EN

Case No COMP/M.2690 - SOLVAY / MONTEDISON-AUSIMONT

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REGULATION (EEC) No 4064/89
MERGER PROCEDURE

Article 6(2) NON-OPPOSITION
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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 09.04.2002
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PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) and 6(2)
DECISION

To the notifying party

Dear Sir/Madam,

<u>Subject</u>: **Case No COMP/M.2690 – SOLVAY/MONTEDISON - AUSIMONT Notification of 21.02.2002 pursuant to Article 4 of Council Regulation No 4064/89[1]**

1. On 21 February 2002, the Commission received notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89 ("the Merger Regulation") by which Solvay SA ("Solvay") will acquire within the meaning of Article 3(1)(b) of the Merger Regulation control of the whole of Agorà SpA ("Agorà), a company whose sole function is to act as the holding company of Ausimont SpA ("Ausimont"), in which it owns 100% of the share capital.

2. In the course of the investigation, Solvay submitted undertakings designed to eliminate the competition concerns identified by the Commission in accordance with Article 6(2) of the Merger Regulation. The Commission has concluded that the notified operation falls within the scope of the Merger Regulation and, in the light of these modifications, does not raise serious doubts as to its compatibility with the common market and with the functioning of the EEA Agreement.

I. THE PARTIES

3. Solvay is an international chemicals and pharmaceuticals group, with its headquarters in Brussels, Belgium. Solvay is listed on the Euronext 100 index of leading European

[1] OJ L 395, 30.12.1989 p. 1; corrigendum OJ L 257 of 21.9.1990, p. 13; Regulation as last amended by Regulation (EC) No 1310/97 (OJ L 180, 9. 7. 1997, p. 1, corrigendum OJ L 40, 13.2.1998, p. 17).

companies. It has operations in virtually all EEA States and in all it operates in 50 countries worldwide, employing over 32,000 people. It organises its activities into four business segments: chemicals, plastics, processing and pharmaceuticals.

4. Ausimont is headquartered in Milan, Italy and has four manufacturing and research and development sites in Italy, one in Germany and four in the United States. It also has a research and development facility in Japan. Ausimont is active in a number of sectors of the chemical industry, in particular peroxygenated products and fluorinated materials (fluoropolymers and fluoroelastomers), fluids and gases (fluoroderivatives). Ausimont employs nearly 2,000 people worldwide.

II. THE OPERATION

5. The operation is the acquisition by Solvay of all of the issued share capital in Agorà SpA, a company whose sole function is to act as the holding company of Ausimont, in which it owns 100% of the share capital. Agorà is currently a majority-owned subsidiary of Montedison (which holds 80% of Agorà's share capital). The remaining 20% is currently held by Longside International. This holding will also be bought by Solvay.

III. CONCENTRATION

6. Upon completion of the notified operation, Solvay will own 100% of the share capital of Agorà. It will therefore have sole control of Agorà and indirectly, sole control of Ausimont and its subsidiaries. The notified operation is therefore a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

IV. COMMUNITY DIMENSION

7. The undertakings concerned have a combined aggregate world-wide turnover of more than €5 billion[2] (Solvay €8,863 million, Agorà €580 million). Each of Solvay and Agorà have a Community-wide turnover in excess of €250 million (Solvay €[…] million, Agorà €[…] 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.

V. COMPETITIVE ASSESSMENT

8. The notified concentration involves a considerable number of affected markets, including both horizontally and vertically affected markets. This decision is structured in relation to the horizontal overlaps that arise.

A. Polyvinylidene Fluoride ("PVDF")

9. PVDF is a long-established fluoropolymer manufactured from the vinylidene difluoride ("VF2") monomer. PVDF is now the third most important thermoplastic

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2 Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25). To the extent that figures include turnover for the period before 1.1.1999, they are calculated on the basis of average ECU exchange rates and translated into EUR on a one-for-one basis.

within the fluoropolymer family in terms of volumes sold, after Polytetrafluoroethylene ("PTFE") and fluorinated ethylenepropylene ("FEP"). The spatial arrangement of its polymer chain gives PVDF a number of specific characteristics. A high performance material, it boasts outstanding thermal stability, mechanical strength, as well as resistance to fire. For example, it is particularly resistant to harsh chemical, thermal, ultraviolet, weathering, oxidizing or high energy radiation environments[3].

10. PVDF can be supplied both as pellets and as powders and dispersions. This renders it suitable for a number of different end-use applications. In particular, PVDF can be produced as a latex or a fine powder used as an ingredient for paints; it is then called coatings PVDF. But it can also be produced as a powder with a large particle size, generally called non-coatings PVDF, that is then extruded into pellets, which can then be processed using standard thermoplastic forming equipment (extrusion and injection moulding) by plastics processors. Non-coatings PVDF can finally be used as a powder that is then dispersed on metal sheets, or processed as a solution in specific solvents for producing very thin films, for example for lithium batteries.

11. There are two distinct manufacturing processes for the production of PVDF: the emulsion polymerisation process and the suspension polymerisation process. Solvay and the Japanese company Kureha both use a suspension polymerisation process, which produces larger particles than the emulsion polymerisation process. The only other two companies that are active in the PVDF markets, Atofina and Ausimont, both use an emulsion polymerisation process.

i Relevant product market

- *Applications*

12. In powders and dispersions form, PVDF is used extensively as a base for long-lasting decorative or protective architectural finishes, such as paints, that are able to withstand prolonged exposure to severe climatic conditions. This "coatings" PVDF is sold to specialist formulators such as Akzo Nobel, PPG, BASF, Becker and Valspar. It is used to coat aluminium, aluminised steel and galvanised steel for use on exterior surfaces for use in constructing warehouses, large office blocks, sports stadia and the like. Coatings PVDF products are rarely used for residential buildings. Coatings PVDF materials can also be used industrially, for example as an anti-corrosion coating for certain under-bonnet automobile components.

13. Non-coatings PVDF is generally sold in ready-to-use pellets to processors who manufacture the end-product. Non-coatings PVDF is easily melt-processible, enabling it to be used in a variety of injection and compression moulding and extrusion processes. Moulded and extruded product applications listed by Solvay in its notification include: extruded solid or lined pipes; injection moulded valves, tubes, pumps and heat-exchangers; packaging; ultra high purity water systems for the cleaning of microprocessors in the semi-conductor industry; in the pharmaceutical industry; medical devices; filtration membranes and fibres in the biotechnology

[3] More technical characteristics include: a unique polarity; a high dielectic constant; polymorphism and high piezoelectric and pyroelectric activity.

industry and for manufacturing automotive components such as fuel lines, dash-boards and panels and in the offshore oil industry, for example in composite pipes used to extract crude oil. Non-coatings PVDF also has a variety of applications in the electronics industry, essentially as films, for example as connector and battery sheaths and in the electrical industries as cable jacketing.

- *Grades*

14. Both coatings and non-coatings PVDF are produced in a range of different grades, where a grade is defined as a different formulation of the basic PVDF homopolymer or copolymer. The various grades have slightly different properties in terms for instance of molecular weight, melt point, melt viscosity and crystallinity. Each supplier has a catalogue, where its grades are presented, using a trade mark, like SOLEF (Solvay), KYNAR (Atofina) or HYLAR (Ausimont), and a grade number. Such lists were presented by Solvay to the Commission where PVDF grades are classified in four categories: (i) dispersion coatings grades used for general coatings, (ii) emulsion coatings grades (or latex) used for impregnating fabrics (water based), (iii) melt-processible homopolymers for extrusion, injection moulding and extrusion and (iv) melt-processible copolymers for extrusion and moulding. In manufacturing a specific grade, the manufacturer produces the basic polymer in the reactor and then compounds it to make the specific grade in the extrusion process. The grades are all manufactured using the same technology, with differences created by the precise conditions during the polymerisation process. Additives are mixed with the polymers at the compounding stage (for the relatively small proportion of grades which contain additives).

