, Baycor (Bitertanol), Teldor (Fenhexamid), Euparen-M (Tolyfluanid) and Folicur (Tebuconazole), while ACS sells Aliette (Fosetyl) and Scala (Pyrimethanil).
- (685) The parties argue that only [10-20]\*% of the sales of Scala are generated in fruits and nuts, since Scala is mainly used in vegetables and thus priced according to the competitive situation in that market.<sup>33</sup> Likewise the parties argue that only [50-60]\*% of the sales of Aliette in Denmark can be allocated to fruits and nuts. The remaining [50-60]\*% of the sales are achieved in vegetables. The parties therefore argue that it would be impossible for the combined entity to price discriminate particularly towards growers of fruits and nuts. However, the parties do not explain how this argument can also be valid for Bayer's products. Teldor is sold [90-100]\*%, Baycor [90-100]\*% and Euparen-M [90-100]\*% in fruits and nuts. Only Folicur has the majority of its sales outside fruits and nuts.
- (686) The parties also argue that the market share of BASF is likely to increase due to the launch of a very competitive broad-spectrum mixture product (BAS510 and BAS500). They have, however, not given concrete indications for when this introduction will take place. The Commission has asked actual and potential competitors to comment on the claims made by the parties and has come to the conclusion that this new competition will not lead to significant changes to the competitive situation in the near future.<sup>34</sup>
- (687) It should also be noted that Teldor (Fenhexamid) was only introduced in the Danish fruits and nuts market in 2000 and in that year achieved a market share of [...]\*. The parties' position is therefore likely to be even stronger in 2001 than it was in 2000.
- (688) Combining this with the already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fruits and nuts fungicides in Denmark.
- (689) In **France** the parties in the notification estimated their combined market share to be [50-60]\*% (Bayer: [20-30]\*%, ACS: [20-30]\*%) with main competitors being BASF ([10-20]\*%), Syngenta ([10-20]\*%), DuPont ([0-10]\*%) and a number of national suppliers, selling mostly copper (approx. [10-20]\*%) and

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<sup>32</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>33</sup> This number was, however, given before the correction of Scala sales referred to above.

<sup>34</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

sulphur compounds. The parties have later corrected their combined market share to [50-60]\*% (Bayer: [30-40]\*%, ACS: [20-30]\*%). In their Reply to the Statement of Objections they have once again corrected this number due to some misallocations of sales of the product Scala and now argue that the parties have a combined market share of [50-60]\*%. This also logically means that the parties' estimates of market shares of competitors must be slightly lower than those quoted above. The market investigation has confirmed that the position of the parties is above [50-60]\*% and that their combined market share is considerably larger than any of the competitors.<sup>35</sup>

- (690) ACS's product portfolio encompasses [...] products. The most important active ingredient is Iprodione, which is sold in three different formulations (Kidan, Rovran 500 WP and Rovran Aq 500 SC). Other main active ingredients are Pyrimethanil sold under the brand name Sari and Fluquinconazole (Vision) and Myclobutanil (Systane). Bayer's main products include Horizon (Tebuconazole), Euparen (Tolylfluanid) and Captan.
- (691) The parties argue that Horizon, which accounts for more than [30-40]\*% of Bayer's sales in the market for fruits and nuts fungicides, is mainly used on cereals, and that the parties would therefore not be able to raise the price of Horizon without losing sales in the cereals market. However, both Euparen and Captan are used [90-100]\*% in fruits and nuts. Among ACS's products, Kidan is used [70-80]\*% in fruits and nuts, while Sari and Vision are both used [90-100]\*% as are other ACS products such as Octave (Prochloraz), Melprex (Donine), Aliette WG (Fosetyl), Indar (Fenbuconazole), Rhodiasan Flash (Thiram), Aaprotec and Carbazinc (Ziram).
- (692) The parties furthermore argue that generic competitors, particularly Makhteshim, will enter the market, due to the fact that Tolylfluanid is already off patent and that Tebuconazole will be off-patent in 2003. The parties also submit that BASF is expected to launch a very competitive broad-spectrum mixture product (BAS510 and BAS500). As a result, the parties expect that their combined market share will decrease over the following years to [40-50]\*% in 2004. The parties have not, however, explained when this new competition will take effect. The Commission has asked actual and potential competitors to comment on the claims made by the parties and has come to the conclusion that this new competition will not lead to significant changes to the competitive situation in the near future<sup>36</sup>.
- (693) On the other hand, the Bayer' product Flint was introduced in 2001. The parties expect Flint to reach a market share of [0-10]\*% in 2004. The parties' position is therefore likely to be even stronger in 2001 than it was in 2000. It should also be noted that Teldor (Fenhexamid) has only recently been introduced in France. Given the success of Teldor in several other countries in the fruits and nuts market, there seems therefore to be reasons to give some weight to the claims of

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<sup>35</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>36</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

third parties that Teldor is still in the process of market penetration in this market.

- (694) Combining this with the already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products, the lack of new strong competition in the near future, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fruits and nuts fungicides in France.
- (695) In **Germany**, the parties estimate that their combined market share amounts to [50-60]\*% (Bayer [30-40]\*%, ACS [10-20]\*%) with leading competitors being BASF ([20-30]\*%) and Syngenta ([0-10]\*%). The market investigation has confirmed that the position of the parties is around [50-60]\*%.<sup>37</sup>
- (696) ACS sells three products, Vision (Fluquinconazole and Pyrimethanil), Scala (Pyrimethanil) and Systhane (Myclobutanil). Bayer's main products include Euparen (Dichlofluanid) and Folicur (Tebuconazole).
- (697) The parties argue that Dichlofluanid, which accounts for [40-50]\*% of Bayer's sales in this market under the brand name Euparen, will not be re-registered under Council Directive 91/414/EEC. The parties submit, however, that Bayer [...]\*. The Tebuconazole based product Folicur is Bayer's second main product, but has its main markets in cereals and in oil and protein crops. The parties argue Tebuconazole will be off-patent in 2003 and thus subject to generic competition; the parties expect that this circumstance will result in a decline of Bayer's market shares. The parties also argue that the market share of BASF is likely to increase due to the launch of its new product Pyraclostrobin (BAS 500). Furthermore, they argue that BASF is expected to launch a very competitive broad-spectrum mixture product (BAS510 and BAS500). They have, however, not given concrete indication for when this introduction of new products by generic producers and BASF will take place. The Commission has asked actual and potential competitors to comment on the claims made by the parties and has come to the conclusion that this new competition will not lead to significant changes to the competitive situation in the near future.<sup>38</sup>
- (698) On the other hand, the Bayer' product Flint was introduced in 2001 and reached a market share of [0-10]\*%. The parties expect Flint to reach a market share of [0-10]\*% in 2004. It should also be noted that Teldor (Fenhexamid) was only introduced in the fruits and nuts market in 2000 and in that year achieved a market share of [0-10]\*%. The parties' position is therefore likely to be even stronger in 2001 than it was in 2000.
- (699) Combining this with the already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products, the lack of new strong competition in the

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<sup>37</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>38</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*



near future, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fruits and nuts fungicides in Germany.

*c) Strawberry fungicides in Sweden*

- (700) In Sweden, the parties submit in the notification that Bayer has a market share of [40-50]\*% in the overall fruits and nuts market, while ACS has [...]\*. Bayer sells Baycor (Bitertanol), Bayleton (Triadimefon), Euparen-M (Tolyfluanid) and Teldor (Fenhexamid).
- (701) However, in their Reply to the Statement of Objections the parties acknowledge that ACS's products Scala, Rovral 75 WG and Aliette 80 WG have erroneously been omitted in the data for fruits and nuts due to the fact that the marketing and the distribution of ACS's products is done through a sales agent, Nordisk Alkali.
- (702) The Commission's attention was led to this problem by respondents to its market investigation who submitted that ACS have products registered for use on strawberries, and that the parties would have a very strong position in strawberry fungicides and indeed be the only ones with products to treat certain diseases. Thus, one respondent wrote: "According to the Swedish registration handbook "Bekaempning i praktikken", there are only 4 products registered for control of *botrytis cinerea* in strawberries in Sweden. These products are Euparen M 50 WG (dichlofluanid), Rovral Flo (iprodione), Teldor (fenhexamid) and Scala (pyrimethalil). All these products are either Bayer or Aventis products. The only product recommended to treat phytophthora on strawberries is Aliette 80 WG (fosetyl-al) from Aventis. Therefore, we can assume that the parties have a 100% market share in the Swedish strawberry market." Another respondent wrote: "The following fungicides are registered for use in strawberries in Sweden: Bayleton Special (Bayer), Euparen M 50 WG (Bayer), Rovral 75 WG (Aventis), Scala (Aventis), Teldor 50 WG (Bayer) and Topas (Syngenta, only allowed for post-harvest use). Due to this product portfolio the parties have a very strong market position". A third respondent writes that regarding certain diseases in strawberries as e.g. botrytis and phytophthora, the new entity would have almost 100% dominance. The respondent mentions Aliette, Bayleton Special, Euparen, Rovral, Scala and Teldor as the dominating products. This respondent actually mentions this as a general problem in fruit fungicides in Sweden, mentioning the products Euparen, Topsin (Aventis), Baycor (Bayer), Bayleton Special and Scala.
- (703) The parties in an answer to an Article 11 request wrote "all major companies do have or could well have fungicides which are also used on strawberries for the following diseases, such as" (list follows). However, the parties did not at that point specify which of the competitors' products on their list are actually registered in Sweden for use on strawberries.
- (704) In their Reply to the Statement of Objections the parties gave a list of products, giving the Swedish Board of Agriculture as source, which would be registered for strawberry fungicide in Sweden in 2002. There are 12 products on the list and the parties submit that there is no disease, which can only be treated by the

parties' products. Six of the 12 products on the list belong to the parties: Alliette 80 WG, Bayleton Special, Euparen M 50 WG, Rovral 75 WG, Scala and Teldor WG 50. They mention two products by Syngenta, Topas 100 EC and Recop. However, the parties have provided a label for Topas, according to which Bayer (Gullviks) distributes this product in Sweden. Furthermore, according to the homepage of "Kemikalieinspektionen", the Swedish government agency responsible for registration, the registration of Recop stopped 31.12.2001. The same is true for another product on the list, Funguran-OH 300 SC. Another product mentioned by the parties is Zence 40 (Svenska Predator). However, on the home page of Kemikalieinspektionen there is no trace of this product. The final two products on the parties' list is Kumulus DF, which is based on sulphur and Binab TF WP, which is an not an agrochemical but an agrobiological product, which can be used for disease control in various crops.

- (705) According to the list supplied by the parties, Binab TF WP is the only product other than those of the parties, which is active against botrytis. Thus, among agrochemical product, the parties have the only products active against botrytis; as mentioned above, Euparen, Rovral, Teldor and Scala. Aliette is the only product registered for treating the diseases phytophthora fragariae and phytophthora cactorum. Thus the information from third parties that the parties for some diseases in strawberry have all or nearly all products that can be used has been largely confirmed. The Commission has received no evidence that this situation will change substantially in the near future.
- (706) The parties in their Reply to the Statement of Objections contest that there is a separate market for strawberry fungicides; they argue that strawberries are part of the overall fruits and nuts market. The market segment "strawberry fungicides" would be too small (approx. EUR [...] million in 2000) to develop and register a product only for strawberries. The parties argue that the products used on strawberries are in general broad range fungicides, which are registered and used not only in strawberries in Sweden, but also in other crops and other countries. Thus, the parties argue that they are not in the position to price discriminate especially against growers of strawberries in Sweden.
- (707) The Commission accepts that in some markets it may be a valid argument that market participants cannot raise prices for broad range fungicides for a specific, small market segment. However, this clearly depends on the distribution of the sales of the products for the various segments. This is also the way the parties have used this argument in other product markets. They have, however, not provided such data for their products used in the fruits and nuts - and in particular in strawberries - in Sweden. It should in this respect that the total fruits and nuts market in Sweden according to parties was EUR [...] million in 2000. The strawberries segment is therefore [40-50]\*% of the overall fruits and nuts market. Furthermore, there is often a difference between products working well on "soft fruits" and fruit such as apples and pears, which may very well make up a large part of the remainder of the fruits and nuts market. The parties have therefore not provided convincing arguments why the monopoly or near-monopoly on strawberries could not be a basis for anti-competitive behaviour.

- (708) Based on this information the Commission considers that it is likely that Aventis is indeed active on the fruits and nuts market in Sweden and the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for strawberry fungicides in Sweden.

*d) Grape fungicides for control of botrytis*

- (709) Of the three grape-disease markets, botrytis is (in value terms) the smallest market. Bayer estimates sales within the EEA of approximately EUR [...] million in 2000. At the EEA level, the parties submit that Syngenta is the market leader with [30-40]\*%, followed by ACS ([20-30]\*%), BASF ([10-20]\*%), Bayer ([0-10]\*%) and DuPont ([0-10]\*%).
- (710) It is noteworthy that Dow is not active at all on this market, while DuPont only has a marginal position in a few national markets. For instance, DuPont has no sales at all in the by far largest market, France. Furthermore, the parties seem to overestimate the position of BASF. Thus, if the proposed transaction went ahead as notified, the general picture would therefore be more that of two large players, Bayer/ACS and Syngenta, together having around [70-80]\*% of the total EEA market, with the third player BASF much smaller than either of these two.<sup>39</sup>
- (711) The Commission in its 6(1)c decision found that the parties in several national markets have underestimated their own position. The same finding is maintained in this Decision, despite the parties' objections. In their observations on the 6(1)c decision, the parties restate their belief in their estimates relating to their market shares. The parties argue that their market share estimates are based on panel data as well as expert judgements concerning the total market volume and on actual sales figures. The parties argue that discrepancies with respect to market share estimations, wherever they appear, could be due to the fact that third parties may not have a correct picture of the split between grapes and other crops in the use of certain products. Since most of ACS's and Bayer's products are also used on other crops, the parties consider it difficult for other market participants to correctly allocate product sales to the various crops.
- (712) The Commission recognises that there may be some merit in these arguments. However, just as other market participants may have some difficulties in correctly estimating the sales of Bayer and ACS, Bayer and ACS may have difficulties correctly estimating the sales of their competitors. The best view of the market can therefore be found by compiling data from the various market participants regarding their own sales and then comparing these. The Commission's view of the market shares has been formed in this way.
- (713) According to the parties, the botrytis market is reacting very sensitively to resistance developments. To avoid resistance of the disease against a given product, the farmer has to switch products after a certain time. The parties therefore submit that even a successful product cannot maintain a high market share over a long period of time; new product launches within short intervals

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<sup>39</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

have occurred in the past and are also expected in the near future. It should, however, also be noted that grapes are treated with many sprays (according to the Commission's decision in M.1806 - *AstraZeneca/Novartis*, up to 15 sprays in one season). The resistance problems referred to by the parties and the large number of sprays means that in grape fungicides it can become very difficult to avoid buying the products of a company who controls a relatively small part of the market.

- (714) The main active ingredients of the parties in the botrytis market are ACS's Pyrimethanil and Iprodione and Bayer's Fenhexamid and Dichlofluanid. Respondents to the Commission's market investigation has argued that ACS with Pyrimethanil and Iprodione have a broad portfolio in the treatment of botrytis while Bayer's Fenhexamid has the advantage of a very short pre harvest interval. This should help growers build more flexibility into their spray program. The addition of these four active ingredients would create a very strong position in this market, particularly since it has been argued that Pyrimethanil and Fenhexamid, which were both introduced in the 90's, do not yet face any resistance issue.
- (715) The parties in their observations on the 6(1)c decision present arguments against the view that the combined entity will enjoy a competitive advantage over other manufacturers of fungicides.
- (716) They argue that ACS's Iprodione and Bayer's Dichlofluanid are rather "unattractive" components due to their lower efficacy compared to top-ranked products such as Switch from Syngenta. They claim that [...] is regarded as having the weakest efficacy out of all of the Dicarboximides, when compared to BASF's Ronilan (based on Vinclozolin) and Sumitomo's Sumislex (based on Procymidone). Furthermore, they argue that Syngenta's Switch has the additional advantage of incorporating two active ingredients with two different modes of action, thus allowing a farmer in some countries to apply this product twice as often as specific products (e.g. the Parties' products Scala or Teldor) in a regular spray programme. They also argue that [...] is not applied more than [...] per season and is subject to severe competition from other Anilinopyrimidines (Syngenta's Switch based on Cyprodinil and Sipcam's Frupica based on Mepanipyrim). They further argue that other important alternative treatments include Syngenta's Geoxe (based on Fludioxonil), Sumitomo's Sumico based on Diethofencarb and Carbendazim and Syngenta's Sekoya (based on Fluazinam).

- (718) The parties furthermore argue that the short pre-harvest interval of Bayer's Teldor is not a significant advantage for the Parties, since botryticides are hardly ever used late in the season.
- (719) Other market participants argue, however, that the parties will have the broadest product portfolio in the industry in terms of number of active ingredients and number of modes of action. The only competitor, which has anything like the portfolio of the parties, is considered to be Syngenta.
- (720) The parties reiterate the above arguments in their Reply to the Statement of Objections. Third parties, however, argue that the parties would be the only company with botryticides based on active ingredients having four different modes of action. One market respondent argue that this would allow them to cover the whole spray schedule during a season since normally three, but in some botrytis areas four, applications against botrytis are used. It is thus argued that the parties would have a unique spray system using Pyrimethanil for the first application, Iprodione for the second, Dichlofluanid for the third and Fenhexamid at the end of the season. Another respondent submits that in theory four treatments are required, but in practice two or three are normally applied, except in the Champagne area where three or more treatments are applied. In the context of these remarks, the fact that Scala is not applied more than one time per season would thus not seem to be a strong argument, when the parties would have active ingredients from four different modes of actions.
- (721) Other market participants acknowledge that older chemistries like Iprodione and Dichloflunid may be technically less attractive but that this is reflected in their price and that they are therefore used in sequence with other active ingredients like Fenhexamid and Pyrimethanil.
- (722) As to the argument that the short pre-harvest interval of Teldor is not a significant advantage, this is contradicted by other market participants who were asked to comment on this point. It is mentioned explicitly on Teldor labels that they for grapes can be used up to short periods before harvest. One market respondent mentions that this advantage is especially important for the table grape segment.
- (723) In addition, the parties argue that [...]\*, and that Iprodione already faces not only generic competition, but also certain resistance problems. The parties did not give the names of any companies selling products in the EEA based on Iprodione and they have not described in more detail what ]\*certain resistance problems]\* means. The Commission was therefore not able to verify whether the statements above were important for the assessment of the parties' position.<sup>40</sup>
- (724) The parties in their Reply to the Statement of Objections provide a list of companies, which according to the parties supply generic Iprodione in Italy. However, Italy is not one of the markets in which the Commission has competition concerns. It should also be noted that competitors state that they are not aware of generic Iprodione in the EU.

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<sup>40</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

- (725) One market participant argues that in general generic competition is likely to be less important on newer products in the botrytis market than in some other markets. The reason given is the widespread resistance problems, since this means a shortening of product life cycles.
- (726) Finally, the parties argue that BASF is developing their new product BAS510 against botrytis, which will be launched in 2002 or 2003. It is indeed true that most market participants expect BASF's BAS510 to be a successful product. However, market participants argue that even if this one product becomes successful, it will not change the overall situation in this market of the parties having by far the best portfolio in the market.<sup>41</sup>
- (727) The parties submit that seven national markets are affected by the transaction. Of these France is easily the largest with a value of EUR 32 million, followed by Italy with EUR 15 million. Competition problems are found in France, Germany, Greece and Portugal.
- (728) In **France**, the parties in the notification estimated their combined market share to be [40-50]\*% (Bayer [10-20]\*%, ACS [20-30]\*%) with leading competitors being Syngenta ([30-40]\*%) and BASF ([0-10]\*%). The parties have later corrected this to [40-50]\*% (Bayer [10-20]\*%, ACS [20-30]\*%). The market investigation has broadly confirmed the parties' view of the positions of the main competitors.<sup>42</sup> The situation would therefore be that of two large competitors with a considerable gap down to the third player BASF.
- (729) ACS generates almost 90% of its turnover through the sale of Scala (Pyrimethanil) while Bayer's only product is Teldor (Fenhexamid). As mentioned above, both Pyrimethanil and Fenhexamid are relatively new active ingredients. Bayer has thus increased its sales in the French botrytis market from EUR [...] in 1998 and 1999 to EUR [...] in 2000. According to the parties, Scala and Teldor together have a market share of [40-50]\*%.
- (730) This combination of the parties' successful active ingredients, the growth potential of their newer products and the parties' high market share has led the Commission to reach the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fungicides for treating botrytis on grapes in France.
- (731) In **Germany**, the parties estimate that their combined market share is [30-40]\*% (Bayer [10-20]\*%, ACS [20-30]\*%) with leading competitors being Syngenta ([30-40]\*%) and BASF ([10-20]\*%). The market investigation suggests that the position of the parties is somewhat larger than [30-40]\*% and more likely in the neighbourhood of [40-50]\*% and that their combined market share is substantially bigger than that of Syngenta.<sup>43</sup>

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<sup>41</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

<sup>42</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>43</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

- (732) Bayer's main product sold in the German market for the protection of grapes against botrytis is Teldor (Fenhexamid) while ACS's market share is based on Scala (Pyrimethanil), Rovral (Iprodione) and Sumico (Carbendazim and Diethofencarb).
- (733) The combination of the parties' successful active ingredients, the growth potential of their newer products and the parties' high market share has led the Commission to reach the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fungicides for treating botrytis on grapes in Germany.
- (734) In **Greece**, the parties estimate that their combined market share amounts to [20-30]\*% (Bayer: [10-20]\*%, ACS: [10-20]\*%) with leading competitors being Syngenta ([30-40]\*%), BASF ([10-20]\*%) and DuPont ([0-10]\*%). Other market participants give considerably higher estimates (ranging from [50-60]\*% to [80-90]\*%) of the parties' market share. The market investigation has in fact shown that the parties' position is likely to be considerably higher than what the parties estimate and that the combined market share of the parties is much larger than that of any of their competitors.<sup>44</sup>
- (735) Bayer sells Teldor (Fenhexamid) while ACS sells Rovral (Iprodione), Scala (Pyrimethanil) and Ronilan Flow (Vinclozolin), which accounts for almost [50-60]\*% of ACS sales in this market.
- (736) The combination of the parties' successful active ingredients, the growth potential of their newer products and the parties' high market share has led the Commission to reach the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fungicides for treating botrytis on grapes in Greece.
- (737) In **Portugal**, the parties estimate that their combined market share amounts to [50-60]\*% (Bayer: [10-20]\*%, ACS: [30-40]\*%) with leading competitors being DuPont ([10-20]\*%), Syngenta ([10-20]\*%) and BASF ([0-10]\*%). The market investigation has generally confirmed that the parties would have a high combined market share, which is likely to be over [50-60]\*% and considerably larger than that of any of its competitors.<sup>45</sup>
- (738) Bayer sells Euparen (Dichlofluanid) while ACS sells Scala (Pyrimethanil) and Rovral (Iprodione). Bayer is planning to introduce [...]\*. Both are expected to achieve significant market shares by 2004.
- (739) The combination of the parties' successful active ingredients, the growth potential of their newer products and the parties' high market share has led the Commission to reach the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fungicides for treating botrytis on grapes in Portugal.

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<sup>44</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>45</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

*e) Hops fungicides*

- (740) The parties submit that the only country in which an affected market arises is **Germany**, where the parties estimate their combined market share to be [30-40]\*% (Bayer: [0-10]\*%, ACS: [20-30]\*%) with leading competitors being BASF ([40-50]\*%), Syngenta ([0-10]\*%) and Dow ([0-10]\*%). The market investigation has confirmed that there would be two main players in this market, Bayer/ACS and BASF, with Syngenta and Dow far behind.<sup>46</sup> Furthermore, it should be noted that Bayer in late 2000 bought the product Flint, based on the strobilurin Trifloxystrobin. This product was introduced in Germany in 2000 and had in 2001 already achieved a market share of [0-10]\*%.<sup>47</sup> The parties foresee that Flint will achieve a market share of [10-20]\*% by 2004.
- (741) Bayer sells mainly Bayfidan (Triadimenol), which controls powdery mildew. ACS sells only Aliette WG (Fosetyl). The parties argue that this product is primarily designed for the protection of grapes against downy mildew. They also in general argue that products used for the protection of hops are multipurpose products, primarily used for the protection of other crops. They argue that the fact that the same end formulations and the same active substances are used in several crops makes it difficult for the parties to price-discriminate towards growers of particular crop. Yet the parties also indicate that in Germany Aliette WG is used 100% for hops. Hence, the most important product of the parties in Germany is not a multipurpose crop, but is used only in hops.
- (742) Third parties do, however, in general agree with the parties' argument that hops is a small market for fungicides and that no company develop products exclusively for use on this crop. Yet, an important consequence of this is also that a strong position in a hops market is quite likely to be a lasting one, since entry is less likely than it may be for other crops, where fungicides sales are larger.
- (743) The parties argue that the parties' market share is expected to decrease whereas that of BASF will increase, since they expect BASF to launch their new product BAS 500, a strobilurin called Pyraclostrobin, in 2003. They argue that BAS 500 will be a fierce competitor to Bayer's strobilurin Flint (Trifloxystrobin). The parties also argue that Flint is expected to only offset the decrease in sales of other Bayer products, which are expected to be either discontinued ([...]\* or to decrease substantially in terms of sales ([...]\*). They therefore argue that the expected launch of Flint will not substantially change the present market situation. The Commission notes that Flint is already present on the market in a successful way. The Commission cannot base its assessment of this market on claims by the parties that they expect some of their products to be discontinued. The parties have not explained why the sales of [...]\* should be decreasing in the short term. In their Reply to the Statement of Objections, the parties also argue that the parties' products will have to face competition from Syngenta due to the registration of the product Ridomil Granular and the expected registration

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<sup>46</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>47</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*



for Amistar. The market investigation, including an assessment of new product introductions, has not supported the claims of the parties that the introduction of Flint will not strengthen their position nor their claims about the importance of product introductions by competitors.<sup>48</sup>

- (744) Combining this with the already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products, the lack of new strong competition in the near future, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for hops fungicides in Germany.

*f) Oil and protein crops fungicides*

- (745) The parties estimate that the overall market value of the EEA-wide market for oil crops amounted to EUR [...] million in 2000, with the parties having [20-30]\*% (Bayer: [10-20]\*%, ACS: [10-20]\*%), Syngenta and BASF each [10-20]\*% and DuPont [10-20]\*%. Since ACS is only active in a few countries within the EEA, the parties submit that their activities only overlap in three countries.
- (746) In **Germany**, the parties estimate that their combined market share is [50-60]\*% (Bayer: [30-40]\*%, ACS: [20-30]\*%) with BASF being the leading competitor with [40-50]\*%. The market investigation has broadly confirmed the parties' view of the market shares, that is, the parties have a very high combined market share, and BASF is the only competitor with a significant market share.<sup>49</sup>
- (747) ACS generates about [60-70]\*% of its turnover with Folicur based on the active ingredient Tebuconazole supplied by Bayer. Bayer sells only Folicur. ACS's products Derosal (Carbendazim) and Verisan (Iprodione) account for the remaining [40-50]\*% of ACS's sales in this market.
- (748) The parties make the argument that, since ACS already today sells products supplied by Bayer, the transaction does not lead to a substantial change of the current market structure. To the contrary, the Commission is of the opinion that the fact that the proposed transaction will eliminate direct competition on Tebuconazole based products, which according to third parties account for about [50-60]\*% of the German market, down from about [70-80]\*% in 1997.
- (749) The parties expect their combined market share to decrease substantially to only [30-40]\*% by 2004. The parties argue that they face vigorous competition from BASF, which they claim is able to expand its market position in the German market based on its fungicide Metconazole. According to the parties, the market share of BASF has increased over the last years particularly due to this product, whereas the parties' share has been declining within the same period of time. The parties argue that the expected launch by BASF of Pyraclostrobin in 2002/2003 will result in additional competitive pressure on the combined entity.

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<sup>48</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

<sup>49</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

The parties also argue that Syngenta will launch a Difenconazole-based fungicide under the brand Eria and is expected by the parties to acquire a market share of more than [10-20]\*%. Furthermore, the parties argue that Bayer's Tebuconazole will be off-patent in 2003 and the entry of generics will further contribute to strong competition on the German market for fungicides to be used for the protection of oil and protein plants. The parties argue that such generic competition will primarily come from Makhteshim. The claims of the parties about the importance of these various product introductions in the near future have not been confirmed by the market investigation.<sup>50</sup>

- (750) Combining this with the already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products, the lack of new strong competition in the near future, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the market for fungicides for oil and protein crops in Germany.

*g) Vegetable fungicides*

- (751) According to Bayer's estimate, the EEA-wide market for vegetable fungicides in 2000 amounted to about EUR [...] million. At the EEA level, the parties would be market leader with [30-40]\*%, followed by Syngenta ([20-30]\*%), BASF ([10-20]\*%), DuPont ([0-10]\*%) and Dow ([0-10]\*%). According to the parties, the transaction leads to affected markets at a national level in 12 countries.
- (752) The parties argue that the segment of vegetable crops includes a high number of different plants with a large variety of problems. They maintain that, on the one hand, although there are some 30 vegetable crops, the diseases affecting these and the products used to treat these diseases are broadly similar. On the other hand, due to the large variety of diseases affecting the different plants, the protection of vegetable crops requires the use of products with broad-spectrum efficacy, which can also be used in other crops.
- (753) The products sold by Bayer are mainly formulations of the active substances Tebuconazole, Propineb, Triadimenol and Dichlofluanid, while ACS sells fungicides based on Iprodione and Fosetyl. Tebuconazole is a systemic fungicidal active ingredient, which is used as a spray under the brand names Folicur and Horizon, and as a seed treatment. The parties argue that the active ingredient is effective against several diseases in cereals (Fusarium, Septoria and Puccinia), peanuts (Mycosphaerella, Puccinia, Sclerotinia, Rhizoctonia), grapes (Uncinula), oil seed rape (Pyrenopeziza, Alternaria, Leptosphaeria), bananas, coffee, fruit, and vegetables. Likewise, the parties argue that Propineb, which is marketed under the trade mark Antracol, is used for a number of crops including vegetables, potatoes, tobacco, ornamentals, fruits and, in some regions, also in rice, hops and coffee. Finally, Triadimenol, which is marketed as a spray under the brand name Bayfidan and as a seed dressing under the brand name Baytan, is

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<sup>50</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

efficient against powdery mildew, rusts, and various kinds of leaf spots, particularly in cereals, coffee, grapes, fruit, and vegetables.

- (754) The parties argue that they face strong competition from other international and national companies, some of which (including Syngenta and BASF) have a strong position in almost every national market. They argue that BASF is expected to launch the strobilurin-based fungicides Dimoxystrobin and Pyraclostrobin as well as BAS 510 in 2003 and that its market share can therefore be expected to rise. Moreover, the parties argue that since most of the active ingredients used for the formulation of vegetable fungicides are already off-patent, generic competition is readily available on the market. The parties give the example of Bayer's product Triadimenol, which according to the parties is produced by Makhteshim and various Chinese suppliers (e.g. Seven Continents Agriculture) and sold within the EU. They argue that the same is true of Propineb, which is imported into the EEA from China. Patent protection for Bayer's active ingredient Tebuconazole will expire in 2003. Since the generic company Makhteshim already manufactures Tebuconazole in its own production plant in Brazil, the parties argue that it will have the capacity to sell the active ingredient in the EEA as soon as the patent protection expires. Finally, similar to the market for fruits and nuts fungicides, Bayer and ACS generate part of their turnover through third party products, the supply of some of which will likely be discontinued by the respective suppliers due to the interference of the third party products in the combined product portfolio of Bayer and ACS.
- (755) The Commission wrote in the Statement of Objections that these arguments are mostly of such a general nature that it is difficult for the Commission to give them much weight in its assessment of these markets. The parties did not give concrete examples of third party products, which are likely to be discontinued. Nor did they explain in which markets generic producers are selling Triadimenol and Propineb or when and in which markets they expect generic competition in Tebuconazole.<sup>51</sup> The Commission's market investigation has also shown that the importance given by the parties to BASF's future products cannot be fully confirmed.<sup>52</sup>
- (756) In their Reply to the Statement of Objection the parties have for the first time given lists with the registration status of generic Triadimenol from Makhteshim; they refer again to Tebuconazole, mention that generic Propineb is produced by Agrimont in Italy and SPRJ in China and provide names of claimed generic competitors for several products in Belgium. The parties do not attempt to quantify the impact of this competition or even to explain whether registered products are actually sold (and how much is sold). The Commission cannot on the basis on such scarce information given at a very late stage in the procedure change its general view that generic competition in these markets is not a serious threat to the strong combined position of the parties.

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<sup>51</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

<sup>52</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

- (757) To the contrary, it has been argued, similar as for fruit fungicides, that the parties' position will be strengthened in the near future with the introduction of Bayer's Flint (Trifloxystrobin) product. Together with the available products of the parties, Scala (Pyrimethanil), Vision (Pyrimethanil and Fluquinconazole), Folicur (Tebuconazole) and Euparen (Dicholfluanid), the parties' position will be strengthened. It is also argued that Bayer's newly developed botryticide Teldor (Fenhexamid) is still in the process of market penetration and supports the market presence of the parties. It is also argued that the parties have other products in their pipeline such as BAY14120 (triazole procide) and Dioxastrobin<sup>53</sup>. Furthermore, Bayer's Iprovalicarb and ACS's Fenamidon are both said to be in the process of market penetration.
- (758) Furthermore, the parties recognise that ACS will introduce a new fungicide for [...]\*, mentioned as [...]\*, which is expected to achieve considerable market shares in various countries, the highest being [...]\*.
- (759) The parties in their Reply to the Statement of Objections argue that ACS's new product, [...]\*, serves only as a replacement of the existing [...]\* product, [...]\*. The same applies for [...]\*, which will replace Rovral WP. The Commission does not dispute that this to some extent may be correct. However, in some countries this is not the full story. For instance, the parties in Germany expect [...]\* to achieve a market share of [10-20]\*% in 2004, while Previcur only had a share of [0-10]\*% in 2000. Furthermore, it should be noted that even when a replacement product does not lead to higher market share, it does mean that the parties are better able to defend their market position with a newer product.
- (760) This large number of fungicides represents a broad portfolio with different modes of action. Trifloxystrobin is a strobilurine type fungicide, Pyrimethanil belongs to the group of anilinopyrimidines, Fluquinconazole and Tebuconazole are triazoles and Dicholfluanid is an isocyclic compound. It is argued that this number of different modes of action will enable the parties to implement very effectively anti-resistance tools in the vegetable fungicides market.
- (761) In **Austria**, the parties estimate that their combined market share amounts to [30-40]\*% (Bayer: [10-20]\*%, ACS: [20-30]\*%) with leading competitors being Syngenta ([30-40]\*%), BASF ([0-10]\*%), DuPont ([0-10]\*%) and Dow ([0-10]\*%). According to the parties, Syngenta's market share has increased quite substantially over the last years whereas that of the parties has been declining. The Commission's market investigation has shown that it is likely that the parties' market share is considerably higher than that claimed by the parties. In particular, the parties' estimate of the total market size seems too high, which would mean that the parties have a market share significantly above [40-50]\*%.<sup>54</sup>

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<sup>53</sup> The parties argue that they have no triazole named BAY 14120 under development and that the statement probably refers to JAU 6476.