15. Solvay has stated in their notification that manufacturers of non-coatings PVDF have a range of standard grades, each based upon a PVDF homopolymer or PVDF copolymer[4]. These standard grades are listed in the manufacturer's technical sales literature and are available "off the shelf". Solvay defines these standard grades as those grades that are generally kept in stock and which are usually available for immediate sale to customers. [A majority] of Solvay's top ten grades (in terms of sales) are standard grades[5].

16. The notifying party has also indicated that its homopolymer grades are generally used for injection moulding and extrusion, in order to make pipes and components for a wide range of end-use applications, while its copolymer grades are generally used for the extrusion of wire and cables and are formulated with special fire retardant and/or "low smoke" agents. However, the parties stress that the distinction between coatings and non-coatings PVDF is more fundamental than the distinction between, for example, two non-coatings grades. This is because it is the differences in the particle size of the polymer product itself that creates the coatings/non-coatings distinction.

17. This distinction between coatings and non-coatings PVDF has been validated by the Commission's investigation. It appears that from a customer point of view, there is no

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[4] PVDF can be produced as a homopolymer or as a copolymer. The homopolymer is a strong semi-crystalline polymer that contains 59.4% fluorine and 3% hydrogen by weight. Copolymers additionally contain small amounts of other monomers (for example HFP or CTFE).

[5] See Solvay's response of 2 April 2002 to the Commission's request for information of 22 March 2002.

possibility to substitute coatings with non-coatings PVDF. This is due, notably, to the size of particles: only fine powders can be used as ingredients for paints produced by coatings customers, while the extrusion and moulding machinery used by non-coatings customers requires large granules and will not process the fine powders used as coatings. Moreover, customers stressed that the machinery and processes they used to process non-coatings, where a calendering machinery is used to extrude or mould, were radically different from those used for coatings, where PVDF is applied as a cold fine powder or a solvent dispersion.

18. In addition, it was examined whether different grades could constitute separate markets. None of the respondents to the Commission's questionnaires has indicated that homopolymer and copolymer PVDF products are sufficiently distinct that they should belong to separate relevant markets. In fact some customers indicated that all non-coatings PVDF were transformed using the same process, by melting granular PVDF in a plasticising machine and either extruding (for cables and wires) or moulding it. One grade which is of specific importance to Ausimont's non-coatings PVDF business is its "460" grade. This is a non-coatings grade, used to make heat-shrinkable tubing that is used to sleeve bundles of cables in, for example, aircraft. This grade can only be manufactured using the emulsion polymerisation process. Consequently, this grade can only be manufactured by Ausimont and Atofina. The notifying party has highlighted the specificities of this grade but has not argued that it belongs to a separate relevant product market. The Commission's market investigation has also proven inconclusive on this point, even though some market players recognised it could be substituted to some extent by other non-coatings grades. However, it is not necessary to reach a definitive conclusion on this as the serious doubts raised by the operation would remain whether Ausimont's "460" grade is included in the relevant product market or not.

- *Supply-side considerations*

19. The notifying party has argued that Atofina is the only company to have successfully developed its technology to be able to produce a wide range of both coatings and non-coatings PVDF. This is due to the fact that the emulsion polymerisation can be used to produce both coatings and non-coatings PVDF. Ausimont, it claims, has been relatively unsuccessful in developing its non-coatings PVDF business (other than the 460 grade) and neither Solvay nor Kureha are able to produce coatings PVDF. The notifying party therefore argues that these supply-side differences reinforce the differences that can be observed between coatings and non-coatings grades of PVDF.

20. It is important to stress that Atofina and Ausimont's technologies share the same heritage, and were in fact formerly part of the same company Pennwalt, which in the 1970s and 1980s was the leading supplier of PVDF. This situation has arisen because Ausimont bought its Thorofare PVDF plant from Atofina (then called Elf Aquitaine) when Atofina bought Pennwalt. The sale of the Thorofare PVDF plant to Ausimont was in accordance with a 1989 consent order from the United States' FTC[6]. Consequently, Ausimont licenses its technology from Atofina. As a result, similar – in many cases identical – PVDF products can be produced by Ausimont and Atofina.

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6 FTC File No. 891 0069

21. Consequently, while there is a degree of supply-side substitutability between all types of PVDF for Atofina and Ausimont, due to their identical technology for coatings and for non-coatings grades, there is little if any supply-side substitutability between coatings and non-coatings.

- *Product market conclusion*

22. In the light of the above, it can be concluded that coatings and non-coatings PVDF belong in separate relevant product markets. It can be left open whether 460 grade of PVDF belongs in a wider market for non-coatings PVDF or whether this should be excluded from the relevant market.

23. There do not appear to be sufficiently clear boundaries between the different applications in which non-coatings PVDF is used, or between different product characteristics (such as homopolymer/copolymer) to justify defining separate markets within a non-coatings PVDF market.

ii Relevant geographic market

24. Regardless of the precise boundaries of the product market, Solvay considers that the relevant geographic markets are worldwide, on the basis that there are considerable trade flows, insignificant transport costs and comparable prices in different parts of the world.

a. Coatings PVDF

25. Coatings PVDF is only manufactured in the United States at Ausimont's Thorofare plant and at Atofina's Calvert City plant. Atofina's facility in France has previously been used to produce both coatings and non-coatings PVDF, but it is currently only producing non-coatings PVDF. Coatings PVDF is consumed in both the United States and in Europe.

b. Non-coatings PVDF

26. Non-coatings PVDF is manufactured in France (Solvay and Atofina), the United States (Atofina, Ausimont, Solvay) and Japan (Kureha). Until Solvay's Decatur, Alabama plant started production in December 2000, it produced all of its PVDF in Tavaux, France. Ausimont exports from the United States to the EEA, Japan and elsewhere.

27. The Commission's market investigation has confirmed that the geographical market is wider than the EEA and also includes the United States. In relation to non-coatings PVDF no conclusive picture can be drawn of whether Japan should also be included in the relevant market. Kureha's production is in Japan and the vast majority of its non-coatings PVDF sales are in Japan. The question of whether Japan should be regarded as in the market or outside the market can be left open. This decision would not significantly affect the structural assessment of the effects of the merger and in both scenarios it is necessary to examine the strength of the potential competition that Kureha exerts as a manufacturer of non-coatings PVDF.

Geographic market conclusion

28. It can be concluded that the relevant geographic market for coatings PVDF is worldwide. For non-coatings PVDF, it can be left open whether the market is truly global or whether it includes just the EEA and the United States and excludes Japan.

iii Impact of the concentration

a Coatings PVDF

29. Table A.1 gives the parties estimates of market shares on a global market for coatings PVDF for the period 1998-2001.

Table A.1: Coatings PVDF global market shares, 1998-2001

Year	Ausimont	Atofina
1998	[50-60]	[40-50]
1999	[50-60]	[40-50]
2000	[50-60]	[40-50]
2001	[50-60]	[40-50]

30. As this table shows, there is no overlap in terms of **coatings PVDF** between Solvay and Ausimont. Solvay does not currently manufacture coatings PVDF. Ausimont and Atofina are the only suppliers of coatings PVDF worldwide. The current operation therefore does not lead to any structural change in the worldwide coatings PVDF market. Post-concentration, this will become a duopoly between Atofina and Solvay.

- *High barriers to entry*

31. This is a market with extremely high barriers to entry. This is shown by the fact that only two companies have ever developed technology that is suitable for producing coatings grades, Du Pont[7] and Atofina. Pennwalt's PVDF activities were split in two when they were bought by Atofina, as a result of a consent order imposed by the FTC which enabled Ausimont to buy one of Pennwalt's PVDF production facilities.

32. In addition, since coatings PVDF is used in paints and on the exterior of buildings, the customers (paint producers) need data showing how the characteristics of the coatings PVDF may change over a period of about 20 years, to see how well the product performs. The following excerpt from one of the responses received by the Commission from a customer of coatings PVDF demonstrates the nature of the barriers to entry in this market:

7 PVDF was patented by Du Pont in the 1940s, but was not commercialised by it. In 1958 it licensed its PVDF patents for the emulsion polymerisation process to an American manufacturer, Pennsalt (later renamed Pennwalt). Pennwalt began commercialising PVDF in the early 1960s and made mainly coatings PVDF.

"*...if new (alternative) products are introduced [...] extensive testing of environmental resistance would have to be carried out, with some elements (natural weathering) that could take decades. The cost is not extremely high (tens of thousands of EUR, rather than millions), but the time it takes would be almost prohibitive.*"

Even under accelerated testing, this data would take many years to acquire.

33. Solvay's failure to enter the coatings market successfully is a good indication of the height of the entry barriers.

- *Solvay – a potential coatings PVDF competitor?*

34. In the past Solvay has tried to enter the coatings market, however, Solvay has stated that its R&D activity in relation to coatings grades ended in 1993 with the finding that the technology that Solvay uses (the suspension polymerisation process) is not suitable for producing PVDF particles small enough to be used for coatings purposes. Since then, Solvay has not spent any money on coatings PVDF R&D.

- *Coatings PVDF conclusion*

35. While concerns have been raised by third parties in the Commission's investigation, these concerns have related more to the existing duopolistic structure of the market than to any change brought about by the operation. For the purposes of assessing the effect of the current operation, as it has been established that Solvay is neither an existing, nor it seems a credible potential competitor, the Commission does not need to reach any conclusion about the current state of competition in the coatings market.

36. In the light of the above, the proposed acquisition of Ausimont by Solvay does not threaten to create or strengthen a dominant position on the worldwide market for coatings PVDF as a result of which effective competition would be significantly impeded.

b Non-coatings PVDF

37. The following table sets out the notifying party's estimates of market shares under alternative geographic market definitions for **non-coatings PVDF**.

Table A.2: Market shares in all non-coatings PVDF (1998 - 2001) – Global

	Solvay	**Ausimont**	**Combined**	**Atofina**	**Kureha**
1998	[35-45]	[5-10]	[40-50]	[40-50]	[5-10]
1999	[35-45]	[5-10]	[40-50]	[40-50]	[5-10]
2000	[35-45]	[5-10]	[40-50]	[40-50]	[5-10]
2001	[35-45]	[5-10]	[40-50]	[40-50]	[5-10]

Table A.3: Market shares in all non-coatings PVDF (1998 - 2001) – EEA + United States (excluding Japan)

	Solvay	Ausimont	Combined	Atofina	Kureha
1998	[35-45]	[5-10]	[45-55]	[45-55]	[0-5]
1999	[35-45]	[5-10]	[45-55]	[45-55]	[0-5]
2000	[35-45]	[5-10]	[45-55]	[45-55]	[0-5]
2001	[35-45]	[5-10]	[45-55]	[45-55]	[0-5]

Table A.4: Market shares in non-coatings PVDF excluding 460 grade (1998 - 2001) – Global

	Solvay	Ausimont	Combined	Atofina	Kureha
1998	[40-50]	[0-5]	[40-50]	[45-55]	[5-10]
1999	[40-50]	[0-5]	[40-50]	[45-55]	[5-10]
2000	[40-50]	[0-5]	[40-50]	[45-55]	[5-10]
2001	[40-50]	[0-5]	[40-50]	[45-55]	[5-10]

38. As can be seen from the above market shares, the merger between Solvay and Ausimont will eliminate one of four PVDF manufacturers and result in a global duopoly, with almost perfect symmetry between Atofina and the merged entity, holding between them over [85-95%] of the market.

- *Elimination of a competitor*

39. The parties argue that the notified operation will result in a very modest accretion of market share in respect of non-coatings PVDF. Solvay considers that the overlap between Solvay and Ausimont is only in non-460 grades, and that it represents around [0-5%] world-wide. Solvay claims not to be able to produce the '460' grade of non-coatings and it claims that Ausimont's range of non-460 grades is not generally competitive on the market. It states that it does not regard Ausimont, with [0-10%] market shares world-wide, as a serious potential competitor. On the contrary, Solvay claims that Kureha, with [0-10%] market share world-wide, is a strong competitor, despite the fact that it only very recently tried to gain sales in Europe; it mentions that Kureha has hired a new sales manager in Germany and that it won one existing contract from Solvay in Germany. Solvay also mentions that Atofina is a strong competitor, […], despite having the same technology. In consequence, the parties argue that the notified operation will not have any impact on the competitive structure of the market.

40. The market investigation has however produced a different picture from what the parties present. First of all, it appears that Ausimont is perceived by market participants as a real and credible competitor. Ausimont was mentioned as an actual or potential competitor by a number of customers and was generally regarded as comparatively innovative. There is evidence that Ausimont is capable of taking customers not only from Atofina but also from Solvay, and had done so in the past thanks notably to better prices. Ausimont almost doubled its sales on non-460 non-coatings PVDF from [100-150] t. in 1998 to [200-300] t. in 2001, which contradicts the

idea that it is only through its 460 grade that Ausimont is present in the non-coatings PVDF market.

41. Ausimont's internal documents also show it is committed to developing both its range of non-coatings PVDF products and its production capabilities. [Description of Ausimont's actions]. […] [description of strategy]. It is also noteworthy that Solvay's internal documents (obtained from the FTC) show that Solvay consider Ausimont to be a potential competitor for a number of Solvay's actual or potential customers in the non-coatings PVDF market. In addition it appears that Kureha is in fact almost only present in Asia and that it is closer to a potential entrant than to a present competitor in Europe and the USA. Kureha seems to be very much focused on a limited number of particular applications like non-coatings PVDF for batteries, which represents large sales in Japan, and to have a limited number of grades. The market investigation has shown that many EU and US customers did not know Kureha and that they did not consider it as a potential supplier, in contrast to their view of Ausimont. A document provided by Solvay[8], indicates that Solvay was considering in 1997 [description of a strategy for entering a particular segment of the market].

42. In conclusion, and contrary to the claims of the notifying party, it appears that Ausimont is, and is regarded as, an effective competitor in the non-coatings PVDF market and that it is in the process of actively developing its presence in that market.

- *Current state of competition in the market*

43. There are some indications that competition in the non-coatings PVDF market is not particularly intense. In general, it appears that selling prices do not have a tendency to decrease over time – which would be expected from products that require some big initial investment – but that they rather remain stable.

44. [The investigation identified] some issues regarding the intensity of competition in the non-coatings PVDF market. [Description of the issues].

45. [Description of documents]. First it appears that there is repeated interaction between market players and that they have a fairly good knowledge of the capacity and customer basis of their competitors. [Description of facts raising concerns[9]]. Then, it appears that Solvay develops some understanding about how its competitors would behave and what they would understand from Solvay's behaviour. [Description of facts raising concerns]. This is an indication that tacit collusion in the non-coatings PVDF market is a genuine possibility.