<sup>54</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

- (762) ACS sells Rovral (Iprodione) and Previcur (Propamocarb), while Bayer's only product is Bayfidan (Triadimenol). The new product [...] is expected to achieve [0-10]\*% and Flint (Trifloxystrobin) [0-10]\*% by 2004. It should be noted that Flint was introduced already in 2001 and it should therefore already now be in the process of achieving market share.
- (763) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create a dominant position in the Austrian market for vegetable fungicides.
- (764) In **Belgium**, the parties estimate that their combined market share amounts to [30-40]\*% (Bayer: [10-20]\*%, ACS: [20-30]\*%) with leading competitors being Syngenta ([20-30]\*%) and BASF ([20-30]\*%). The market investigation has shown that it is likely that the parties' market share is considerably higher than that claimed by the parties. In particular, the parties' estimate of the total market size seems too high, which would mean that the parties have a market share significantly above [40-50]\*%. Furthermore, Bayer in 2001 had an additional [0-10]\*% market share from the sale of Alto SL 100, a product based on Cyproconazole from the "Flint package" acquired by Bayer as a result of the divestments in the Syngenta merger.
- (765) ACS's product portfolio consists of 11 different products, while Bayer sells mostly Horizon (Tebuconazole), and Baycor (Bitertanol). The new product [...] is expected to achieve [0-10]\*%, Flint (Trifloxystrobin) [0-10]\*% and a new formulation based on Iprodione [0-10]\*% by 2004. It should be noted that Flint was introduced already in 2000.
- (766) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the Belgian market for vegetable fungicides.
- (767) In **France** the parties in the notification estimated their combined market to be [30-40]\*% (Bayer: [0-10]\*%, ACS: [30-40]\*%) with leading competitors being Syngenta ([30-40]\*%) and BASF ([20-30]\*%). The parties have later corrected this to [30-40]\*% (Bayer: [0-10]\*%, ACS: [30-40]\*%), but in the Reply to the Statement of Objections correct it again to [30-40]\*%. The market investigation has shown that the parties most likely seriously overestimate the total market size and that their combined market share is more likely in the region of [50-60]\*%.<sup>55</sup>

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<sup>55</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

- (768) ACS's main products are based on Iprodione, sold in different formulations under the brand name Rovral, Fosetyl (marketed under the brands Aliette and Rhodax), Pyrimethanil (sold under the brand names Scala and Walabi), Propamocarb (sold under the brand Previcur) and Chlorotalonil. Bayer's main product is Horizon, based on Tebuconazole, and a mixture of Tebuconazole and ACS's Carbendazim sold under the brand name Libero.
- (769) The new product [...] is expected to achieve [0-10]\*% and Flint (Trifloxystrobin) [0-10]\*% by 2004. It should be noted that Flint was introduced already in 2001 and it should therefore already now be in the process of achieving market share. Furthermore, also Teldor (Fenhexamid) has recently been introduced in this market.
- (770) The parties in their Reply to the Statement of Objection argue that Flint will only be introduced in vegetables in 2002 in France and that this was communicated to the Commission in an annex to an earlier submission. However, in another annex to the same submission it is indicated that the product was introduced in 2001. Whether it was introduced in 2001 or will be in 2002 will, however, not significantly change the assessment of the impact of this product. The main point is that the product will be on the market immediately and not some years from now.
- (771) The parties submit that since Bayer adds only a very small percentage to ACS's market share, the market structure will not change in France as the result of the proposed merger. However, the addition of Flint and Teldor increases the market presence of the Bayer and the combination of Flint with ACS's product portfolio strengthens the possibility of the parties to offer very effective anti-resistance tools in the vegetable fungicides market.
- (772) The parties argue in their Reply to the Statement of Objections that [...]\*. The introduction of Flint therefore strengthen the possibility of the parties to offer an anti-resistance programme.
- (773) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the French market for vegetable fungicides.
- (774) In **Germany** the parties estimated in the notification that their combined market share amounts to [30-40]\*% (Bayer: [30-40]\*%, ACS: [0-10]\*%) with leading competitors being BASF ([30-40]\*%) and Syngenta ([20-30]\*%). In the Reply to the Statement of Objections, the parties correct their combined market share to [30-40]\*%. The market investigation has shown that the parties most likely seriously overestimate the total market size and that their combined market share is more likely in the region of [60-70]\*%.<sup>56</sup> This conclusion is based on a comparison of the actual sales figures reported by competitors as well as these

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<sup>56</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

competitors' estimates of the total market size. In any event, the combined market share of the parties is significantly higher than that of any of their competitors.

- (775) The parties' market position is based on the sale of Tebuconazole and Triadimenol (Bayer), Iprodione, Propamocarb and Pyrimethanil (ACS).
- (776) The new product [...] is expected to achieve [10-20]\*% and Flint (Trifloxystrobin) [0-10]\*% by 2004. It should be noted that Flint was introduced already in 2001 and it should therefore already now be in the process of achieving market share.
- (777) The parties in their Reply to the Statement of Objection argue that Flint will only be introduced in vegetables in 2002 in Germany and that this was communicated to the Commission in an annex to an earlier submission. However, in another annex to the same submission it is indicated that the product was introduced in 2001. It should in this respect be noted that the parties have indicated that the same product (Flint 50 WG) achieved sales in hops in Germany in 2001. Whether it was introduced in 2001 or will be in 2002 will, however, not significantly change the assessment of the impact of this product. The main point is that the product will be on the market immediately and not some years from now.
- (778) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the German market for vegetable fungicides.
- (779) In **Greece**, the parties estimate that their combined market share is [30-40]\*% (Bayer: [10-20]\*%, ACS: [20-30]\*%) with leading competitors being Syngenta ([10-20]\*%), BASF ([10-20]\*%), DuPont ([0-10]\*%) and Dow ([0-10]\*%). The market investigation has shown that the parties most likely overestimate the total market size and that their combined market share is more likely in the region of [50-60]\*%. The market investigation has also shown that the parties have by far the strongest position and have a combined market share several times higher than the nearest competitor.<sup>57</sup>
- (780) ACS's most important products in 2000 were Afugan (Pyrazophos), Previcur (Propamocarb) and Rovral (Iprodione). Bayer's main products are Antracol (Propineb), Antracol-Kombi (Triademefon and Propineb) Baycor (Bitertanol) and Teldor (Fenhexamid). The new product [...] is expected to achieve [0-10]\*% and other new products 8% by 2004. On the other hand, the parties argue that there have been no sales of Afugan in Greece after 2000 and that there are no stocks lefts in Greece, which could be sold.

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<sup>57</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

- (781) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the Greek market for vegetable fungicides.
- (782) In the **Netherlands**, the parties estimate that their combined market share is [40-50]\*% (Bayer [0-10]\*%, ACS [30-40]\*%) with leading competitors being Syngenta ([30-40]\*%) and BASF ([10-20]\*%). The market investigation has shown that the parties most likely overestimate the total market size and that their combined market share is more likely significantly above 50%. The market investigation has also shown that the parties have by far the strongest position and have a combined market share several times higher than the nearest competitor.<sup>58</sup>
- (783) The parties in the Reply to the Statement of Objections submit that they believe in their own data for the total market size, which is based on independent panel data. However, the competitors also base their estimates of the total market size on independent panel data. In this market all competitors have estimates of the total market size considerably lower than that of the parties. The Commission therefore considers that the total market very likely is significantly lower than what the parties submit.
- (784) Bayer sells the Baycor (Bitertanol) and Euparen (Tolylfluanid). ACS's turnover is mainly generated through the products Previcur (Propamocarb), Rovral (Iprodione) and Sporgon and Sportak (both Prochloraz). The new product [...] is expected to achieve [10-20]\*%, Flint (Trifloxystrobin) [0-10]\*% and another new Bayer product another [0-10]\*% by 2004.
- (785) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the Dutch market for vegetable fungicides.
- (786) In **Portugal**, the parties estimate that their combined market share amounts to [30-40]\*% (Bayer: [0-10]\*%, ACS: [30-40]\*%) with leading competitors being Syngenta ([20-30]\*%) and BASF ([0-10]\*%). The market investigation has shown that the parties most likely overestimate the total market size and that their combined market share is more likely in the region of [50-60]\*%. The market investigation has also shown that the parties have by far the strongest position and have a combined market share several times higher than the nearest competitor.<sup>59</sup>

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<sup>58</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>59</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*



- (787) ACS's most important products are Rubigan (Fenarimol) and Baktane (Myclobutanil). The new product [...] is expected to achieve [0-10]\*% and Flint (Trifloxystrobin) [0-10]\*% by 2004.
- (788) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the Portuguese market for vegetable fungicides.
- (789) In **Sweden**, the parties estimate that they have a combined market share of [50-60]\*% (Bayer: [40-50]\*%, ACS: [10-20]\*%) with leading competitors being Syngenta ([30-40]\*%) and BASF ([0-10]\*%). The market investigation has confirmed that the parties have a unique position in Sweden and distribute a very large part of the total sales of the products research based companies. The market investigation has also shown that the parties have by far the strongest position and have a combined market share several times higher than the nearest competitor.<sup>60</sup>
- (790) ACS sells mainly products based on Iprodione. The parties argue that Bayer's market share is almost entirely due to the marketing of third party products by its affiliate Gullviks and that Bayer only sells very small amounts of its Fenhexamid based product Teldor. Other products sold by Gullviks are Amistar and Ridomil, based on Azoxystrobin and Metalaxyl respectively, which are both supplied by Syngenta. The Commission can, however, not accept that these arguments are sufficient to eliminate competition concerns from the proposed transaction on the Swedish market. The fact is that the transaction will lead to considerably less competition on the Swedish market and that there is no reason to believe that the strong position of the combined entity would be challenged.
- (791) The parties reiterate that the Commission does not correctly assess the impact of Gullviks in Sweden. In particular, they argue that Gullviks portfolio, in contrast to that of its competitors', is limited to crop protection products, which only constitute a limited amount of farmers' total needs. According to the parties, farmers continue to be dependent on Gullviks' competitors, farmers' co-operatives, for other products such as, for instance, agricultural machines, sale of building material, fertilizer and seeds.
- (792) The Commission cannot accept that such arguments would prevent the possibility of anti-competitive behaviour on a market, where the parties according to their own figures would have a combined share of almost [50-60]\*%. The fact that the parties through Gullviks would have a unique portfolio of vegetable fungicides, selling not only their own products but also Syngenta products. There is no reason to believe that a farmer would have much of an alternative to buying from Gullviks, no matter how much machinery and building material he may buy from co-operatives.

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<sup>60</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

- (793) Furthermore, the new product [...] is expected to achieve [0-10]\*% and another new ACS product based on Iprodione [0-10]\*% by 2004.
- (794) The already strong position of the parties, the fact that they combined are much larger than their closest competitors, the growth potential in the parties' newer and future products and the lack of new strong competition in the near future does that the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position in the Swedish market for vegetable fungicides.

General conclusion on fungicides

- (795) In fungicides, the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position in the markets for cereal fungicides in Italy, fruits and nuts in Denmark, France and Germany, strawberry fungicides in Sweden, fungicides for botrytis on grapes in France, Germany, Greece and Portugal, hops fungicides in Germany, fungicides for oil and protein crops in Germany, and vegetable fungicides in Austria, Belgium, France, Germany, Greece, Netherlands, Portugal, and Sweden.

**E. Seed treatment**

- (796) Seeds are at risk from seed- and/or soil-borne diseases or from soil-dwelling and/or early season insects. To ensure good germination and avoid seedling losses and damages due to fungi and insect attack, both fungicides and insecticides are applied to the seed, in most cases at the same time. The suppliers of seed treatment products do not in most cases dress the seed grains themselves but supply the products to other firms with the appropriate dressing plants.
- (797) The market for seed treatment is seen as a market with growing importance. Seed treatment is highly efficient and environmentally very friendly. Many respondents to the Commission's market investigation expect the importance of seed treatment to grow because there will be more demand for the protection of higher value seeds, especially genetically enhanced seeds, securing strong emergence and effective protection of the seed in the early growth periods.
- (798) Bayer estimates that the total size of the seed treatment market in the EEA amounted to EUR [...] million in 2000 and growing. In 2000, the turnover generated by Bayer in the EEA in the segment of seed treatment amounted to EUR [...] million and that of ACS to EUR [...] million.
- (799) In their observations on the Commission's 6(1)c decision, the parties argue that a further substantial increase of the market value for seed treatment is not expected due to a highly competitive environment, the increasing presence of low value generic products – especially in the fungicides segment - and the competitive pressure resulting from the demand side, consisting of nationally and internationally operating seed-companies and seed treatment companies which exercise strong countervailing bargaining power.

- (800) The majority of the respondents to the Commission's market investigation do not agree with this description of the market development. Furthermore, it also seems to be at odds with internal documents received from the parties. For instance, in an internal ACS presentation made at the end of 1999, [confidential information of ACS]\*
- (801) Bayer is the global leader in seed treatment. At the EEA-level, the parties would have [60-70]\*% of the overall sales of seed treatment products (Bayer [40-50]\*%, ACS [20-30]\*%). There are only two other significant participants in seed treatment in Europe, Syngenta and the much smaller Uniroyal. Of the research based agrochemical companies, BASF, Dow and DuPont have basically no sales at all in seed treatment, while Monsanto has one recently introduced product against a particular but important disease in cereals (the "take-all disease").
- (802) Market participants generally describe seed treatment as a market, which has specific requirements for companies that want to be active in this market. Naturally, a company has to be in possession of an active ingredient, which is particularly suited to seed treatment. In insecticides, the parties' active ingredients Imidacloprid and Fipronil have been particularly successful because of their long lasting efficacy. In fact, it has been argued that these new chemistries represent a step change in seed treatment. For fungicides, the active ingredients have to be particularly active against certain soil borne diseases, which may vary from crop to crop.
- (803) However, besides the possession of adequate active ingredients, other factors mentioned by several respondents as important for success in seed treatment are technical and marketing know-how, a joint offer of seed treatment products and the special machinery used for seed treatment, as well as a reputation in this special area.
- (804) In their observations on the 6(1)c decision, the parties argue that they are only suppliers of seed treatment product formulations but do not manufacture or supply application technology (machines). The only exception was supposed to be the United Kingdom, where, e.g. Bayer and Uniroyal are also involved in providing machines for seed treatment of cereals. However, in a later reply to an Article 11 letter, [confidential information of ACS]\*
- (805) The parties argue that the existence of only a few market players does not lead to the possibility of manufacturers having sufficient market power to raise prices and foreclose competition in these markets. The parties contend that this is due to the fact that, firstly, the purchasers of seed treatment agents are sophisticated customers yielding substantial bargaining power. Secondly, they argue that large competitors each have the R&D capabilities and sufficient economic strength to enter the European market and/or to expand sales and market share if one of the leading suppliers already active on those markets attempts to raise prices. The parties argue that strong competition can also be expected from generic companies and that the parties will not retain their market position.

- (806) Most respondents to the Commission's market investigation disagree with these statements. They argue that seed treatment is a difficult technical market with special know-how. In an internal ACS presentation from late 1999, it is stated that [confidential information of ACS]\*. This view seems to be more in line with that of the respondents to the Commission's market investigation than the arguments put forward by the parties in the context of this investigation.
- (807) Finally, the parties contend that there is a certain degree of substitutability between seed treatment products on the one side and fungicides and insecticides on the other. In this respect, the parties argue that a significant increase in the price of seed treatment agents would lead to farmers switching to fungicides or insecticides applied to the plant after sowing, instead of sowing pre-treated seeds.
- (808) The parties have, however, not argued that seed treatment is not a separate market. Respondents to the Commission's market investigation have argued that while it may be true that increased use of, for instance, seed treatment insecticides products may reduce the need for early "normal" insecticides applications, this should not be seen as these products being in the same relevant product market.
- (809) Moreover, the investigation shows that there is substitution from foliar and soil applications into seed treatment, whenever this is possible, but not the other way around. The investigation does not lend support to the parties' argument that farmers would switch back to fungicides or insecticides applied to the plant after sowing, instead of sowing pre-treated seeds in face of a price increase. As discussed above, seed treatment will be further endorsed in the EEA because of a better environmental fit compared to traditional applications of insecticides and fungicides, its better safety to the user and easier application.

### ***E.1. Relevant product markets***

- (810) In M.1806 - *AstraZeneca/Novartis*, the Commission found that seed treatment constitutes a separate product market rather than a particular type of application of insecticides and fungicides. The Commission found that the diseases and insects, which are targeted by seed treatment products, differ from those dealt with by spraying programmes; that products used for seed treatment must be registered separately; and that the customers for seed treatment products differ from those for insecticides and fungicides, most seed treatment products being sold to seed producers and propagators and not to farmers. The Commission concluded that there is no supply-side substitution between products registered as insecticides or fungicides and those registered as seed treatment.
- (811) The parties, in general, in the notification follow the market definition suggested by the Commission in M.1806 - *AstraZeneca/Novartis* and they submit that seed treatment constitutes a separate product market. They submit that products sold for seed treatment have specific properties that distinguish these products from insecticides and fungicides applied to the soil or by spraying. Seed treatment products are mostly based on the same active ingredients, which are used for the formulation of insecticides and fungicides, but contain specific additives in order

to ensure that the dressed seeds remain protected against infestations of insects and fungi. The parties argue that as seed treatment products are applied directly to the seed prior to the emergence of infestations, they provide better protection against some diseases than spraying programmes. A number of soil and seed borne diseases particularly affecting cereals can only be combated via seed treatment.

- (812) The parties submit, however, that in general, a distinction between so-called *high value crops* and *low-value crops* is appropriate. According to the parties, high value crops include sugar beet, oil seed rape and maize, while low-value crops are, for instance, cereals.
- (813) The parties argue that seed treatment products for high value crops are sold as insecticides or fungicides to specialised professional seed-treaters, which dress the seed grains with the respective products. Seeds are sold either directly or via the normal distribution channel (wholesalers, distributors). Seed treatment is primarily carried out by a limited number of world-wide but also locally acting seed companies, including Pioneer (DuPont), Monsanto Seeds, Syngenta Seeds and KWS. Generally, these companies mix insecticides and fungicides, which are specifically developed for seed treatment, and apply them to the seed to provide full protection against both insects and fungi.
- (814) In the notification the parties further submit that seed-treatment agents for low-value seed are normally ready-to-use mixtures of insecticides and fungicides. They are supplied to the distribution channel, which is also used for other crop protection agents, including fungicides, insecticides and herbicides. For these low-value seeds, the parties claim that the dressing of the seeds is done by the distributors, or by the farmers themselves who have the necessary equipment to apply the respective product to a given crop.
- (815) In the notification, the parties supplied data on a crop-by-crop basis, except for cereals and rice, which are treated as one product market because the products used for the treatment of these two crops are identical. A number of third party respondents to the Commission's Phase I market investigation argued, however, that a distinction between cereals and rice should be made.
- (816) The parties in their reply to the Commission's 6(1)c decision countered that cereals and rice belong to the same "family" and that the product range for the dressing of rice seeds is identical to the product range used for the dressing of other cereal seeds. Hence, the parties in the notification included the data for rice seed treatment in the same table as cereal seed treatment. The parties furthermore argued that the market for rice seed treatment is very small (approximately 100 000 hectares and approximately EUR 250 000). Bayer is not present at all in this market and ACS has only very limited sales of fungicides (EUR 0,05 million). According to the parties, neither of the parties is present in insecticides for seed treatment for rice and about[90-100]\*% of the market for rice seed treatment is served by generics. Therefore, the parties submit that those sales of seed treatment for rice do not have any impact on the parties' market shares in the market for seed treatment for cereals, and the question whether one

has to define a separate market for seed treatment products used on rice can be left open.

- (817) As concerns insecticides, the above question can be left open as the operation as notified would lead to the creation of a dominant position, if considering cereals as a separate relevant product market or if considering cereals and rice as constituting together a separate relevant product market.
- (818) As regards fungicides, a review of the parties' product portfolio seems to suggest that there is not one product market for cereals and rice, in fact there is not one product market for cereals since the parties have different products for the different types of cereals. A useful distinction seems to be between, on the one hand, barley, and, on the other hand, wheat, rye and triticale ("wheat" for short). For instance, in Germany Bayer's product portfolio in fungicides for barley consists of the following products: Raxil S FS 040 (Tebuconazole and Triazoxide), Baytan Universal FS 094 (Triadimenol, Fuberidazol and Imazalil), Solitär FS 060 (Fludioxonil, Ciprodinil and Tebuconazole). In wheat Bayer's products are Landor CT (Fludioxonil, Difenconazole and Tebuconazole) and Arena C FS 030 (Fludioxonil and Tebuconazole). Similarly, in France Bayer has two different combination products based on Imidacloprid, Gaucho Orge (Imidacloprid, Tebuconazole and Triazoxide) and Gaucho Blé (Imidacloprid, Bitertanol and Anthraquinone). In fungicides Bayer only sells the product Sibutol A FS 325 (Bitertanol and Anthraquinone), which is used for wheat but not barley. Since the products sold by Bayer in these two segments are completely different, the transaction will be assessed on the basis of two different product markets, barley and wheat (including rye and triticale).
- (819) As regards insecticides for seed treatment, the above question can be left open as the assessment of the case would not be affected.
- (820) The parties did not in the notification distinguish between insecticides and fungicides for seed treatment. Such a distinction was, however, suggested by several respondents to the Commission's Phase I market investigation. In this respect, third parties indicated that, in the past, seed treatment product manufacturers were selling broad solutions (fungicides, insecticides and bird repellents) mostly based on generic chemistry. However, with the development of more elaborated and higher value products in both the insecticides market (the parties' products Imidacloprid and Fipronil and Syngenta's Tefluthrin) and to a lesser extent fungicides (Syngenta's Fludioxonil and ACS's Triticonazole) belonging to different manufacturers, seed treatment solutions are sold, and sometimes applied, separately. Therefore, it was argued that insecticides and fungicides generate different segments.
- (821) The parties in their reply to the Commission's 6(1)c decision argued that the large majority of products sold by the parties and their competitors in the market for cereals seed treatment are combinations of several fungicides or fungicides and insecticides in order to combat a broad range of fungi and pests. Only ACS offers to a very limited extent a straight insecticide in France for cereals seed treatment, which is being phased out as little market exists. The parties have

therefore submitted data for cereals for both fungicides "solo", insecticides "solo" and combination products insecticides/fungicides.

- (822) With regard to cereals the parties furthermore submitted in the notification that a separate sub-market must be defined for products designed for protecting cereals against *Gaeumannomyces Graminis*, also known as "take-all-disease". Cereal crops are one of the main host crops for this disease. Currently, there are only two products available for protection against this disease; one is a Fluquinconazole-based product developed by ACS and sold under the brand name Jockey, the other is a comparable product recently launched by Monsanto called Latitude. Since these products are specific new products for control of "take-all-disease", they cannot be substituted by any other active ingredient. According to the parties, Jockey and Latitude do, however, compete with the other fungicides seed treatment products, since they can treat other diseases than the "take-all-disease". This is thus an example of "one-way substitution". Most respondents to the Commission's Phase II market investigation concur that only Jockey and Latitude can protect against the "take-all-disease". However, they also point out that Latitude only treats the "take-all-disease", while Jockey has a broader spectrum. Thus the one-way substitution in fact only applies to Jockey, but not to Latitude. The question of the exact market definition with respect to products treating the take-all disease can, however, be left open.
- (823) The present operation will therefore be assessed on the basis of separate markets for insecticides and fungicides for seed treatment on a crop-by-crop basis. For fungicides, two separate cereals market are assessed: on the one hand, barley, on the other hand, wheat, rye and triticale.

## ***E.2. Competitive assessment***

### *General considerations*

- (824) In the notification the parties argued on the basis of insecticides and fungicides for seed treatment being part of one overall market for seed treatment. On this basis the parties' activities overlap in a large number of crops and Member States. According to the information in the notification, there would be 18 affected national seed treatment markets. However, as mentioned above, the Commission's market investigation has shown that the product market definition proposed by the parties was too broad. As a result, the number of affected markets is higher than that claimed by the parties in the notification. Following the investigation, the Commission considers that the transaction would create or strengthen a dominant position in 27 national markets, 14 insecticides markets and 13 fungicides markets. These markets will be analysed in detail below.
- (825) In the other affected markets, the Commission considers that no competition problems arise. The Commission has in each of these markets reached this conclusion for one or more of the following reasons:
- (826) The combined market share of the parties is low; there is no overlap between the parties' activities either because of misallocation of market share or because the overlap has ceased to exist for other reasons; the market share increment is very

small and the structure of the market is unlikely to be affected by the operation; the structure of the market is unlikely to be affected by the operation as the pricing incentives of the parties' products would not be affected; the parties have largely overestimated their market position; there are strong competitors who are likely to be able to provide effective competition on the market; new product introductions by competitors are likely to provide strong competition to the parties' products in the near future.

- (827) The Commission's analysis in the markets where competition concerns are found is as follows:

### ***E.2.1 Seed treatment insecticides***

#### *Introduction*

- (828) Seed treatment insecticides constitute the most successful application of ACS's Fipronil and Bayer's Imidacloprid. Imidacloprid is the leading seed treatment product in the EEA. The sales of Imidacloprid for this application totalled some EUR [...] million in 2000. According to the parties, in fact, the sales of Imidacloprid-based seed treatment insecticides account for approximately [70-80]\*% of the overall turnover achieved by Bayer through its sale of Imidacloprid-based products in the EEA for foliar, soil and seed treatment applications and [50-60]\*% of Imidacloprid based products sold in the EEA for all applications (including also home and garden, small animal ectoparasiticides, professional pest control and environmental health). Fipronil-based seed treatment insecticides account for about [confidential information of ACS]\* of all applications for foliar, soil and seed treatment applications and some [confidential information of ACS]\* of the overall turnover achieved by ACS through the sale of straight Fipronil or Fipronil-based products in the EEA.
- (829) Bayer's neonicotinoid Imidacloprid and ACS's pyrazole Fipronil are practically the only active ingredients currently used in the EEA in seed treatment insecticides for maize. As regards seed treatment insecticides for cereals and rice, the only active ingredients currently used in the EEA are ACS's Fipronil and Syngenta's Tefluthrin, which is sold by Bayer in the UK. [...]\*. The Commission also notes that ACS has another pyrazole in its portfolio, Ethiprole. This product is not currently marketed in the EEA. [...]\*. Likewise, ACS has submitted that [confidential information of ACS]\*. Furthermore, ACS has submitted that [confidential information of ACS]\*. The Commission has therefore only taken into account [...]\* in the assessment of the seed treatment markets.
- (830) Therefore, after the implementation of the proposed transaction, the merged entity would control [...] active ingredients for seed treatment - Imidacloprid, Fipronil [...] - while the only remaining competitor, Syngenta, would control only two active ingredients for seed treatment, Tefluthrin and Thiamethoxam. It is to be noted, however, that as regards Tefluthrin, this product represents a so-called old chemistry class, compared to the new chemistries neonicotinoids and pyrazoles. In seed treatment, Tefluthrin is only used for cereals and rice, and is currently sold by Bayer in the UK. On the basis of the investigation, the



Commission considers that Syngenta will effectively have only one seed treatment product technically corresponding to the parties' products, the neonicotinoid Thiamethoxam, although already marketed in the US is not yet launched in Europe.

- (831) The parties have argued that Syngenta's Thiamethoxam will be registered in a number of markets and will have a substantial impact on the market share of the parties. The parties have submitted that Thiamethoxam is superior to Imidacloprid in that not only Thiamethoxam is comparable to Imidacloprid as regards its mode of action and spectrum of activity, but also in that it can be applied with lower dosages than Imidacloprid. The parties have also argued that Fipronil will not significantly strengthen the market position of the parties.
- (832) On the basis of the investigation, the Commission does not consider that it is correct to say that Thiamethoxam is superior to the parties' products. First, the investigation shows that [confidential comparison between the product characteristics of [...] and Thiamethoxam as regards maize and cereals]\*. The application rates of Thiamethoxam and [...] [confidential comparison between the product characteristics of [...] and Thiamethoxam]\*.
- (833) Second, as regards maize and cereals, both the additional information provided by the parties at the Commission's request and also information obtained from Syngenta does not lend support to the parties' argument that Thiamethoxam is a superior product to Imidacloprid. Based on the information submitted by Syngenta, [confidential comparison between the product characteristics relating to the effectiveness and the application rates between Imidacloprid, [...]\*, Fipronil and Thiamethoxam as regards maize and cereals]\*.
- (834) As regards maize, [confidential comparison between the product characteristics relating to the effectiveness and the application rates between Imidacloprid, [...]\*, Fipronil and Thiamethoxam as regards maize]\*.
- (835) Therefore, on the basis of the above, the Commission believes that the combination of Imidacloprid, [...]\* and Fipronil will allow the parties' to maintain their dominating market position vis-à-vis Thiamethoxam.
- (836) The parties have provided a number of studies which describe the distinguishing features of Thiamethoxam. The Commission notes, however, that most of the studies quoted by the parties do not address maize or cereals. The study on the chemodynamic behaviour of Thiamethoxam, which discusses maize, does not make any comparisons with any of the parties' products. Another study comparing Thiamethoxam with Imidacloprid has been conducted in Brazil on cornstalk borer (*Elsamopalpus lignosellus*) which, to the Commission's knowledge and based on the pest spectrum provided by both the parties and Syngenta, is either not existing or at least not economically important in the EEA. The only study addressing cereals has been conducted in Brazil and addresses only aphids and a lepidoptera *Diloboderus abderus* which is not found in Europe. The study does not address the most important pest in the EEA, the wireworm. Therefore, the Commission does not consider these studies as

relevant for the assessment of the EEA market in general or the markets which are relevant for this investigation.

- (837) Furthermore, the Commission considers that Thiamethoxam is a new product and will have to compete against the only two existing products, which are considered by third parties as being the best products on the market. Gaucho (Imidacloprid) and Regent (Fipronil) are established brand names. These products are well recognised and the companies who supply them have a proven expertise on the market. Bayer has virtually created the seed treatment market with Imidacloprid and, thus, has considerable know-how and a reputation on the seed treatment insecticides market. Both parties have an established customer base and proven expertise of cooperation with seed companies, coaters and pelleters ("breeders") in seed treatment insecticides. In this respect, it has been indicated to the Commission that the seed treatment market is "highly technical" and, to enter, one needs *inter alia* know-how accumulated over a period of time. The Commission's investigation shows that customers do not easily switch suppliers on the seed treatment market. The responsibility of the seed treatment company is to sell coated seeds that have full germination power and which are totally protected from insects and diseases. It has been indicated to the Commission that no seed manufacturer would take the risk of rapidly switching from one set of active ingredient to another, as this could prove highly risky for the reputation of the brand. In this respect, it has been indicated that it would take at least 3 years of testing before switching to another active ingredient. Moreover, it has been indicated that seeds must be dressed often within a very short period of time and companies are unwilling to take the risk of failure with a new supplier. Internal documents of the parties seen by the Commission also recognise that barriers to entry to seed treatment are high.
- (838) While it is true that Syngenta is active on the market, Syngenta is on the market primarily as a fungicides seed treatment provider. In seed treatment insecticides, Syngenta faces high entry barriers in the form of the parties' established brands and reputation. The Commission considers that the proven expertise and high entry barriers in the seed markets could also partly explain why Fipronil has hardly been introduced in any of those markets, where Imidacloprid is already present and where Fipronil targets economically important pests (e.g. maize). It would also partly explain why Fipronil has a lower market share in those markets where Imidacloprid is already present.
- (839) The parties have provided examples of markets which they consider as evidence of Syngenta making inroads into the seed treatment insecticides with Thiamethoxam. It is to be noted that the parties have been able to provide only one example in Europe, that is, Finland. However, as the Finnish market concerns only beet insecticides, it has no direct relevance for the case at hand because Fipronil cannot be used for beets and beet insecticides are therefore not a concern in the present case. Moreover, Finland is an exceptional market in that farmers are obliged, by law, to stop using Imidacloprid after four years. This explains why Thiamethoxam is able to take market share from Imidacloprid. The Commission is not aware of similar restrictions for the use of Imidacloprid in other seed treatment markets. The parties have used both the United States

and Canada as examples of successful market penetration by Thiamethoxam. However, information submitted by Syngenta shows that [confidential information concerning the market position of Thiamethoxam]\*. As regards Turkey, information submitted by Syngenta shows that [confidential information concerning the market position of Thiamethoxam]\*. In any event, it is to be noted that Fipronil is not present in any of the markets discussed by the parties. Therefore, the evidence is not comparable with the situation in the EEA and especially with the maize and cereals markets in France and Italy.

- (840) It is also important to note that [confidential information concerning the product characteristics of Thiamethoxam]\*<sup>61</sup>. Therefore, the parties' argument that [...] will come on the market considerably after the introduction of Thiamethoxam, may not be true.
- (841) [...]\*. The Commission considers that this is unlikely in cereals in France, where Imidacloprid is on the market only in the form of combination products. As regards maize, [...]\*, the Commission considers that, with three products on the market, the parties are in a position to defend their market position by for instance offering discount packages of the three products to seed companies.
- (842) Finally, the parties have argued in their reply to the Commission's supplementary Statement of Objections that Syngenta enjoys secure links to the downstream seed markets since it is active also as a seed company. The parties have argued that Syngenta is one of the biggest seed companies worldwide, currently ranking third in terms of worldwide sales immediately after DuPont/Pioneer and Monsanto. However, in view of the fact that, to the Commission's knowledge, the two leading seed companies are unconnected to Syngenta and that the parties have established links with these companies, the Commission does not consider that, should Syngenta enter the market, the parties would not be able to find a buyer for their products. Moreover, in view of the parties' strong product offering, they will be in a unique position to offer discount packages to seed companies.
- (843) For the foregoing reasons, the Commission concludes that there is no evidence that, in general terms, Thiamethoxam is a superior product compared to the parties' products. The Commission also concludes that the entry barriers in seed treatment insecticides markets are very high and that it is unlikely that Thiamethoxam will be able to rebut the market power of the new entity. The Commission also notes that [confidential information concerning the product characteristics of Thiamethoxam]\*. In any event, the notified operation will reduce the number of players in this market from three (Bayer, ACS and Syngenta) to two. This means that even when Syngenta, if at all, becomes an established competitor, the reduction from three players to two will prevent conditions of effective competition from being preserved in these markets. The parties have argued that they settled the patent dispute with Syngenta following the competition concerns the Commission raised in the decision based on Article 6(1)c of the Merger Regulation. Some internal documents obtained by the

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<sup>61</sup> Confidential information concerning the product properties of Thiamethoxam

Commission show, however, that Bayer expected Syngenta to win the patent dispute in the EEA. Therefore, in the absence of the present transaction, the Commission considers it likely that three companies would have been active on the European seed treatment market.

*a) Seed treatment insecticides for cereals and rice*

- (844) As regards straight insecticides for cereals and rice, Bayer is currently the only player in the UK with Tefluthrin (Evict CS 010), a product supplied by Syngenta under a long-term supply agreement. [...]\*. ACS is the only player in France with Fipronil-based products under the brand names Metis and Texas.
- (845) The market for straight cereals products in France was EUR [...]\* million in 2000. As regards seed treatment combination products (insecticides and fungicides), that market amounted to some EUR [...]\* million in 2000. The two markets together amount to some EUR [...]\* million.
- (846) Bayer seems to have chosen to first introduce Imidacloprid on the cereals markets as combination products. Bayer sells such combination products in France, the UK and Belgium. As regards France, there is an important overlap between the parties: Bayer is on the French market with combination products (Gaucho blé FS 337,5 and Gaucho orge FS 375) [...]\*. ACS is selling a combination product Zoom and it is the only supplier of a straight insecticides (Fipronil) on this market. There is therefore a current overlap between Bayer and ACS and their products are competing. As will be shown below, a customer wanting to use seed treatment insecticides for cereals would to a very large extent be constrained to choose the parties' products, either a combination product or a straight insecticide.
- (847) On the overall cereals market in France (wheat, rye, triticale and barley), Bayer would have [70-80]\*% of combination products and ACS [0-10]\*%, while Syngenta has the remaining [20-30]\*% of this market. ACS has [90-100]\*% of the straight insecticides for seed treatment. In the hypothetical overall market comprising both straight insecticides and combination products, Bayer would have [70-80]\*% and ACS [0-10]\*%. If considering only the insecticides being part of this market (i.e. the straight insecticides and the insecticides in the combination products), the parties are likely to have a higher market share, since part of the overall market includes also fungicides, part of ACS's sales are straight insecticides and the parties have the latest chemistry on the market. Looking separately at wheat and barley, the overlap would be in the barley segment: in this segment, the parties would have [60-70]\*% (Bayer [40-50]\*%, ACS [10-20]\*%). Again, looking only at the insecticides part, the market share of the parties is likely to be higher since part of the overall market includes also fungicides, part of ACS's sales are straight insecticides and the parties have the latest chemistry on the market. The parties have argued in their reply to the Commission's supplementary Statement of Objections that due to the termination of the Guazatine business to Makhteshim, any existing overlap would be eliminated in this market. The Commission notes that even if the Guazatine business is sold to Makhteshim, the parties have not submitted that ACS's

product Zoon will be sold. The parties could source Guazatine for their product Zoon in the future.

- (848) After the implementation of the proposed transaction, the merged entity would control [...] active ingredients for seed treatment insecticides for rice and cereals in the EEA: Imidacloprid and Fipronil, which are currently on the market, [...]. The only remaining competitor Syngenta would control Thiamethoxam, which is not yet launched on the market, and Tefluthrin, that however is a old chemistry class, compared to the new chemistries neonicotinoids and pyrazoles. In the light of the investigation, the Commission considers that Tefluthrin does not exercise sufficient competitive pressure on the parties' neonicotinoids and pyrazole. This is evidenced by the relatively low market share of Tefluthrin in the cereals market in France, even though according to the parties Tefluthrin was first launched in 1986 and Imidacloprid only 4 years later, in 1990.
- (849) The parties have argued that Syngenta's neonicotinoid Thiamethoxam will provide competition to the new entity and that no competition concerns would arise. However, for the reasons given above, the Commission considers that Syngenta is unlikely to be in a position to offset the market power of the new entity in the near future. As to the question whether the transaction would lead to the elimination of ACS as a potential competitor in the UK where Bayer is currently the only player with a third party product [...], the parties have argued that Fipronil is used in France for the control of wheat bulb fly which has no economic importance in the UK. Therefore, the parties have argued that ACS has never developed Fipronil for cereal seed treatment use in the UK and has no plans to do so either.
- (850) Therefore, the Commission considers that combining Fipronil with [...] will have a negative effect on competition. For these reasons the Commission has reached the conclusion that the proposed transaction will create or strengthen a dominant position on the French market for seed treatment insecticides for cereals and rice. The above assessment is not materially affected if considering cereals and rice together, as neither party is active in insecticides used for seed treatment for rice in France.