- *Structure of the market*

46. <u>Symmetry of market shares</u>: there will be almost perfect symmetry between the market shares of the merged entity with [40-50%] and the one of Atofina with [40-50%] worldwide in 2001. In addition, market shares appear to be relatively stable over time. If Japan is excluded from the scope of the geographic market, then as shown in Table

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8 confidential annex 8 of Solvay's response to the Commission's article 11 request of 4 March 2002

9 [details of documents]

A.3, the market would be split evenly between the merging parties and Atofina. This symmetry in market shares in terms of sales is reflected in the capacity of Solvay and Atofina. [Description of operating levels]. In December 2000, Solvay brought its Decatur plant in the USA on line, adding 2300 tonnes per year capacity. In 2002, Atofina will complete the expansion at its facility in Pierre Benite, France, increasing its capacity by a further 2250 tonnes/year. As a result, Solvay's and Atofina's capacity utilisation rates will be comparable.

47. Market transparency: in a market that is – due to the absence of Kureha in Europe and the United States – substantially a duopoly between Atofina and the merged entity, transparency is already by nature high. It is easy for Solvay to know which customers its competitor has, to know whether its prices are higher or not, whether its quality is higher or not and to have knowledge about its competitors' production and capacity. In addition, a number of other features indicate a high degree of transparency in the market. For instance, Solvay maintains a general price list on its catalogue. [Description of pricing strategy] this gives a degree of price transparency; customers have confirmed this and have indicated that prices are relatively transparent in the non-coatings PVDF market. Transparency in terms of capacity is also high, due to the simple fact that there are only six production facilities in the world. It is also apparent that competitors are well informed about each others' capacity and of changes in that capacity[10]. In addition, it appears that [confidential sales information]; this could represent a signal between the two entities in order to indicate their capacity utilisation and in any event leads to a reduction in competition in the market. In addition, and from the merger, Solvay will have access to a plant that used to be part of the same firm as Atofina and which shares its technology. This will increase transparency on costs.

48. Symmetry of costs: As described in paragraph 11 above, there are two different production processes: the one of Solvay/Kureha and the one of Atofina/Ausimont. With the limited information available to the Commission, [description of relative costs]. In its Notification, Solvay emphasised that "on the basis of general knowledge on polymerisation processes, the emulsion and suspension polymerisation processes should – in principle – have similar reaction and production efficiencies and yields"[11]. First of all, the chemical composition of PVDF is identical; the key raw material is VF2, which represents around [confidential cost information] of total production costs for both Solvay and Ausimont and therefore presumably for Atofina. From the information provided by the parties, it appears that [description of relative costs], which is an indication that the incentives to increase production are not very different between them. In addition, it is likely that symmetry will be reinforced, since Atofina has the same production process as Ausimont.

49. Price elasticity of demand: the market investigation has shown that customers bought rather small amounts of non-coatings PVDF and that this product seems relatively

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10 As shown in the confidential annex 8 of Solvay's response to the Commission's article 11 request of 4 March 2002, and in Solvay's response of 2 April 2002 to the Commission's request for information of 22 March 2002 which details Solvay's understanding of capacity expansions for all the players in the non-coatings PVDF market.

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expensive in absolute terms. Even though price was mentioned as a dimension in their decision to buy from a supplier, it appears that customers are not likely to increase or decrease their demand in relation to price variations. This is due to the fact that PVDF is often linked to a particular need in terms of application. These applications are frequently critical applications, for example in pipes for the transport of highly corrosive chemicals, where the costs of product failure would be high. This factor is likely to reduce customers' price sensitivity. Moreover, regulatory provisions can make it necessary to use PVDF in some cases (e.g. wire and cable) and therefore customers would have to take any price increase. All these elements indicate that price elasticity of the demand should be rather low. Some more precise analysis would be required before reaching a definite conclusion.

50. Moderate rate of product and/or process innovation: Contrary to what Solvay claims, the market investigation did not find that non-coatings PVDF was a very innovative market. More precisely, it seems that there is some innovation in terms of developing PVDF grades for new applications, but this is a slow process which is more a type of applied research and development and closer to process development and testing than to fundamental innovation. Moreover, the new grades, where innovation may take place, represent a small part of the total market. There is a bulk of "standard" grades that have been around for many years and which customers even describe as being commodity products.

51. Market growth influenced by different applications: The non-coatings PVDF market has experienced an average growth of +5% from 1992 to 2001. The growth is linked to the various applications for the final customers who buy from the extruders and mould-injection manufacturers. Overall demand is however fluctuating, and is affected by cyclical developments in the wider economy, especially in line with semi-conductors and telecoms and high-tech industries. In fact, different applications are at different stages in the development cycle: for some applications (like high purity industries, chemical processing) demand for PVDF is mature, for some others the demand is growing. According to a document from Solvay[12], mature applications like high purity industries and chemical processing will represent [40-50%] of the total demand in 2005. While the volume of PVDF used in cables may experience slow growth if not decline due to the current telecom crisis, it will represent around [30-40%] of the total demand of non-coatings PVDF in 2005. This shows that even though some components of the demand will experience strong growth, the bulk of demand is in fact at a mature stage.

52. Structural links and multi-market contacts: Solvay and Atofina have a number of joint-ventures in the VCM/PVC production (Vinylbere, Vinylfos, Vinilis). In fact, PVDF manufacturers often co-operate in the context of specific projects, and with customers, in the non-coating segment. [Confidential sales information]. More importantly, the notified operation would bring about a situation whereby the merged entity and Atofina will be in a duopoly in two closely related markets: coatings and non-coatings PVDF.

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[12] See confidential annex 8 of Solvay's response to the Commission's article 11 request of 4 March 2002

53. In conclusion, it appears that a number of elements in the market for non-coatings PVDF could make it possible for Solvay/Ausimont and Atofina to tacitly coordinate their behaviour. Obviously, some supplementary investigation would be needed to clarify some points. But in a market where transparency and symmetry are relatively high and with limited and localised growth and innovation, the change in the structure leading to only two substantial competitors raises competitive concerns. The parties however, have argue that the risk of collective dominance is not substantial, given the high degree of differentiation in the market.

- *Differentiated products and research and development*

54. The parties have argued that the non-coatings PVDF market is characterised by highly heterogeneous grades. According to the parties, grades are highly differentiated products and that competitors generally do not have a comparable grade with which to compete; each individual customer receives a tailor-made product that is very specific to its needs, if not specifically developed for him through joint research and development programmes that last an average of […] months. For that reason, Solvay claims, a supplier will need to create a new grade that is of improved technical performance in order to gain a new customer and convince him to support the expenses of switching supplier. Solvay has argued that as a result of this differentiation, any form of tacit collusion in the non-coatings PVDF market would be impossible.

55. The Commission's market investigation, however, has portrayed a fairly different picture about how the non-coatings PVDF market works. First of all, the nature of the research and development proved to be rather application development than fundamental research. As the parties themselves recognise, PVDF is a rather old product, invented more than 30 years ago. Most product development results from the extension into new fields of use.

56. It is true that some new development occurs when non-coatings manufacturers enter into new fields, by developing new grades. This has happened over the last fifteen years when new grades were developed for the off-shore oil industry and for low-smoke grades for the wire and cable industry. However, most of the market is made of "standard" grades, which do not appear to be tailor-made by customer. These "standard" grades have been already developed some time ago and there is little innovation in regard to these grades. They are off-the-shelf and not developed specifically for customers. For example, in the EEA, sales of Solvay's top five non-coatings PVDF grades represent [>75%] of Solvay's non-coatings sales. Knowing that Solvay's top 20 customers only represent [50-75%] of its total sales, this means that a large number of Solvay's customers must have received the same grade. This is confirmed by the market investigation: in fact, a number of customers of non-coatings PVDF have a policy of multi-sourcing and have explained that they could use without difficulty the grades supplied by alternatively Ausimont, Solvay and Atofina. This contradicts the argument of the parties that grades are manufacturer-specific. On the contrary, for these standard grades that correspond to an established technology and that represent a large part of the total market, it appears that Solvay and Atofina are actually capable of and do offer competing grades to customers. Since, Ausimont and Atofina have some identical products, the overlap between the new entity and Atofina will be further extended. For these standard grades, the Commission has found that competition based on price and available capacity is occurring, and not a competition based on tailor-made applications.