*b) Seed treatment insecticides for maize*

- (851) Bayer considers that maize is one of the fastest growing insecticides seed treatment market. Currently ACS and Bayer are the only significant players in the **French** market (Bayer: [70-80]\*%, ACS [10-20]\*%) and the only players in the **Italian** market (Bayer: [60-70]\*%, ACS: [30-40]\*%) for seed treatment insecticides for maize. Contrary to what has been stated in the Statement of Objections given to a misinterpretation of the data provided by the parties, ACS is currently not active in the market for seed treatment insecticides for maize in the Netherlands. The parties have explained that these seeds are exported to

France<sup>62</sup>. However, since Bayer's neonicotinoid Imidacloprid and ACS's pyrazole Fipronil are considered generally to be the best active ingredients currently used in the EEA in seed treatment insecticides for maize and their pest spectrum overlaps, ACS is currently a potential competitor of Bayer in all the EEA national markets where Bayer is active

- (852) As regards seed treatment for maize, the EEA market was estimated as EUR [...] million in 2000, of which only France and Italy accounted in the same year for EUR [...] and [...] million, respectively. The French and the Italian markets together represent more than [...] % of the whole EEA-wide market for seed treatment insecticides for maize.
- (853) ACS sells Fipronil marketed under the brand Regent both in France and Italy. Bayer sells Imidacloprid under the brand Gaucho in both countries.<sup>63</sup> [...]\*. Third parties have indicated that there are no present substitutes for the parties' products Imidacloprid and Fipronil.
- (854) The parties have argued that the new entity will have to face strong competition by Syngenta's pipeline product Thiamethoxam. However, for the reasons indicated above, the Commission considers that Thiamethoxam will not be able to offset the market power of the new entity. [Confidential information concerning the sales forecasts of Thiamethoxam]\*.
- (855) The Commission has therefore reached the conclusion that the transaction would create or strengthen a dominant position in seed treatment insecticides for maize in France and Italy. In addition to this, the transaction will remove Fipronil as a potential competitor in all those markets where Imidacloprid is currently present and where [...] will be introduced, that is, in Austria, Belgium, Germany, Greece, the Netherlands, Portugal and Spain.

*- Seed treatment for other crops*

- (856) The Commission considers that competition would be restricted not only in those areas, where the parties have current overlaps but also in crops, where only one of the parties is currently present, because the operation would remove a potential competitor from those markets.
- (857) As regards potatoes, even though the parties have argued that Fipronil is not suitable as potato tuber treatment, the information obtained from the parties shows that Fipronil has good activity against wireworm, a pest affecting potatoes. It cannot therefore be excluded that Fipronil could have, in the absence of the merger, been developed for this high-value market, where Imidacloprid is the only effective competitor at the moment in Spain and the Netherlands.

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<sup>62</sup> The allocation of the sales derived from the exports of Fipronil from the Netherlands to France would not materially affect the sales and market share figures provided by the parties in the French market.

<sup>63</sup> Market data submitted by the parties suggests that Bayer sells also Methiocarb under the brand Mesurol FS 500 in France. The parties have argued, however, that Bayer's sales of Mesurol are exclusively derived from the export of this product since it is not registered in France for corn seed treatment.

- (858) [...]\*. The parties have not provided evidence which would show that Imidacloprid could not be developed for this high-value market. The Commission considers, therefore, that Bayer would be removed as a potential competitor in these countries following the transaction.
- (859) The parties have submitted in their reply to the Commission's supplementary Statement of Objections that, as regards oil seed rape, the key pest to be controlled in oil seed rape is the flea beetle *Phyllotreta* spp. The parties have argued that Fipronil has only very weak activity against this pest and has therefore never been developed or registered for this use. The parties have submitted that the whole crop is not accessible to Fipronil. No issues of potential competition therefore are likely to arise on this market.
- (860) On the basis of the foregoing, the Commission has reached the conclusion that the removal of a potential competitor would lead to the creation or strengthening of a dominant position in seed treatment for potatoes in Spain and the Netherlands and for vegetables in France and in the Benelux.

*Conclusion on insecticides for seed treatment*

- (861) The investigation shows that the merger would create the most powerful company in insecticides used for seed treatment. The only two existing products considered by all third parties as relevant for seed treatment and which are currently competing, will be owned by the same company. The parties' products would strengthen the position both by targeting the same pests and also by complementing each other. Imidacloprid and Fipronil are said to constitute the ideal combination to have the strongest market position in seed treatment. [...]\*. For the reasons given above, the Commission does not consider that Syngenta's Thiamethoxam will be able to offset the resulting market power of the new entity. Even if Syngenta were to enter the market, the transaction would reduce competition in the market since it would reduce the number of players from three to two.
- (862) In the light of the above, the Commission considers that the transaction would lead to the creation or strengthening of a dominant position in seed treatment insecticides for cereals and rice in France and seed treatment insecticides for maize in France, Italy, Austria, Belgium, Germany, Greece, the Netherlands, Portugal and Spain. The operation would further lead to the creation or strengthening of a dominant position in seed treatment insecticides for potatoes in Spain and the Netherlands and in seed treatment insecticides for vegetables in France and in the Benelux by removing a potential competitor from the market.
- (863) Almost all third parties consulted by the Commission have expressed serious concern over the transaction and indicated that competition in the seed treatment markets would be severely restricted in the future as a result of the operation.

***E.2.2 Seed treatment fungicides***

- (864) The only three seed treatment fungicides markets, where competition problems are found, are the two cereals markets barley and wheat (including rye and triticale) and potatoes.

*a) Seed treatment for cereals and rice*

- (865) The parties estimate that the total EEA-wide markets for seed treatment with fungicides for cereals in 2000 was barley EUR 34 million and wheat EUR [...] million. On these markets, the parties estimate their combined share to be [60-70]\*% in barley (Bayer: [30-40]\*%, ACS: [20-30]\*%) and [20-30]\*% in wheat (Bayer: [10-20]\*%; ACS: [10-20]\*%). The parties reckon that Syngenta is the largest competitor with [20-30]\*% (barley) and [40-50]\*% (wheat) of the total market.

*- Barley*

- (866) In barley, Bayer sells Tebuconazole straight and with various mixing partners under the brand name Raxil: Raxil ES 015 (straight Tebuconazole), Raxil S FS 040 (Tebuconazole and Triazoxide) and Raxil IM ES 035 (Tebuconazole and Imazalil). It also sells Triadimenol with various mixing partners under the brand name Baytan: Baytan DS 17,5 (Triadimenol and Imazalil) and Baytan Universal FS 094 (Triadimenol, Fuberidazol and Imazalil). It finally sells Fludioxonil with mixing partners under the brand name Solitär FS 060 (Fludioxonil, Cyprodinil and Tebuconazole).
- (867) ACS sells Triticonazole with various mixing partners under the brand names Premis Delta (Triticonazole and Iprodione), Kinto TS and Seman (Triticonazole, Prochloraz and Anthraquinone). It sells Prochloraz in mixtures with other active ingredients under the brand names Abavit UF and Abavit UT (Prochloraz and Carboxin), Abavit Universal AB and Prelude Universal (Prochloraz, Carboxin and Anthraquinone) and Rubin (Prochloraz, Pyrimethanil and Flutriafol). It sells Guazatine straight and with various mixing partners under the brand names Pallas, Ravine, Panocrine 35, Panocrine 70 (straight Guazatine), Panocrine, Panocrine Aqua and Panocrine Plus (Guazatine and Imazalil), Panocrine GF (Guazatine, Fenfuram and Imazalil). It sells Iprodione with mixing partners under the brand names Germipro (Iprodione and Carbendazim) and Geriko Biop (Iprodione, Diniconazole and Anthraquinone). Finally, it sells Imazalil straight under the brand name Fungazil.
- (868) In 2001 ACS divested Guazatine to Makhteshim. However, in several countries ACS retained the distribution rights for the products based on Guazatine, while it in others will continue to sell mixture products with Guazatine while Makhteshim distributes straight Guazatine products. The effects of this divestment have therefore to be analysed in the light of the situation in the individual Member State. However, it is worth noting that ACS in internal documents discussing the divestment [confidential information of ACS]\*. The assessment of the importance of the divestment of the Guazatine business will be done in light of these statements.



- (869) According to the data submitted by the parties, affected markets arise in the following Member States: Austria ([20-30]\*%), Germany ([60-70]\*%), Ireland ([60-70]\*%), Italy ([60-70]\*%), the United Kingdom ([80-90]\*%). The Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the markets for fungicides for seed treatment of barley in Germany, Ireland, Italy and the United Kingdom.
- (870) The **German** market amounted in 2000 to EUR [...] \* million and is expected by the parties to grow slightly to EUR 16 million by 2004. The parties estimate their combined market share in Germany to be [60-70]\*% (Bayer: [30-40]\*%, ACS: [30-40]\*%) with Syngenta the largest competitor with [30-40]\*%.
- (871) Bayer's main product is Baytan Universal FS 094 (Triadimenol, Fuberidazol and Imazalil), followed by Raxil S FS 040 (Tebuconazole and Triazoxide) and Solitär FS 060 (Fludioxonil, Cyprodinil and Tebuconazole). ACS sells mainly Prochloraz in mixtures with other active ingredients, Abavit UF and Abavit UT (Prochloraz and Carboxin) and Rubin (Prochloraz, Pyrimethanil and Flutriafol). ACS also sells Panocrine GF (Guazatine, Fenfuram and Imazalil).
- (872) The parties argue that ACS will loose market share since it divested Guazatine, including Panocrine GF in Germany, to Makhteshim Agan in 2001. As Panocrine GF only achieved [0-10]\*% out of ACS's total market share of [30-40]\*% in Germany, this does, however, not change the assessment in any fundamental way. The parties furthermore argue that Fludioxonil is supplied to Bayer by [...] \*. The parties claim that they do not expect that [...] \*. The parties have not, however, provided any evidence that this will actually happen. On the other hand, it should be noted that ACS's Rubin was only introduced in 1999 and managed to achieve a market share of [10-20]\*% by 2000.
- (873) The parties in their Reply to the Statement of Objections argue that the Commission has not sufficiently taken into account that the parties expect their market shares to decrease because of competitive pressure resulting from generic Tebuconazole. They also argue that the Commission has failed to acknowledge that [...] \*. Bayer submits that its new product [...] \* is not expected to fully compensate for the losses in market share due to the termination of Solitär and the expected generic pressure on Tebuconazole. The parties furthermore argue that the Commission does not take into consideration the strong competition the parties are facing in the fungicides seed treatment in cereals from Syngenta, Monsanto and, after acquisition of Guazatine, from Makhteshim. Syngenta's market share is expected to increase because of its technically superior products. Syngenta's product portfolio encompasses the fungicidal active ingredients Difenoconazole, Fludioxonil and Fludioxonil. Syngenta's current fungicidal portfolio (products marketed under the brand names Celest, Celest Gold, Beret Gold) shows the best performance especially against Fusarium (snow-mould) and is in this respect unmatched by the product range offered by competitors. In addition, the parties lead the attention to the fact that Monsanto will launch a new product under the brand name Latitude.

- (874) The Commission cannot share these views put forward by the parties. As to the generic pressure in Tebuconazole, the Commission has no evidence that such generic pressure will be more effective as a competitive restraint on the parties than generic competition has been in other markets. In a market so specialised as seed treatment, the effects of generic competition are likely to be even less strong. [...]\*. As to the claim that Syngenta should have technically superior products and an unmatched product range offered by competitors, the Commission notes that the two parties individually have been able to achieve as high market shares in Germany as has Syngenta. These two individual positions are now being joined; it seems hard to accept that Syngenta after the transaction would have an "unmatched product range". As to the effect of the launch of Latitude, this is a specialised product competing basically against ACS's Jockey product line, which is the only other product treating this disease. According to the data provided by the parties, ACS has no sales of Jockey in barley in Germany. It therefore seems difficult for Monsanto to take away any of the parties' sales in this market.
- (875) The parties have a very strong position on the German market for seed treatment of barley with fungicides. There is no indication that any competitor should be a serious candidate to challenge this strong position. Competition on the market would basically be reduced to two companies, the new entity and Syngenta, with Syngenta having a much weaker position.
- (876) The **Irish** market amounted in 2000 to EUR [...] million and is expected by the parties to remain at EUR 0,8 million in 2004. The parties estimate their combined market share in Ireland to be [60-70]\*% (Bayer: [20-30]\*%, ACS: [40-50]\*%) with unspecified "others" having the remaining part of the market.
- (877) Bayer sells Raxil ES 015 (straight Tebuconazole) and Raxil IM ES 035 (Tebuconazole and Imazalil), while ACS sells Fungazil (straight Imazalil) and Panocrine Plus (Guazatine and Imazalil).
- (878) The parties argue that Panocrine Plus was divested to Makhteshim in 2001. However, ACS keeps the distribution rights to Panocrine Plus in Ireland until [...]\*. Their very strong position in the Irish market can thus be expected to remain in the near future.
- (879) The **Italian** market amounted in 2000 to EUR [...] million and is expected by the parties to grow slightly to EUR [...] million by 2004. The parties estimate their combined market share in Italy to be [60-70]\*% (Bayer: [20-30]\*%, ACS: [30-40]\*%) with unspecified "others" having the remaining part of the market.
- (880) Bayer sells Raxil IM ES 035 (Tebuconazole and Imazalil), while ACS sells Premis Delta (Triticonazole and Iprodione) and Panocrine 70 (straight Guazatine).
- (881) The parties argue that ACS has divested Guazatine to Makhteshim in 2001, including Panocrine 70 in Italy. This product had the majority of the ACS's sales in this market in 2000. However, the parties also estimate that Premis Delta in 2004 will have a market share on its own of [40-50]\*%, while Raxil IM ES 035

will [...] its share of [20-30]\*%. The parties therefore expect to improve on their already very strong position in Italy despite the sale of Guazatine to Makhteshim.

- (882) The market in the **United Kingdom** amounted in 2000 to EUR [...] million and is expected by the parties to remain at that level in 2004. The parties estimate their combined market share in the United Kingdom to be [80-90]\*% (Bayer: [70-80]\*%, ACS: [0-10]\*%) with Syngenta the largest competitor with [10-20]\*%. Bayer sells Raxil S FS 040 (Tebuconazole and Triazoxide), while ACS sells Ravine (straight Guazatine).
- (883) Also in this market, the parties bring forward the argument about ACS's divestment of Guazatine to Makhteshim Agan as of 2001. However, ACS will anyway keep the distribution rights for Ravine in the United Kingdom until [...]\*. The parties claim that they expect Bayer's market share to decline from the present [70-80]\*% to [50-60]\*% by 2004. They have, however, not explained the reasons for such a [...] decline. The Commission therefore considers that Bayer has a dominant position on the market for fungicides for seed treatment of barley in the United Kingdom.
- (884) For all the above reasons, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the markets for fungicides for seed treatment of barley in Germany, Ireland, Italy and the United Kingdom.

- *Wheat, rye and triticale*

- (885) In wheat, rye and triticale, Bayer sells Bitertanol with various mixing partners under the brand name Sibutol: Sibutol FS 398, Sibutol LS 298 and Sibutol FS 199 (all Bitertanol and Fuberidazol), Sibutol A FS 325 (Bitertanol and Anthraquinone), Sibutol Morkit FS 375 (Bitertanol, Fuberidazol and Anthraquinone). It sells Tebuconazole straight and with various mixing partners under the brand name Raxil: Raxil ES 015 and Raxil ES 025 (straight Tebuconazole), and Raxil T FS 515 (Tebuconazole and Thiram). It also sells Triadimenol under the brand name Baytan: Baytan DS 17,5 (Triadimenol and Imazalil). It finally sells Fludioxonil with various mixing partners under the brand names Landor CT FS 050 (Fludioxonil, Difenconazole and Tebuconazole) and Arena C FS 030 (Fludioxonil and Tebuconazole).
- (886) ACS sells Triticonazole straight and with various mixing partners under the brand names Premis, Real (straight Triticonazole), Legat, Premis, Premis Blé, Premis Geta and Real Geta (all Triticonazole and Guazatine), Kinto TS and Seman (Triticonazole, Prochloraz and Anthraquinone) and Rubin (Prochloraz, Pyrimethanil and Flutriafol). It sells Prochloraz in mixtures with other active ingredients under the brand names Abavit UF and Abavit UT (Prochloraz and Carboxin), Abavit Universal AB and Prelude Universal (Prochloraz, Carboxin and Anthraquinone). It sells Fluquinconazole straight and with various mixing partners under the brand names Jockey Flexi (straight Fluquinconazole), Jockey and Jockey Plus AB (Fluquinconazole and Prochloraz), Jockey Plus AB (Fluquinconazole, Prochloraz and Anthraquinone). It sells Iprodione with mixing

partners under the brand name Germipro (Iprodione and Carbendazim). It sells Guazatine straight and with various mixing partners under the brand names Pallas, Panocrine, Panocrine 30, Panocrine 35, Panocrine 70 and Panocrine 400 (straight Guazatine), Panocrine, Panocrine Aqua and Panocrine Plus (Guazatine and Imazalil), Lotus (Guazatine and Flutriafol) and Panocrine GF (Guazatine, Fenfuram and Imazalil). Finally, it sells Carboxin straight under the brand name Vitavax.

- (887) Also in this market the parties refer to ACS's divestment of Guazatine in 2001 to Makhteshim. The comments made in the assessment of the barley market apply also here.
- (888) According to the data submitted by the parties, affected markets arise in the following Member States: Austria ([50-60]\*%), Belgium ([30-40]\*%), Finland ([30-40]\*%), France ([30-40]\*%), Germany ([60-70]\*%), Ireland ([40-50]\*%), Italy ([80-90]\*%), Sweden ([70-80]\*%), United Kingdom ([40-50]\*%). The Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the markets for fungicides for seed treatment of wheat, rye and triticale in Germany, Italy, Sweden and the United Kingdom.
- (889) The **German** market amounted in 2000 to EUR [...] million and is expected by the parties to grow slightly to EUR [...] million by 2004. The parties estimate their combined market share in Germany to be [60-70]\*% (Bayer: [20-30]\*%, ACS: [40-50]\*%) with Syngenta the largest competitor with [30-40]\*%. The parties estimate that their combined market share in 2004 will be [50-60]\*%, while that of Syngenta will remain at [30-40]\*% and Monsanto will enter with [0-10]\*%. Bayer generates its entire turnover in this market with Fludioxonil sold as mixtures with other active ingredients including Tebuconazole, Difenoconazole and Cyprodinil. ACS sells mainly Prochloraz in mixtures with other active ingredients.
- (890) The parties argue that ACS will lose market share since it divested Guazatine, including Panocrine GF in Germany, to Makhteshim Agan in 2001. As Panocrine GF only achieved [0-10]\*% out of ACS's total market share of [40-50]\*% in Germany, this does, however, not change the assessment in any fundamental way. Furthermore, ACS will still be selling Legat (Triticonazole and Guazatine), which accounts for another [0-10]\*%.
- (891) The parties furthermore argue that Fludioxonil is supplied to Bayer by [...] on the basis of a supply agreement, which terminates by the end of [...]. [...] The parties have not, however, provided any evidence that this will actually happen. On the other hand, it should be noted that ACS's Rubin and Jockey were only introduced in 1999 and managed to achieve market shares of [...] and [...], respectively, by 2000.
- (892) The parties also argue the Monsanto will enter with its product Latitude, which according to the parties will take [...] of the total market for fungicides for seed treatment for wheat. In this respect it should be noted that Latitude only treats the take-all disease and is therefore not in direct competition with most

other fungicides products. The only other product treating the take-all disease is ACS's Jockey products, which however also treat other diseases than the take-all disease.

- (893) The **Italian** market amounted in 2000 to EUR [...] million and is expected by the parties to grow to EUR [...] million by 2004. The parties estimate their combined market share in Italy to be [80-90]\*% (Bayer: [10-20]\*%, ACS: [60-70]\*%) with Syngenta the largest competitor with [10-20]\*%. Bayer sells Raxil ES 025 (straight Tebuconazole), and Raxil T FS 515 (Tebuconazole and Thiram), while ACS sells Panoctine 70 (Guazatine) and Real Geta (Triticonazole and Guazatine).
- (894) ACS divested Guazatine, including the distribution rights to Panoctine 70 in Italy, to Makhteshim Agan as of 2001. In year 2000, about [60-70]\*% of ACS's sales in Italy came from the sale of Panoctine 70, while the rest came from sales of Real Geta. Real Geta was introduced in 1999 and had by 2000 already achieved a market share of [20-30]\*%. It should in this respect be kept in mind that ACS kept distribution rights for Guazatine, where [confidential information of ACS]\*. It thus seems rather unlikely that ACS will only have [10-20]\*% in 2004, as projected by the parties.
- (895) The **Swedish** market amounted in 2000 to EUR [...] million and is expected by the parties to decrease slightly to EUR [...] million by 2004. The parties estimate their combined market share in Sweden to be [70-80]\*% (Bayer: [30-40]\*%, ACS: [30-40]\*%) with Syngenta the largest competitor with [20-30]\*%. Bayer sells Sibutol LS 298 (Bitertanol and Fuberidazol), while all of ACS's sales in Sweden in year 2000 came from the sale of Guazatine, either straight or mixed with Imazalil.
- (896) The parties refer again to ACS's divestment of Guazatine to Makhteshim Agan as of 2001. However, although ACS divested Guazatine in 2001 it keeps the distribution rights in Sweden until [...]\*. The parties would therefore have kept control over the vast majority of sales on the Swedish market at least until [...]\*.
- (897) The market in the **United Kingdom** amounted in 2000 to EUR [...] million and is expected by the parties to increase to EUR [...] million by 2004. In earlier submissions the parties estimated their combined market share in the United Kingdom to be [40-50]\*% (Bayer: [20-30]\*%, ACS: [20-30]\*%) with Syngenta the largest competitor with [30-40]\*%. The parties have in their Reply to the Statement of Objections corrected their own market share figures to [50-60]\*% (Bayer: [30-40]\*%, ACS: [20-30]\*%) because of an omission of Bayer's product Baytan. Bayer also sells Sibutol LS 298 (Bitertanol and Fuberidazol), while ACS sells Jockey (Fluquinconazole and Prochloraz), Ravine (Guazatine) and Premis (Triticonazole and Guazatine).
- (898) Also in this market, the parties argue that ACS's divestment of Guazatine to Makhteshim Agan as of 2001 will result in a decrease in market share. However, the sale of Ravine only accounted for [0-10]\*% out of ACS's [20-30]\*% in year 2000, and ACS will anyway keep the distribution rights in the United Kingdom until [...]\*.

- (899) The parties also argue the Monsanto will enter with its product Latitude. In this respect it should be noted that Latitude only treats the take-all disease and is therefore not in direct competition with most other fungicides products. The only other product treating the take-all disease is ACS's Jockey products, which however also treat other diseases than the take-all disease. Although this product may take some of ACS's sales of Jockey, the overall strong position of the parties will not be challenged by this one product.
- (900) For all the above reasons, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the markets for fungicides for seed treatment of wheat, rye and triticale in Germany, Italy, Sweden and the United Kingdom.

*b) Seed treatment for potatoes*

- (901) The parties estimate that the total EEA-wide market for seed treatment with fungicides for potatoes was EUR [...] million in 2000. On this market, the parties estimate their combined share to be [70-80]\*% (Bayer: [40-50]\*%, ACS: [20-30]\*%). The parties reckon that Syngenta is the largest competitor with [0-10]\*% of the total market.
- (902) Bayer sells Pencycuron straight (Monceren DS 12,5 and Monceren FS 250) and mixed with Imazalil (Monceren IM DS 13,3). ACS sells Thiabendazole mixed with Imazalil (Fungaflor TZ), Flutolanil (Iota, Symphonie and Monarch), Mepronil (Basitac), Imazalil straight (Fungazil) and Validamycin (Solacol). All of the active ingredients are owned by third parties, Imazalil by Janssen and the others by Japanese companies.
- (903) Several Dutch respondents to the Commission's market investigation argue that the parties would have a very large position (90-100%) of the market for control of the disease Rhizoctonia in potatoes in the Netherlands. As a response to an Article 11 request, the parties have argued that this problem relates to seed treatment of potatoes. According to the parties, Rhizoctonia is the main disease affecting potatoes not only in the Netherlands, but in all countries within the EEA. The disease can be controlled by a treatment of the potato tubers, which must therefore be considered a seed treatment. According to the parties, all products used for the treatment of potato tubers are designed to combat Rhizoctonia. According to the parties, the two main active ingredients treating Rhizoctonia are Pencycuron from Bayer and Flutolanil, which is a third party product supplied by [...] to ACS. Other active ingredients used for the treatment of Rhizoctonia include Imazalil, supplied to Bayer and ACS by [...]\*, and Mepronil [...]\*.
- (904) While third parties agree that Rhizoctonia is the main disease affecting potatoes in the Netherlands and in all countries within the EEA, they do not agree to the parties' assertion about which active ingredients can effectively be used to combat Rhizoctonia. For instance, it is argued that Imazalil and Thiabendazole give no effective control of Rhizoctonia. Third parties underline that Pencycuron and Flutolanil are the two major active ingredients, which provide such control, and must therefore be seen as each other's closest substitutes.

- (905) The parties also argue that Pencycuron is off-patent and faces growing generic competition; however, the parties have not provided the names of any competitor selling products based on Pencycuron for use as seed treatment in Europe. Asked where Pencycuron faces generic competition, the parties replied that generic Pencycuron is currently produced (and sold) in Taiwan and Korea. The parties are not aware of any company selling generic Pencycuron within the EEA. The parties, in fact, are the main sellers in the EEA of all the four active ingredients mentioned above as being used for the treatment of Rhizoctonia (Pencucuron, Flutolanil, Imazalil and Mepronil).
- (906) In a reply to an Art. 11 letter during the Phase I investigation the parties argue that competition is already strong on the market for seed treatment of potatoes with Syngenta having introduced two new active ingredients treating Rhizoctonia over the past years, that is, Fenpiclonil (marketed under the brands Gambet, Galbas, Beret) and Fludioxonil (marketed under the brands Maxim, Celest, Beret gold). Furthermore, the parties argue that Syngenta is currently developing Azoxystrobin, which will be marketed under the brand Amistar.
- (907) In the reply to the Phase I Art. 11 letter, the parties also argue that the following two active ingredients are under development or registration: Thifluzamide, developed by Dow, which will be marketed under the brand Pulsan, and Furametpyr, developed by Sumitomo, which will be marketed under the brand Limber. In their observations on the 6(1)c decision, the parties again argue that Dow, but now also DuPont, are expected to develop new seed treatment products for use in potatoes, which will increase the competitive pressure on the combined entity. The parties do not explain when they expect these new products to enter the market. However, as witnessed above, the parties apparently do not think that the launch of these new products will have any major impact on the parties' combined position when comparing 2004 to 2000.
- (908) The Commission has in its market investigation asked third parties to comment on the claims by the parties relating to the new products that the parties argue have recently been introduced or are in the pipeline. Syngenta has explained that it has withdrawn the active ingredient Fenpiclonil from all countries in the EEA in 1999 and ceased to manufacture this active ingredient and has no plans to re-introduce it for sale. Syngenta also does not agree that the active ingredient Fludioxonil has been introduced in any country within the EEA for use on potatoes. The market investigation has furthermore shown that no other new products can be expected to seriously challenge the position of the parties in the near future.<sup>64</sup>
- (909) The parties submit that affected markets arise in the following Member States: Belgium ([70-80]\*%), France ([80-90]\*%), Ireland ([50-60]\*%), the Netherlands ([80-90]\*%) and the UK ([70-80]\*%). Furthermore, Bayer has a relatively strong market position in a number of Member States, according to the market shares provided by the parties: Denmark ([60-70]\*%), Germany ([50-60]\*%), Italy ([40-50]\*%), Spain ([40-50]\*%) and Sweden ([50-60]\*%). It is

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<sup>64</sup> [Business secrets: Deleted confidential information about competitors' product introductions.]\*

noteworthy that, on all these markets, multinational companies are all but absent, except Syngenta having [10-20]\*% in Germany and Italy, and the parties have allocated [40-50]\*% of the market share to local and generic companies. Third parties have suggested that Bayer's market position could actually be stronger in some of these countries. By way of example, Bayer is said to account for [80-90]\*% of the market in Germany.

- (910) The **Belgian** market totalled EUR [...] million in 2000 and is expected to grow slightly. The parties estimate their combined market share in Belgium to be [70-80]\*% (Bayer: [20-30]\*%, ACS: [50-60]\*%) with Syngenta the largest competitor with [20-30]\*%. The parties estimate that their combined market share in 2004 will be [60-70]\*%. Bayer sells Pencycuron (Monceren DS 12,5), while ACS sells Flutolanil (Symphonie) and Mepronil (Basitac).
  
- (911) The **French** market was at EUR [...] million in 2000 and is expected to grow slightly. The parties estimate their market share to be [80-90]\*% (Bayer: [30-40]\*%, ACS: [50-60]\*%) with Syngenta having [10-20]\*% of the market. The parties estimate that their combined market share in 2004 will be [70-80]\*%. Bayer sells Pencycuron (Monceren DS 12,5 and Monceren FS 250) while ACS's main product is a mixture of Thiabendazole and Imazalil (Fungaflor TZ). This product accounts for [30-40]\*% of ACS's sales in that market. Other products are based on Flutolanil (Iota and Symphonie) and Mepronil (Basitac).
  
- (912) The **Irish** market amounted to EUR [...] million in 2000 and is not expected to grow. The parties estimate their market share to be [50-60]\*% (Bayer: [20-30]\*%, ACS: [20-30]\*%) with Syngenta having [30-40]\*%. The parties estimate that their combined market share in 2004 will remain [50-60]\*%. On this market, Bayer sells a mixture of Pencycuron and Imazalil (Monceren IM DS 13,3) while ACS sells a product based on straight Imazalil (Fungazil).
  
- (913) The **Dutch** market was at EUR [...] million in 2000 and is not expected to grow. The parties estimate that their combined market share is [80-90]\*% (Bayer: [60-70]\*%, ACS: [20-30]\*%). Syngenta is not present in this market and the competitors are national and local companies, accounting for a combined market share of [10-20]\*%. The parties expect their combined share in 2004 to be [70-80]\*%. Bayer sells Pencycuron in different formulations (Monceren DS 12,5 and Monceren FS 250). ACS's product portfolio includes Flutolanil (Symphonie and Monarch) and Validamycin (Solacol).
  
- (914) The market in the **United Kingdom** amounted to EUR [...] million in 2000 and is expected to decrease slightly. The parties estimate that they have a market share of [70-80]\*% (Bayer: [40-50]\*%, ACS: [20-30]\*%). The parties submit that they mostly face competition from local suppliers, accounting for a combined market share of [20-30]\*%. Syngenta has only [0-10]\*% of the market. The parties expect their combined share in 2004 to be [70-80]\*%. Bayer sells Pencycuron straight (Monceren DS 12,5 and Monceren FS 250) and mixed with Imazalil (Monceren IM DS 13,3) while ACS sells Imazalil straight (Fungazil).



- (915) For all the above reasons, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the markets for fungicides for seed treatment of potatoes in Belgium, France, Ireland, the Netherlands and the United Kingdom.

*Conclusion on fungicides for seed treatment*

- (916) For all the above reasons, the Commission has reached the conclusion that the proposed transaction would create or strengthen a dominant position on the markets for fungicides for seed treatment of barley in Germany, Ireland, Italy and the United Kingdom; on the markets for fungicides for seed treatment of wheat, rye and triticale in Germany, Italy, Sweden and the United Kingdom; and on the markets for fungicides for seed treatment of potatoes in Belgium, France, Ireland, the Netherlands and the United Kingdom.

**F.Active Substances**

*F.1 Relevant Markets*

- (917) The active substances constitute key raw materials in order to manufacture agricultural protection products. The production in crop protection takes place in three stages: the manufacture of the active substances, the manufacture of the formulations (i.e. formulated products) from the active substances, and the packaging of such formulations. Bayer and ACS are vertically integrated enterprises which manufacture active ingredients primarily for internal use to produce their own end-products.
- (918) In M.737 *Ciba-Geigy/Sandoz*, the Commission arrived at the conclusion that active substances are basically not substitutable for one another but form separate product markets. Each active substance has its unique properties and, where appropriate, is patented. The parties follow the Commission's definition.
- (919) As to the geographic market, the parties submit that the upstream markets for active substances are at least EEA-wide, if not world-wide given that active substances are registered European-wide according to Directive No. 91/414 and market access restrictions as a result of national authorisation requirements do not exist, market and distribution takes currently place world-wide and, finally, transport costs are insignificant. The Commission agrees with this view.

*F.2 Competitive Assessment*

*- Active substances supplied by Bayer*

- (920) Bayer sells a number of active ingredients used for the formulation of herbicides: Aminotriazole, Diuros, Flufenacet and Metamitron. All of them are already off-patent, with the exception of Flufenacet, which is supplied to [...] for a limited value of EUR [...] million in 2000. As to active ingredients used for the formulation of fungicides sold to third parties, Bayer currently supplies [...] with Tebuconazole, mainly used for the formulation of cereal fungicides. With respect to active ingredients used on the downstream insecticides markets,

Bayer's sales to third parties are limited to Oxydemeton-Methyl to [...] (EUR [...] million) and Fentitrothion to [...] (EUR [...] million).

*- Active substances supplied by ACS*

- (921) As regards ACS, of all the active ingredients used for the formulation of agricultural crop protection products including insecticides, fungicides and herbicides, only a few enjoy patent protection, including Diflufenican, Isoxaflutole, Fenpiroximate, Glufosinate, Propamocarb and Fosethyl. With the exception of some limited sales of Fosethyl to [...] and of Diflufenican to [...], all of these patented products are sold to Bayer.
- (922) For all those active ingredients where no overlapping will be produced as a result of the transaction, the prospected merger will not result, therefore, in any changes of the current market structure.
- (923) Of all active ingredients sold by Bayer and ACS for the formulation of crop protection products, off-patent Diuron is the only one which is sold by both Parties. The volume of the EEA-wide market for Diuron sales amounts to about EUR [...] million and the parties' combined market share in the market is far below [10-20] %.
- (924) In view of the above, the Commission concludes that the transaction will not lead to the creation or the strengthening of a dominant position on the different markets for active substances.
- (925) With respect to the active ingredients sold by ACS for the formulation of non-agricultural products, including parasiticides for small animals, pesticides to be applied by the private home gardener and household insecticides, reference can be made to the information provided in the corresponding sections.

G. Industrial weed control

*G.1 Relevant Markets*

*- Product market*

- (926) As the Commission held in *Hoechst/Rhône-Poulenc*, the market for industrial weed control products encompasses products which are used for clearing weeds in a variety of non-agricultural applications, including weed clearance at industrial sites, railway tracks, electricity wires, car parks and aquatic applications. Industrial weed control products are sold in formulations different from agricultural herbicides and to different customers.

*- Geographic market*

- (927) The parties submit that the relevant geographic market for industrial-weed control products is EEA-wide. This view is supported by the existence of major multinational suppliers, central production sites and low transport costs. A final market definition, however, can be left open, because even if the relevant

product markets have to be defined on a narrow basis as only being national, the transaction does not lead to concerns over market dominance.

## ***G.2 Competitive assessment***

### *- Parties' portfolio*

- (928) Bayer's activities are concentrated on the German market, where it sells glyphosate under the brand name "Tender" and the herbicide Ustinex G, consisting of a mixture of the active ingredients Glyphosate and Diuron. The Glyphosate products are supplied to Bayer by [...] and [...] on the basis of non-exclusive supply contracts.
- (929) ACS also sells formulated products in the industrial weed control market either directly to the end user or through distributors in different Member States. ACS is selling its products and/or services to railway companies. It has service contracts with [...] and [...] (France).

### *- Market position*

- (930) At EEA level, according to the parties figures, the market is estimated to have a size of [...] Meuro. The market share of the merged entity would be of [20-30]\*% (Bayer [0-10]\*%, ACS [10-20]\*%).
- (931) In the EEA, the Parties face strong competition, in particular from Monsanto (around [10-20]\*%), but also from other international players (Dow and BASF) and a range of national suppliers such as Spiess Urania and Feinchemie. Furthermore, Bayer adds only little to ACS's market share and the transaction therefore does not lead to a significant change in the market structure.
- (932) The only Member State where there is a product overlap between the Parties and in which an affected market arises is Germany. On the German market, the combined market share of the Parties amounts to [20-30]\*% (Bayer: [10-20]\*%, ACS: [10-20]\*%). Spiess Urania with a market share of around [50-60]\*%, remains the clear market leader even after completion of the transaction. Another strong competitor is Monsanto with a market share of [10-20]\*%. Furthermore, there are a number of other local suppliers, such as Lauff and Evers, with a combined market share of [10-20]\*%.
- (933) Moreover, the turnover of both, Bayer and ACS, in industrial weed control in Germany is almost exclusively derived from their sales to one single customer, which is [...] \*.

### *- Conclusion in Industrial Weed Control*

- (934) In view of the above, the Commission concludes that the transaction will not lead to the creation or the strengthening of a dominant position on the market for industrial weed control.

## **H. Professional pest control (Insecticides, rodenticides)**

### ***H.1. The Relevant product markets***

- (935) Professional pest control products are insecticides especially designed for use by professional pest control operators, industrial customers and local authorities and municipalities. The products differ in packaging, distribution and formulation from products sold to the household customer.
- (936) Insecticides for professional pest control are applied against all kinds of insects including, inter alia, flies, cockroaches and ants. According to the parties, most of the products are designed to combat a variety of insects. The parties submit that the overall professional pest control market can be split into *multipurpose insecticides, rodenticides and products for flies, ticks and fleas*. Multipurpose insecticides include liquid and spray products (mainly residual and space sprays) against various types of crawling and flying insects.
- (937) Insecticides, which are designed to combat only specific insects, include in increasing numbers "passive" treatments such as gels and baits for the control of cockroaches and ants. The efficacy of the formulated product depends on the suitability of the active ingredient to be ingested by mouth, the palatability of the product, that must be attractive to insects in the presence of abundant alternative food supplies, and the proper design of the bait station.
- *The parties submit that gel/baits against cockroaches do not form a separate market*
- (938) The parties argue that products against specific targets and based on gel and baits do not constitute a distinct product market since multipurpose insecticides are used as effective replacements for target specific gel and baits.
- (939) According to the parties' written observations to the Commission decision, "It is not appropriate to define a separate market for gels/baits against cockroaches, but the market for cockroaches insecticides has to be defined as encompassing both sprays and active treatment and gel/baits for passive treatment". This statement is based on the view that "sprays differ from gels/baits only the manner in which they are applied to insects (active treatment versus passive treatment) but they are equally suitable for combating the target animal".
- *Respondents claim existence of substantial efficiency advantages in use of gel/baits.*
- (940) The respondents, customers as well as consumers, agreed during the investigation that both sprays and gel are effective against cockroaches. The broader spectrum and the quickness of action in sprays make them more suitable to deal with heavy infestation when a knockdown treatment is required. Gel and

baits are specifically targeted against cockroaches and do not have this immediate action though they present generally a longer duration. They appear more adequate for a regular control of cockroaches and also more suitable for cases where selective target impacts are desired, (eg zoos).

- (941) Even if some respondents view the efficacy against cockroaches of both products as comparable, it has been pointed out that the use of gel/baits has efficiency gains that cannot be ignored.
- (942) In particular, it has been consistently indicated that treatment based on gel/baits presents environmental benefits that sprays cannot compete with. Among others, the use of gel/baits does not pose the problems of toxic deposits on surface that the sprays may present.
- (943) Given the lack of residual toxicity associated with gel/baits, this technology presents substantial advantages on the treatment of indoor facilities and in general, places with continuous presence of human or pets. Additionally, treatments based on sprays bring about some degree of disruption of the normal activities, which puts them also in disadvantage in the treatment of facilities such as hospitals, schools, restaurants, etc.
- (944) Furthermore, the application of gel and baits does not require as many protection measures and equipment as spray-based treatments. This is also pointed out as a practical advantage from the pest control operators' point of view.
- (945) As a premium for the advantages above mentioned, gel and baits are viewed as a more expensive product when compared to sprays. As also stated by the parties, the use of gel/baits has been increasing over the last years.

*- Conclusion*

- (946) The professional pest control operators as well as the final beneficiaries of pest control treatment consider that the environmental and safety benefits that are associated with gel and baits are relevant features of the products. Gel and baits are then perceived as new generation products belonging to a technology that is environmentally safer and easier to use.
- (947) These attributes are indeed taken into account by the operators and final beneficiaries along with the effectiveness of the product.
- (948) It is not therefore accurate to state that gel/baits and sprays constitute merely two modes of application, sprays being a curative treatment and gel/baits a preventive treatment. As mentioned before, features related to environment benefits, safety and practicality in the application are substantial advantages of gel/baits.
- (949) In terms of economical relationship between the two products, they present features of complementarity in a long run treatment of cockroaches control, since both active and passive treatments are likely to be necessary.

- (950) In the short run they would present some degree of one-direction substitutability. Gel and baits would not successfully replace sprays when a general "clean-out" action is required given their narrower spectrum and its limited immediate action.
- (951) In the other hand, sprays would substitute gel/baits since sprays are effective against cockroaches. However, the substitutability is necessarily limited as it would not apply in situations where the practical advantages of use of gel and baits are requested.
- (952) In view of the additional features and benefits before mentioned that place gel/ baits as new generation products with respect to spray treatments and the limited capacity of sprays to effectively replace them, the Commission considers that gel and bait for cockroaches form a distinct separate product market.
- (953) The exact delimitation of the rest of markets within Professional Pest Control can be left open since, even if the narrowest definition is taken, the notified operation does not raise competition concerns.

## ***H.2 Competitive assessment***

### ***H.2.1 Multipurpose insecticides***

- (954) The EEA market for multipurpose insecticides has a size of around EUR [...] million. Bayer and ACS are present with formulations of Pyrethroids and Carbamates. The active ingredients are all off-patent. Main competitors on that market are Dow, with products formulated from the generic active substance Chlorpyrifos, BASF, with Alpha-Cypermethrin-based products, Sumitomo and Syngenta. The parties would hold a combined market share of [20-30]\*%. Products provided by Syngenta and Dow, would have an estimated market shares of [10-20]\*% and [10-20]\*% respectively.
- (955) At national level, the Member States which constitute affected markets are Austria, Belgium, Denmark, France, Italy and the Netherlands.
- (956) In Austria, the Parties' combined market share amounts to [20-30]\*% (Bayer [10-20]\*%, ACS [10-20]\*%). Clear market leader is Dow with a market share estimated to be of [50-60]\*%. Local suppliers are also present in this market ([20-30]\*%).
- (957) In Belgium, the Parties' combined market share amounts to [20-30]\*% (Bayer [0-10]\*%, ACS [10-20]\*%). The Parties face competition by Syngenta ([40-50]\*%) and Dow ([10-20]\*%). The market share of local suppliers account for [20-30]\*%.
- (958) In Denmark, the Parties have a combined market share of [30-40]\*% (Bayer [20-30]\*%, ACS [0-10]\*%). The Danish market is characterised by a large number of local suppliers with a combined market share of [60-70]\*%.

- (959) In France, the Parties have a combined market share of [20-30]\*% (Bayer [0-10]\*%, ACS [20-30]\*%). They face vigorous competition by a range of multinational companies such as Dow ([10-20]\*%), Syngenta ([10-20]\*%), FMC ([0-10]\*%), BASF ([0-10]\*%) and Sumitomo ([0-10]\*%), as well as local suppliers with a combined market share of [20-30]\*%.
- (960) In Italy, the Parties have a combined market share of [20-30]\*% (Bayer [0-10]\*%, ACS [20-30]\*%). The Parties face competition by a number of multinational companies, such as Dow with a market share of [10-20]\*%, Sumitomo ([10-20]\*%) and Syngenta ([10-20]\*%). Other competitors include local suppliers such as Leica ([10-20]\*%) and Copyr ([0-10]\*%).
- (961) In the Netherlands, the combined market share of the parties is [40-50]\*% (Bayer: [20-30]\*%; ACS: [10-20]\*%). Syngenta is firmly active in this market with around [30-40]\*%.

### *Conclusion*

- (962) In all the affected markets above mentioned, due to the presence of well established competitors in the market place, sufficient alternatives will be available for customers. Therefore, the Commission considers that the notified operation would not lead to the creation of a dominant position on the market of professional pest control – multipurpose insecticides in Austria, Belgium, Denmark, France, Italy and the Netherlands

### *H.2.2 Professional pest control for cockroaches*

#### *a) The parties' portfolio*

- (963) ACS is present in the cockroach segment with its Fipronil based product named Goliath and a Hydramethylnone based product named Maxforce, which is supplied by the US based company Clorox. Bayer is selling two products (Premise and Proflid) based on Imidacloprid
- (964) All active ingredients used for this market, except the parties' Imidacloprid and Fipronil, are off-patent.
- (965) Fipronil, particularly, is in general regarded as the leading and most efficient active ingredient in this field in view of its effectiveness at lower doses and higher speed of action. Hydramethylnone also provides a mode of action that is different from that provided by traditional insecticides. Although off-patent, BASF American Cyanamid is at present the only Hydramethylnone manufacturer world-wide.
- (966) It is worth mentioning that Bayer's has known a significant growth of its sales and market share thanks to the product Premise, recently introduced. Following parties' figures, Bayer was insignificantly present at EEA level in 1998 and only held a market share of [0-10]\*% in 1999, whereas in 2000 it reached a share of [0-10]\*%. According to the parties' estimation for 2004, Bayer would be expected to attain then a market share of [10-20]\*%.

- *The acquisition of Maxforce*

- (967) During the investigation, it has come to the knowledge of the Commission that negotiations between Clorox and ACS were taking place. The object of the negotiations would be the transfer of all the assets used primarily or exclusively in the professional pest control from Clorox to ACS. The assets under negotiation include intangible assets regarding the product Maxforce.
- (968) According to the information subsequently made available by ACS, the agreement has taken place and ACS will be the owner of Maxforce trade mark and related patents, technical know-how and goodwill. Those intangible assets would be eventually acquired, and the corresponding rights exerted, by Bayer as a natural result of the merger transaction.
- (969) At the present day, the company Clorox has introduced already the active ingredient Fipronil in the formulation of the product in the market of the US, not in the EEA. As confirmed by the parties, Fipronil presents higher efficiency in the action compared to Hydramethylnone. The parties also admit that the cost of the active ingredient does not represent a significant proportion of the final product and that therefore, the cost of production is very similar in case Maxforce is based on Fipronil or on Hydramethylnone. The parties also state that the price for the end-consumer in both cases would be very similar.
- (970) As a result of the transaction between ACS and Clorox, ACS's market position is qualitatively different since Maxforce is now to be seen in the portfolio as a company product and not as a third party product distributed by the company. In addition, in view of the new content of Maxforce related rights, it would be rational to introduce Fipronil as active ingredient in the formulation of the product. Besides the gains in terms of effectiveness, this production switch would eliminate the dependence on Hydramethylnone, an active ingredient controlled ultimately at present by BASF, a competitor in this segment.

*b) The competitors' portfolio*

- (971) As to the other major players, BASF offers the product Faslane, based on Hydramethylnone.

*c) Market position*

- (972) At EEA level and according to the parties' figures, the total market for professional pest control products against cockroaches amounted to EUR [...] million in 2000. Bayer and ACS would account for [50-60]\*% of this market (Bayer: [0-10]\*%, ACS: [40-50]\*%). The largest competitor is BASF ([10-20]\*%). The parties argue that there is little transparency in this market. The investigation has confirmed this point.
- (973) The resulting entity of the proposed merger would therefore enjoy a leading position. The parties argue that nevertheless no competition concerns would arise given that Bayer only adds in general a small percentage to ACS's market share.



- (974) It is also argued that international companies including Dow and BASF are present in this market and can respond to any anti-competitive behaviour of the merged entity. However, the Commission has found during the investigation that the Dow has withdrawn its product, the organophosphate-based named Swat, from the market during year 2000 and therefore is no longer present. It has also been confirmed that Syngenta does not directly or indirectly manufacture, market or distribute any gel and bait for cockroach control.
- (975) Due to the lack of transparency, it is in general difficult to verify the identity and the sales and market shares of minor competitors.

*d) Assessment*

- (976) In a pre-merger situation, only three major agrochemical players are therefore present at EEA level: ACS, BASF and Bayer. As shown before, ACS is clearly the leading player in this market with products considered to be of high quality formulation and based on the leading active ingredient. Bayer and BASF are currently offering products containing effective active ingredients, Imidacloprid and Hydramethylnone respectively, not belonging to old chemistry classes.
- (977) The merged entity would be able to offer a range of products based on the two only active ingredients in the market enjoying patent protection. There would only remain at EEA level one major player, BASF, that would offer a product acting through an active ingredient, Hydramethylnone, that does not belong to an old family class.
- (978) As a result of the exclusive rights related to the off-patent active ingredients, only the merged entity is in a position to offer a treatment alternating modern active ingredients. This ability provides an outstanding competitive advantage in order to manage potential resistance effects.
- (979) Alternatively, in view of the lack of resistance shown so far with respect to Fipronil and imidacloprid, the merged entity could rationally have the option of simply eliminating Bayer's current products.
- (980) The parties command high combined market shares in several national markets: Austria ([30-40]\*%), Belgium ([60-70]\*%), France ([60-70]\*%), Germany ([50-60]\*%), the Netherlands ([40-50]\*%) and Spain ([40-50]\*%).
- (981) In Austria, market size is estimated to be of EUR [...] million, the combined parties' market share in 2000 would total [30-40]\*% (Bayer: [0-10]\*%, ACS: [30-40]\*%). It is considered that the market share is not sufficiently high for the parties to impede competition. Therefore, the Commission has reached the conclusion that the proposed transaction will not create a dominant position on the market for gel and baits for cockroaches in Austria.
- (982) No major player is present neither in the market of Belgium, where the market volume is estimated to be EUR [...] million. The parties would hold a combined market share of [60-70]\* % in 2000 (Bayer: [40-50]\*%, ACS: [20-30]\*%).

- (983) France represents the biggest market in Europe with a value of EUR [...] million. The parties' joint market share is estimated at [60-70]\*% (Bayer: [0-10]\*%, ACS: [60-70]\*%). BASF would be present in the market and would hold a market share of [10-20]\*%, according to the parties' estimations. Though Bayer's market share is significantly lower, the new entity could take advantage of the possibilities in products management above-mentioned given the broader portfolio availability. Again, the qualitative advantages explained above of merging the leading product with the main emerging competitor ought to be underlined.
- (984) A similar situation appears in Germany, whose market value is EUR [...] million. The combined market shares of the parties are estimated at [50-60]\*% (Bayer: [0-10]\*%, ACS: [40-50]\*%). BASF holds a market share of approximately [10-20]\*%.
- (985) The market in the Netherlands accounts for EUR [...] million. The combined market shares of parties would total [40-50]\*% (Bayer: [0-10]\*%, ACS: [30-40]\*%). The only international competitor present in the market in 2000 was Dow with a market share of [0-10]\*%. As mentioned before, Dow has retired from this market. The remaining market share of would be held by minor suppliers.
- (986) In Spain, with a total market size of [...] million, the combined entity would enjoy a market share of [40-50]\*% (Bayer: [10-20]\*%, ACS: [30-40]\*%). BASF is present in the Spanish market with a market share of [10-20]\*%. Local suppliers' market share add up to [40-50]\*%, though the verification of their identities and market sales and shares is problematic.

### *Conclusion*

- (987) Given the parties' portfolio, the proposed transaction leads to the concentration of the most effective products of ACS with the promising and successfully introduced product of Bayer. No other player rivals the capacity of product development of the merged entity. Taking also into account the high market shares of the combined entity, the Commission considers that the proposed transaction will create a dominant position on the market for gel and baits for cockroaches in Belgium, France, Germany, the Netherlands and Spain.
- (988) It is noteworthy that in some countries totalling [20-30]\*% of the global EEA market, ACS enjoys presently an unrivalled position without any international supplier present in the market. According to the parties' information this situation is given in Greece (ACS: [60-70]\*%), Italy (ACS: [50-60]\*%), Portugal (ACS: [50-60]\*%) and the UK (ACS: [30-40]\*%). Consequently, Bayer would not have to enter into a launching effort for the introduction of its new products, since the proposed transaction allows the acquisition of a portfolio enjoying already the leading position.

### *H.2.3 Professional pest control for flies, ticks and fleas*

- (989) The EEA market for professional pest control products against flies, ticks and fleas was EUR [...] million in 2000. The Parties' combined market share accounts for [0-10]\*% (Bayer: [0-10]\*%, ACS: [0-10]\*%). Syngenta is leading the market with a market share of [40-50]\*% and Dow is also active with a market share of [0-10]\*%.
- (990) France is the only national affected market, the Parties' combined market share is [10-20]\*%. The Parties face competition from the clear market leader Syngenta ([60-70]\*%) and also from Dow ([20-30]\*%).
- (991) The Commission considers, for the above reasons, that the notified operation would not lead to the creation of a dominant position on the market of professional pest control for flies, ticks and fleas in France.

#### *H.2.4 Professional pest control - rodenticides*

- (992) The EEA market for rodenticides was around EUR [...] million in 2000. The Parties' combined market share accounts for [10-20]\*% (Bayer: [0-10]\*%, ACS: [0-10]\*%). Syngenta leads the market with a market share of around [20-30]\*%. Lipha ([10-20]\*%), Sorex ([0-10]\*%) and BASF ([0-10]\*%) are also present.
- (993) The Member States which constitute affected markets are Belgium and Germany.
- (994) In Belgium, the Parties' combined market share amounts to [30-40]\*% (Bayer [0-10]\*%, ACS [30-40]\*%). Competition conditions prevail due to the presence of BASF and Syngenta, both with a market share of [20-30]\*% and Lipha with a market share of [0-10]\*%.
- (995) In Germany, the Parties' combined market share amounts to [10-20]\*% (Bayer [0-10]\*%, ACS [10-20]\*%). Sufficient alternative suppliers are present in this market including Syngenta ([10-20]\*%), Frowein ([10-20]\*%) Lipha ([0-10]\*%), Killgem, Hygan, Sorex and BASF, each with a market share of [0-10]\*%.
- (996) The Commission considers, for the above reasons, that the notified operation would not lead to the creation of a dominant position on the market of rodenticides in Belgium and Germany.

#### *General conclusion in Professional Pest Control*

- (997) In Professional Pest Control, the Commission has reached the conclusion that the proposed transaction will create a dominant position on the market for gel and baits for cockroaches in Belgium, France, Germany, the Netherlands and Spain.

### **I. Non-agricultural crop protection agents for home and garden**

#### ***I.1. Relevant product markets***

- (998) The parties have submitted that Non-Agricultural Crop Protection Agents for Home and Garden (NACPAHG) products constitute a separate market from agricultural products because these products are sold in different formulations and to different customers. Furthermore, the parties submit that separate markets must be defined for herbicides, fungicides and insecticides, and that a further breakdown of these markets by type of plant is not appropriate, as most products have broad and general application labelling and can be used to protect various types of plants.
- (999) The Commission's investigation has to a large degree confirmed this market definition. However, for the purpose of assessing this sector it is not necessary to reach a precise definition of the relevant product and geographic markets as, irrespective of the market definitions adopted, the proposed acquisition will not give rise to competition concerns.

## ***1.2. Competitive assessment***

### *a) The current market structure*

- (1000) Bayer is active in the NACPAHG sector, through its Garden/Professional Care Division (GPC). In Europe, the GPC division is only active in the overall Home and Garden sector and does not sell products for professional applications.
- (1001) ACS is not active in the supply of formulated products for the NACPAHG sector after the divestiture of the former Rhône-Poulenc Jardin to Scotts in 1998. Consequently, there are no horizontal overlaps of the parties' activities in this sector. However, a vertical relationship exists to the extent that ACS manufactures and distributes active ingredients to manufacturers of home and garden crop protection agents, including Bayer's biggest competitor, Scotts.
- (1002) Scotts is an international Home and Garden consumable products company supplying a range of fertilizers, growing media and control products in all the world's major markets.

### *b) Links created between Bayer and Scotts as a consequence of the proposed acquisition*

- (1003) In 1998 Scotts acquired Rhone-Poulenc's Lawn and Garden business. Shortly after this transaction Rhone-Poulenc merged with AgrEvo to form ACS. As part of the transaction between Scotts and Rhone-Poulenc, [...]\*
- (1004) Due to Bayer's succession in the agreements between Scotts and ACS, links will be created between Bayer and Scotts. The most important agreements are (i) [...]\*. The remaining agreements are all to some extent related to the two former agreements.
- i) The supply agreement
- (1005) The supply agreement between ACS and Scotts includes [...]\*

(1006) The Commission's investigation has shown that the supply from Bayer, after the proposed acquisition, would not account for a significant part of Scotts' total purchase of active ingredients and that by far most of these active ingredients are off-patent. Moreover, the active ingredients supplied are used to produce various products, without any concentrated effect on a single product area. As the Commission does not regard these factors to be sufficient to give rise to competition concerns in this sector, the Commission has no competition concerns regarding the supply agreement.

ii) The R&D agreement

(1007) Since the R&D expenses of large agrochemical companies like Bayer and ACS account for a large proportion of the total costs, it seems unlikely that their R&D facilities will not be merged to a very large extent, in order to increase profits and share know-how. Therefore, the Commission has investigated to what extent the proposed acquisition would make it difficult to distinguish new developments by Bayer from those of ACS, and whether the two major players in this sector would, to some extent, base their future products on the same R&D, which could diminish future competition between Bayer and Scotts

(1008) However, the parties have shown to the Commission that Bayer and Scotts will not have access to the same R&D pool and that it will be possible to distinguish new active ingredients belonging to Bayer from those belonging to ACS. [...]\*. Therefore, the R&D agreement will not create a situation where future competition will be eliminated between Bayer and Scotts, because they will not have access to the same R&D pool.

Conclusion

(1009) Taking all the above arguments into consideration, the Commission decides that the proposed acquisition will not create or strengthen a dominant position in the NACPAHG markets.

**J. Small animal ectoparasitocides**

***J.1 Relevant product market***

(1010) Bayer is active in the production and sale of small animals ectoparasitocides ("SAEs"), i.e. products used for control of fleas and/or ticks on small companion animals such as dogs and cats. Bayer's main SAE's brand is Advantage, an anti-flea product for dogs and cats. ACS is not active in the production and sale of SAEs. However, ACS produces the active substance Fipronil which it sells to Merial, a 50-50 joint venture of Aventis Agriculture S.A. and Merck & Co. Inc.. Merial uses Fipronil to manufacture Frontline, a product against fleas and ticks for dogs and cats.

- (1011) As in *Ciba-Geigy/Sandoz*<sup>65</sup> in the present case the investigation has also shown that SAEs do not constitute a homogeneous product market. From the investigation it appears, in particular, that the SAE sector should be subdivided into three categories of products: (i) adulticides, which kill adult fleas, (ii) insect growth regulators ("IGRs"), which control flea eggs, larvae and pupae, and (iii) combination products, which act at the same time as adulticides and IGRs.
- (1012) Adulticides and IGRs are not substitutable. Adulticides are short-term curative solutions (they kill the current flea population once fleas appear, and might prevent a new infestation for some weeks after their application), IGRs are long-term preventive solutions (they combat flea reproduction by killing the eggs so preventing the development of adult fleas), but do not have an effect against adult parasites. Combination products combine both properties of adulticides and IGRs. Therefore, there appears to be a certain substitutability between adulticides and combination products on the one hand, and between IGRs and combination products on the other hand.
- (1013) A large majority of the SAEs' wholesalers who submitted their comments clearly stated that IGRs cannot substitute adulticides. The reason is that when a pet owner notices adult fleas on its dog or cat he wants to get immediately rid of them, and the only products that give quick relief from flea infestations are adulticides, which kill adult fleas within 24 hours. IGRs, on the contrary, have no adulticidal properties and effective flea control is generally not achieved for several weeks following their use. A wholesaler stated that combination products can substitute adulticides.
- (1014) Similarly, all competitors surveyed during the investigation recognise that IGRs cannot replace adulticides for quick relief from flea infestations, and that in case of a small but permanent relative price increase of adulticides only an insignificant number of customers, if any, would switch to IGRs in response to such price increase. Some competitors submitted that IGRs and adulticides are complementary but not substitutable, because for an effective flea treatment it is necessary to use both IGRs and adulticides, or a combination product.
- (1015) These findings are not denied by the parties. In their notification, in fact, the parties state that they agree with the Commission's approach in *Ciba-Geigy/Sandoz* and that, on that basis, "the proposed transaction does not have any impact on the IGR segment".
- (1016) The investigation has shown that, to define the relevant product market, a distinction of anti-fleas products for cats and dogs by distribution channel, depending on whether they are distributed over-the-counter (OTC) or through veterinarians (veterinary), is not necessary, because buyers have access to both distribution channels, where largely identical products can be obtained. Similarly, it appears from the investigation that a distinction of anti-fleas products

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<sup>65</sup> Commission decision of 17 July 1996 in Case IV/M.737 *Ciba-Geigy/Sandoz* OJ 1997 L 201/1, para 229.

for cats and dogs by dosage form (spot-on, spray, tablets, injection) is not necessary for the definition of the relevant product market.

- (1017) In the light of the above, the Commission concludes that the relevant product market for the purpose of assessing the competitive impact of the present concentration in the SAEs sector is the market for the production and sale of adulticides and combination products.

## ***J.2. Competitive assessment***

### ***a) General conditions of the SAEs sector***

- (1018) In the last decade the SAEs sector has been among the fastest growth rate sectors of the animal health industry. Market growth has been led by three products in particular: (i) Frontline, an adulticide manufactured by Merial, administrated as a topical application, that kills adults and prevents reinfection for more than a month and also killed ticks; (ii) Advantage, an adulticide manufactured by Bayer, administrated as a topical application, that kills adults and prevents reinfection for approximately a month; (iii) Program, an IGR manufactured by Novartis, given once monthly as a tablet, that effectively blocks development of flea eggs, pupae, and larvae for a month. Pet owners who use these products can effectively eliminate fleas, and prevent their return.
- (1019) The SAEs sector, however, is reaching its mature stage and a much slower growth rate is expected in the coming years. According to Bayer, growth of the SAEs sector over the next four years will be much flatter than it was in the last four to five years. Ignoring inflation Bayer expects the market to grow by only a total of [0-10]\*% in the four years from 2000 to 2004 from EUR [...]\* million to around EUR [...]\* million. Bayer expects its overall sales of SAEs to decline from [10-20]\*% to [10-20]\*% and Merial's sales to increase from [40-50]\*% to [40-50]\*%.

### ***b) The market for adulticides and combination products***

- (1020) According to Bayer's estimates, in 2000 the total size by value of the market for adulticides and combination products in the EEA was of about EUR [...]\* million, accounting for about [90-100]\*% of the overall SAE sector. In 2000 the total size by value of the market for IGRs in the EEA was of about EUR [...]\* million.
- (1021) Combination products join the effects of adulticides and IGRs, offering to the user an integral way to fight against fleas. Bayer estimates that in 2000 combination products constituted still a negligible part of the EEA national markets for adulticides and combination products, generally accounting for less than [0-10]\*% of such market. However, combination products are expected to increase their market position and to gradually replace adulticides in the next years.
- (1022) Despite the presence of a number of different brands in the various EEA national markets for adulticide and combination products, Merial's adulticide Frontline

and Bayer's adulticide Advantage constitute by far the market leaders, although Frontline has higher market shares than Advantage in most EEA national markets. The success of these two brands is due to their innovative active ingredients: Imidacloprid (for Advantage), and Fipronil (for Frontline), which are under patent protection in the EEA mostly [...]\*

- (1023) Compared to old molecules, in fact, both Fipronil and Imidacloprid have a high and quick efficacy against adult fleas and a quite long residual power, providing a continuous protection against new infestations for about one month for Imidacloprid and longer for Fipronil. They also have a reasonably low toxicity for both humans and pets. So far no resistance against these products have been reported for the target parasite species. Fipronil is also effective against ticks, and its protection period against fleas could be longer than Imidacloprid. Convenient formulations and presentations are also key factors for the success of Frontline and Advantage.

*- Main brands of adulticides and combination products in the EEA*

- (1024) Besides the leading product Advantage, other Bayer's adulticides are: "Sebacil Wash" based on Phoxim, "Kiltix Collar" based on Flumethrin and Propoxur, "Tivugon spot-on" based on Fenthion, "Bolfo - powder/shampoo/spray/collar" based on Propoxur, and "Asuntol Powder" based on Coumaphos. Not all brands are sold in all countries.
- (1025) Merial sells the following adulticide anti-flea products in all EEA Member States: Frontline Spot On Dog, Frontline Spot On Cat, and Frontline Spray. All these products are based on the active ingredient Fipronil.
- (1026) The other main adulticides sold in various EEA national markets by competitors of Bayer and Merial are: EXspot, a spot-on product against fleas and ticks on dogs, based on Permethrin and sold by Schering-Plough; Behaphar, sold by the homonymous company under different formulations and based on Diazinon and Permethrin; Defendog, sold by Virbac under different formulations and based on a number of active ingredients; and Frento, sold by SaraLee under different formulations and based on a number of active ingredients. A number of small competitors sell minor brands or private labels only in few national markets, as for instance Emax OTC and Crisco, that are active only in the Netherlands and Denmark, respectively.
- (1027) The main combination products sold in the EEA are: Stronghold, a spot-on product based on Selemectin and sold by Pfizer, and Duowin, sold by Virbac in spot-on and spray form and based on pyroproxifen and permethrin. Bayer's main combination product is "Fleegard Environment Spray", which is an adulticide/IGR combination used to control fleas and flea larvae in the animal's bedding and environment based on Pyriproxifen and Cyfluthrin.

*- Market shares*

- (1028) Most EU national markets for adulticides and combination products are highly concentrated. As it appears from the table below, in 2000 Merial and Bayer had



a combined market share between 60% to 80% in nine national markets (Belgium, Denmark, Greece, Ireland, Italy, the Netherlands, Portugal, Sweden and the UK) and between 50% to 60% in four national markets (Austria, France, Germany, and Spain). In most of these national markets, the remaining sales are divided between one or two main competitors with important market shares, and a number of very small competitors or private labels each with very low or insignificant market shares.

*Table 1. Parties' estimates of market shares by value in the main EU national markets for adulticides and combination products (year 2000)*

	<b>Bayer</b>	<b>Merial</b>	<b>Close competitors</b>	<b>Others (small competitors/ private labels)</b>
<b>Austria</b>	[30-40]*%	[10-20]*%	[30-40]*% (Sara Lee) [10-20]*% (Pfizer)	[0-10]*%
<b>Belgium</b>	[20-30]*%	[40-50]*%	[10-20]*% (Beaphar)	[10-20]*%
<b>Denmark</b>	[10-20]*%	[50-60]*%	[20-30]*% (Crisco)	[10-20]*%
<b>France</b>	[0-10]*%	[50-60]*%	[10-20]*%(Nestlé- Friskies)	[30-40]*%
<b>Germany</b>	[30-40]*%	[20-30]*%	[10-20]*% (Essex/ Schering-Plough) [10-20]*% (Beaphar)	[10-20]*%
<b>Greece</b>	[10-20]*%	[60-70]*%	[10-20]*% (Virbac)	[10-20]*%
<b>Ireland</b>	[40-50]*%	[20-30]*%	[10-20]*% (Pfizer)	[10-20]*%
<b>Italy</b>	[10-20]*%	[60-70]*%		[20-30]*%
<b>Netherlands</b>	[30-40]*%	[30-40]*%	[10-20]*% (Emax OTC) [0-10]*% (Beaphar)	[10-20]*%
<b>Portugal</b>	[0-10]*%	[60-70]*%	[0-10]*% (Sara Lee)	[10-20]*%
<b>Spain</b>	[10-20]*%	[30-40]*%	[10-20]*% (Virbac) [0-10]*% (Pfizer)	[10-20]*%
<b>Sweden</b>	[0-10]*%	[60-70]*%	[30-40]*%(Schering- Plough)	
<b>UK</b>	[10-20]*%	[50-60]*%	[0-10]*% (Pfizer)	[10-20]*%

- (1029) The combined position of Bayer and Merial on the above markets is not expected to change substantially for the next three years. From 2000 to 2004, in fact, Bayer expects its overall sales of SAEs to decline from [10-20]\*% to [10-20]\*% and Merial's sales to increase from [40-50]\*% to [40-50]\*%. Considering that the overall sales of adulticides and combination products account, as explained above, for about 90% of the total SAE sector, it seems reasonable to believe that in the year 2004 the combined position of Bayer and Merial on the various national markets for adulticides and combination products will remain overall substantially unchanged.

*- Market entry*

- (1030) Entry in the market for adulticides and combination products can take place by means of generic or innovative products. Generic products are based on active ingredients that are off-patent. There are already a number of products based on off patent active ingredients in the various national markets for adulticides and combination products. These products, however, are not as efficacious as the leading products of Merial and Bayer, which are based on the innovative and patented active ingredients Fipronil and Imidacloprid. That explains why the combined market share of Merial and Bayer has increased over the last years and is expected to remain stable, if not to increase further, during the coming years. Potential market entry of generic products, therefore, does not exercise competitive pressure on innovative products such as Frontline and Advantage.
- (1031) Market entry by means of innovative products is extremely difficult and resource-intensive. The costs of R&D and registration programs vary widely, but for innovative products, the cost can exceed EUR 100 million and the total time can exceed 10 years. This is the case regardless whether the product is an adulticide or an IGR. Combination products may require more work and time by virtue of the fact that they contain two active ingredients. Other barriers to enter this market are represented by the need to build a brand, to educate the sales forces and to establish solid relationships with veterinarians.
- (1032) From the investigation it appears that, since the launch of Advantage and Frontline in the EEA more than six years ago, the only companies that have entered the adulticide and combination product market with innovative products are Pfizer, with Stronghold, a combination product based on the active ingredient Selemectin, and Novartis, with Capstar, an adulticide based on the active ingredient Nitempyran. Both companies, however, do not expect their products to substantially change the market position of Bayer and Merial in the coming years.
- (1033) No adulticides based on innovative active ingredients are expected to be launched on the market for the next five years, nor new companies are expected to enter the market with adulticides based on active ingredients off-patent because these products would not be able to capture a substantial market share.
- (1034) [...]\*. Although other combination products based on existing active ingredients might be launched on the market in the coming years, it is very unlikely that they might challenge the leading position that Bayer and Merial have established on the adulticide and combination product market through their innovative and now largely notorious branded products.

*c) Assessment*

- (1035) As it appears from above, the market for adulticide and combination products has the characteristics of an oligopolistic market. The investigation has shown that such market has practically reached its maturity, that it is highly concentrated, that is dominated by two leading firms (Bayer and Merial) having a combined market share between [50-60]\*% to [80-90]\*% in most national

markets, that these firms are expected to maintain their combined position substantially unchanged in the coming years, and that the market is characterised by high barriers to entry.

- (1036) It also appears from the investigation that in such a market competition takes place mainly at the R&D and promotional level. Consumers are not price sensitive. Their choice depends on the effectiveness of the product and on the notoriety of the brand.
- (1037) New products can successfully enter the market and achieve a reasonable market share only if their active ingredient produces more effective results against parasites than the active ingredient of existing products, if their level of toxicity is acceptable, if their administration to the pet appears easy and safe from a pet owner point of view, and if the brand is well promoted to the public. Bayer and Merial have gained a strong position on the adulticide and combination product market precisely because their products Advantage and Frontline met all these conditions. If Frontline has been more successful than Advantage in most national markets that is because, besides combating adult fleas, Frontline is also effective against ticks. Effective competition in R&D and promotional activities are therefore crucial factors for competition to be maintained on the market for adulticides and combination products.
- (1038) Currently, Merial's position on the market for adulticides and combination products is guaranteed by its Fipronil licensing and supply agreements with ACS. [Confidential information of ACS]\*. [...]\*. [Confidential information of ACS]\*.
- (1039) Following the implementation of the proposed transaction, not only Bayer would become the supplier and licensor of Fipronil to Merial, but it would also become a party to the current research and license agreement for future products between ACS and Merial. Given to the creation of such vertical links between Bayer and Merial, serious concerns arise that the proposed transaction might lead to the creation or strengthening of a collective dominant position on the market for adulticides or combination products.
- (1040) First of all, Bayer's control of the active ingredient used for Merial's most important product (Frontline) would give Bayer an incentive to discipline Merial's behaviour by, for instance, lowering or threatening to lower the quality or the quantity of Fipronil supplies.
- (1041) In their reply to the Commission's statement of objections, the parties have claimed that, as the current supply obligations of ACS towards Merial will be transferred to Bayer, Bayer would not have the incentive to engage in any squeezing behaviour with regard to the quantities of Fipronil needed by Merial [...]\*.
- (1042) With regard to the parties' submission that Merial might claim compensation and damages before a court in case of a breach of contract by Bayer, the Commission considers that post-merger Bayer would have the ability and the

incentive to discipline Merial's behaviour by foreclosing Merial or by threatening to do so. [Confidential information of ACS]\*.