57. The parties have pointed at relatively high R&D spending. However, it appears that this spending relates mostly to technical support rather than new research and development. Moreover, innovations were in limited number and can not be qualified as being radical; they represent a limited share of the total market ([…]). Finally, the parties claim that R&D programs are particularly secretive and that it is therefore not possible for competitors to monitor any new grade from their competitor that may reach the market soon. Additional investigation would be needed to verify this claim. However, the Commission has noted that Solvay and Atofina developed all the innovations of the last 20 years (high-purity grade PVDF, foam grade PVDF, grades for offshore oil industry and low-smoke grades) at the same time.

58. These elements indicate, that contrary to what the parties claim, the non-coatings PVDF market does not, for a very large part, consist of manufacturer specific grades that are tailor-made for individual customers; it is not opaque in terms of the grades produced by whom and for whom, be they standard or – so it seems – grades for new developments.

59. Given the market structure and given the elements identified in the present behaviour of Solvay, it appears to the Commission that there are serious risks that it would be possible for Solvay/Ausimont and Atofina to find a common understanding by which they would tacitly co-ordinate their behaviour. For the purpose of a preliminary assessment of tacit collusion, it is not necessary to define the rule that would be adopted by Solvay/Ausimont and Atofina without explicit co-ordination.

- *Possibility for retaliation*

60. Tacit co-ordination in the non-coatings PVDF market could be sustained thanks to some retaliation mechanism. First of all retaliation could occur in the non-coatings PVDF standard grades, which represent the bulk of the market. Given the structure and transparency of the market, it is possible for Solvay/Ausimont and Atofina to monitor what the other is doing. For the standard grades, the Commission found evidence that price competition is relevant and that multi-sourcing applies to some extent. Furthermore Solvay, through the merger, would have from Ausimont some grades that are identical to those of Atofina and would be produced with the same process. Moreover, it appears that both Solvay and Atofina have substantial spare capacity, due to anticipated growth in the high-tech sector that did not materialise.

61. Retaliation could also be achieved in the coatings PVDF market where Solvay/Ausimont and Atofina will be facing each other again with [45-55]% market shares each. They would have the same product, the same technology and the same costs in a market which is yet more commoditised and where barriers to entry are extremely high. Consequently, Solvay/Ausimont or Atofina could also retaliate in the coatings market if the other should deviate from a position of tacit coordination in the non-coatings PVDF market.

- *Buyer power*

62. It seems that customers in the non-coatings PVDF market have little buying power. First of all, there are comparatively very small and buy low volumes. The top 5 customers of Solvay represent only [25-50%] of its total global sales and the top 20

customers only [50-75%]. On the other hand Solvay/Ausimont together with Atofina represent the quasi-totality of the supply.

- *Barriers to entry*

63. New entry appears a remote possibility. First of all, any new entrant would need to have access to raw materials, and in particular VF2, the production of which is usually vertically integrated with PVDF. World-wide capacity is in the hands of Solvay, Ausimont, Atofina, Kureha and Alventia (joint-venture 50/50 between Solvay and Dyneon). Any entrant in non-coatings would also need to enter the VF2 market. Moreover, PVDF non-coatings is based on proprietary technology and intellectual property. Any new entrant would need to find access to the technology and have the research and development potential to be competitive. In addition to all the elements that would refrain Kureha to be an aggressive competitor (see paragraph 64 below), these factors make the possibility of a new entry very unlikely, so that the potential creation of a collective dominant position between Solvay/Ausimont and Atofina would remain unchallenged.

64. The position of Kureha appears unlikely to maintain competition. Kureha is hardly present in Europe and not at all present in the USA. It does not appear to have a sufficient portfolio of grades to represent an alternative to Solvay/Ausimont or Atofina. Kureha would have to develop good marketing and sales capabilities as well as after-sales technical support in order to be able to take market shares from the duopolist. It would also have to undergo some qualification process before customers would be ready to buy from it. All these elements represent substantial costs and since Solvay/Ausimont and Atofina have spare capacity, they could easily lower prices momentarily to dissuade Kureha.

- *Conclusion*

65. In the light of the analysis above, the notified operation raises serious doubts as to its compatibility with the common market as it threatens to create a position of collective dominance in the global market for non-coatings PVDF.

B. Vinylidene Difluoride ("VF2")

66. VF2 is a gas that is used in the production of polymers, mainly PVDF (see Section A. above) and fluoroelastomers. The majority of VF2 produced both worldwide and in the EEA is used captively by its producers for the production of PVDF and fluoroelastomers, as well as in small quantities for Tetrafluorethylene/Hexafluoropropylene/Vinylidene fluoride ("THV") and polychlorotrifluoroethylene ("PCTFE"). The merchant market for VF2 is limited to the sale of VF2 to chemicals companies. In the EEA, there are only two non-integrated purchasers of VF2, Dyneon (3M) and Du Pont Dow Elastomers.

67. Solvay considers that there is an EEA-wide geographic market for VF2 that is separate from the market for VF2 that exists in the United States. Ausimont does not manufacture or sell VF2 in the EEA and Solvay is not present in the United States, other than through a production only joint venture with Dyneon, a subsidiary of 3M. Trade flows for VF2 are extremely limited, and the transport of VF2 requires specialised containers which significantly increase the costs of transporting VF2 compared to other gases.

68. The effects of the current operation on the market will be extremely limited. […]. This will have no impact on the state of competition in the markets for VF2. The current operation therefore does not threaten to create or strengthen a dominant position on the markets for VF2 as a result of which effective competition would be significantly impeded.

C. Hydrogen Peroxide

i Relevant Product Market

69. Hydrogen peroxide, also known as oxygenated water, is a strong oxidising agent sold as a bulk commodity in a broad range of concentrations and grades. It has a wide range of industrial and commercial applications in the following sectors: pulp and paper, textiles, electronics and semi-conductors, environmental (water and sewage treatment), and chemicals. Hydrogen peroxide is also used as a raw material for the production of other peroxygen products, such as persalts and peracetic acid. The notifying parties consider that hydrogen peroxide forms a distinct product market, which is subject to competitive pressures from alternatives (like sodium hypochlorite or chlorine) in some applications.

70. In a previous decision[13], the Commission considered a distinct market for hydrogen peroxide. The market investigation in the present case confirmed that customers consider hydrogen peroxide as a separate product market. For some applications and when it is used as a raw material, there is no possible substitutes to hydrogen peroxide. For disinfection applications, some customers indicated other possible products but most customers and competitors confirmed that there was no alternative product, which is environmentally friendly. Given that no competition concerns arose on the basis of a market for hydrogen peroxide, it is not necessary to consider further competition from substitutes[14]. Moreover, many customers indicated that their production process could not substitute hydrogen peroxide with any alternative product. The Commission therefore considers that hydrogen peroxide constitutes a distinct product market for the purpose of this decision.

ii Relevant Geographic Market

71. The parties claim that the relevant geographic market for hydrogen peroxide is EEA-wide. They point in particular to important import penetration across the EEA, to the fact that most producers have customers located throughout the EEA and not only around their production sites, and that many of the largest European customers conduct negotiations on the basis of pan-European contracts. Moreover, the parties indicate that large new plants have been built during the 1990s, in particular in Eastern Germany and in the Netherlands, which have to achieve high capacity utilisation rates and therefore sell hydrogen peroxide not only in their home country but also across the EEA. Hydrogen peroxide is a hazardous material and its transportation is regulated. It

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13 IV/M.197 – Solvay/Laporte, 30.04.1992

14 In addition, to the extent that sodium hypochlorite may be a substitute of hydrogen peroxide for disinfection applications, this product is considered separately in the present decision.

has to be diluted before it is transported. Transportation costs are significant and account for up to 10% of the delivered price for a 1000 km transportation distance.