- (1043) Furthermore, as explained above, following the proposed transaction Bayer would gain control also over the research activities of ACS relating to the animal health sector which are currently carried on exclusively for Merial. After the proposed transaction, therefore, Merial and the animal health business of Bayer/ACS would both have access to the results of the crop research activities of the merged entity that might be used to produce innovative products in the market for adulticide and combination products.
- (1044) As a result, after the implementation of the proposed transaction, the two leading firms in the market for adulticides and combination products would share the results of such crop research activities carried out by the merged entity. This co-operation in crop research would very likely lead to a co-ordinated behaviour of the two market leaders in the downstream market for adulticides and combination products.
- (1045) In this respect it is indicative that, under the heading "Marketing JV Agreement", a draft version of a prospected agreement between Bayer/ACS and Merial submitted to the Commission during the investigation states that [Confidential information of ACS]\*.
- (1046) The parties have submitted that the research agreement between Merial and the merged entity would not eliminate the incentives of the two leading players in the market for adulticide and combination products to compete against each other.
- (1047) In particular, the parties have submitted that crop research is not essential for the development of adulticides and combination products, and that in the future pharmaceutical research will become increasingly important in this field. This would be demonstrated, according to the parties, by the fact that [Confidential information of ACS]\*.
- (1048) The Commission recognises that crop research appears not to be essential for developing innovative adulticides and combination products. Indeed this is demonstrated by the fact that [Confidential information of ACS]\* and that Pfizer's combination product Stronghold is based on an active ingredient, Selemectin, which is not a result of crop research activities. However, the investigation has shown that research in the crop sector may still be relevant for the development of new adulticides or combination products. Therefore, although it is certainly possible that innovative adulticides or combination products will result in the future from non-crop research activities, serious concerns remain that if Bayer and Merial shared the same crop research activities to develop adulticides and combination products, they would have very strong incentives to engage in co-ordinated behaviour in a market where they are already the two leading players.
- (1049) The parties have also submitted that even if a successful new molecule resulting from the merged entity's crop research had to be shared between Merial and the

animal health division of Bayer, the two companies would still remain independent with regard to all the development activities of the respective final products. These development activities which, according to the parties, are cost intensive, include tests for animal health-specific long-term toxicology, global field studies, target expansion, combinations, etc.

- (1050) In the Commission's view, however, this does not eliminate the fact that the pre-condition for any development activities is the discovery of new molecules and that, after the merger, the two dominant players in the market for adulticides and combination products would share the same discoveries of the merged entity's crop research activities.
- (1051) The parties have also submitted that the merged entity and Merial would still compete in the future on factors such as brands and advertising, and that a co-promotion agreement for any future product of Merial and Bayer based on the same molecule is unlikely.
- (1052) According to the Commission, however, [Confidential information of ACS]\*.
- (1053) Finally, the parties have submitted that there is a significant competitive fringe in some countries. In the Commission view, however, the fact that in some countries (such as Austria, Germany, Belgium or Denmark), certain competitors of Bayer and Merial have achieved markets shares above [10-20]\*%, and in the case of Sara Lee in Austria even above [30-40]\*%, does not mean that these competitors would be able to exercise a significant competitive pressure on Merial and Bayer's post-merger co-ordinated behaviour, given to the innovative properties of Frontline and Advantage, the future launching of Merial's combination product (which would not be matched for instance by companies such as Sara Lee, and Schering-Plough that do not currently sell nor expect to sell in the future combination products), and the strong potential for innovation of these two companies.

#### General conclusion on small animal ectoparasiticides

- (1054) In the light of the above, the Commission concludes that the concentration would lead to the creation or strengthening of a dominant position in the following national markets for adulticides and combination products: Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK.

#### **K. Household insecticides**

- (1055) Household insecticides are formulated as ready-to-use products which are applied against various kinds of insects, including cockroaches, flies, moths and ants. Household insecticides are applied by so called do-it yourself customers.
- (1056) Bayer's consumer care group, which is part of its Pharmaceutical business, is active in the market of household insecticides.

- (1057) ACS is no longer active in the distribution of active ingredients for household insecticides after its recent disposal of its household insecticides business to Sumitomo.. Consequently, there is no horizontal overlap of the Parties' activities in the market for formulated household insecticides products.
- (1058) The only remaining business of ACS on this market is the supply of active ingredients to [...]\*. The supply is guaranteed under a long-term supply agreement starting in [...]\*, ACS supplies to [...]\* active ingredients for the formulation of household insecticides
- (1059) In view of the above, the Commission concludes that the transaction will not lead to the creation or the strengthening of a dominant position on the market for household insecticides.

#### **L. Overall conclusion of competitive assessment**

- (1060) In view of the above, the Commission has come to the conclusion that the transaction as originally notified is incompatible with the common market and the functioning of the EEA Agreement, since it would create or strengthen dominant positions in the markets for foliar insecticides for beets (France and Greece), cereals (Italy and Portugal), citrus fruit (Portugal), cotton (Greece), fruits and nuts (Belgium, Denmark, Germany, Greece and Portugal), grapes (Germany), potatoes (Portugal and Spain), rice (Portugal), tobacco (Greece and Italy) and vegetables (France, Portugal, Spain and Italy); and in soil insecticides for bananas (Spain), beets (Belgium, France, the UK and Italy), ornamental plants (Italy), potatoes (Greece and Portugal), tobacco (Spain) and vegetables (Greece and Portugal); in the following national markets for molluscicides: the UK, Belgium, Ireland, Portugal, Sweden, Finland and Iceland; in the markets for beets herbicides (other than post-emergence graminicides) in the whole of the EU, for cereal herbicides in Belgium, Germany and Sweden, for maize herbicides in Belgium and the Netherlands, for potato herbicides in Greece, Portugal, Spain and Sweden, in vegetable herbicides in Portugal and Sweden and for cotton defoliant in Greece and Spain; in the markets for cereal fungicides in Italy, fruits and nuts in Denmark, France and Germany, strawberry fungicides in Sweden, fungicides for botrytis on grapes in France, Germany, Greece and Portugal, hops fungicides in Germany, fungicides for oil and protein crops in Germany, and vegetable fungicides in Austria, Belgium, France, Germany, Greece, Netherlands, Portugal, and Sweden; in seed treatment insecticides for cereals and rice in France and seed treatment insecticides for maize in France, Italy, Austria, Belgium, Germany, Greece, the Netherlands, Portugal and Spain. The operation would further lead to the creation or strengthening of a dominant position in seed treatment insecticides for potatoes in Spain and the Netherlands and in seed treatment insecticides for vegetables in France and in the Benelux; in the markets for fungicides for seed treatment of barley in Germany, Ireland, Italy and the United Kingdom; in the markets for fungicides for seed treatment of wheat, rye and triticale in Germany, Italy, Sweden and the United Kingdom; and in the markets for fungicides for seed treatment of potatoes in Belgium, France, Ireland, the Netherlands and the United Kingdom; in the market for gel and baits for cockroaches in Belgium, France, Germany, the Netherlands and Spain and in

the following national markets for aduclticides and combination products: Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK.

## **V. COMMITMENTS SUBMITTED BY BAYER**

- (1061) In order to remove the above-mentioned competition concerns, Bayer has submitted a number of commitments with a view to modify the original concentration plan. The commitments are set out in full in the Annex, which forms an integral part of this Decision. The assessment of the competition effects of the modified transaction is presented in the following paragraphs.

### **V.1. Insecticides**

- (1062) Bayer has offered to the Commission the divestment of the Fipronil business on a world-wide basis. In addition, Bayer has offered to the Commission the following Europe-wide divestments: the divestment of the Acetamiprid business; the Cyfluthrin business; the Beta-Cyfluthrin business; the Fenamiphos business; the Oxydemeton-Methyl business; the Phosalone business; and the Cypermethrin business.
- (1063) Bayer has also offered the following exclusive licences: a Europe-wide exclusive license for the Acrinathrin business; an exclusive license for Endosulfan-based formulations in Greece and Portugal and Carbaryl-based formulations in France.
- (1064) In addition, Bayer has proposed to discontinue a number of third party distribution agreements, as specified in the annexed undertakings.
- (1065) The divestment of Acetamiprid includes the parties transferring the current agreements concluded between ACS and Nippon Soda in Europe back to Nippon Soda. The parties have also undertaken to make their best efforts to find a third party to take over these agreements. Finally, the divestment includes all the mixtures. The divestment of Acetamiprid will remove any current or future overlap between Bayer and ACS in the neonicotinoids. The Commission considers that the divestment of Acetamiprid, together with other undertakings submitted in this case, is sufficient to restore competitive conditions in the insecticides markets and especially as regards neonicotinoids.
- (1066) As concerns Fipronil, the parties have offered the divestment of Fipronil for agricultural uses on a world-wide basis. The divestment includes all assets and intellectual property rights. Outside Europe and the US, the parties have the right to negotiate a license back for the Fipronil business. Such negotiations can, however, commence only after the whole of the world-wide Fipronil business has been divested to the new purchaser so as to prevent Bayer to condition the divestiture of Fipronil on the obtention of licenses outside Europe and the US. Any such license will have to be approved by the Commission. As regards Ethiprole, the parties have undertaken to grant an European-wide exclusive license to develop, manufacture, use and sell Ethiprole for agricultural uses. Finally, Bayer commits to abstain from any use of ACS's existing and pending patents world-wide related to the pyrazole family as well as any future patents

obtained by Bayer world-wide following its acquisition of ACS to the extent that this would prevent inter alia the purchaser of the Fipronil and Ethiprole businesses from developing, producing, using or selling Fipronil and/or Ethiprole or analogues. The proposed divestment of Fipronil will remove the possibility of combining the neonicotinoids and the pyrazoles in the new entity's insecticides portfolio and will remove the competition concerns as regards the new entity's strength vis-à-vis the distribution sector. Together with other undertakings submitted in this case, the divestment of Fipronil is likely to restore competitive conditions in the insecticides markets and especially as regards the new chemistries, neonicotinoids and pyrazoles. The divestment of Ethiprole will in particular ensure that the new entity will not be able to undermine the divestment of Fipronil by developing a competing pyrazole in the European markets. Furthermore, the Commission considers it particularly important that the purchaser of Fipronil will have the possibility to develop and launch a second generation pyrazole in the European market following the loss of patent protection of Fipronil in the near future.

- (1067) The Commission considers that the purchaser of these divested products should be a R&D company who is able to take over the relevant production assets and the full position of ACS before the merger with regard to the divested assets .
- (1068) As regards the individual markets, the assessment of the undertakings is as follows:
- (1069) *Banana Soil, Spain*: Bayer has proposed to divest the Fenamiphos business (including the mixture product consisting of the active substances Fenamiphos and Imidacloprid). The proposed remedy will practically eliminate the overlap created by the merger and reduce the market share to only [10-20]\*%. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1070) *Beets Foliar, France*: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; and the divestment of the Cypermethrin business. The proposed remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1071) *Beets Foliar, Greece*: Bayer has proposed a package of remedies, which includes the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Cypermethrin business; and a non-exclusive license for Deltamethrin. In addition, the parties will terminate the distribution of Azymphos-Methyl. The parties have explained that the complete removal of the overlap between the parties would be unproportionate, because both Deltamethrin (ACS) and Fethion (Bayer) are used only for a very small extent in this crop. The Commission has therefore decided to approve, under these very exceptional circumstances, a non-exclusive license for Deltamethrin. The Commission estimates that this together with the offered divestments is sufficient under the very particular conditions to create competitive conditions



on this market both as regards the overall market and also the sucking and the chewing insects segments. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1072) Beets Soil, Belgium: Bayer has proposed a package of remedies which includes the divestment of the business conducted under the trade names Curaterr and Yaltox based on the third party active substance Carbofuran. In addition, Bayer has proposed to divest Fipronil and all the formulations in the EEA. The proposed remedies will reduce the parties' market share from [80-90]\*% to only [0-10]\*%. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1073) Beets Soil, France: Bayer has proposed a package of remedies which includes the divestment of the business conducted under the trade names Curaterr and Yaltox based on the third party active substance Carbofuran; the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; and the divestment of the Fipronil business. The proposed remedies will remove the market share overlap between the parties. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1074) Beets Soil, Italy: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the divestment of the Fipronil business; and the termination of the commercialising of the third party product Marshall (Carbosulfan). The proposed remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1075) Beets Soil, UK: Bayer has proposed to divest its business conducted under the trade names Curaterr, Yaltox and Marshall based on the third party active substance Carbofuran on an EEA-wide basis. The proposed remedy will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1076) Cereals Foliar, Italy: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; and the divestment of the Oxydemeton-Methyl business. The proposed remedies will eliminate the market share overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1077) Cereals Foliar, Portugal: Bayer has proposed to divest the Oxydemeton-Methyl business. The proposed remedy will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1078) Citrus Foliar, Portugal: Bayer has proposed a package of remedies which includes the divestment of the Oxydemeton-Methyl business and the termination of the commercialising of the third party products Cascade (Flufenoxuron) and Lorvek (Chlorpyrifos). The proposed remedies would bring down the parties'

combined market share to [30-40]\*% on the overall market and to [30-40]\*% in sucking insects and to [30-40]\*% in chewing insects. In view of these market shares, those of the competitors ([confidential information concerning the market position of a competitor]\*), in view of the competing product launches, and given [confidential information of ACS]\*, the Commission considers that competitive conditions will be sufficiently ensured. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1079) *Cotton Foliar, Greece*: Bayer has proposed a package of remedies which includes the following: the divestment of the Acetamiprid business; the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; an exclusive licence for Endosulfan; and the termination of the commercialising of the third party products Xentari (Bacillus T.), Azinphos-Methyl (Gusathion M-EC) and Omite (Propargite). The proposed remedies would bring down the combined market share to [20-30]\*% on the overall market and to [30-40]\*% in sucking insects. In chewing insects, the parties' market share would be [20-30]\*%. On this basis, in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*) and the competing product launches, the Commission considers that no dominant position will be created or strengthened on this market.
- (1080) *Fruits/Nuts Foliar, Belgium*: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the termination of the commercialising of the third party products Masai and Pyranica (Tebufenpyrad), Dimilin (Diflubenzuron) and Mimic (Tebufenozide). The proposed remedies would reduce the parties' combined market share to [30-40]\*% in the overall market and to [30-40]\*% in the sucking insects segment. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1081) *Fruits/Nuts Foliar, Denmark*: Bayer has proposed a package of remedies which includes the divestment of the Phosalone business; the termination of the commercialising of the third party products Maladan (Malathion), Nissorun (Hexythiazox) and Dimilin (Diflubenzuron). The proposed remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1082) *Fruits/Nuts Foliar, Germany*: Bayer has proposed a package of remedies which includes the divestment of the Oxydemeton-Methyl business; the termination of the commercialising of the third party products Xentari (Bacillus T.), Dimilin (Diflubenzuron), Kiron (Fenproximate) and Mimic (Tebufenozide). The proposed remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1083) Fruits/Nuts Foliar, Greece: Bayer has proposed a package of remedies which includes the divestment of the Acetamiprid business; the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; the divestment of the Phosalone business; an exclusive licence for Endosulfan; the termination of the commercialising of the third party products Xentari (Bacillus T.), BT (Bacillus T.), Metamidophos (Monitor), Azinphos-Methyl (Gusathion-M) and Omite (Propargite). The proposed remedies would bring down the combined market [...] [30-40]\*% on the overall market and to [30-40]\*% in sucking insects and [30-40]\*% in chewing insects. In view of these markets shares, and those of the competitors ([confidential information concerning the market position of a competitor]\*), taking into account the fact that the parties have undertaken to divest Acetamiprid, which has already been launched on the market, and given the competing product launches both in the sucking and the chewing insects segments in the near future, the Commission considers that these undertakings are sufficient to ensure competitive conditions. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1084) Fruits/Nuts Foliar, Portugal: Bayer has proposed a package of remedies which includes the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; the divestment of the Phosalone business; an exclusive licence for Endosulfan; the termination of the commercialising of the third party products Cascade (Flufenoxuron), Mimic (Tebufenozide) and Omite (Propargite). The proposed remedies would reduce the parties' combined market share on the overall insecticides market to [30-40]\*% and to [30-40]\*% in sucking insects and to [20-30]\*% in chewing insects. In view of these market shares, and those of the competitors ([confidential information concerning the market position of a competitor]\*), and taking into consideration that [confidential information of ACS]\*, and given the competing product launches both in the sucking and the chewing insects segments in the near future, the Commission considers that these undertakings are sufficient to ensure competitive conditions. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1085) Grapes Foliar, Germany: Bayer has proposed a package of remedies which includes the divestment of the Oxydemeton-Methyl business; and the termination of the commercialising of the third party products Xentari (Bacillus T.), Mimic (Tebufenozide) and Kiron (Fenpyroximate). The proposed remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1086) Ornamentals Soil, Italy: Bayer has proposed a package of remedies which includes the divestment of the Fenamiphos business; the termination of the commercialising the third party products Pyrinex (Chlorpyrifos) and Marshall (Carbosulfan). The proposed remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1087) Potatoes Foliar, Portugal: Bayer has proposed to divest the Beta-Cyfluthrin business and terminate the commercialising of the third party product Biotrata (Bacillus T.). The proposed remedies would reduce the parties' market share to [20-30]\*% on the overall market and to [30-40]\*% in chewing insects. The EEA-wide divestment of the Cyfluthrin business will also create a potential new entrant on the market with a competing pyrethroid, who will also have a mixture product of Cyfluthrin and Imidacloprid. According to the parties, the combination product has already been registered on this market and the sales can start immediately. On this basis, in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*) and the competing products launches, the Commission considers that no dominant position will be created or strengthened on this market.
- (1088) Potatoes Foliar, Spain: Bayer has proposed a package of remedies which includes the divestment of the Fipronil business; the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; the divestment of the Cypermethrin business; and the termination of the commercialising of the third party products Mimic and Confirm (Tebufenozide) and Azinphos-Methyl (Gusathion M WP). The proposed remedies would reduce the parties' market share by [10-20]\*% to [30-40]\*% on the overall market. In chewing insects, mainly due to the divestment of Fipronil, the market share is reduced to [20-30]\*%. This divestment would eliminate the Commission's concern that the parties could offer attractive spraying programmes for the control of the Colorado potato beetle together with Imidacloprid. In sucking insects, the parties would still have [40-50]\*% of the market. However, this market share is derived largely from Imidacloprid. The Commission considers that because the parties have divested Acetamiprid, a new entry with a competing neonicotinoid is possible in the near future. In addition, [confidential information concerning pipeline products of the competitors]\*. Finally, the divestment of the Cyfluthrin business and the Beta-Cyfluthrin business and the mixture product with Imidacloprid is likely to provide competition on this market. On this basis, and in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*), the Commission considers that no dominant position will be created or strengthened on this market.
- (1089) Potatoes Soil, Greece: Bayer has proposed a package of remedies which includes the divestment of the Fenamiphos business; and the divestment of the business conducted under the trade names Curaterr, Yaltox and Marshall based on the third party active substance Carbofuran. The proposed remedies will eliminate the market share overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1090) Potatoes Soil, Portugal: Bayer has proposed to divest the Fenamiphos business. This will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1091) Rice Foliar, Portugal: Bayer has proposed to divest the Oxydemeton-Methyl business. This will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1092) Tobacco Foliar, Greece: Bayer has proposed a package of remedies which includes the divestment of the Acetamiprid business; the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; and the termination of the commercialising of the third party product Monitor (Metamidophos). The remedies will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1093) Tobacco Foliar, Italy: Bayer has proposed to divest the Cyfluthrin business and the Oxydemeton-Methyl business. These divestments will remove the addition of the market share created by the operation. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1094) Tobacco Soil, Spain: Bayer has proposed a package of remedies, which includes the divestment of the Cyfluthrin business ; the divestment of the Beta-Cyfluthrin business; and the divestment of the Fenamiphos business. The proposed remedies eliminate the entire market share overlap and, most importantly, remove the overlap between the parties' leading soil insecticides. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1095) Vegetables Foliar, France: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the divestment of the Phosalone business; the divestment of the Oxydemeton-Methyl business; the divestment of the Acrinathrin business; an exclusive licence for Carbaryl-based formulations in France; and the termination of commercialising of the third party products Umuter (Diazinon), Rhodocide (Ethion), Azinphos-Methyl (Gusathion M WP) and Orthene (Acephate). Following these divestments, the parties combined market share both on the overall market and also in the sucking and chewing insects segments will be reduced to [...] below 40%. The Commission has taken into account the fact that [confidential information of ACS]\*. The Commission considers that these undertakings, which address effectively all the market segments where the Commission identified competition concerns, will also facilitate the market penetration of the competitors, who will launch competing products both in the sucking and the chewing insects segments [confidential information concerning pipeline products of the competitors]\* in the near future. Therefore, the Commission considers that these undertakings are sufficient to ensure competitive conditions. On this basis, and in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*), the Commission considers that no dominant position will be created or strengthened on this market.

- (1096) *Vegetables Foliar, Italy*: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; and the termination of the commercialising of the third party products Dipel (Bacillus T.), Smart (Malathion), Azinphos-Methyl (Gusathion SC, Gusathion M WP) and Omite (Propargite). Following these divestments, the parties' combined market share would be [30-40]\*% on the overall market and [30-40]\*% in the sucking insects segment. On this basis, in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*) and the competing product launches, the Commission considers that no dominant position will be created or strengthened on this market.
- (1097) *Vegetables Foliar, Portugal*: Bayer has proposed a package of remedies which includes the following: the divestment of the Beta-Cyfluthrin business; the divestment of the Phosalone business; the divestment of the Oxydemeton-Methyl business; the divestment of the Acrinathrin business; an exclusive license for Endosulfan; and the termination of the commercialising of the third party product Omite (Propargite). Taking into account of the products which have been divested during 2001, the proposed remedies would bring down the combined market share by [20-30]\*%, to around [30-40]\*%, on the overall market. The Commission has estimated that these undertakings would reduce the market share in both sucking and chewing insects to below [30-40]\*%. For essentially the same reasons as apply for the French vegetables market for foliar application, the Commission considers the undertakings submitted as sufficient to ensure competitive conditions. On this basis, and in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*), the Commission considers that no dominant position will be created or strengthened on this market.
- (1098) *Vegetables Foliar, Spain*: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the divestment of the Beta-Cyfluthrin business; the divestment of the Oxydemeton-Methyl business; the divestment of the Phosalone business; the divestment of the Cypermethrin business; the divestment of the Acrinathrin business;; and the termination of the commercialising of the third party products Mimic and Confirm (Tebufenozide), Dimilin (Diflubenzuron), Xentari (Bacillus T.), Omite (Propargite) and Dipel (Bacillus T.). The proposed remedies would bring down the combined market share to [20-30]\*% on the overall market and to [30-40]\*% in the sucking insects segment. On this basis, in view of the market shares of the competitors ([confidential information concerning the market position of a competitor]\*) and the competing product launches, the Commission considers that no dominant position will be created or strengthened on this market.
- (1099) *Vegetables Soil, Greece*: Bayer has proposed a package of remedies which includes the divestment of the Cyfluthrin business; the divestment of the Fenamiphos business; and the divestment of the business conducted under the trade names Curaterr and Yaltox based on the third party active substance Carbofuran. The proposed remedies would reduce the parties' market share to [0-

10]\*%. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1100) *Vegetables Soil, Portugal*: Bayer has proposed to divest the Fenamiphos business (including the mixture of Fenamiphos and Imidacloprid). The proposed remedy will eliminate the overlaps created by the merger. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

## V.2. Molluscicides

- (1101) The parties undertake to grant an Europe-wide exclusive license to manufacture and sell Thiodicarb-based snail bait formulation, marketed under the brand "Skipper". The exclusive license will include a license to all property rights, registration rights, know-how, documentation and trade names relating to the "Skipper" formulation for use as snail bait. If requested by the licensee, Bayer would enter into a transitional toll manufacturing agreement with the licensee on cost plus terms.
- (1102) This undertaking will have the effect to eliminate the overlap in this market, as ACS's Thiodicarb-based molluscicide Skipper is the only molluscicide produced and sold by ACS in Europe. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

## V.3 Herbicides

### *Beets Herbicides*

- (1103) Bayer proposes to eliminate the overlap by divesting European-wide the entire Metamitron ("Goltix") business and offers toll-manufacturing of the active ingredient for three years on a cost plus basis and on an arm's length basis thereafter if requested by the purchaser. On this basis the Commission considers that no dominant position will be created or strengthened in these markets.

### *Cereal Herbicides*

- (1104) As concerns Belgium and Germany, Bayer proposes to divest the majority of the overlap and two other molecules which will be more than the remaining overlap. The package consists of a divestiture of Herold (Flufenacet/Diflufenican), of Ralon Super and Puma Super (Fenoxaprop) and a European-wide licence to use Propoxycarbazone in mixtures with the molecules of the acquirer. All three commitments together account for a higher market share than what Bayer achieves in those two Member States. Moreover, all three products control grass weeds, the segment in which the merged entity would become very strong also in France and the Netherlands. Both Herold and Radon/Puma will be toll-manufactured by Bayer on request for a period of 3 years on a cost plus basis, and on an arm's length basis thereafter if requested by the purchaser.. As concerns Sweden, the divestment of Gullviks would eliminate the current overlap. On this basis the Commission considers that no dominant position will be created or strengthened in these markets.

### *Maize Herbicides*

- (1105) Bayer would become dominant in those two Member States based on the figures of 2000. In the meantime, however, the direct competitor to Bayer's Mikado, Callisto, has been introduced in those two countries (2001 and 2002 respectively). In order to bring down market shares in those two countries to an acceptable level, Bayer proposes to grant an exclusive licence to manufacture, use and sell Isoxaflutole ("Merlin") in Belgium and the Netherlands. Isoxaflutole will be toll-manufactured by Bayer on request for a period of 3 years on a cost plus basis, and on an arm's length basis thereafter if requested by the purchaser. The licencing of Isoxaflutole, a patent protected broad leaf maize herbicide, would eliminate the overlap. On this basis the Commission considers that no dominant position will be created or strengthened in these markets.

### *Potato and Vegetable Herbicides*

- (1106) Bayer offers to divest the Europe-wide Linuron-business including the brand Afalon. Toll-manufacturing is offered for 3 years on a cost plus basis, and on an arm's length basis thereafter if requested by the purchaser. This would eliminate the overlap (Portugal, Spain) or bring down market shares to an acceptable level (Greece, to around [40-50]\*% in 2000 and below [30-40]\*% in 2004, with Syngenta as a strong competitor with close to [20-30]\*%). To remedy the situation in Sweden, Bayer offers to sell the majority in Gullviks, its wholesaler in the Swedish market, and to grant an exclusive licence for the vegetable herbicide Aclonifen. This package would also eliminate the overlap. On this basis the Commission considers that no dominant position will be created or strengthened in these markets.

### *Cotton defoliants Greece and Spain*

- (1107) Bayer offers to grant an exclusive licence for its only product DEF (active ingredient tribufos) until it is withdrawn from the market in Greece and Spain after 2003. On this basis the Commission considers that no dominant position will be created or strengthened in these markets.

## *V.4 Fungicides*

### *a) Cereal fungicides*

- (1108) In cereal fungicides the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in Italy. For this market the remedy offered by the parties to divest ACS's Prochloraz business including mixtures with Fenpropimorph would mean divesting the majority ([90-100]\*%) of ACS's business in the Italian cereals market. The resulting addition of market share would be very small (less than [0-10]\*%) and the new entity would have less than [20-30]\*%. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.



*b) Fruits and nuts fungicides*

- (1109) In fruits and nuts fungicides the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in Denmark, France and Germany.
- (1110) The remedies affecting the Danish market are the divestment of Pyrimethanil (Europe-wide), including the brand name Scala, and the granting of an exclusive license for Bitertanol (including the brand name Baycor for a period of [...]\*). According to the parties' data, the sales of Scala account for [10-20]\*% of the total market, while the remaining ACS sales, which will be taken over by Bayer, account for only [0-10]\*%. On the other hand, Bayer's Baycor, which will be licensed, accounts for [10-20]\*%. The new entity would thus have [0-10]\*% less than Bayer's current market share and less than [30-40]\*% of the market. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1111) The remedies affecting the French market are the divestment of Pyrimethanil and mixtures with Fluquinconazole (Europe-wide), the divestments of Iprodione and Prochloraz (Europe-wide), including brand names. This would account for [80-90]\*% of ACS's sales based on own active ingredients and [50-60]\*% of total ACS sales. The parties would have just around [40-50]\*% with Bayer having [30-40]\*% and ACS [10-20]\*%. However, the main part of ACS's remaining sales would be based on third party products, while the ACS active ingredients mentioned by third parties as being the main contributions to Bayer's portfolio would be divested. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1112) The remedies affecting the German market are the divestment of Pyrimethanil and mixtures with Fluquinconazole (Europe-wide) and the granting of an exclusive license for the Triadimenol based formulation Bayfidan (including the brand name for a period of [...]\*). The ACS part of the commitment accounts for all of ACS's sales based on own active ingredients and [50-60]\*% of total ACS sales. According to the parties' data the divested ACS products have a market share of [0-10]\*%, the one remaining ACS third party product a share of [0-10]\*% and the licensed Bayfidan a share of [0-10]\*%. According to the parties, the remaining addition is [0-10]\*% to be added to Bayer's remaining [30-40]\*%. It should, however, be noted that the market investigation has shown that the parties slightly overestimate their share of this market. Instead of [40-50]\*% they would have around [40-50]\*% with only a small increase in market share, as Bayer already today has about [30-40]\*%. As for France, the ACS products mentioned by third parties as being the main contributions to Bayer's portfolio are divested, while the remaining addition is a third party product, which the parties anyway expect to stop selling before 2004. The

market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

*c) Strawberry fungicides in Sweden*

- (1113) The Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in strawberry fungicides in Sweden. The remedies affecting this market are the divestments of Pyrimethanil and Iprodione (Europe-wide). This would mean a divestment of Scala (Pyrimethanil) and Rovral (Iprodione). The only remaining addition to Bayer's portfolio would thus be Aliette (Fosetyl-Al) which treats different diseases on strawberries than Bayer's own products. The divestment of Gullviks would furthermore mean that Bayer would no longer distribute Syngenta's Topas. The main competition problem identified by the Commission was the near-monopoly for fungicides to treat botrytis on strawberries. The remedies would completely eliminate the overlap. The addition of Aliette to Bayer's portfolio will not significantly change the competitive situation as Aliette treats other diseases than botrytis. Furthermore, the divestment of Topas through the sale of Gullviks would be a counterbalance to the addition of Aliette. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

*d) Grape fungicides for control of botrytis*

- (1114) In grape fungicides for control of botrytis the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in France, Germany, Greece and Portugal.
- (1115) The remedies affecting the French market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for [90-100]\*% of the sales of ACS in France. The addition of market share would be close to zero and Bayer has around [10-20]\*% share in this market. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1116) The remedies affecting the German market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for [50-60]\*% of the sales of ACS in Germany. The combined market share of the parties would after the commitments be less than [20-30]\*%. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1117) The remedies affecting the Greek market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for [50-60]\*% of the sales of ACS in Greece. The combined market share of the parties would after the commitments be less than [20-30]\*%. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1118) The remedies affecting the Portuguese market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for the entire sales of ACS in Portugal. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

*e) Hops fungicides*

- (1119) In hops fungicides the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in Germany. The remedy affecting this market is an exclusive license giving access to the Triadimenol-base product Bayfidan 250 EC (including the brand name Bayfidan for a period of [...]\*). Bayfidan 250 EC accounted for [60-70]\*% of Bayer's sales in 2000, although it would be a smaller proportion of sales in 2001 since Bayer's new Flint product in that year achieved sales similar to those of Bayfidan. Based on those figures the parties would after the remedy have a present market share of around [30-40]\*% (including sales of Flint) expected to decrease to about [30-40]\*% in 2004. The gap to the next competitor, BASF, would therefore be reduced significantly.<sup>66</sup> The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

*f) Oil and protein crops fungicides*

- (1120) In oil and protein crops fungicides the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in Germany. The remedies affecting this market are the Europe-wide divestment of Iprodione and the transfer of the existing distribution rights currently held by ACS to sell Folicur (Tebuconazole) in Germany to a third party. The sales of Virisan (Iprodione) and Folicur accounted in 2000 for [80-90]\*% of ACS sales in Germany. The remaining ACS product is Derosal (Carbendazim), which adds less than [0-10]\*% to Bayer's [30-40]\*%. Sales of Derosal are forecast to go down to account for less than [0-10]\*% in 2004. Furthermore, the gap to BASF would be drastically reduced.<sup>67</sup> The market test of

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<sup>66</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

<sup>67</sup> [Business secrets: Deleted confidential information based on competitors' sales data.]\*

the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

*g) Vegetable fungicides*

- (1121) In vegetable fungicides the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position in Austria, Belgium, France, Germany, Greece, Netherlands, Portugal, and Sweden.
- (1122) The remedies affecting the Austrian market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for [60-70]\*% of the sales of ACS in Austria. The combined market share of the parties would after the commitments be less than [20-30]\*% based on 2000 sales. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1123) The remedies affecting the Belgian market are the Europe-wide divestments of Pyrimethanil, Iprodione and Prochloraz. Products based on these active ingredients accounted for [40-50]\*% of the 2000 sales of ACS in Belgium. The combined market share of the parties would after the commitments be around [30-40]\*% based on 2000 sales. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1124) The remedies affecting the French market are the Europe-wide divestments of Pyrimethanil, Iprodione and Prochloraz. Products based on these active ingredients accounted for [20-30]\*% of the sales of ACS in France in 2000. They were also equivalent to almost five times the sales of Bayer in this market in 2000. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1125) The remedies affecting the German market are the Europe-wide divestments of Pyrimethanil and Iprodione; an exclusive license giving access to the Triadimenol-base product Bayfidan 250 EC; the transfer of the existing distribution rights currently held by ACS to sell Folicur (Tebuconazole) in Germany to a third party; and an exclusive license to the product Matador (based on the active ingredients Tebuconazole and Triadimenol) in Germany. Products based on these active ingredients account for [20-30]\*% of the sales of ACS in Germany in this market as well as [40-50]\*% of those of Bayer. The total sales of remaining products in year 2000 would be [10-20]\*% less than those sold by Bayer in 2000. The market test of the remedies has largely confirmed that this

remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

- (1126) The remedies affecting the Greek market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for [10-20]\*% of the sales of ACS in Greece. The addition to Bayer's portfolio of products based on these two active ingredients was the main competition concern identified during the course of the market investigation in the vegetable fungicides markets. Taking into account also the fact that Afugan is no longer sold in Greece, the sales of the products being acquired by Bayer would account for [60-70]\*% of ACS's sales in year 2000. The total sales of the new entity would on a year 2000 basis be less than [40-50]\*% and would be falling to below [30-40]\*% by 2004. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1127) The remedies affecting the Dutch market are the Europe-wide divestments of Pyrimethanil, Iprodione and Prochloraz. Products based on these active ingredients account for [40-50]\*% of the sales of ACS in the Netherlands. They are also equal to nine times the sales of Bayer in 2000 in this market. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1128) The remedies affecting the Portuguese market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients account for [10-20]\*% of the sales of ACS in Portugal in 2000. However, they are also equal to [150-160]\*% of the sales of Bayer in 2000 in this market. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.
- (1129) The remedies affecting the Swedish market are the Europe-wide divestments of Pyrimethanil and Iprodione. Products based on these active ingredients accounted for all the sales of ACS in Sweden in 2000. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on this market.

#### V.5 Seed treatment

- (1130) Bayer commits to transfer to one single purchaser the whole of ACS's existing seed treatment business including but not limited to a number of active ingredients used in ACS's seed treatment business. This commitment, including

the transfer of necessary know-how, ensures the viability of ACS's seed treatment business in this very concentrated sector, where presently only Syngenta, Bayer and ACS have a real significant presence.

#### *V.5.1 Seed treatment insecticides*

- (1131) In order to remove the competition concerns arising in seed treatment insecticides, Bayer has proposed to divest the whole of ACS's Fipronil business for seed treatment purposes. This undertaking removes the overlap between the parties' activities in seed treatment insecticides. On this basis the Commission considers that no dominant position will be created or strengthened on any of the seed treatment insecticides markets.

#### *V.5.2 Seed treatment fungicides*

##### *a) Cereal fungicides*

- (1132) In fungicides for seed treatment of cereals, the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position on the barley markets in Germany, Ireland, Italy and the United Kingdom and on the wheat, rye and triticale markets in Germany, Italy, Sweden and the United Kingdom.

##### *- Barley*

- (1133) The remedies affecting the barley markets are the Europe-wide divestments of Triticonazole and Prochloraz and the termination of an agreement to distribute Fungazil (Imazalil) in Ireland as well as to terminate all existing distribution agreements between ACS and Makhteshim in relation to Guazatine and hand back all existing distribution rights to Makhteshim.
- (1134) These commitments would eliminate the entire overlap in all four countries where competition problems were found, that is, Germany, Ireland, Italy and the United Kingdom. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on these markets.

##### *- Wheat, rye and triticale*

- (1135) The remedies affecting the markets for wheat, rye and triticale are the Europe-wide divestments of Triticonazole, Prochloraz and Fluquinconazole (with Bayer, however, getting a co-exclusive licence to sell Fluquinconazole and mixtures of Fluquinconazole for uses in seed treatment); the transfer of all existing distribution agreements between ACS and Makhteshim in relation to Guazatine and hand over of all existing distribution rights ([...]\*); and an exclusive licence to the Triadimenol-based formulation Baytan in the United Kingdom (including the brand name Baytan for a period of [...]\*).