72. In its past decision, the Commission left open whether the relevant geographic market was national or broader. The investigation in the present case seemed however to convincingly indicate that the relevant geographic market for hydrogen peroxide is now EEA-wide. Almost all respondents to the Commission's questionnaires defined the market as being EEA-wide. The main reasons mentioned were that there are no trade barriers between member states, that there are common European standards and rules for transportation (e.g. EU guideline 93/112) and that supply and demand are largely organised on a pan-European basis. It was confirmed that European producers were present all over Europe, with cross-border sales within the EEA and that some customers operated pan-European delivery contracts.

73. In conclusion, the Commission considers the relevant geographic market for the hydrogen peroxide to be EEA-wide.

iii Assessment

74. In terms of market shares, the merging parties would reach [20-30%] in the EEA in 2001 ([10-20%] for Solvay and [5-10%] for Ausimont) against [10-20%] for EKA-Nobel, [10-20%] for Kemira, [10-20%] for Degussa, [10-20%] for Atofina and [5-10%] for FMC Foret. A number of medium competitors would therefore remain after the merger that could compete with the new entity. According to the parties – and confirmed in the market investigation – these competitors to Solvay and Ausimont have some spare capacity with rates for the EEA of [>75%] capacity utilisation in 2001.

75. Even though hydrogen peroxide requires customers to undertake quality testing before approving a supplier, the Commission found that these tests were not very costly. In fact, it appeared that hydrogen peroxide was to some degree a commodity product with price being the most important dimension for customers. Moreover, most customers seem to have a policy of multiple sourcing and they clearly indicated that there was the possibility for customers to switch between suppliers in the case of any price increase. In addition, there is some purchaser power on the demand side, with large companies such as the paper producers accounting for a substantial part of the total demand (for instance UPM-Kymmene on its own represents around [10-30%] of the EEA demand according to the parties).

76. In conclusion, the Commission does not consider that the proposed operation would raise competitive concerns in the hydrogen peroxide market.

D. Persalts

i Relevant Product Market

77. Persalts form a group of chemicals derived from hydrogen peroxide and a number of other raw materials. They are used as a raw material in the production of detergents, for example in washing machines, dishwashers and hand washing powders and tablets. There are two basic categories of persalts: sodium perborate (PBS) and sodium percarbonate (PCS), which differ in their chemical composition and have different production processes. According to the parties, there is presently no product other than

persalts that can be used to deliver a bleaching agent for detergent powders and tablets. Due to its better ecological image, and thanks to technological improvements, significant substitution has taken place between PBS and PCS, the large detergent producers (so-called "big soapers") changing their formula to use PCS instead of PBS. The parties claim that this substitution process will continue but that there will remain some demand for PBS (due to its higher chemical stability and to customer preferences for some applications). However, in the present case, Solvay considers that the precise product market definition used would not significantly alter the substantive competition analysis since the same conclusions would be reached with one or two distinct product markets.

78. The investigation has provided contrasting evidence about the product market definition. It clearly appears that there is no supply-side substitution between PBS and PCS. Moreover, some customers have indicated that they would not switch back to PBS in the case of a lasting price increase of 5 to 10% of the PCS. However, some other customers have indicated that they would switch back to PBS in the case of a lack of supply, even though they would incur some costs by switching between PBS and PCS, in particular related to the costs of finding a new detergent formula and testing the persalt ingredient.

79. In conclusion, since the competitive issues identified below are similar in the PBS and PCS markets and since the parties' market shares are not dramatically different on these two markets, the Commission considers that the exact market definition can be left open for the purpose of the present case.

ii Relevant Geographic Market

80. The parties consider that the relevant geographic market is at least the EEA. This is in line with a past Commission decision[15]. This results from the purchasing patterns of the big soapers, the only clients for persalt products, from large scale cross-border trade and from different textile washing habits between Europe and other regions of the world.

81. The market investigation has confirmed that the relevant geographic market is the EEA. There is no barrier to trade within the EEA and transportation does not represent a large part of delivery costs. Negotiations are conducted on a pan-EEA basis by customers, who are for the most part large multinational companies. The Commission has also found indications that the market was not wider than the EEA. According to some customers, around 80% of the worlds' persalts capacity is based in Europe; moreover there are very limited imports of PBS and no imports of PCS into the EEA. It was mentioned that importation from outside the EEA is more difficult because of transportation costs and since in particular PCS is potentially an unstable material.

82. Therefore, the relevant geographic market for persalts (PBS and PCS) for the purpose of this decision is the EEA.

iii Assessment

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[15] COMP/M.197 – Solvay/Laporte, 30/08/1992

83. Both Solvay and Ausimont manufacture persalts. Ausimont is present in the PBS and PCS market through its joint-venture with Degussa. The creation of this joint venture, called Medavox, was approved by the Commission in a recent decision[16]. Medavox's production facility is based in Bussi, Italy. It combines the supply by Ausimont of the key raw materials (notably hydrogen peroxide) and the proprietary technology of Degussa to produce PCS. In addition Ausimont has a toll agreement to supply Medavox with PBS and has actually stopped selling PBS on the open market as of January 1st 2002. Medavox does not at present manufacture PCS but the production of PCS is scheduled to start in [the near future]. In consequence, the overlap between Solvay and Ausimont is only through the Medavox joint venture, which is selling PBS to the open market already today, using Degussa sales capabilities, and which will start selling PCS in 2003.

84. On the basis of one market for all persalts and attributing Ausimont/Medavox's entire market shares to the combined entity, the merged entity would reach [50-60]% market shares in 2001 against [20-30%] for Degussa, [5-10%] for FMC Foret and [5-10%] for Kemira. Solvay/Ausimont will reach [40-50%] market shares for PBS in the EEA against [30-40%] for Degussa and [10-20%] for FMC Foret for 2001. It will have [60-70%] in PCS but without overlaps in 2001 (Solvay market shares only) against [10-20%] for Degussa, [10-20%] for Kemira and [5-10%] for EKA-Nobel. EKA-Nobel has recently withdrawn from production of PCS. Solvay is therefore a clear leader in the PCS segment. According to the parties, and by 2003, Medavox in Bussi should have a PCS production capacity of […] Kt (shared 50/50 between Degussa and Ausimont), Degussa will have additional PCS capacity of 50kt in Rheinfelden, FMC Foret should have started production of PCS with a capacity of 10kt and EKA-Nobel will have exited the market. In terms of production capacity and by attributing 50% of MedAvox production capacity to each of the merged entity and Degussa, the merged entity would therefore reach [50-60%] market shares in 2003 against [30-40%] for Degussa, [5-10%] for Kemira and [0-5%] for FMC Foret. As a result of the merger, it therefore appears that Solvay would substantially increase its leading position in the persalts markets.

85. More specifically, the market structure indicates that only Degussa will be in a position to compete effectively against the new entity. Apart from Degussa, Solvay/Ausimont will only be faced with a limited number of comparatively small competitors, with low market shares: FMC Foret, Kemira and EKA. These competitors are mostly present in the PBS segment, which is decreasing rapidly, and focus on some regions of the EEA market. Their capacity utilisation is particularly high in the PCS segment; it is also relatively high in the PBS segment – despite the decrease of this segment, due to some market exit (Caffaro and Atofina) and anticipated plant closures. Consequently, these players would not be in a position to counter any price increase or capacity restriction on the part of the merged entity, especially for PCS.