- (1136) The commitments would eliminate the overlap in Italy and Sweden. The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on the markets for seed treatment of wheat, rye and triticale in Italy and Sweden.
- (1137) In Germany and the United Kingdom, there would be some remaining overlap from the addition of a very specific ACS product line (Fluquinconazole straight or mixed with Prochloraz) to Bayer's portfolio through Bayer receiving a co-exclusive license for this product line. The product line and the use of the brand name Jockey will, however, be divested with the active ingredient Fluquinconazole. Jockey is mainly targeted against a very specific disease, the so-called "take-all" disease, for which Bayer has no product. In fact, the only direct competitor to Jockey with respect to the take-all disease is Monsanto's Latitude, which recently has been or soon will be introduced in both Germany and the United Kingdom.
- (1138) In Germany the addition of this product range to that of Bayer will, supposedly, add some market share to Bayer's existing [20-30]\*%. However, since Jockey will also be sold by the purchaser of Fluquinconazole it is unlikely that Bayer will be able to take over all of Jockey's existing market share of [10-20]\*%. It should also be noted that Syngenta sells identical products (even the same brand names) to Bayer's present products and that Monsanto is in the process of launching Latitude, which is a direct competitor to Jockey. The parties forecast that sales of Jockey in Germany will diminish as a result of this competition ([...]\*). The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on the markets for seed treatment of wheat, rye and triticale in Germany.
- (1139) In the United Kingdom, sales of Jockey account for around [20-30]\*% of the total market. With its existing market share of [30-40]\*%, Bayer would still have a quite high market share if it managed to capture a significant part of Jockey's existing sales. Bayer therefore also offers to give an exclusive licence to the Triadimenol-based formulation Baytan in the United Kingdom (including the brand name Baytan for a period of [...]\*). According to the year 2000 data provided by the parties, Bayer would after the commitments have a market share of [20-30]\*% based on Bayer's Subitol (Bitertanol) and in addition what it can achieve with the Fluquinconazole-based product for which it gets a co-exclusive licence. It is, however, not likely that it will achieve all the [20-30]\*% that ACS's Jockey enjoys today, since Jockey will still be sold by the purchaser of the Fluquinconazole active ingredient. Furthermore, the parties' forecasts for the market shares of Subitol and Jockey in year 2004 are [10-20]\*% and [20-30]\*%, respectively. As in Germany, Monsanto is in the process of launching Latitude. Contrary to the situation in Germany, the parties apparently do not in the United Kingdom consider that this will reduce the market position of Jockey. However, the introduction of Latitude will introduce a direct competitor to Jockey. The

market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on the markets for seed treatment of wheat, rye and triticale in the United Kingdom.

*b) Seed treatment for potatoes*

- (1140) In fungicides for seed treatment of potatoes, the Commission has concluded that the proposed transaction as notified would have created or strengthened a dominant position on the markets in Belgium, France, Ireland, the Netherlands and the United Kingdom.
- (1141) The remedy affecting these markets is the proposal to transfer as many as possible of ACS's third party distribution agreements to the purchaser of ACS's seed treatment business, and discontinue the remaining third party distribution agreements. This would eliminate the entirely overlap and ensure that there is at least one possible, viable distributor for these products, that is the purchaser of ACS's seed treatment business. [...]\*. This would also eliminate the overlap entirely.
- (1142) The market test of the remedies has largely confirmed that this remedy would be sufficient to eliminate the competition problem created by the proposed transaction. On this basis the Commission considers that no dominant position will be created or strengthened on the markets for seed treatment of potatoes in Belgium, France, Ireland, the Netherlands and the United Kingdom.

V.6 Professional Pest Control

- (1143) In order to remove the competition concerns arising in gel and baits for cockroaches, Bayer has proposed to divest the whole of ACS's Fipronil business for professional pest control. However, Bayer shall be entitled to replace this commitment by the grant of an irrevocable, exclusive license for Europe and the U.S. to manufacture, use and sell Imidacloprid-based formulations for use as cockroach gels and baits and as a termiticide. This option can only be proposed in the event that Bayer finds a viable Purchaser accepted by the Commission who is willing to acquire its Imidacloprid business for use as cockroach gels and baits and as a termiticide Professional Pest Control in Europe and in the U.S.
- (1144) The undertaking offered as first option represent the divestment of the leading product of this market and creates a strong alternative for customers. The second option is also acceptable since the appropriateness of the acquirer is ensured by the Commission's right of approval. Moreover, as prerequisite, the proposed candidate must also be in conditions to take over the business in the U.S. On this basis the Commission considers that no dominant position will be created or strengthened on any of the markets for gel and baits for cockroaches identified above.

V.7 Small Animal Ectoparasiticides



- (1145) Bayer has undertaken to divest existing inventories, formulations and all intellectual property rights relating to Fipronil, in particular patents and trade names, know how, registration rights and documentation, as well as the Fipronil production assets in Elbeuf, France. Bayer has also undertaken to transfer to the purchaser of the Fipronil business the Fipronil licensing and supply agreements and the research agreement for future products between Merial and ACS SA. Moreover, Bayer has undertaken to assign to Merial at no-price the intellectual property rights for the transformation of technical grade Fipronil to animal health grade Fipronil.
- (1146) During the transitional period between the acquisition of ACS by Bayer and the divestment of the Fipronil business, Bayer has also undertaken a number of obligations, set out at paragraph 41 of the Annex to this decision, vis-à-vis Merial aimed at ensuring that Merial would receive all the supplies of Fipronil it needs to produce Frontline and has undertaken to irrevocably offer to incorporate these obligations into the Fipronil supply agreement at the request of Merial before the divestment of the Fipronil business.
- (1147) The Commission takes note that, if Merial does not consent to the assignment of the Fipronil supply agreement to the purchaser of the Fipronil business, Bayer undertakes to honour the same obligations vis-à-vis Merial also after the divestment of the Fipronil business.
- (1148) The undertakings described above will ensure that Merial will not be subject to Bayer's strategic behaviour as regards to the regularity of Fipronil supplies. In fact, during the transitional period between the acquisition of ACS by Bayer and the divestment of the Fipronil business, the obligations undertaken by Bayer to guarantee the continuity of Fipronil supplies will strongly reduce Bayer's incentives to foreclose Merial or to discipline Merial's behaviour by threatening to do so. On the other hand, after the Fipronil business has been divested, Bayer would lose the ability and incentives to engage into a foreclosing behaviour vis-à-vis Merial, as the latter would be free to source the input for its main product Frontline from a supplier independent from Bayer.
- (1149) In the event that Merial does not consent to the assignment of the research agreement for future products between Merial and ACS to the purchaser of the Fipronil business, Bayer has also offered to divest to a specialised R&D company the relevant parts of ACS's research activities dedicated to animal health that are currently carried out for Merial. [...]\*. New compounds to be generated for insecticides screening will derive (i) from the research company's own synthesis of chemical structures potentially useful in crop-protection primarily targeted to insecticides; or (ii) [...]\*, which for animal health uses will be exclusively licensed to and reserved for screening in the interest of Merial. Bayer commits to finance the crop protection-related research activities carried out by the R&D company [...]\*.
- (1150) During the transitional period between the acquisition of ACS by Bayer and the transfer of the Fipronil licensing agreement and the research for future products agreement to the purchaser of the Fipronil business, Bayer has undertaken a

series of unilateral waivers and additional obligations to the Fipronil licensing agreement and to the research for future products agreement, set out at paragraph 184 of the Annex to this decision, and has undertaken to irrevocably offer to incorporate these waivers and obligations into these agreements at the request of Merial before the divestment of the Fipronil business.

- (1151) The Commission takes note that, if Merial does not consent to the assignment of the Fipronil licensing agreement and of the research for future products agreement to the purchaser of the Fipronil business, Bayer undertakes to honour the same waivers and obligations vis-à-vis Merial also after the divestment of the Fipronil business.
- (1152) As a result of this divestment, the post-merger research links between Bayer and Merial will be eliminated as Bayer will not have access to the animal health results of the crop research activities which the R&D company will carry out exclusively for Merial, nor will Merial have access to the results of the crop research activities of Bayer which are dedicated to its own animal health business.
- (1153) Moreover, the elimination of the research links between Merial and Bayer will not compromise the capability of Merial to maintain a competitive position on the market for adulticide and combination products either in the short or in the long term. With regard to the short term, the market investigation has shown that the position of Merial on the market for adulticides and combination products is not expected to change substantially for the next three to five years, and that it might even improve given to the expected launch of Frontline Plus on the European market.
- (1154) In the long term, Merial will be able to maintain a competitive position in this market given to its privileged access to the research activities of the aforementioned specialised research company and to the research activities of Merck. Moreover, Merial will remain free to enter into R&D agreements with other agrochemical companies, as well as universities, research institutes or other third parties owning libraries of chemical compounds. The market investigation has shown not only that animal health companies (such as for instance Pfizer) can be active in the adulticide and combination product market without relying on crop science research activities, but also that there are agrochemical companies which would have no impediments to enter into R&D agreements with Merial for the development of innovative adulticides or combination products based on the results of their crop research activities.
- (1155) Furthermore, in the long term, innovative adulticides or combination products could also be launched on the market by animal health companies other than Bayer and Merial, such as for instance Pfizer and Novartis (which have shown to have sufficiently strong R&D capabilities in the SAEs sector) either alone or in co-operation with agrochemical companies.
- (1156) In the light of the above undertakings, therefore, the Commission considers that no dominant position will be created or strengthened on this market.

## **VI. CONCLUSION**

- (1157) The Commission has come to the overall conclusion that the notified concentration, as modified by the commitments entered into by Bayer, would not create or strengthen a dominant position on any of the markets assessed above.

HAS ADOPTED THIS DECISION:

*Article 1*

The notified operation whereby Bayer would acquire sole control of Aventis Crop Science Holding SA within the meaning of Article 3(1)(b) of the Merger Regulation is, as modified according to the Annex to this decision, hereby declared compatible with the common market and the functioning of the EEA Agreement.

*Article 2*

Article 1 is subject to full compliance with the conditions set out in paragraphs 35 to 186 of the Annex to this decision, except that the provisions of paragraph 41 and 184 of the Annex to this decision shall apply as condition during the transitional period between the acquisition of ACS by Bayer and the divestment of the Fipronil business. Article 1 is also subject to full compliance with the conditions set out in paragraphs 189, 190 and 224 of the Annex to this decision.

*Article 3*

Article 1 is subject to full compliance with the obligations set out in paragraphs 187 to 241 of the Annex to this decision, except for paragraphs 189, 190 and 224 of the Annex to this decision which shall apply as conditions pursuant to Article 2.

*Article 4*

This decision is addressed to:

**Bayer AG**  
51386 Leverkusen  
Deutschland

Done at Brussels, 17.04.2002

For the Commission,  
Mario MONTI  
Member of the Commission

## **CASE COMP/M.2547 - BAYER / AVENTIS CROP SCIENCE**

### **ANNEX**

Pursuant to Article 8(2) of Council Regulation (EEC) No. 4064/89 as amended (hereinafter the "Merger Regulation"), Bayer AG, Bayer Crop Science (hereinafter "Bayer") and Aventis Crop Science Holding SA (hereinafter "ACS") hereby provide the following Commitments (hereinafter the "Commitments") in order to enable the European Commission (hereinafter the "Commission") to declare the acquisition of control by Bayer of ACS compatible with the Common Market and the EEA Agreement by its decision pursuant to Article 8(2) of the Merger Regulation (hereinafter the "Decision") subject to the conditions and obligations contained in these Commitments.

These Commitments shall take effect upon the date of adoption of the Decision (hereafter "the Effective Date") save for Section 2, which shall be subject to closing of the acquisition of ACS by Bayer.

Any term used in these Commitments shall be interpreted in the light of the Commission's Notice on remedies acceptable under the Merger Regulation and under Commission Regulation (EC) No 447/98 (**Official Journal C 68, 02.03.2001, pages 3-11**) as amended from time to time.

The Schedules referred to in this Annex constitute an integral part of the Annex.

## SECTION 1: DEFINITIONS

In these Commitments, the following expressions will have the following meaning:

Active Substance:	the specific molecule, which carries the biological activity, such as herbicidal, insecticidal, fungicidal or other similar activity in the products referred to in the Divested Businesses.
Agricultural Uses:	all uses of products with an intended efficacy as insecticide, herbicide, fungicide or molluscicide with a registered application in professional agriculture, including Formulations and Mixture Products sold by Bayer or any directly or indirectly affiliated member of its Group for Home And Garden Uses which are substantially similar to Existing Formulations and Existing Mixture Products for use in professional agriculture divested in the Divested Businesses.
Animal Health Uses:	all uses in pharmaceutical, biological and medicinal products, including in-feed products, intended to enhance the health or performance of any and all species of animals, including livestock and companion animals, excluding humans, but to exclude (i) any product with a different intended utility, (ii) nutritional additives, (iii) chemical intermediates and (iv) the inhalational anaesthetics Isoflurane, Halothane, Sevoflurane and Desoflurane.
Closing Date:	the date of the transfer of the legal title of the Divested Business to the Purchaser.
Cost Plus Terms:	terms agreed between Bayer and the contractual parties of supply and/or toll manufacture and/or toll formulate arrangements set out in these Commitments to cover all of Bayer's or the contractual parties' (as the case may be) costs and expenses directly or indirectly related to their manufacture and supply plus an overhead of no more than <b>[Confidential]</b> *%.

Customer List:	the list of customers of the Divested Business, comprising the customers with whom (a) the Divested Business did business during the years 2000 and 2001, and (b) the Divested Business did business during the year 2002 up to the Closing Date.
Divested Businesses:	businesses, as defined in Section 2, that Bayer commits to divest within the time period provided for in Section 4. For the purposes of Sections 3-7 (paras. 213-264), the term 'Divestment', shall include not only strict divestments, but also all licences of Active Substances, Formulations, Mixture Products and the discontinuation of commercialising Third Party Products that are included in these Commitments and the term 'divestiture' shall also be construed to mean 'completion of the licence', 'transfer of supply or other related agreements', 'completion of toll manufacture, toll formulate or other supply arrangements', as appropriate.
Divestment Period:	the period within which the Parties can propose a Purchaser for the Divested Businesses (para. 236).
Divestment Trustee:	one or several legal or natural persons, independent from the Parties or any directly or indirectly affiliated member of their Groups, which are approved by the Commission and appointed by the Parties, and which have received from the Parties an irrevocable and exclusive mandate to sell the Divested Businesses to a Purchaser at no minimum price.
Effective Date:	the date of the Commission's Decision declaring the acquisition of ACS by Bayer compatible with the Common Market and the EEA Agreement pursuant to Article 8(2) of the Merger Regulation.
Europe:	the geographical area comprising all EU Member States and Norway, Iceland, Liechtenstein, Cyprus, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovakia and Slovenia.

Exclusive Rights:	rights that can be exercised to the exclusion of any other party including the grantor, that are transferable, assignable or sub-licensable by the grantee without the prior consent of the grantor whether by means of a transfer, assignment or sub-licence or any other means.
Existing Formulations:	Formulations that are already registered and sold in the divestment territory prior to the Effective Date.
Existing Mixture Products:	Mixture Products that are already registered and sold in the divestment territory prior to the Effective Date.
Extended Divestment Period:	the period from the date of expiration of the Divestment Period within which the Divestment Trustee shall have an irrevocable and exclusive mandate from the Parties to sell the Divested Business at no minimum price (para. 237).
Formulation:	one Active Substance in a specific concentration and dispersion form to be applied for Agricultural, Non-agricultural, Home And Garden or Animal Health Uses.
Group:	(a) the undertaking to which reference is being made; and (b) all undertakings in which this undertaking, directly or indirectly, (i) owns more than half the capital or business assets, or (ii) has the power to exercise more than half the voting rights, or (iii) has the power to appoint more than half the members of the supervisory board, the administrative board or bodies legally representing the undertakings, or (iv) has the right to manage the undertaking's affairs; and (c) those undertakings which have in the undertaking concerned the rights or powers listed in (b); and (d) those undertakings in which an undertaking as referred to in (c) has the rights or powers listed in (b); and (e) those undertakings in which two or more undertakings as referred to in (a) to (d) jointly have the rights or powers listed in (b).



Hold Separate Manager:	the person or persons employed by the Divested Businesses, who will be responsible for the separation of the Divested Businesses from the Parties' retained businesses and the day-to-day management of the Divested Businesses at arms length from the Parties' retained businesses under the authority of the Monitoring Trustee.
Home And Garden Uses:	all uses of products with an intended efficacy as insecticide, herbicide, fungicide or molluscicide for sale to and use by the general public indoors or in the garden, excluding any products intended for Agricultural Uses.
Intellectual Property Rights:	any form of intellectual property relating to the research, development, manufacture, sale or use of an Active Substance, Formulations or Mixtures Products thereof, including but not limited to, existing and pending patents, trademarks, copyright, trade secrets, research materials, technical information, inventions, test data, know-how, product efficacy and safety data.
Mandate:	the mandate, as approved by the Commission, in accordance with which the Parties are authorised by the Commission to appoint the Monitoring and/or Divestment Trustee.
Mixture Products:	a formulation which contains two or more Active Substances at least one of which is included in the Divested Businesses.
Monitoring Trustee:	one or several natural or legal persons, independent from the Parties or any directly or indirectly affiliated member of their Groups, which are approved by the Commission and appointed by the Parties, which have the duty to monitor and to ensure that the Parties comply with the conditions and obligations in these Commitments.
Non-agricultural Uses:	all uses other than Agricultural Uses, Home And Garden Uses and Animal Health Uses.

Parties:	Bayer AG, Bayer Crop Science and all directly and indirectly affiliated members of their Groups, as well as Aventis Crop Science Holding SA and its Subsidiaries.
Personnel:	all personnel employed in the Divested Businesses, including secondees and shared personnel.
Pipeline Products:	Formulations or Mixture Products for which work on residue studies has begun by the Parties in Europe or the Divestment Territory, if world-wide, prior to the closing of the Bayer/ACS transaction; and for which work on residue studies has begun outside Europe on the same crops as those covered by the Divested Businesses prior to the closing of the Bayer/ACS transaction. For Pipeline Products for which work on residue studies has only begun outside Europe, the Exclusive Rights divested to the Purchaser shall be limited to develop, manufacture, use and sell in the Divestment Territory, Formulations or Mixture Products that are substantially similar to the Formulations or Mixture Products for which work on the said residue studies has begun outside Europe.
Purchaser:	the entity approved by the Commission as the acquirer of any part of the Divested Businesses in accordance with the criteria set out in para. 242, whether by way of sale and/or licence.
Registration Data Package:	data relating to an Active Substance, Formulation or Mixture Product submitted to an administrative authority with the aim to obtain a registration, including without limit technical information on the product's chemistry and manufacture, toxicology, metabolism and toxicokinetics, residues, efficacy, occupational health and safety and environmental effects.
Registration Rights:	all rights to market an Active Substance, Formulation or Mixture Product, which are derived from their registration including any rights under pending registrations.

R&D:	all activities aimed at finding of new chemicals with potential efficacy in certain areas and their assessment regarding a potential use in products as well as the activities aimed at finding new processes for the manufacture of such products or the application thereof, and the development of such new chemicals or processes for use at an industrial scale.
Subsidiaries	all companies directly or indirectly controlled by Aventis Crop Science Holding SA..
Third Party Products:	Active Substances, Formulations and Mixture Products distributed by Bayer and/or ACS on behalf of third parties in accordance with the arrangements more particularly delineated in <u>Schedule 1</u> and <u>Schedule 2</u> hereto.
Trustee:	means either the Monitoring Trustee or the Divestment Trustee or both.

## **SECTION 2: DIVESTMENT COMMITMENTS**

### **A. AGRICULTURAL INSECTICIDES / SEED TREATMENT INSECTICIDES / PROFESSIONAL PEST CONTROL**

#### **I. DIVESTITURE OF FIPRONIL**

##### **1. Divestiture of the Active Substance**

63. Bayer will divest the whole of ACS' world-wide Fipronil business save that for Non-agricultural Uses the divestment is Europe-wide, including the Active Substance Fipronil and its Existing Formulations, all Existing Mixture Products, existing inventories of the same, as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, Pipeline Products, R&D, Personnel, all related agreements and documentation relating to Fipronil.

64. For all Animal Health Uses Bayer will:

- transfer to the Purchaser all related agreements particularly those referred to in para. 65 below ([**Confidential**]\*);
- not transfer to the Purchaser all the Intellectual Property Rights, contract rights (including, without limitation, all contract rights with [**Confidential**\*]), and know-how (including, without limitation, the manufacturing process) pertaining or relating to the transformation of technical grade Fipronil to animal health grade Fipronil (collectively, "the Fipronil Upgrade Rights"). [**Confidential**]\*

1. The Fipronil related production assets in Elbeuf, France, will also be divested to the Purchaser of the Fipronil business. In the event that this is impossible, Bayer may apply to the Commission to review the Fipronil commitment pursuant to "Section 7: The Review Clause" (paras. 263-264).

65. The divestments referred to in paras. 63 to 1 above shall be subject to any rights of Merial Limited (hereinafter "Merial") under any of the following agreements entered into between Rhône-Poulenc Agrochimie SA (now ACS SA) and Merial on May 23, 1997:

- Supply Agreement (hereinafter the "Supply Agreement");
- Fipronil and Existing Products License Agreement (hereinafter the "License Agreement"); and
- Research and License Agreement for Future Products (hereinafter the "Research Agreement");

as they exist at the Effective Date.

66. If transfer of all or part of the Fipronil patents to the Purchaser were impossible due to **[Confidential]\*** License Agreement to the Purchaser, Bayer **[Confidential]\***
67. In the event that Merial does not consent to the assignment of the Supply Agreement to the Purchaser, Bayer may condition its sale of ACS' world-wide Fipronil business for all Animal Health Uses, upon the Purchaser agreeing to supply Bayer with sufficient quantities of Fipronil at the Fipronil Supply Price pursuant to Article 5 of the Supply Agreement, so as to ensure that Bayer fulfils its obligations under the Supply Agreement.
68. During the transitional period between the acquisition of ACS by Bayer and the Closing Date and beyond in the event that the Supply Agreement is not transferred to the Purchaser, Bayer will honour its obligations under the aforementioned agreement, and in addition and separately from Bayer's obligations under the Supply Agreement offer the following safeguards:

**[Confidential]\***

69. Bayer may condition the divestment of Fipronil upon **[Confidential]\***
70. In the event that **[Confidential]\***
71. In the event that **[Confidential]\***

## **2. Supply of the Active Substance to Bayer**

72. The transfer of the plant referred to in para. 1 to the Purchaser of the Fipronil business shall be subject to the Purchaser agreeing to supply Fipronil to Bayer in amounts necessary to cover Bayer's Fipronil needs for Non-agricultural Uses outside Europe, and within Europe subject to the Commission granting the waiver referred to in para. 76. The terms of the supply arrangement between Bayer and the Purchaser shall be on a Cost Plus Terms basis for **[Confidential]\*** from the Closing Date. After **[Confidential]\***, the supply arrangement between Bayer and the Purchaser shall be negotiated in good faith at market price on an arm's length commercial basis.

## **3. Non-compete**

73. From the Closing Date, Bayer commits to abstain from carrying on or seeking any business, or from taking any action that would facilitate the same, in respect of the transferred Fipronil businesses, including Fipronil-based Formulations and Mixture Products, with different concentration ratios or dispersion forms until the expiry of either a period of 5 years, or the expiry of the Fipronil patents, whichever is longer.

74. Notwithstanding the above, following the Closing Date, and subject to the prior agreement of the Commission, Bayer may negotiate a licence agreement with the Purchaser to produce, use and sell Fipronil for Agricultural Uses outside Europe and the U.S. and for Home and Garden Uses outside Europe upon terms subject to the Commission's prior approval.

75. **[Confidential]\***

#### **4. Waiver**

76. In the event that Bayer, within the Divestment Period, finds a Purchaser accepted by the Commission who is willing to acquire its Imidacloprid business for use as cockroach gels and baits and as a termiticide in Europe and in the U.S., this shall constitute an exceptional circumstance entitling Bayer to request the Commission to replace Bayer's commitment to offer a Europe-wide Fipronil divestment for Non-agricultural Uses and all obligations relating thereto by the following commitment under "Section 7: The Review Clause" (paras. 263-264):

77. Bayer commits to grant an irrevocable, assignable exclusive licence for Europe and the U.S. to develop, manufacture, use and sell Imidacloprid-based Formulations for use as cockroach gels and baits and as a termiticide, including the right to use the trade names Premise® (Europe and U.S.) and Proficid® (Germany only).

78. Bayer will provide the Purchaser with an irrevocable and transferable letter of access to the database for Imidacloprid for the sole purpose of the Purchaser obtaining and maintaining registrations for use as cockroach gels and baits and as a termiticide with the Active Substance Imidacloprid. The exclusive licence will also include Exclusive Rights to all Intellectual Property Rights, all currently and pending registered labels for Imidacloprid and its Formulations, Registration Data Packages, Registration Rights, Customer Lists, R&D, Personnel, all related agreements and documentation relating to the Active Substance Imidacloprid and its Formulations for use as cockroach gels and baits and as a termiticide, upon terms subject to the Commission's prior approval.

79. If requested by the Purchaser, Bayer will offer to supply Imidacloprid to the Purchaser, as provided for in para. 214 below, to allow the Purchaser to commence its own production of the Active Substance Imidacloprid or to source Imidacloprid from third parties.

80. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Imidacloprid or any other Neonicotinoid, as well as Mixture Products and Formulations based on Imidacloprid or any other Neonicotinoid, including those with different concentration ratios or dispersion forms, for use as cockroach gels and baits and as a termiticide in Europe and in the U.S. This commitment does not affect Bayer's right to develop and sell Imidacloprid or any other Neonicotinoid, as well as Mixture Products and

Formulations based on Imidacloprid or any other Neonicotinoid for use as cockroach gels and baits and as a termiticide outside Europe and the U.S.

## **II. EXCLUSIVE LICENCE FOR ETHIPROLE**

81. Bayer commits to grant a Europe-wide irrevocable, assignable, exclusive licence to develop, manufacture, use and sell Ethiprole for the same uses as those relating to the divested Fipronil business. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, Registration Data Packages, Registration Rights, Pipeline Products, R&D and Personnel and documentation relating to the Active Substance Ethiprole, and necessary for the development, production, use and marketing of Ethiprole, upon terms subject to the Commission's prior approval. Any new studies required to register Ethiprole in Europe would be the responsibility of the Purchaser.
82. Bayer may condition the divestment of Ethiprole upon **[Confidential]\***

## **III. NON-ASSERTION OF PHENYL-PYRAZOLE PATENTS**

83. Bayer commits to abstain from any use of ACS' existing and pending patents world-wide related to the Phenyl-Pyrazole family as well as any future patents obtained by Bayer world-wide following its acquisition of ACS to the extent that this would prevent the Purchaser of the Fipronil and Ethiprole businesses from developing, producing, using or selling Fipronil and/or Ethiprole (including any analogues of Fipronil and/or Ethiprole invented by the Purchaser), Fipronil and/or Ethiprole-based Formulations (including any Formulations based on analogues of Fipronil and/or Ethiprole invented by the Purchaser) and any Fipronil and/or Ethiprole-based Mixture Products (including any Mixture Products based on analogues of Fipronil and/or Ethiprole invented by the Purchaser).

## **IV. DIVESTITURE OF CYFLUTHRIN**

### **1. Divestiture of the Active Substance**

84. Bayer will divest the whole of its Europe-wide Cyfluthrin business for all Agricultural Uses, including the Active Substance Cyfluthrin, its Existing Formulations (Blocus AC® and Baythroid®) and all Existing Mixture Products, including the Mixture Product consisting of the Active Substances Cyfluthrin and Imidacloprid and existing inventories of the same, as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, Pipeline Products, R&D, Personnel, all related agreements and documentation relating to Cyfluthrin.
85. The Purchaser will be granted an irrevocable and transferable letter of access to Bayer's Registration Data Package for the Active Substance Imidacloprid and its Formulations, to the extent necessary for the Purchaser to obtain and maintain

Europe-wide registrations of the Imidacloprid/Cyfluthrin Mixture Product, upon terms subject to the Commission's prior approval.

## **2. Non-compete**

86. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Cyfluthrin, Cyfluthrin-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Cyfluthrin, Cyfluthrin-based Mixture Products and Formulations outside Europe.

## **3. Supply of the Active Substance**

87. If requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that its supplier of Cyfluthrin, Mitchell Cotts, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and Mitchell Cotts or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to those governing its current relationship with Mitchell Cotts for a period of 3 years from the Closing Date. If the remaining duration of the contract between Bayer and Mitchell Cotts is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.
88. Bayer will offer the Purchaser a supply contract for Imidacloprid to cover the Purchaser's needs for the manufacture of the Mixture Product consisting of Cyfluthrin and Imidacloprid in Europe as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Imidacloprid or to source Imidacloprid from third parties.

# **V. DIVESTITURE OF BETA-CYFLUTHRIN**

## **1. Divestiture of the Active Substance**

89. Bayer will divest the whole of its Europe-wide Beta-Cyfluthrin business for Agricultural Uses, including the Active Substance Beta-Cyfluthrin, its Existing Formulations (Bulldock® and Ducat®), and all Existing Mixture Products, including the Mixture Product consisting of the Active Substances Beta-Cyfluthrin and Oxydemeton-Methyl (Enduro EC® and Full-M®) and existing inventories of the same. The Divested Business shall include Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, R&D, Pipeline Products, Personnel, all related agreements and documentation relating to Beta-Cyfluthrin. The Divested Business shall



exclude Beta-Cyfluthrin Mixture Products used in seed treatment. Bayer will retain the right to use Beta-Cyfluthrin in Mixture Products for seed treatment applications.

90. The Purchaser will be granted an irrevocable and transferable letter of access to Bayer's Registration Data Package for the Active Substance Oxydemeton-Methyl and its Formulations, to the extent necessary for the Purchaser to obtain and maintain Europe-wide registrations of the Oxydemeton-Methyl/Beta-Cyfluthrin Mixture Product, upon terms subject to the Commission's prior approval. This shall exclude uses in seed treatment which are retained by Bayer.

## **2. Non-compete**

91. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Beta-Cyfluthrin, Beta-Cyfluthrin-based Formulations, and Beta-Cyfluthrin-based Mixture Products, including those with different concentration ratios or dispersion forms in Europe. This non-compete obligation does not apply to any Beta-Cyfluthrin-based Mixture Products used in seed treatment, which are not part of the Divested Business. This commitment does not affect Bayer's right to develop and sell Beta-Cyfluthrin, Beta-Cyfluthrin-based Mixture Products and Formulations outside Europe.

## **3. Supply of the Active Substance**

92. If requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that its supplier of Beta-Cyfluthrin, Mitchell Cotts, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and Mitchell Cotts or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to those governing its current relationship with Mitchell Cotts, for a period of 3 years from the Closing Date. If the remaining duration of the contract between Bayer and Mitchell Cotts is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.
93. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Oxydemeton-Methyl to cover the Purchaser's needs for the manufacture of the Beta-Cyfluthrin/Oxydemeton-Methyl Mixture Product in Europe, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Oxydemeton-Methyl or to source it from third parties.

## **VI. DIVESTITURE OF OXYDEMETON-METHYL**

### **1. Divestiture of the Active Substance**

94. Bayer will divest the whole of its Europe-wide Oxydemeton-Methyl business for Agricultural Uses, including the Active Substance Oxydemeton-Methyl, its Existing Formulations (Metasystox®), all Existing Mixture Products and existing inventories of the same, including the Mixture Product consisting of the Active Substances Oxydemeton-Methyl and Beta-Cyfluthrin. The Divested Business shall include Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, R&D, Pipeline Products, Personnel, all related agreements and documentation relating to Oxydemeton-Methyl.
95. The Purchaser will be granted an irrevocable and transferable letter of access to Bayer's Registration Data Package for the Active Substance Beta-Cyfluthrin and its Formulations, to the extent necessary for the Purchaser to obtain and maintain Europe-wide registrations of the Oxydemeton-Methyl/Beta-Cyfluthrin Mixture Product, upon terms subject to the Commission's prior approval.

### **2. Non-compete**

96. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Oxydemeton-Methyl, Oxydemeton-Methyl-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Oxydemeton-Methyl, Oxydemeton-Methyl-based Mixture Products and Formulations outside Europe.

### **3. Toll Manufacturing Agreement**

97. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Oxydemeton-Methyl as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Oxydemeton-Methyl or to source it from third parties.
98. If requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that its supplier of Beta-Cyfluthrin, Mitchell Cotts, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement to cover the Purchaser's needs for the manufacture of the Beta-Cyfluthrin/Oxydemeton-Methyl Mixture Product in Europe. From the Closing Date and until such a supply agreement is entered into between the Purchaser and Mitchell Cotts or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to those governing its current relationship with Mitchell Cotts, for a period of 3 years from the Closing Date. If the remaining duration of the contract between Bayer and Mitchell Cotts is shorter,

Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **VII. DIVESTITURE OF PHOSALONE**

### **1. Divestiture of the Active Substance**

99. Bayer will divest the whole of ACS' Europe-wide Phosalone business for Agricultural Uses, including the Active Substance Phosalone, its Existing Formulations (Zolone®), all Existing Mixture Products and existing inventories of the same as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, R&D, Pipeline Products, Personnel, all related agreements and documentation relating to Phosalone.

### **2. Non-compete**

100. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Phosalone, Phosalone-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Phosalone, Phosalone-based Mixture Products and Formulations outside Europe.

### **3. Supply of the Active Substance**

101. If requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that its supplier of Phosalone, Rallis, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and Rallis or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to those governing its current relationship with Rallis, for a period of 3 years from the Closing Date. If the remaining duration of the contract between Bayer and Rallis is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **VIII. DIVESTITURE OF CYPERMETHRIN**

### **1. Divestiture of Active Substance**

102. Bayer will divest the whole of ACS' Europe-wide Cypermethrin business for Agricultural Uses under the trade name Sherpa®, including the Active Substance Cypermethrin, its Existing Formulations, all Existing Mixture Products and

existing inventories of the same. The Divested Business shall include Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, R&D, Pipeline Products, Personnel, all related agreements and documentation relating to Cypermethrin.

## **2. Non-compete**

103. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Cypermethrin, Cypermethrin-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Cypermethrin, Cypermethrin-based Mixture Products and Formulations outside Europe.

## **3. Supply of the Active Substance**

104. If requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that its supplier of Cypermethrin, FMC, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and FMC or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to those governing its current relationship with FMC, for a period of 3 years from the Closing Date. If the remaining duration of the contract between Bayer and FMC is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

# **IX. DIVESTITURE OF FENAMIPHOS**

## **1. Divestiture of the Active Substance**

105. Bayer will divest the whole of its Europe-wide Fenamiphos business for Agricultural Uses, including the Active Substance Fenamiphos, its Existing Formulations (Nemacur GR® and Nemacur EC) and all Existing Mixture Products, including the Mixture Product consisting of the Active Substances Fenamiphos and Imidacloprid (Nemacur Multi®) and existing inventories of the same, as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, Pipeline Products, R&D, Personnel, all related agreements and documentation relating to Fenamiphos.
106. The Purchaser will be granted an irrevocable and transferable letter of access to Bayer's Registration Data Package for the Active Substance Imidacloprid and its Formulations, to the extent necessary for the Purchaser to obtain and maintain

Europe-wide registrations of the Fenamiphos/Imidacloprid Mixture Product, upon terms subject to the Commission's prior approval.

## **2. Non-compete**

107. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Fenamiphos, Fenamiphos-based Formulations and Mixture Products, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Fenamiphos, Fenamiphos-based Mixture Products and Formulations outside Europe.

## **3. Toll Manufacturing Agreement**

108. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Fenamiphos, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Fenamiphos or to source it from third parties.

109. Bayer will offer the Purchaser a supply contract for Imidacloprid to cover the Purchaser's needs for the manufacture of the Mixture Product consisting of Fenamiphos and Imidacloprid in Europe as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Imidacloprid or to source Imidacloprid from third parties.

# **X. DIVESTITURE OF ACETAMIPRID**

## **1. Divestiture of Active Substance**

110. Bayer will divest the whole of ACS' Acetamiprid business in Europe and in the U.S. licensed to it by Nippon Soda, including the Active Substance Acetamiprid, its Existing Formulations and all Existing Mixture Products and existing inventories of the same, as well as Registration Data Packages, Registration Rights, Customer Lists, Pipeline Products, R&D, Personnel, all related agreements and documentation relating to Acetamiprid, to a Purchaser assigned by Nippon Soda, under at least the same terms and conditions as ACS has with Nippon Soda, or back to Nippon Soda provided that Nippon Soda takes over the existing position of ACS in the divestment territory.

111. Bayer will use its reasonable best endeavours to procure the divestment of the Acetamiprid business to the same single Purchaser of the following businesses to be divested "en-block": "Fipronil", "Ethiprole" "Iprodione", "Prochloraz", "Pyrimethanil", "Triticonazole" and "Fluquinconazole". **[Confidential]\***

## **2. Non-compete**

112. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Acetamiprid, Acetamiprid-based Formulations and Mixture Products, including those with different concentration ratios or dispersion forms in Europe and in the U.S. This commitment does not affect Bayer's right to develop and sell Acetamiprid, Acetamiprid-based Mixture Products and Formulations outside Europe and the U.S.

**[Confidential]\***

113. **[Confidential]\***

114. **[Confidential]\***

## **XI. DIVESTITURE OF CURATERR AND YALTOX**

### **1. Divestiture of brands**

115. Bayer will divest the whole of its business conducted under the trade names Curaterr® and Yaltox® based on the third party Active Substance Carbofuran on a Europe-wide basis for all Agricultural Uses, by way of an outright transfer of all brands to the Purchaser, including the transfer of existing inventories of the Formulations and any Mixture Products, marketed under the said trade names, Registration Data Packages, Registration Rights, Customer Lists, Personnel and all related agreements, upon terms subject to the Commission's prior approval. Bayer will not make use of the trade names in Europe.

### **2. Non-compete**

116. From the Closing Date, Bayer commits to abstain, for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Carbofuran, Carbofuran-based Formulations and Carbofuran-based Mixture Products, including those with different concentration ratios or dispersion forms in the Europe. This commitment does not affect Bayer's right to develop and sell Carbofuran, Carbofuran-based Formulations and Mixture Products outside Europe.

### **3. Active Substance Supply**

117. If requested by the Purchaser, Bayer will use its reasonable best efforts to procure that its supplier of Carbofuran, FMC, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and FMC or a third party, Bayer will continue to

supply the Purchaser on terms which are substantially similar to those governing its current relationship with FMC, for a period of 3 years. If the remaining duration of the contract between Bayer and FMC is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **XII. DIVESTITURE OF GUSATHION-M**

### **1. Divestiture of brands**

118. Bayer will divest the whole of its business conducted under the trade name Gusathion-M® based on the third party Active Substance Azinphos-Methyl on a Europe-wide basis for all Agricultural Uses, by way of an outright transfer of all brands to the Purchaser, including the transfer of existing inventories of the Formulations and Mixture Products, marketed under the said trade names, Registration Data Packages, Registration Rights, Customer Lists, Personnel and all related agreements, upon terms subject to the Commission's prior approval. Bayer will not make use of the trade names in Europe.

### **2. Non-compete**

119. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Azinphos-Methyl, Azinphos-Methyl-based Formulations and Mixture Products, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Azinphos-Methyl, Azinphos-Methyl-based Formulations and Mixture Products outside Europe.

### **3. Active Substance Supply**

120. If requested by the Purchaser, Bayer will use its reasonable best efforts to procure that its supplier of Azinphos-Methyl, Makhteshim, will enter into a supply agreement with the Purchaser on terms substantially similar to Bayer's current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and Makhteshim or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to those governing its current relationship with Makhteshim, for a period of 3 years from the Closing Date. If the remaining duration of the contract between Bayer and Makhteshim is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

### **XIII. EXCLUSIVE LICENCE FOR ACRINATHRIN FORMULATIONS**

121. Bayer commits to grant an irrevocable, assignable, Europe-wide exclusive licence to develop, manufacture, use and sell Acrinathrin-based Existing Formulations and all Existing Mixture Products for Agricultural Uses, including the right to use the trade names Rufast® and Orytis®. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered and pending crop labels for Acrinathrin-based Formulations, Registration Data Package, Registration Rights, Customer Lists, Pipeline Products, Personnel, all related agreements and documentation relating to the Acrinathrin-based Formulations in Europe, upon terms subject to the Commission's prior approval. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for Acrinathrin for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Acrinathrin-based Formulations and Mixture Products for Agricultural Uses in Europe (at the Purchaser's own costs).
122. If requested by the Purchaser, Bayer will offer to toll formulate Acrinathrin-based Formulations or, alternatively, to toll manufacture the Active Substance Acrinathrin, as provided for in para. 214 below, until **[Confidential]\***.

### **XIV. EXCLUSIVE LICENCE FOR ENDOSULFAN FORMULATIONS**

123. Bayer commits to grant an irrevocable, assignable exclusive licence to develop, manufacture, use and sell Endosulfan-based Existing Formulations and all Existing Mixture Products for Agricultural Uses in Greece and Portugal, including the right to use the trade name Thiodan®. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered and pending crop labels for Endosulfan-based Formulations, Registration Data Package, Registration Rights, Customer Lists, Pipeline Products, Personnel, all related agreements and documentation relating to Endosulfan-based formulations in Greece and Portugal, upon terms subject to the Commission's prior approval. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for Endosulfan for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Endosulfan-based Formulations and Mixture Products for Agricultural Uses in Greece and Portugal (at the Purchaser's own costs).
124. If requested by the Purchaser, Bayer will offer to toll formulate Endosulfan-based Formulations as provided for in para. 214 below, or, alternatively, subject to the Purchaser's request, to toll manufacture the Active Substance Endosulfan as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Endosulfan or to source it from third parties.

### **XV. EXCLUSIVE LICENCE FOR CARBARYL FORMULATIONS**

125. Bayer commits to grant an irrevocable, assignable exclusive licence to develop, manufacture, use and sell Carbaryl-based Existing Formulations and all



Existing Mixture Products in France, including the right to use the trade name Sevin®. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered and pending crop labels for Carbaryl-based formulations, Registration Data Package, Registration Rights, Customer Lists, Pipeline Products, Personnel, all related agreements and documentation relating to the Carbaryl-based Formulations in France, upon terms subject to the Commission's prior approval. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for Carbaryl for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Carbaryl-based Formulations and Mixture Products in France (at the Purchaser's own costs).

126. If requested by the Purchaser, Bayer will offer to toll formulate Carbaryl-based Formulations as provided for in para. 214 below, or, alternatively, subject to the Purchaser's request, to toll manufacture the Active Substance Carbaryl as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Carbaryl or to source it from third parties.

#### **XVI. NON-EXCLUSIVE LICENCE FOR DELTAMETHRIN FORMULATIONS**

127. Bayer commits to grant an irrevocable, assignable non-exclusive licence to develop, manufacture, use and sell the Deltamethrin-based Formulation Decis EC 25 in Greece for all Agricultural Uses, excluding the right to use the trade name Decis®. However, to allow the Purchaser to establish its own brand in Greece, Bayer commits to grant an exclusive licence to the trade name Decis® for an interim period of [Confidential]\* from the Closing Date, which may be extended by [Confidential]\*, subject to the Commission's prior approval upon request by the Purchaser showing good cause. The licence will include a licence to all Intellectual Property Rights, all currently and pending crop labels for the Deltamethrin-based Formulation Decis EC 25, Registration Data Package, Registration Rights, Customer Lists, all related agreements and documentation relating to the Deltamethrin-based Formulation Decis EC 25 in Greece, upon terms subject to the Commission's prior approval. Bayer will provide the Purchaser upon its request with an irrevocable, transferable letter of access to Bayer's database for Deltamethrin for the exclusive purpose of the Purchaser (at the Purchaser's own costs) to obtain and maintain any registration of the Deltamethrin-based Formulation Decis EC 25 in Greece.
128. If requested by the Purchaser, Bayer will offer to toll formulate the Deltamethrin-based Formulation Decis EC 25, as provided for in para. 214 below, or, alternatively, subject to the Purchaser's request, to toll manufacture the Active Substance Deltamethrin as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Deltamethrin or to source it from third parties.

## **XVII. DISCONTINUATION OF THIRD PARTY PRODUCTS DISTRIBUTION**

### **1. Discontinuation of distribution**

129. Bayer will discontinue selling the Third Party Products set out in Schedule 1 and will terminate the distribution agreements with the respective producers. If applicable, Bayer will transfer its technical know how and databases, and documentation for these products, including Registration Data Packages, Registration Rights, Customer Lists, Personnel, all related agreements to the respective manufacturers and/or their designated distributors upon terms subject to the Commission's prior approval. If requested by the respective manufacturers and/or their designated distributors, Bayer will transfer all trade names, brands or trade marks pertaining to the respective Third Party Products, if owned by Bayer or ACS.

### **2. Non-compete**

2. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of any of the Third Party Products set out in Schedule 1, and any competing third party product in Europe, to the extent that they are registered on the same crops and against the same insects and are sold in the same countries as the Third Party Products set out in Schedule 1. In respect of the Third Party Product Monitor, this non-compete shall not prevent Bayer from carrying on or seeking any business, or taking any action that would facilitate the same with regard to the Third Party Product Tamaron. This commitment does not affect Bayer's right to sell any Third Party Products, including the Third Party Products set out in Schedule 1, outside Europe.

## **B. MOLLUSCICIDES**

### **I. EXCLUSIVE LICENCE FOR THIODICARB**

130. Bayer commits to grant a Europe-wide irrevocable, assignable exclusive licence to develop, manufacture, use and sell Thiodicarb, Thiodicarb-based Existing Formulations and all Existing Mixture Products for use as a molluscicide, including the right to use the trade name Skipper®. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered and pending crop labels for Thiodicarb and its Existing Formulations and Existing Mixture Products, Registration Data Packages, Registration Rights, Customer Lists, Pipeline Products, Personnel, all related agreements and documentation relating to the Active Substance Thiodicarb and its Formulations and Mixture Products, for use as a molluscicide, upon terms subject to the Commission's prior approval.
131. Upon request, Bayer will provide the Purchaser with an irrevocable and transferable letter of access to Bayer's database for Thiodicarb for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Thiodicarb-based Formulations and Mixture Products as a molluscicide in Europe (at the Purchaser's own costs).
132. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Thiodicarb, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Thiodicarb or to source it from third parties.

## **C. AGRICULTURAL HERBICIDES**

### **I. DIVESTITURE OF ACTIVE SUBSTANCE METAMITRON**

#### **1. Divestiture of Bayer's Metamitron business**

133. Bayer will divest its Europe-wide business of the Active Substance Metamitron, including the trade name Goltix® and all Existing Formulations of Metamitron (Goltix WG70, Goltix WG90 and Goltix SC700) for all Agricultural Uses, including existing inventories of the Active Substance and Formulations, and Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Customer Lists, Bayer Pipeline Products based on Metamitron, R&D, Personnel, all related agreements and documentation relating to Metamitron. Bayer will also divest its Europe-wide business for all Existing Metamitron-based Mixture Products. Bayer will retain Exclusive Rights to all of ACS' Metamitron-based Mixture Products including any Metamitron-based future Mixture Products.

#### **2. Non-compete**

134. From the Closing Date, Bayer commits to abstain, and for a period of 5 years, from carrying on or seeking any business in respect of straight Metamitron, Formulations of straight Metamitron, and Metamitron-based Mixture Products divested by Bayer, or from taking any action that would facilitate the same, including those with a different concentration ratio or dispersion form in Europe. This commitment does not affect Bayer's right to develop and sell straight Metamitron and Formulations of straight Metamitron outside Europe and Bayer's Exclusive Rights to all of ACS' Metamitron-based Mixture Products including any Metamitron-based future Mixture Products.

#### **3. Toll Manufacturing Agreement**

135. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Metamitron or to source Metamitron from third parties.

### **II. DIVESTITURE OF ACTIVE SUBSTANCE LINURON**

#### **1. Divestiture of Linuron business**

136. Bayer will divest the whole of ACS' Europe-wide Linuron business for Agricultural Uses, including the Active Substance Linuron, its Existing Formulation (Afalon®), all Existing Mixture Products and existing inventories of

the same, and Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, Pipeline Products, R&D, Personnel, Customer Lists, all related agreements and documentation relating to Linuron.

## **2. Non-compete**

137. From the Closing Date, Bayer commits to abstain and for a period of 5 years from carrying on or seeking any business in respect of Linuron, Linuron-related Formulations, as they exist at the time of the transfer, or from taking any action that would facilitate the same, including those with a different concentration ratio or dispersion form in Europe. This commitment does not affect Bayer's right to develop and sell Linuron, Linuron-based Mixture Products and Formulations outside Europe.

## **3. Toll Manufacturing Agreement**

138. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Linuron or to source Linuron to third parties.

## **III. EXCLUSIVE LICENCE FOR ISOXAFLUTOLE FORMULATION**

139. Bayer commits to grant an irrevocable, assignable, exclusive licence to develop, manufacture, use and sell the Isoxaflutole-based Existing Formulation marketed under the trade name Merlin® in Belgium and the Netherlands. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the Isoxaflutole-based Formulation, Registration Data Packages, Registration Rights, Customer Lists, Personnel, Pipeline Products, all related agreements and documentation relating to the Isoxaflutole-based Formulation, in Belgium and the Netherlands. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for the Active Substance Isoxaflutole for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Isoxaflutole-based Formulations in Belgium and the Netherlands (at the Purchaser's own cost).
140. If requested by the Purchaser, Bayer will offer to toll manufacture the Active Substance Isoxaflutole for the Purchaser, as provided for in para. 214 below. Alternatively, subject to the Purchaser's request, Bayer commits to supply the Isoxaflutole-based Formulation to the Purchaser, as provided for in para. 214 below.

#### **IV. EXCLUSIVE LICENCE FOR FLUFENACET AND DIFLUFENICAN MIXTURE PRODUCT**

141. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Existing Mixture Product, consisting of the Active Substances Flufenacet and Diflufenican in Belgium and Germany, including the right to use the trade name Herold®. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the Mixture Product, Registration Data Packages, Registration Rights, Customer Lists, Personnel, Pipeline Products, all related agreements and documentation relating to the Mixture Product in Belgium and Germany. Upon request, Bayer will provide the Purchaser with an irrevocable and transferable letter of access to Bayer's database for the Active Substances Flufenacet and Diflufenican for the exclusive purpose of the Purchaser obtaining and maintaining any registration of the Mixture Product, consisting of the Active Substances Flufenacet and Diflufenican, in Belgium and Germany (at the Purchaser's own costs).
142. If requested by the Purchaser, Bayer will offer to toll manufacture Flufenacet and Diflufenican for the Purchaser, as provided for in para. 214 below. Alternatively, subject to the Purchaser's request, Bayer commits to supply the Mixture Product consisting of the Active Substances Flufenacet and Diflufenican to the Purchaser, as provided for in para. 214 below.

#### **V. EXCLUSIVE LICENCE FOR FENOXAPROP FORMULATION**

143. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Fenoxaprop-based Existing Formulation marketed under the brand Puma Super® in Belgium and under the brand Ralon Super® in Germany. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the aforementioned Fenoxaprop-based Formulation, Registration Data Packages, Registration Rights, Customer Lists, Personnel, Pipeline Products, all related agreements and documentation relating to the Fenoxaprop-based Formulation for use as a cereal herbicide in Belgium and Germany. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for the Active Substance Fenoxaprop for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Fenoxaprop-based Formulations as a cereal herbicide in Belgium and in Germany (at the Purchaser's own costs).
144. If requested by the Purchaser, Bayer will offer to toll manufacture the Active Substance Fenoxaprop for the Purchaser, as provided for in para. 214 below. Alternatively, subject to the Purchaser's request, Bayer commits to supply the Fenoxaprop-based Formulation to the Purchaser, as provided for in para. 214 below.

## **VI. EXCLUSIVE LICENCE FOR TRIBUFOS FORMULATION**

145. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Tribufos-based Existing Formulation marketed under the brand DEF® in Greece and Spain. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the Tribufos-based Formulation, Registration Data Packages, Registration Rights, Customer Lists, Personnel, Pipeline Products, all related agreements and documentation relating to the Tribufos-based Formulation for use as a harvest aid in Greece and Spain. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for the Active Substance Tribufos for the exclusive purpose of the Purchaser obtaining and maintaining any registration of Tribufos-based Formulations as a harvest aid in Greece and Spain (at the Purchaser's own cost).
146. If requested by the Purchaser, Bayer will offer to toll manufacture the Active Substance Tribufos for the Purchaser, as provided for in para. 214 below, until the expiration of the registration for Tribufos in the EEA in 2003.

## **VII. EXCLUSIVE LICENCE FOR ACLONIFEN FORMULATION**

147. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Aclonifen-based Existing Formulation in Sweden, including the right to use the trade name Fenix®. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for Aclonifen-based Formulations, Registration Data Packages, Registration Rights, Customer Lists, Personnel, Pipeline Products, all related agreements and documentation relating to the Aclonifen-based Formulations in the Sweden. Upon request, Bayer will provide the Purchaser with an irrevocable, transferable letter of access to Bayer's database for the Active Substance Aclonifen for the exclusive purpose of the Purchaser obtaining and maintaining any registration of the Aclonifen-based Formulations in Sweden (at the Purchaser's own cost).
148. If requested by the Purchaser, Bayer will offer to toll manufacture the Active Substance Aclonifen for the Purchaser, as provided for in para. 214 below. Alternatively, subject to the Purchaser's request, Bayer commits to supply the Aclonifen-based Formulation to the Purchaser, as provided for in para. 214 below.

## **VIII. LICENCE FOR PROPOXYCARBAZONE-MIXTURES**

149. Bayer commits to grant a Europe-wide irrevocable, assignable co-exclusive licence to develop Propoxycarbazone-based Mixture Products and an irrevocable, assignable exclusive licence to manufacture, use and sell such Mixture Products developed by the Purchaser for use as a cereal herbicide. The exclusive licence to manufacture, use and sell Propoxycarbazone-based Mixture Products shall also extend to Mixture Products developed jointly by Bayer and the Purchaser. The exclusive licence includes Exclusive Rights to all Intellectual Property Rights, all

currently registered crop labels for the Mixture Product, Registration Data Packages, Registration Rights, all related agreements, R&D, Personnel and all documentation relating to the Mixture Product.

150. Upon request, Bayer commits to provide the Purchaser with an irrevocable, transferable letter of access to the database for the Active Substance Propoxycarbazone, for the exclusive purpose of the Purchaser obtaining and maintaining any registration of the product for use as a cereal herbicide in Europe (at the Purchaser's own costs).
151. If requested by the Purchaser, Bayer will offer to toll manufacture the Active Substance Propoxycarbazone for the Purchaser, as provided for in para. 214 below.

**IX. REFRAIN FROM DEVELOPMENT AND MARKETING OF  
FLUCARBAZONE IN EUROPE**

152. Bayer commits to refrain from developing and marketing Flucarbazone for uses in cereal herbicides in Europe for a period of five years.



## **D. AGRICULTURAL FUNGICIDES / SEED TREATMENT FUNGICIDES**

153. Bayer commits to transfer the whole of ACS' existing Europe-wide seed treatment business including but not limited to the Divested Businesses "Iprodione", "Prochloraz", "Pyrimethanil", "Triticonazole", "Fluquinconazole", "Third Party Products", "Guazatine" and "Fipronil", as well as any related tangible assets predominantly dedicated to ACS's existing seed treatment business (such as any movable plant, machinery, equipment, fixtures and fittings, furniture and other like items), or intangible assets referred to in para. 213.

### **I. DIVESTITURE OF IPRODIONE**

#### **1. Divestiture of the Active Substance**

154. Bayer will divest the whole of ACS' Europe-wide Iprodione business for all Agricultural Uses including the Active Substance Iprodione, its Existing Formulations and all Existing Mixture Products and existing inventories of the same as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, R&D, Pipeline Products, Personnel, Customer Lists, all related agreements and documentation relating to Iprodione.

155. Bayer also commits to grant an irrevocable, assignable, non-exclusive licence to develop, manufacture, use and sell Iprodione, its Existing Formulations and all Existing Mixture Products for seed treatment uses outside Europe. The licence includes a licence to all Intellectual Property Rights, access to the Registration Data Packages, Registration Rights, documentation related to the use of Iprodione for seed treatment and Customer Lists, upon terms subject to the Commission's prior approval. Bayer will provide the Purchaser upon its request with an irrevocable, transferable letter of access to Bayer's database for Iprodione for the Purchaser (at the Purchaser's own costs) to obtain and maintain any registrations of Iprodione and Iprodione-based Formulations and Mixture Products for seed treatment uses outside Europe, upon terms subject to the Commission's prior approval.

#### **2. Non-compete**

156. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking any business or from taking any action that would facilitate the same in respect of Iprodione and Iprodione-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Iprodione and Iprodione-based Mixture Products and Formulations outside Europe.

### **3. Toll Manufacturing Agreement**

157. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Iprodione, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Iprodione or to source it from third parties.
158. If requested by the Purchaser, Bayer will enter into a supply agreement with the Purchaser for the Active Substances Carbendazim and Bromuconazole for the production of Mixture Products based on Iprodione and Carbendazim (Quintal®, Calidan®, and Germipro®), and Iprodione and Bromuconazole (Granit Plus®, and Granit Or®) and used as foliar fungicide or fungicidal seed treatment, as provided for in para. 214 below, to allow the Purchaser to commence its own production of Carbendazim and Bromuconazole, or to source Carbendazim and Bromuconazole from third parties.
159. To the extent that ACS is supplied with Active Substances (Thiophanate Methyl, Diniconazole, Chlorothalonil and Anthraquinone) from third party suppliers, and if requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that ACS' suppliers enter into a supply agreement with the Purchaser on terms substantially similar to ACS' current supply agreements. From the Closing Date and until such supply agreements are entered into between the Purchaser and ACS' suppliers or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationships between ACS and its suppliers, for a period of 3 years. If the remaining duration of the contract between ACS and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **II. DIVESTITURE OF PROCHLORAZ**

### **1. Divestiture of the Active Substance**

160. Bayer will divest the whole of ACS' Europe-wide Prochloraz business for Agricultural Uses including the Active Substance Prochloraz, its Existing Formulations and all Existing Mixture Products and existing inventories of the same as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data, Registration Data Packages, Registration Rights, R&D, Pipeline Products, Personnel, Customer Lists, all related agreements and documentation relating to Prochloraz. The Divested Business does not include the Existing Mixture Product Prochloraz and Tebuconazole sold under the trade name Epopée® in France and Agate® in the United Kingdom.
161. Bayer also commits to grant an irrevocable, assignable, non-exclusive licence to manufacture, use and sell Prochloraz, its Existing Formulations and Existing Mixture Products for seed treatment uses outside Europe. The licence includes a licence to all Intellectual Property Rights, access to the Registration Data Packages, Registration Rights, documentation related to the use of Prochloraz for

seed treatment and Customer Lists, upon terms subject to the Commission's prior approval. Bayer will provide the Purchaser upon its request with an irrevocable, transferable letter of access to Bayer's database for Prochloraz for the Purchaser (at the Purchaser's own costs) to obtain and maintain any registrations of Prochloraz and Prochloraz-based Formulations and Mixture Products for seed treatment uses outside Europe, upon terms subject to the Commission's prior approval.

## **2. Non-compete**

162. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Prochloraz and Prochloraz-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This non-compete obligation does not apply to the Existing Mixture Products Prochloraz/Tebuconazole sold under the trade name Epopée® in France and Agate®, in the United Kingdom and to the Mixture Products referred to in para 178. This commitment does not affect Bayer's right to develop and sell Prochloraz and Prochloraz-based Mixture Products and Formulations outside Europe.

## **3. Toll Manufacturing Agreement**

163. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Prochloraz, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Prochloraz or to source it from third parties.

164. If requested by the Purchaser, Bayer will enter into a supply agreement with the Purchaser for the Active Substances Carbendazim and Bromuconazole for the production of Mixture Products of Prochloraz and Carbendazim and Prochloraz and Bromuconazole and used as foliar fungicides or fungicidal seed treatments, as provided for in para. 214 below, to allow the Purchaser to commence its own production of Carbendazim and Bromuconazole, or to source Carbendazim and Bromuconazole from third parties.

165. To the extent that ACS is supplied with Active Substances (Fenpropidin, Flutriafol, Fenpropimorph, Fenbuconazole, Cyproconazole, Carboxin, Chlorothalonil and Anthraquinone) from third party suppliers, and if requested by the Purchaser, Bayer will use its reasonable best efforts to procure that ACS' suppliers will enter into a supply agreement with the Purchaser under terms substantially similar to the ones of ACS's current supply agreements. From the Closing Date and until such supply agreements are entered into between the Purchaser and ACS' suppliers or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationships between ACS and its suppliers, for a period of 3 years. If the remaining duration of the contract between ACS and its suppliers is shorter, Bayer

undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

### **III. DIVESTITURE OF PYRIMETHANIL**

#### **1. Divestiture of the Active Substance**

166. Bayer will divest the whole of ACS' Europe-wide Pyrimethanil business for all Agricultural Uses including the Active Substance Pyrimethanil, its Existing Formulations and all Existing Mixture Products and existing inventories of the same as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, R&D, Pipeline Products, Personnel, Customer Lists, all related agreements and documentation relating to Pyrimethanil.

167. Bayer also commits to grant an irrevocable, assignable, non-exclusive licence to manufacture, use and sell Pyrimethanil, its Existing Formulations and Existing Mixture Products for seed treatment uses outside Europe. The licence includes a licence to all Intellectual Property Rights, access to the Registration Data Packages, Registration Rights, documentation related to the use of Pyrimethanil for seed treatment and Customer Lists, upon terms subject to the Commission's prior approval. Bayer will provide the Purchaser upon its request with an irrevocable, transferable letter of access to Bayer's database for Pyrimethanil and Pyrimethanil-based Formulations and Mixture Products for seed treatment uses outside Europe, upon terms subject to the Commission's prior approval.

#### **2. Non-compete**

168. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Pyrimethanil and Pyrimethanil-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Pyrimethanil and Pyrimethanil-based Mixture Products and Formulations outside Europe.

#### **3. Toll Manufacturing Agreement**

169. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Pyrimethanil, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Pyrimethanil or to source it from third parties.

170. To the extent that ACS is supplied with Active Substances (Chlorothalonil and Flutriafol) from third parties, and if requested by the Purchaser, Bayer will use its reasonable best efforts to procure that ACS' suppliers will enter into a supply

agreement with the Purchaser on terms substantially similar to ACS' current supply agreement. From the Closing Date and until such a supply agreement is entered into between the Purchaser and ACS' supplier or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationship between ACS and its suppliers, for a period of 3 years. If the remaining duration of the contract between ACS and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

#### **IV. DIVESTITURE OF TRITICONAZOLE**

##### **1. Divestiture of the Active Substance**

171. Bayer will divest the whole of ACS' Europe-wide Triticonazole business for all Agricultural Uses including the Active Substance Triticonazole, its Existing Formulations and all Existing Mixture Products and existing inventories of the same as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, R&D, Registration Rights, Pipeline Products, Personnel, Customer Lists, all related agreements and documentation relating to Triticonazole.

172. Bayer also commits to grant an irrevocable, assignable, non-exclusive licence to manufacture, use and sell Triticonazole, its Existing Formulations and all Existing Mixture Products for seed treatment uses outside Europe. The licence includes a licence to all Intellectual Property Rights, access to the Registration Data Packages, Registration Rights, documentation related to the use of Triticonazole for seed treatment and Customer Lists, upon terms subject to the Commission's prior approval. Bayer will provide the Purchaser upon its request with an irrevocable, transferable letter of access to Bayer's database for Triticonazole for the Purchaser (at the Purchaser's own costs) to obtain and maintain any registrations of Triticonazole and Triticonazole-based Formulations and Mixture Products for seed treatment uses outside Europe, upon terms subject to the Commission's prior approval.

##### **2. Non-compete**

173. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Triticonazole, Triticonazole-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to develop and sell Triticonazole and Triticonazole-based Mixture Products and Formulations outside Europe.

### **3. Toll Manufacturing Agreement**

174. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser for the Active Substance Triticonazole, as provided for in para. 214 below, so to allow the Purchaser to commence its own production of Triticonazole or to source it from third parties.
175. To the extent that ACS is supplied with Active Substances (Guazatine, Imazalil and Anthraquinone) from third parties, and if requested by the Purchaser, Bayer will use its reasonable best efforts to procure that ACS' suppliers will enter into a supply agreement with the Purchaser under terms substantially similar to the ones of ACS' current supply agreements. From the Closing Date and until such supply agreements are entered into between the Purchaser and ACS' suppliers or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationships between ACS and its suppliers, for a period of 3 years. If the remaining duration of the contract between ACS and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **V. DIVESTITURE OF FLUQUINCONAZOLE**

### **1. Divestiture of the Active Substance**

176. Bayer will divest the whole of ACS' Europe-wide Fluquinconazole business for all Agricultural Uses including the Active Substance Fluquinconazole, its Existing Formulations and all Existing Mixture Products and existing inventories of the same as well as Exclusive Rights to all related Intellectual Property Rights, Registration Data Packages, Registration Rights, R&D, Pipeline Products, Personnel, Customer Lists, all related agreements and documentation relating to Fluquinconazole.
177. Bayer also commits to grant an irrevocable, assignable, non-exclusive licence to manufacture, use and sell Fluquinconazole, its Existing Formulations and Existing Mixture Products for seed treatment uses outside Europe. The licence includes a licence to all Intellectual Property Rights, access to the Registration Data Packages, Registration Rights, documentation related to the use of Fluquinconazole for seed treatment and Customer Lists, upon terms subject to the Commission's prior approval. Bayer will provide the Purchaser upon its request with an irrevocable, transferable letter of access to Bayer's database for Fluquinconazole for the exclusive purpose for the Purchaser (at the Purchaser's own costs) to obtain and maintain any registrations of Fluquinconazole its Formulations and Mixture Products for seed treatment uses outside Europe, upon terms subject to the Commission's prior approval.
178. The Purchaser of Fluquinconazole shall grant to Bayer an irrevocable, assignable Europe-wide co-exclusive licence for the use of Fluquinconazole, for foliar and seed treatment uses as follows: a) for seed treatment uses, Bayer may

manufacture, use and sell Fluquinconazole and any Fluquinconazole-based Mixture Products including the divested Mixture Products; b) for foliar uses, Bayer may manufacture, use and sell Fluquinconazole and any Fluquinconazole-based Mixture Products excluding the divested Mixture Products. The licence includes a licence to all Intellectual Property Rights, Registration Data Packages and documentation related to the use of Fluquinconazole in foliar and seed treatment uses. The licence shall exclude all current or pending trade marks relating to Fluquinconazole. The Purchaser will provide Bayer upon its request with an irrevocable, transferable letter of access to the Purchaser's database for Fluquinconazole for the exclusive purpose for Bayer (at Bayer's own cost) to obtain and maintain any registrations of straight Fluquinconazole for foliar and seed treatment uses, any Fluquinconazole-based Mixture Products excluding the divested Mixture Products for foliar uses, and Fluquinconazole-based Mixture Products including the divested Mixture Products for seed treatment uses, in Europe, upon terms subject to the Commission's prior approval.

## **2. Non-compete**

179. From the Closing Date, Bayer commits to abstain for a period of 5 years from carrying on or seeking any business or from taking any action that would facilitate the same in respect of the divested Fluquinconazole, Fluquinconazole-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms, for foliar uses in Europe. This commitment does not affect Bayer's right to develop, use and sell Fluquinconazole and Fluquinconazole-based Mixture Products including the divested Mixture Products outside Europe, as well as Fluquinconazole and any Fluquinconazole-based Mixture Products including the divested Mixture Products in seed treatment and Fluquinconazole and any Fluquinconazole-based Mixture Products excluding the divested Mixture Products for foliar uses inside Europe.

## **3. Toll Manufacturing Agreement**

180. If requested by the Purchaser, Bayer will enter into a toll manufacturing agreement with the Purchaser the Active Substance Fluquinconazole, as provided for in para. 214 below, so as to allow the Purchaser to commence its own production of Fluquinconazole or to source it from third parties.

181. If requested by the Purchaser, Bayer will enter into a supply agreement with the Purchaser for the Active Substance Carbendazim for the production of Mixture Products based on Fluquinconazole and Carbendazim (Vista C®) and used as foliar fungicide, as provided for in para. 214 below, to allow the Purchaser to commence its own production of Carbendazim, or to source Carbendazim from third parties.

182. To the extent that ACS is supplied with an Active Substance (Sulfur sold under the brand Castellan S®) from third party suppliers, and if requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that ACS' suppliers enter into a supply agreement with the Purchaser on terms substantially

similar to ACS' current supply agreements. From the Closing Date and until such supply agreements are entered into between the Purchaser and ACS' suppliers or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationships between ACS and its suppliers, for a period of 3 years. If the remaining duration of the contract between ACS and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **VI. TRANSFER OF ACS' DISTRIBUTION RIGHTS FOR FOLICUR® TO A THIRD PARTY**

183. Bayer commits to transfer to a third party the existing distribution rights, including Customer Lists, currently held by ACS in Germany for the Tebuconazole-based Formulation marketed under the trade name Folicur®. Bayer commits to supply the acquirer of the distribution rights with the Tebuconazole-based Formulation upon terms and conditions similar to the ones of Bayer's and ACS' current supply relationship, subject to the Commission's prior approval.

## **VII. EXCLUSIVE LICENSE FOR BITERTANOL IN DENMARK**

184. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Active Substance Bitertanol, its Existing Formulations and all Existing Mixture Products exclusively for use as a foliar fungicide in Denmark. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for Bitertanol-based Formulations, Registration Data Packages, Registration Rights, Customer Lists, Personnel, all related agreements, Pipeline Products and documentation relating to the Bitertanol-based Formulations and Mixture Products. The Divested Business will not include the trade name Baycor®. However, to allow the Purchaser to establish its own brand in Denmark, Bayer commits to grant an exclusive licence to the trade name Baycor® for an interim period of **[Confidential]\*** from the Closing Date, which may be extended by **[Confidential]\***, subject to the Commission's prior approval upon request by the Purchaser showing good cause. Bayer will provide the Purchaser upon its request with a letter of access to Bayer's database for the Active Substance Bitertanol for the exclusive purpose of the Purchaser, at the Purchaser's own costs, to obtain and maintain any registration of Bitertanol-based Formulations and Mixture Products for use as a foliar fungicide in Denmark.
185. Bitertanol is toll manufactured by Makhteshim for Bayer. Bayer will use its reasonable best efforts to procure that Makhteshim will enter into a supply agreement with the Purchaser under terms substantially similar to the ones of its current supply agreement. From the Closing Date and until such supply agreement are entered into between the Purchaser and Makhteshim or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationship with Makhteshim, for a period of 3



years. If the remaining duration of the contract between Bayer and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

#### **VIII. EXCLUSIVE LICENSE FOR A TRIADIMENOL-BASED FORMULATION IN GERMANY**

186. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Triadimenol-based Formulation currently marketed under the brand name Bayfidan 250 EC®, its Existing Formulations and all Existing Mixture Products, exclusively for use as a foliar fungicide on all registered crops in Germany. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the above mentioned Triadimenol-based Formulation, Registration Data Packages, Registration Rights, Customer Lists, Personnel, all related agreements, Pipeline Products and documentation relating to the Triadimenol-based Formulation. The Divested Business will not include the trade name Bayfidan®. However, to allow the Purchaser to establish its own brand in Germany, Bayer commits to grant an exclusive licence to the trade name Bayfidan® for an interim period of [Confidential]\* from the Closing Date, which may be extended by [Confidential]\*, subject to the Commission's prior approval upon request by the Purchaser showing good cause. Upon its request, Bayer will provide the Purchaser with an irrevocable, transferable, letter of access to Bayer's database for the Active Substance Triadimenol for the exclusive purpose of the Purchaser obtaining and maintaining any registration of the above-mentioned Triadimenol-based Formulation and Mixture Products for use as a foliar fungicide in Germany (at the Purchaser's costs).

187. Triadimenol is toll manufactured by Makhteshim for Bayer. Bayer will use its reasonable best efforts to procure that Makhteshim will enter into a supply agreement with the Purchaser under terms substantially similar to the ones of its current supply agreement. From the Closing Date and until such supply agreement are entered into between the Purchaser and Makhteshim or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationship with Makhteshim, for a period of 3 years. If the remaining duration of the contract between Bayer and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

#### **IX. EXCLUSIVE LICENCE FOR THE PRODUCT MATADOR® IN GERMANY**

188. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Mixture Product Matador® consisting of the Active Substances Tebuconazole and Triadimenol for use as foliar fungicide on all registered crops in Germany. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the above

mentioned formulation, Registration Data Packages, Registration Rights, Customer Lists, Personnel, all related agreements, Pipeline Products and documentation for use as a foliar fungicide in Germany. Upon request, Bayer will provide the Purchaser with a letter of access to Bayer's database for the Active Substances Tebuconazole and Triadimenol for the exclusive purpose of the Purchaser obtaining and maintaining any registration of the product for use as a foliar fungicide in Germany (at the Purchaser's costs).

189. Matador is a mixture product consisting of Triadimenol, which is toll manufactured for Bayer by Makhteshim, and Tebuconazole, which is manufactured by Bayer itself. If requested by the Purchaser, Bayer will enter into a supply agreement with the Purchaser for the Active Substance Tebuconazole as provided for in para. 214 below, to allow the Purchaser to commence its own production of Tebuconazole or to source Tebuconazole from third parties. Bayer will use its reasonable best efforts to procure that Makhteshim will enter into a supply agreement with the Purchaser for Triadimenol under terms substantially similar to the ones of its current supply agreement. From the Closing Date and until such supply agreement are entered into between the Purchaser and Makhteshim or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationship with Makhteshim, for a period of 3 years. If the remaining duration of the contract between Bayer and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date. Alternatively, subject to the Purchaser's request, Bayer commits to supply the formulated Mixture Product Matador to the Purchaser on Cost Plus Terms for a period of 3 years.