86. The operation will create some structural links between the merged entity and Degussa, its only strong competitor. Solvay, Ausimont and Degussa will together have [>75%] of the PCS sales in 2001 and [>75%] of the total capacity in 2003, in a market with less than 5 suppliers and where only Solvay and Degussa have demonstrated they have

16 COMP/M.2545 – Degussa/Ausimont, 08/10/2001

mastered the PCS technology. The links between Degussa and the new entity through Medavox are problematic, as the parties themselves recognise. Such links include shared participation in the joint venture, a supply contract and information sharing, in particular on production volumes, on costs and on prices ([description of contractual terms]). For that reason, it appears that the links between the merging parties and Degussa would lead to the possibility of them behaving as a single entity. This raises serious competition concerns: Degussa appears to be the only strong competitor that could prevent Solvay and Ausimont from reaching a dominant position in the persalts market. The parties have already acknowledged these concerns in its Notification.

iv Barriers to entry

87. Barriers to entry in the persalts market are substantial. First of all there are important constraints regarding the raw materials availability. All current producers of PBS and PCS are vertically integrated producers of hydrogen peroxide, which is a critical material for the production of these products. Hydrogen peroxide in particular represents an important part of the production costs for persalts ([20-30%] of total costs for PBS and more than [35-45%] of total costs for PCS), and some respondents expressed the view that being integrated with hydrogen peroxide was a pre-condition for anyone willing to enter and/or to be able to compete in the persalts market.

88. A second barrier to entry relates to the production process itself. The hydrogen peroxide used to produce PBS and PCS is a hazardous material and persalts may explode if not stabilised. The parties indicate that intellectual property rights are not significant for the actual manufacture of PBS, since the technology is well established and readily available. However, market participants have explained that it may take several years before a new entrant could have developed adequate production processes. Moreover, there has been some market exit from the PBS segment in the past, since this market is currently shrinking rapidly. The overall persalts market remains stable or is even decreasing in terms of volume. But PBS is being progressively substituted by PCS, which is regarded as more ecological. For that reason, while PCS is growing from […] Kt in 1994 to more than […] kt in 2005, the PBS market is shrinking and should reach less than […] Kt in 2005 against […] in 1994. Even though the parties have pointed to potential entrants from Eastern Europe and Russia in the PBS segment, the diminishing volumes and expected spare capacity make new entry or capacity expansion in the PBS market unlikely. Moreover, it is not clear whether these entrants can offer sufficient quality standards. Barriers to entry related to the production process are even greater in the PCS segment. Patents protect the PCS production process in particular for the coatings of the various PCS grades; so far only Solvay and Degussa own adequate patents. As the retreat from the market of EKA-Nobel has shown, it is not easy to master the PCS production process. Moreover, PCS requires pre-sales and after-sales support.

89. The main persalts customers are soapers (Procter&Gamble, Unilever, Henkel, Reckit-Benckiser), who together represent almost [>75%] of the persalts markets. The parties have argued that these firms are able to exert competitive pressure on their suppliers, due to their buyer power. The investigation has shown that customers have adopted a policy of multi-sourcing. However, the supply of persalts is already tight among the merged entity's competitors; the merger will reduce choice between Solvay and Degussa substantially and will also create a structural link between Solvay and Degussa, questioning the possibility for customers to exert any buyer power.

90. In conclusion, it appears that the merger between Solvay and Ausimont and the links it would establish with Degussa would lead to manifest competitive issues and that they raise serious doubts as to its compatibility with the common market.

E. Caustic Soda

i Relevant Product Market

91. Caustic soda is produced as a by-product derived from the production of chlorine. It is generally produced from electrolysis of salt and exists in liquid or solid form. Caustic soda can be used as a raw material for the production of sodium hypochlorite, and it is also sold in its own right for a variety of uses including the treatment of bauxite (from which alumina is produced), as a pH balancer in a number of chemical processes, for the treatment of sewage and for washing and cleansing food storage containers. Caustic soda is also used in the production of various types of detergent and is an indispensable element in the manufacture of modern textiles such as cellulose.

92. The parties consider that the liquid and solid caustic soda constitute two separate markets and that liquid caustic soda is the relevant product market in the present case. Both Solvay and Ausimont manufacture liquid caustic soda. Solvay also manufactures solid caustic soda, but Ausimont does not. The main reasons mentioned by the parties to consider two separate markets relate to the different manufacturing procedures, the different prices and the different usage by customers. Another element regards the possibility for diluted soda ash to be substituted for liquid caustic soda. The parties have expressed the view that this was only possible to a limited extent, because of investment costs in terms of storage and dilution conditions.

93. The market investigation has indicated that liquid form and solid form of caustic soda have different applications and different customer types; moreover it appears that in general small customers tend to use the solid form unlike large customers who use the liquid form. However, some distributors also indicated that their customers could switch from one form to the other. In addition, there was some support for the possibility of substitution between liquid caustic soda and soda ash, even though it was pointed out that many customers did not have the equipment which allow them to switch.

94. In conclusion, and while noting that some elements point towards liquid caustic soda as a distinct market, the Commission considers that the exact product market definition can be left open in the present case, since even in the narrowest market definition, no competition concerns would arise.

ii Relevant Geographic Market

95. Solvay indicates that the relevant geographic market is at least EEA-wide. It refers to the Commission 1991 *Soda-Ash/ICI* decision which found the market to be Community-wide, excluding the United Kingdom and Ireland. The parties point at large trade flows between member states and at a high import penetration from other member states ([30-40%] of total EEA sales), and argue that prices are homogeneous across the EEA.

96. The market investigation tended to indicate that the market was broader than national. However, the Commission considers that the exact definition may be left open, since

even with the narrowest possible market definition, no competition concerns would arise.

iii Assessment

97. On the basis of a separate market for liquid caustic soda, Solvay would increase its existing leading market position in the EEA ([10-20%]) by just [0-5%], from the acquisition of Ausimont. On the basis of an overall market comprising liquid and caustic soda, the competitive analysis would be similar: Solvay has [10-20%] of the EEA market and Ausimont [0-5%]. More precisely, Ausimont is only present in the Italian market, where it has around [5-15%] market share. On the basis of national markets for liquid caustic soda, the only affected market would therefore be Italy. In Italy, the combined market share of the parties would be [20-30%] (Solvay [10-20%], Ausimont [10-20%]) in 2001, against [10-20%] for Atochem. Imports into the Italian market represent [10-20%] according to the parties. In addition there are a number of smaller resellers and distributors in the Italian market, who together represent a large proportion of the market. In the EEA, there are also a number of competitors, with notable market shares: Dow with [5-10%] EEA market share in 2000, Ineos with [5-10%] and Akzo with [0-5%].

98. The Commission's investigation indicated that caustic soda was a commodity product and that customers are sensitive to price and to logistics. An important element in the liquid caustic soda market is that spot prices are very volatile and very much affected by the supply and demand balance. Prices variations were indicated to have moved from […] per ton to […] over the past years. This is due notably to the fact that caustic soda is produced as a by-product of the electrolysis process used to produce chlorine and not primarily to match the demand in the caustic soda market.

99. Resellers and traders, who represent a substantial part of the demand, appear to have an important role in exerting some pricing pressure by choosing the best priced sources of supply, even from outside the EEA and by storing some quantities of caustic soda. Customers, more generally, do not seem to face much switching cost and several respondents in Italy have indicated they could find alternative supply easily. The market investigation has also shown that suppliers in the EEA had significant spare capacity.

100. In the light of the foregoing, the operation does not raise any competitive concerns in the Italian market for liquid caustic soda. Since there are no competitive concerns with broader market definitions, the operation does not threaten to create or strengthen a dominant position in the caustic soda market.