#### **X. EXCLUSIVE LICENCE FOR THE TRIADIMENOL-BASED FORMULATION BAYTAN® IN UK**

190. Bayer commits to grant an irrevocable, assignable, exclusive licence to manufacture, use and sell the Triadimenol-based Existing Formulation currently marketed under the trade name Baytan® for use as cereal seed treatment in the United Kingdom. The exclusive licence will include Exclusive Rights to all Intellectual Property Rights, all currently registered crop labels for the above mentioned Triadimenol-based Formulation, Registration Data Packages, Registration Rights, Customer Lists, Pipeline Products, Personnel, all related agreements and documentation relating to the Triadimenol-based Formulations for use as seed treatment in the UK. The Divested Business will not include, the trade name Baytan®. However, to allow the Purchaser to establish its own brand in the UK, Bayer commits to grant an exclusive licence to the trade name Baytan® for an interim period of [Confidential]\*, which may be extended by [Confidential]\*, subject to the Commission's prior approval upon request by the Purchaser showing good cause. Bayer will provide the Purchaser upon its request with a letter of access to Bayer's database for the Active Substance Triadimenol for the exclusive purpose of the Purchaser (at the Purchaser's costs) to obtain and maintain any registration of the Baytan® for use as cereal seed treatment in the U.K.

191. Baytan is a Mixture Product consisting of Triadimenol, which is toll manufactured by Makhteshim for Bayer, and Fuberidazol, manufactured by Bayer. If requested by the Purchaser, Bayer will enter into a supply agreement with the Purchaser for the Active Substance Fuberidazol as provided for in para. 214 below, to allow the Purchaser its own production of Fuberidazol or to source Fuberidazol from third parties. Bayer will use its reasonable best efforts to procure that Makhteshim will enter into a supply agreement with the Purchaser for Triadimenol under terms substantially similar to the ones of its current supply agreement. From the Closing Date and until such supply agreement are entered into between the Purchaser and Makhteshim or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationship with Makhteshim, for a period of 3 years. If the remaining duration of the contract between Bayer and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date. Alternatively, subject to the Purchaser's request, Bayer commits to supply the formulated Mixture Product Baytan® to the Purchaser on cost plus terms for a period of 3 years.

## **XI. DISCONTINUATION OF THIRD PARTY PRODUCTS DISTRIBUTION**

192. Bayer will use its reasonable best efforts to procure the divestment of ACS' business in Europe derived from as many the Third Party Products set out in Schedule 2 as possible, including any trade names or brands owned by Bayer or ACS, Registration Data Packages, Registration Rights, Customer Lists, Personnel and all related agreements, to the same single Purchaser of ACS' seed treatment business divested "en block" as more particularly outlined in "Section 5: Purchasers" below, under at least the same terms and conditions as ACS has with its suppliers.

193. **[Confidential]\***

194. From the Closing Date, Bayer commits to abstain, for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of any of the Third Party Products set out in Schedule 2, including any Formulations or Mixture Products of the same, as well as any other third party products to the extent that they are registered on the same crop as a fungicide and are sold in the same countries as the Third Party Products set out in Schedule 2. This commitment does not affect Bayer's right to sell Third Party Products including any of the Third Party Products set out in Schedule 2 outside Europe.

## **XII. [CONFIDENTIAL]\***

195. **[Confidential]\***

196. **[Confidential]\***

197. [Confidential]\*

198. [Confidential]\*

### **XIII. TERMINATION OF DISTRIBUTION AGREEMENTS FOR GUAZATINE**

#### **1. Termination of distribution agreement**

199. Bayer will use its reasonable best efforts to procure the transfer of all existing distribution agreements between ACS and Makhteshim in relation to Guazatine in Europe including Registration Data Packages, Registration Rights, Customer Lists and all related agreements, to the same single Purchaser of ACS' seed treatment business divested "en block" as more particularly outlined in "Section 5: Purchasers" below, under at least the same terms and conditions as ACS has with Makhteshim.

200. [Confidential]\*

201. [Confidential]\*

#### **2. Non-compete**

202. From the Closing Date, Bayer commits to abstain, and for a period of 5 years, from carrying on or seeking any business, or from taking any action that would facilitate the same in respect of Guazatine, Guazatine-based Mixture Products and Formulations, including those with different concentration ratios or dispersion forms in Europe. This commitment does not affect Bayer's right to sell Guazatine, Guazatine-based Mixture Products and Formulations, outside Europe.

#### **3. Toll Manufacturing Agreement**

203. In the event of a transfer to the same single Purchaser, to the extent that ACS is supplied with the Active Substance Imazalil from third party suppliers, and if requested by the Purchaser, Bayer will use all its reasonable best efforts to procure that ACS' suppliers enter into a supply agreement with the Purchaser on terms substantially similar to ACS' current supply agreements. From the Closing Date, and until such supply agreements are entered into between the Purchaser and ACS' suppliers or a third party, Bayer will continue to supply the Purchaser on terms which are substantially similar to the ones governing the current relationships between ACS and its suppliers for a period of 3 years. If the remaining duration of the contract between ACS and its suppliers is shorter, Bayer undertakes to use its reasonable best efforts to procure the extension of that contract for a period of 3 years from the Closing Date.

## **E. ANIMAL HEALTH**

### **I. SEPARATION OF R&D ACTIVITIES**

204. In the event that Merial does not consent to the assignment of the Research Agreement to the Purchaser of the Fipronil business, or the Purchaser does not accept such a transfer insofar as it does not relate to Fipronil, Bayer offers the following commitments.
205. Bayer commits to transfer the crop protection-related research activities performing the ACS' screening for Animal Health Uses in Frankfurt to an existing reputable specialised R&D company independent from Bayer, or any directly or indirectly affiliated member of its Group, and to transfer or make available the equipment relating to such research to the said company.
206. Bayer will procure the R&D company to undertake the activities of ACS under the Research Agreement and the License Agreement, including **[Confidential]\***. The research activities of this specialised R&D company will have a broad coverage of crop protection-related research activities in general, primarily targeted to insecticides, rather than a limited focus on process steps related specifically to screening for Animal Health Uses.
207. Bayer will ensure that the R&D results potentially applicable for Animal Health Uses are made available directly to Merial on an exclusive basis. Bayer may use these results for purposes other than Animal Health Uses.
208. Bayer commits to finance the crop protection-related research activities referred to in para. 206 above, carried out by the R&D company **[Confidential]\*** for as long as **[Confidential]\***. This provision shall be subject to review by the Commission after a period of 10 years from the Effective Date, upon application by Bayer within 6 months from the expiry of the 10-year period showing good cause. In any case, this provision shall no longer apply from the moment the contractual link between ACS SA and Merial is terminated.
209. Bayer will procure that the research work to be done by the R&D company will be based on various sources, so that new compounds to be generated for screening will derive: (i) from the R&D company's own synthesis of molecules of chemical structures potentially useful in crop-protection primarily targeted to insecticides; or **[Confidential]\***. In addition, Bayer will not restrict the R&D company from negotiating screening rights for compound libraries of third parties.
210. During the transitional period between the acquisition of ACS by Bayer and the Closing Date and beyond in the event that the Research Agreement or the License Agreement is not transferred to the Purchaser, Bayer shall waive its unilateral rights relating to **[Confidential]\***.

**F. DIVESTMENT OF GULLVIKS AB**

**I. COMMITMENT TO DIVEST**

211. Bayer commits to divest Gullviks' distribution business in Sweden.

**II. NON-COMPETE**

212. From the Closing Date, Bayer commits to abstain for a period of 5 years, from carrying on or seeking distribution business in Sweden, or from taking any action that would facilitate the same. For the avoidance of doubt, this commitment does not affect Bayer's right (i) to sell crop protection products to distributors (i.e. retailers, wholesalers or co-operatives) in Sweden; and (ii) to sell crop protection products regardless of the level of distribution outside of Sweden.

## SECTION 3: RELATED COMMITMENTS

### A. SCOPE OF THE DIVESTED BUSINESSES

213. The Divested Businesses enumerated in Section 2, shall consist of all tangible (with the exception of any fixed assets unless expressly referred to in Section 2) and intangible assets which, either contribute to the current operation of the Divested Businesses or may be necessary to ensure their saleability, viability and competitiveness (i.e. possessing the ability and the incentive to maintain and develop the Divested Businesses as an active competitive force); insofar as any assets are shared with the Parties' retained businesses, these shall be dealt with in accordance with para. 3.
3. The shared tangible and intangible assets referred to in para. 213 above are included in the Divested Businesses insofar as they relate predominantly to the Active Substances, Formulations or Mixture Products subject to the divestment, subject to Bayer receiving a licence back or access insofar as these are necessary for its retained businesses. Insofar as such assets do not relate predominantly to the Active Substances, Formulations or Mixture Products subject to the divestment, but are necessary for the operation of the Divested Businesses, an exclusive licence and/or exclusive access to such assets shall be included in the Divested Businesses, insofar as they are necessary for use in the Divested Businesses.
214. The term of any toll manufacture, toll formulate or other supply arrangements entered into between Bayer and the Purchaser shall be for 3 years on a Cost Plus Terms basis from the Closing Date. **[Confidential]\***
215. In cases where the Divested Businesses include all Existing Mixture Products and Pipeline Products, Bayer commits to extend its offer of any toll manufacture or other supply arrangements, to all existing Active Substances used in such Mixture Products and Pipeline Products which may not have been expressly included in the Divested Businesses but the divestment of which is nevertheless necessary to ensure the saleability, viability and competitiveness, of the Divested Businesses within the meaning of para. 213. Such offers shall be made on terms that are substantially similar to those agreed upon by Bayer in respect of the Divested Businesses concerned, including access to all the necessary rights to develop, register and market the same.
216. For a transitional period of **[Confidential]\*** from the Closing Date, Bayer may continue to produce and sell Existing Formulations and Existing Mixture Products for Home And Garden Uses which are substantially similar to Existing Formulations and Existing Mixture Products for use in professional agriculture included in the Divested Businesses. Bayer's non-compete obligations with respect to such Existing Formulations and Existing Mixture Products for Home And Garden Uses do not apply to future Formulations and Mixture Products for Home And Garden Uses which are not substantially similar to Existing Formulations and Existing Mixtures for use in professional agriculture.

**B. PRESERVATION OF VIABILITY, MARKETABILITY AND COMPETITIVENESS**

217. The Parties undertake to preserve from the Effective Date the full economic viability, marketability and competitiveness of the Divested Businesses until the Closing Date, in accordance with best commercial practice, as shall be monitored by the Monitoring Trustee in accordance with paras. 252-253. In this regard, the Parties undertake to reduce to the minimum any possible risk of loss of competitive potential of the Divested Businesses resulting from the uncertainties inherent to the transfer of a business.
218. Within, one week from the Effective Date, the Parties will appoint one or more Hold Separate Managers who shall have the necessary qualifications, experience and seniority to effect the separation of the Divested Businesses from the Parties' retained businesses in consultation with the Monitoring Trustee and take(s) charge of the day to day management of the Divested Businesses as a going concern at arms length from the Parties' retained businesses, in accordance with the criteria set out in para. 217 above, under the authority of the Monitoring Trustee.
219. Should a full separation of the Divested Businesses from the Parties' retained businesses prove impossible, from the Effective Date to the Closing Date, without compromising the full economic viability, marketability and competitiveness of the Divested Businesses, the Hold Separate Manager shall consult with the Monitoring Trustee regarding the implementation of appropriate measures to ensure the full economic viability, marketability and competitiveness of the Divested Businesses, subject to the Commission's prior approval.
220. The appointment of each Hold Separate Manager by the Parties shall be subject to confirmation by the Monitoring Trustee. In the event that the Monitoring Trustee disagrees with the Parties' choice, it will be empowered to appoint another Hold Separate Manager, in consultation with the Commission.
221. Pending divestiture, the Parties shall enable the Hold Separate Manager to manage the Divested Businesses in the best interest of the business. In particular, the Parties undertake not to carry out any act upon their own authority which may have a significant negative impact on the economic value, the management or the competitiveness of the Divested Businesses until the Closing Date. The Parties also undertake not to carry out upon their own authority any act which may be likely to alter the nature and scope of activity of the Divested Businesses, the industrial, commercial or investment strategy of the Divested Businesses. Sufficient resources shall be made available for the Divested Businesses to develop until the Closing Date, based on budgets and business plans approved by the Monitoring Trustee.



**C. RE-REGISTRATION OF ACTIVE SUBSTANCES, FORMULATIONS & MIXTURE PRODUCTS**

4. The Parties represent that they have exercised reasonable due diligence to ensure compliance with all applicable legislation for registration with all the relevant regulatory authorities in order to support the Active Substances, Formulations and/or Mixture Products offered in the Divested Businesses under Section 2 above with respect to the grant of the necessary registrations for the marketing of such Active Substances, Formulations and Mixture Products, including any requests made by the said regulatory authorities for the re-registration of the same.
5. **[Confidential]\***
6. For the Active Substances, Formulations and/or Mixture Products divested under Section 2 in respect of which Bayer remains responsible for the registration of the Active Substance, Bayer further commits to support fully at its own expense (unless otherwise stated) the maintenance of all the necessary registrations for the marketing of the Active Substances concerned, so as to ensure that the Purchaser is able to continue marketing the divested Active Substances, their Formulations and Mixture Products. In the event that Bayer decides to discontinue supporting the registration of the Active Substance concerned it shall offer to transfer the Registration Data Package and Registration Rights to the Purchaser.
7. Bayer commits to offer alternative commitments acceptable to the Commission, in the event that any of the Divested Businesses proposed under Section 2 to a Purchaser fail due to Bayer's failure to fulfil its commitment in the preceding paragraph. Such an event may not constitute an exceptional circumstance upon which Bayer may rely to request the Commission to waive any of its obligations and/or conditions under these Commitments pursuant to "Section 7: The Review Clause" (paras. 263-264) below. The mechanism to achieve this shall be specified in the terms of the agreement concluded with the Purchaser, subject to the Commission's prior approval.

**D. HOLD-SEPARATE OBLIGATIONS OF PARTIES**

222. The Parties commit from the Effective Date, to separate the Divested Businesses from their other retained businesses, as far as reasonably practicable without affecting the full economic viability, marketability and competitiveness of the Divested Businesses, and to ensure that the Hold Separate Manager has no involvement in any other retained businesses of the Parties and vice versa.
223. Prior to the Closing Date, the Parties shall assist the Monitoring Trustee, to the extent possible, in ensuring that the Divested Business is managed as a distinct and saleable entity separate from the retained businesses of the Parties. To the extent possible, the Divested Businesses shall be managed on an independent basis in the best interest of the Divested Businesses and ensuring their continued

viability, marketability, competitiveness and independence from the retained businesses of the Parties.

224. To ensure that the Divested Businesses remain viable entities, their participation in central purchasing arrangements, international marketing efforts, the central IT network and other central operational functions of the Parties will be served to the extent possible, without compromising the full economic viability, marketability and competitiveness of the Divested Businesses. The Hold Separate Manager, after having heard the Parties, shall make a proposal on the latter issue, subject to the approval of the Monitoring Trustee.
225. The Parties shall implement all necessary measures reasonably practicable to ensure that they shall 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 Divested Businesses, with the exception of information reasonably necessary for the divestiture of the Divested Businesses or otherwise required by law. The Monitoring Trustee, after having heard the Parties and the Hold Separate Manager, shall decide on what measures are reasonably practicable to implement this and on the exercise of the exception.
226. The Parties commit to assist the Hold Separate Manager and the Monitoring Trustee to draw up full particulars of the Divested Businesses including any Personnel identified for transfer to the Purchaser taking account of the criteria set out in Section 3A above and Section E below, for submission to the Commission for its prior approval.

## **E. TRANSFER OF PERSONNEL**

227. The Divested Businesses shall be divested as a going concern. The Parties undertake to furnish to the Hold Separate Manager and the Monitoring Trustee a complete list of all Personnel including details of their qualifications and professional experience identifying the Personnel whom the Parties consider to be key Personnel for each of the Divested Businesses.
228. The Hold Separate Manager will, in co-operation with the Monitoring Trustee, identify the human resources requirements of the Divested Businesses including the number of required resources by skill set taking account of the criteria set out in Section 3A above. The Hold Separate Manager will, in co-operation with the Monitoring Trustee, identify the Personnel required to fulfil the aforementioned human resources requirements of the Divested Businesses, distinguishing key Personnel.
229. Bayer commits to transfer the Personnel to the Purchaser, upon the Purchaser's request. This transfer will be achieved in the following manner:
230. The Parties will ensure the compliance with all applicable labour and employment laws, in particular (where relevant) with the Council Directives on collective redundancies, on safeguarding employees rights in the event of transfers

of undertakings and on informing and consulting employees as well as with national provisions implementing these Directives.

231. The Parties shall, subject to customary confidentiality assurances, permit prospective purchasers of the Divested Business to have reasonable access to the Hold Separate Manager to discuss the transfer of the Personnel on the basis of the results of the work carried out under paras. 227-230 above. The Hold Separate Manager shall, subject to review by the Monitoring Trustee, decide upon the requests of prospective purchasers to have access to the Personnel of the Divested Businesses.
232. The Parties and/or the Hold Separate Manager shall provide to the Purchaser information relating to the Personnel to enable the Purchaser to make offers of employment taking into account all applicable labour and employment laws.
233. The Parties shall waive all contractual rights concerning the Personnel of the Divested Businesses and shall take any other measures deemed appropriate by the Monitoring Trustee, subject to the Commission's prior approval, in order to facilitate the immediate transfer of the Personnel to whom the Purchaser makes offers of employment under para. 232 above.
234. **[Confidential]\***
235. The Parties undertake not to solicit the key Personnel transferred with the Divested Business for a period of 3 years after the Closing Date. The Parties shall ensure that any of the key Personnel retained who have been employed by or seconded to the Divested Businesses within the last 3 years, and any of the key Personnel who might not agree to be transferred with the Divested Businesses, shall not be assigned to any business unit that directly or indirectly competes with the Divested Businesses for a period of 3 years after the Closing Date.

## **SECTION 4: THE DIVESTMENT PROCEDURE**

### **A. THE DIVESTMENT PERIOD**

236. Bayer undertakes to find Purchasers for the Divested Businesses **[Confidential]\*** within 6 months from the closing of the Bayer/ACS transaction. **[Confidential]\***

### **B. THE EXTENDED DIVESTMENT PERIOD**

237. **[Confidential]\***, the Divestment Period shall be extended by **[Confidential]\*** months from its expiration. Bayer undertakes to give the Divestment Trustee (to be appointed pursuant to paras. 246-251 below) an irrevocable and exclusive mandate to sell the remaining Divested Businesses within the Extended Divestment Period at no minimum price.

### **C. CLOSING**

238. Bayer shall be deemed to have complied with these Commitments if, within the Divestment Period, it has entered into binding agreements for the sale/licensing of the Divested Businesses in accordance with paras. 242-245 below, provided that the Closing Date takes place within **[Confidential]\*** months after the conclusion of the respective agreements.

### **D. REPORTING**

239. Bayer shall report in full in writing in the English language to the Commission and the Monitoring Trustee on developments in the negotiations with potential purchasers of the Divested Businesses within 10 days from the end of every two month period following the Effective Date (or otherwise at the Commission's request).
240. Bayer shall inform the Commission and the Monitoring Trustee of the preparation of data room documentation, information memoranda and on due diligence procedure and submit copies of all draft documents relating to the divestments process, for the Commission's prior approval, after consultation with the Monitoring Trustee as to the said documents' consistency with the terms of these Commitments.
241. Bayer shall also inform the Commission and the Monitoring Trustee on the identification of possible purchasers and submit to the Commission a list of all potential buyers, who may have expressed an interest in the Divested Businesses.

## SECTION 5: THE PURCHASERS

242. The Purchasers of the Divested Businesses shall be independent of and unconnected to the Parties or any directly or indirectly affiliated member of their Groups, possessing the financial resources, proven expertise and having the incentive to maintain and develop the Divested Businesses as viable and active competitive force in competition with Bayer including any directly or indirectly affiliated member of its Group, and other competitors. In addition, the Purchasers must reasonably be expected to obtain all necessary approvals from the relevant competition and other regulatory authorities for the acquisition of the Divested Businesses (taking into account any remedies that might be offered). Bayer must be able to demonstrate to the Commission that the Purchasers meet the requirements of these Commitments and that the Divested Businesses are sold in a manner consistent with these Commitments.
243. In order to maintain the structural effect of these Commitments, Bayer will not subsequently directly or indirectly re-acquire influence over the whole or part of the Divested Businesses, unless the Commission has previously found that the structure of the market has changed to such an extent that Bayer's absence of influence over the Divested Businesses is no longer necessary to render the acquisition of ACS by Bayer compatible with the Common Market.
244. When Bayer has or is about to reach an agreement with a Purchaser referred to in para. 242 above, it will submit to the Monitoring Trustee and the Commission a fully documented and reasoned proposal enabling the Commission to: (i) verify in consultation with the Monitoring Trustee that the above Purchaser requirements are fulfilled and thereby approve the proposed Purchasers; (ii) grant any approvals required under these Commitments with respect to any ancillary arrangements (e.g. supply or toll manufacturing); and (iii) ensure that the Divested Business in question is being divested in a manner that is entirely consistent with these Commitments in the light of the competition concerns identified in the Decision. Such a proposal **[Confidential]\*** shall include copies of the draft final binding sale and/or licence agreements and drafts of all other ancillary agreements and/or other documents related to the proposed divestment.
245. Bayer commits to transfer the following Divested Businesses: "Iprodione", "Prochloraz", "Pyrimethanil", "Triticonazole", and "Fluquinconazole", as well as "Fipronil", and "Ethiprole" to the same single Purchaser.

## **SECTION 6: TRUSTEES**

### **A. APPOINTMENT PROCEDURE**

246. The Parties shall appoint one or more Trustees, such as an investment bank or consultant or auditor, subject to the prior approval of the Commission. The Trustee shall be independent of the Parties including any directly or indirectly affiliated member of their Groups, possess the necessary qualifications to carry out its Mandate and shall not be, or become, exposed to any conflict of interest affecting its ability to act as trustee on behalf of the Commission. The Trustee shall be remunerated by the Parties in such a way as not to impede its independence and effectiveness in fulfilling its Mandate. In particular, the remuneration package of the Divestment Trustee may not provide for a success premium that is linked to the final sale value of the Divested Business.

#### **I. PROPOSAL BY THE PARTIES**

247. The Parties shall propose one or more proposed Trustees and the terms of the Mandate for approval to the Commission with adequate information for the Commission to verify that the Trustee fulfils the requirements of para. 246 above. The Parties shall indicate to the Commission whether the proposed Trustees will act as Monitoring Trustee as well as Divestment Trustee or whether different Trustees are proposed for the two functions. The Mandate submitted for approval shall be drawn up taking due account of the Commission's Standard Trustee Mandate (which may be modified by the Commission) and shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments. The Parties shall also procure that the proposed Trustee shall submit to the Commission a detailed work plan in which it is described how the Trustee intends to carry out its duties under these Commitments. The proposal of one or more Trustees by the Parties shall be made within one week after the Effective Date.

#### **II. APPROVAL OR REJECTION BY THE COMMISSION**

248. The Commission shall have the discretion to approve or reject the proposed Trustee or Trustees, and to approve the proposed Mandate subject to modifications, that the Commission deems necessary for the Trustee to fulfil its obligations. If only one name is approved, Bayer shall appoint or cause the individual or institution concerned to be appointed as Trustee, in accordance with the Mandate approved by the Commission. If more than one name is approved, Bayer shall be free to choose the Trustee to be appointed from among the names approved.

### **III. NEW PROPOSAL BY THE PARTIES**

249. If all the proposed Trustees are rejected, Bayer will submit the names of at least two further individuals or institutions within one week of being informed of the rejection, together with the full terms of the proposed Mandate as agreed with the proposed Trustees as well as all information necessary for the Commission to verify that the proposed Trustees possess the necessary qualifications to carry out the task and shall not be, or become, exposed to a conflict of interest. If only one name is approved, the Parties shall appoint or cause the individual or institution concerned to be appointed as Trustee, in accordance with the mandate approved by the Commission. If more than one further name is approved, the Parties shall be free to choose the Trustee to be appointed from among the names approved.

### **IV. TRUSTEE NOMINATED BY THE COMMISSION**

250. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee which the Parties will appoint or cause to be appointed in accordance with a Mandate approved by the Commission.

### **V. APPOINTMENT BY THE PARTIES**

251. As soon as the Commission has given approval to one or more proposed Trustees, the Parties shall appoint or cause the Trustee concerned to be appointed within one week thereafter, in accordance with the Mandate approved by the Commission.

## **B. FUNCTIONS OF THE TRUSTEES**

### **I. DUTIES AND OBLIGATIONS OF THE MONITORING TRUSTEE**

252. The Monitoring Trustee shall assume its specified duties in order to ensure compliance with the Commitments on behalf of the Commission.
253. The Monitoring Trustee shall, following its appointment:
1. oversee the appointment of the Hold Separate Manager, and preside over the separation of the Divested Businesses from the Parties' retained and the drawing up of full particulars of the Divested Businesses including Personnel identified for transfer to the Purchaser, for submission to the Commission, in consultation with the Parties. The Trustee shall determine: a) which assets are predominantly related to the Divested Businesses or not within the meaning of paras. 213 and 3 above; b) when work on residue studies has begun within the meaning of Pipeline Products in "Section 1: Definitions", c) what tangible assets are predominantly related to the ACS seed treatment business within the meaning of para. 153 in Section 2 above; and d)

what Formulations and Mixture Products marketed for Home And Garden Uses are "substantially similar" to Formulations and Mixture Products marketed for professional agriculture within the meaning of Agricultural Uses in "Section 1: Definitions", subject to the Commission's prior approval;

2. oversee the on-going management of the Divested Businesses with a view to ensuring their continued viability, marketability and competitiveness and monitor the Parties' compliance with the conditions and obligations under these Commitments.
3. Therefore the Monitoring Trustee shall:
  - (a) in consultation with the Parties, determine the best management structure to ensure that the obligation of non-disclosure of competitively sensitive information is observed by the Parties;
  - (b) monitor that the Parties maintain the viability, marketability and competitiveness of the Divested Businesses in accordance with these Commitments, and the management and operation of the Divested Businesses in the normal course of business, in accordance with best business practice, until closing;
  - (c) monitor, where applicable, that no competitively sensitive information concerning the Divested Businesses is disclosed to the Parties (except in so far as necessary to allow Bayer to carry out the divestiture or as otherwise required by law);
  - (d) propose to the Parties such measures as the Monitoring Trustee considers necessary to ensure compliance with the conditions and obligations under these Commitments;
  - (e) be entitled to impose the measures described in the above subparagraph (d) (with the approval of the Commission) in the event that the Parties do not comply with the Monitoring Trustee's proposals within the timeframe set by the Monitoring Trustee;
4. provide to the Commission, with a simultaneous non-confidential copy to the Parties, a written report within 10 days from the end of every 2 month period following the Trustee's appointment concerning the monitoring of the operation and management of the Divested Businesses in order to assess whether the Divested Businesses are held in a manner consistent with these Commitments. In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission if the Monitoring Trustee concludes on reasonable grounds that Bayer is failing to comply with any of the conditions or obligations under these Commitments. The Parties shall receive a simultaneous non-confidential copy of any such additional reports;



5. assess: (i) the suitability of the proposed Purchaser in the light of the Purchaser criteria set out in Section 5 above, particularly with regard to the continued viability of the Divested Businesses following divestment to the Purchaser; and (ii) whether the proposed divestment, including the terms of any sale/licence agreement as well as any ancillary arrangements comply with the conditions and obligations in these Commitments; and render its reasoned opinion thereon to the Commission.

## **II. DUTIES AND OBLIGATIONS OF THE DIVESTMENT TRUSTEE**

254. Within the Extended Divestment Period (as defined in para. 237 above), the Divestment Trustee shall sell at any price the remaining Divested Businesses to Purchasers independent of Bayer, provided that the Commission has approved both such Purchasers and the final binding sale and purchase agreements as well as any ancillary agreements in accordance with procedures laid down in paras. 242-245.
255. The Divestment Trustee shall report in full in writing in English language to the Commission on developments in the negotiations with potential purchasers of the Divested Business within 10 days from the end of every two month period following the expiration of the Divestment Period (or otherwise at the Commission's request). Simultaneous non-confidential copies of these reports shall be provided to the Monitoring Trustee and Bayer.

## **III. DUTIES AND OBLIGATIONS OF THE PARTIES**

256. The Parties 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 monitor compliance with the conditions and obligations under these Commitments. The Parties shall make available to the Monitoring Trustee one or several offices on their premises. The Parties shall be available for regular meetings with the Monitoring Trustee, according to a timetable agreed between them, in order to provide the Monitoring Trustee, either orally or in document form, with all information necessary for the completion of his task. At the request of the Monitoring Trustee, the Parties shall provide the Monitoring Trustee with access to sites to the extent necessary for the fulfilment of its duties under these Commitments. The Parties shall provide all managerial and administrative support which may reasonably be requested by the Monitoring Trustee on behalf of the management of the Divested Businesses. This shall include all administrative support functions relating to the Divested Business which are currently carried out at headquarters level.
257. At the expense of the Parties, the Trustee may appoint advisors (e.g. for corporate finance, legal or scientific advice), subject to the Parties' approval (this approval not to be unreasonably withheld) if the Trustee considers the advisors necessary or appropriate for the performance of its duties and obligations under the Mandate. In the case that the Parties refuse to approve the advisors proposed

by the Trustee the Commission may approve the appointment of such advisors instead, whereupon the Trustee may appoint such advisors at the Parties expense. Only the Trustee shall be entitled to issue instructions to the advisors. The advisors shall not be liable to the Parties from any consequences of following the Trustee's instructions. In the Extended Divestment Period, the Divestment Trustee may use the Parties' advisors who served during the Divestment Period, subject to the Commission's prior approval which may be granted only if the Divestment Trustee can demonstrate to the Commission's satisfaction that this is in the best interest of an expedient divestment.

258. Bayer shall grant a comprehensive power of attorney to the Divestment Trustee for the carrying out of the sale of the remaining Divested Businesses, and its closing and shall provide all representations and warranties that the Divestment Trustee requires for the sale of the Divested Business and its closing.

### **C. REPLACEMENT, DISCHARGE AND REAPPOINTMENT OF THE TRUSTEES**

259. The Commission may, after hearing the Trustee, order the Parties to remove the Trustee in the event that the Trustee has not acted in accordance with the provisions of these Commitments or for any other good cause.
260. The Trustee may also be removed by Bayer with the prior approval of the Commission and after the Commission has heard the Trustee in the event that the Trustee has not acted in accordance with the provisions of these Commitments or for any other good cause.
261. The Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand-over of all relevant information. Regarding the appointment of a new Trustee the same procedure applies as described in these paras. 259-262).
262. The Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties, following a request from the Trustee made after all the commitments with which it has been entrusted have all been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

## **SECTION 7: THE REVIEW CLAUSE**

263. The Commission may if appropriate, upon request from Bayer showing good cause and after hearing the Monitoring and/or Divestment Trustee, allow for:
- a) an extension of the Divestment Period, or
  - b) the sale of the Divested Businesses, without one or more assets, that are part of the Divested Businesses at the request of the proposed Purchaser showing good cause, or
  - c) waive or modify, in exceptional circumstances, one or more of the conditions and obligations in these Commitments.
264. Bayer shall address any request for an extension of time periods no later than one month prior to the expire of such time period, showing good cause. Only in exceptional circumstances shall Bayer be entitled to request an extension within the last month of any period.

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Disclaimer: This is an interim text of the non-confidential commitments in Case COMP/M.2547-Bayer/Aventis Crop Science. This text is made available for information purposes only and does not constitute an official publication. The official text of the decision and the commitments in Annex will be published in the Official Journal of the European Communities.

ANNEX - SCHEDULE 1				
Trade name	Active Ingredient	Distributor	Contractual party	Divestment territory
Marshall	Carbosulfan	Bayer	FMC	Italy UK
Cascade	Flufenoxuron	Bayer	BASF	Portugal
Xentari	Bacillus Thur.	Bayer	Valent	Greece Spain
			Sumitomo	Germany
Pyranica / Masai	Tebufenpyrad	Bayer	BASF	Belgium
Pyrinex	Chlorpyrifos	Bayer	Maktheshim	Italy
Dipel	Bacillus Thur.	Bayer	Valent (previously Edisco)	Italy
			Sumitomo (previously Abbott)	Portugal
Smart Maladan	Malathion	Bayer	Cheminova	Italy Denmark
Omite	Propargite	Bayer	Uniroyal	Italy
Lorvek	Chlorpyrifos	ACS	Dow	Portugal
Omite	Propargite	ACS	Uniroyal	Greece, Portugal, Spain, France
Dimilin	Diflubenzuron	ACS	Uniroyal	Belgium, Germany, Denmark, Spain, Italy
Mimic	Tebufenozide	ACS	Dow	Belgium, Germany, Portugal, France, Spain
Kiron	Fenpyroximate	ACS	Nihon Nohyaku	Germany
Bt	Bacillus Thur.	ACS	Vertobal (Valent)	Greece
Monitor	Metamidophos	ACS	Arysta (Tomen)	Greece
Talstar	Bifenthrin	ACS	FMC	France
Rhodocide	Ehtion	ACS	Cheminova	France, Greece
Dipel	Bacillus Thur.	ACS	Valent	Spain, Greece
Orthene	Acephate	ACS	Tomen	France



<b>ANNEX - SCHEDULE 2</b>		
<b>Product</b>	<b>Supplier</b>	<b>Country of divestment</b>
Fungazil	Janssen	Ireland
Symphonie	Nihon Noyaku	Belgium, France, Netherlands
Basitac	Kumiai	Belgium, France
Fungaflor	Syngenta	France
Iota	Nihon Noyaku	France
Solacol	Takeda	Netherlands
Monarch	Nihon Noyaku	Netherlands

**Final report of the Hearing Officer**  
**in case COMP/M.2547 – BAYER/AVENTIS CROP/SCIENCE**

**(pursuant to Article 15 of Commission Decision (2001/462/EC, ECSC)  
of 23 May 2001 on the terms of reference of Hearing Officers  
in certain competition proceedings – OJ L162, 19.06.2001, p.21)**

The draft decision based on Article 8 (2) of Regulation 4064/89 (the Merger Regulation), gives rise to the following observations regarding the right to be heard:

1. The Commission sent a statement of objections to Bayer AG (“Bayer”) on 15 February 2002. This was followed by a short supplementary statement sent on 25 February 2002. The parties responded to both statements. They did not request an oral hearing.
2. The parties raised one procedural issue before the Hearing Officer. On 28 March 2002 Bayer wrote to me concerning the replies of third parties to the market test carried out by the Commission on the proposed commitments that had been submitted by the parties on 15 March 2002. The market test resulted in a number of negative replies for certain markets. Bayer was informed of this and provided with an extensive summary of all responses. The summary did not identify the companies providing these responses. In their letter of 28 March Bayer requested that the sources of the responses be revealed. Bayer claimed this was essential for a proper assessment of the comments given by third parties since the reactions were likely to depend on the nature of a given third party and might vary between eg competitors interested in acquiring parts of the assets to be divested, and customers.

In reply, Bayer was informed that the provision of anonymised replies (in summarised form) is consistent with the caselaw of the Court of Justice and the Court of First Instance which has recognised the need to preserve confidential treatment (in particular Case 310/93 *BPB Industries and British Gypsum v Commission* [1995] ECR I-865, and Case T-229/95 *Endemol v Commission* [1999] ECR II-1299). The possibility of retaliation by the parties to the concentration cannot be underestimated. With regard to the specific argument raised by Bayer, the Commission is itself capable of factoring in potential “vested interests” should this be necessary. What is important is that the parties are informed of the facts and issues drawn to the Commission’s attention in order to express their views on them. In the present case, a large number of respondents expressly required confidentiality, in whole or in part. In the circumstances, and given the time constraints involved in conducting and processing the market test, it was appropriate not to reveal the identity of respondents, and to act cautiously by not revealing the names of any respondent (except one) in particular, in order to avoid the possibility that by revealing the identity of some, the identity of the others would also be revealed. The fact that the markets concerned by the present case are highly concentrated is particularly relevant in this respect.

The non-confidential version of one company’s reply, however, was sent to the parties, identity included. This company did not require anonymity and there was no risk that, in revealing its identity, the identity of other third parties would also be revealed.

In the light of the above, I conclude that the parties' rights of defence have been fully respected. The draft decision deals only with objections which the parties have been afforded the opportunity of making known their views.

Brussels, 12 April 2002

*(signed)*  
**Karen WILLIAMS**