F. Peracetic Acid ("PAA")

i Relevant Product Market

101. Peracetic acid (PAA) is a disinfectant sold in various grades for applications such as medicine, animal health, water treatment, the food and drink industry and the paper industry. Solvay considers that it is unclear whether PAA forms a distinct product market or whether it is part of a wider product market for general disinfectants, i.e. specialty biocides. In this respect, Solvay indicates that their customers can switch from one specialty biocide to another based on price and quality considerations.

102. Market investigations have confirmed that for all the applications of PAA several substitutes exist, these substitutes differing according to applications. For most of the applications, PAA is regarded as more efficient and of lower toxicity than other biocides, but as more expensive as well. Hence market shares for PAA tend to overestimate the competitive position of the manufacturers, as they encounter competition from manufacturers of other specialty biocides.

103. Except for medical and animal health applications, the only substantial difference between applications lies in the potential substitute products. Homogeneity in prices and distribution conditions tend to indicate however that there is no need to further delineate the market according to applications.

104. The Commission's investigations have shown that there are several elements that distinguish medical and animal health from other applications. First, these applications are subject to specific registration processes which require long track records and substantial time and costs. Second, the formulation of grades for medical and animal health applications requires the addition of several components to the standard grade. Third, packaging and transportation of PAA for medical and animal health applications is far more demanding than for other applications, and, finally, prices for medical and animal health applications are several times higher than for other applications. As a consequence, these substantial differences between medical and animal health applications and other applications imply that they can not be considered to belong to the same product market.

105. Ausimont does not sell peracetic acid to medical and animal health applicants. Hence the competitive analysis is to be limited to the standard applications only.

ii Relevant Geographic Market

106. Solvay considers the PAA market to be at least EEA wide and submits there is no barrier to cross-border trade. Customers tend to seek European-wide supply contracts, prices are homogenous across Europe and there are significant trade flows in Europe.

107. The Commission's market investigation has shown that few customers secure their peracetic acid procurement on an EEA basis. Even among large customers, most of them still have a national or regional procurement strategy. Second, prices are not homogenous across the EEA as they vary in a range from […] to […] across countries. Last, national registrations, even for applications other than medical and animal health, seem to be an impediment to trade, as these procedures are generally time consuming and not harmonised across Member States.

108. However, significant trade flows do occur throughout the EEA: most of the manufacturers have a single plant in the EEA but sell PAA in the whole territory. Transport costs represent only [< 15%] of the total cost of the product, and peracetic acid can be transported over a distance of 1000-1500 km with no real difficulty.

109. Many elements indicate that there is not today a European market for peracetic acid, but instead a collection of national or regional markets. However, there is a tendency to a European market, which will be reinforced by the adoption of the European Biocide Products Directive. For the purposes of this decision it is not necessary to reach a definitive conclusion on this point.

iii Assessment

110. Solvay argues that PAA industry is very competitive by putting forward low barriers to entry and strong pricing pressure from both resellers and global detergents manufacturers. Moreover, suppliers would actually be threatened by the potential entry of chemical distributors.

111. Considering the national dimension of the relevant geographic markets, significant overlaps appear only in Italy, where Ausimont has [40-50%] market shares and Solvay [10-20%]. These figures need however to be considered with care, market investigations having confirmed that there exist numerous substitutes to peracetic acid.

112. Two strong European competitors, Degussa and SEPPIC, each have [5-15%] of the Italian market. A number of smaller European or local players share the rest of the market. As competition for peracetic acid is mostly based on prices, and as customers change easily and frequently of suppliers, the parties will continue to face significant pricing pressure from their competitors and customers.

113. The competitive pressure imposed by the current competitors is reinforced by the threat of chemical distributors' entry, that most of the current manufacturers of PAA consider as likely. Entry necessitates low investments: […] MEUR for a plant, […] MEUR for registration and up to […] MEUR to obtain the relevant sales force, already held by the chemicals distributors. Moreover, access to technology and raw materials is easy: peracetic acid is obtained simply by mixing hydrogen peroxide and acetic acid (vinegar). Therefore no major obstacles prevent chemicals distributors from entering the market.

114. As a conclusion, the pricing pressure imposed by the current competitors and the customers, supplemented by the actual threat of entry of chemical distributors, indicate that the envisaged concentration does not lead to competitive concerns in the Italian market for peracetic acid.

G. Sodium Hypochlorite

i Relevant Product Market

115. Sodium hypochlorite is a disinfectant created by a reaction between chlorine and caustic soda. It can be produced on its own account ("voluntary sodium hypochlorite") or as a by-product from the production of chlorine ("fatal sodium hypochlorite"): for every 100 tonnes of chlorine produced through electrolysis, there are inevitably […] tonnes of sodium hypochlorite produced. In addition, sodium hypochlorite is produced by the neutralisation of chlorine whenever any intervention or incident occurs on the chlorine production plant.

116. More than half of the sodium hypochlorite produced is diluted into hypo bleach which is then sold as household cleaning agent. The other applications are water treatment and industrial bleaching. Formulation, prices and delivery conditions do not differ across applications, so that sodium hypochlorite market does not need to be segmented according to applications.

117. Solvay considers that sodium hypochlorite represents a distinct product market on the grounds that it is significantly cheaper than other disinfectants. For instance, sodium

hypochlorite is 10 times cheaper than peracetic acid. Investigation have confirmed that no substitute exists for sodium hypochlorite.

118. As a consequence, sodium hypochlorite is to be considered as a relevant product market.

ii Relevant Geographic Market

119. Sodium hypochlorite cannot be transported over great distances because it has limited stability and a high water content. It is also corrosive in contact with most metals. The parties indicate that most sodium hypochlorite is therefore sold within 300 kilometres of its point of production, but that the overlapping concentric circles produced by the various sites of production can be aggregated to justify a national geographic market. Market investigation has confirmed that 300 kilometres is the typical distance over which sodium hypochlorite can be transported.

120. Ausimont only produces fatal sodium hypochlorite and does so only in Italy at its Bussi plant, Abruzzo. Solvay also produces sodium hypochlorite in Italy, at its plant located in Rossignano, Tuscany. Therefore the narrowest possible relevant affected geographic market is the area comprised within a distance of 300 km from Bussi and from Rossignano, which is mostly central Italy.

121. However, whether the relevant geographic market is considered to be central Italy alone or the whole Italian territory, this case does not raise competitive concerns for sodium hypochlorite. Therefore the question of the exact definition of the geographic market can be left open for the purpose of this decision.

iii Assessment

122. On a national basis, the parties combined market share in Italy would be [30-40%] (Solvay [10-20%], Ausimont [10-20%]). They face competition from Caffaro ([20-30%]), Enichem ([5-15%]), Tessenderlo ([0-10%]), Altair ([0-10%]) and Zarelli ([0-10%]).

123. Apart from Solvay and Ausimont, Altair (Florence) and Zarelli (Rome region) have production facilities located in central Italy. Solvay has a capacity of […] kT/yr, Ausimont […], Altaïr […] and Zarelli […]. However Caffaro (Brescia and Venice Region) and Enichem (Sardinia and Venice region), even if not located in central Italy, are within a 300 km distance from most of the places in central Italy, and have production capacities comparable to or greater than the ones of Solvay and Ausimont : Enichem has an overall […] kT/yr capacity and Caffaro […] kT/yr. In addition, Procter and Gamble runs a plant in Campochario (Molise). Most of its production is used internally, but in 2001 small sales were made on the market.

124. Solvay argues that the operation does not raise dominance concerns because: (i) over [40-60%] of their sales are to distributors who source their supplies from many different producers and therefore exert considerable price pressure on producers; (ii) all the producers have significant spare capacities.

125. The pricing pressure of the distributors has been confirmed by market investigations: distributors select their suppliers of sodium hypochlorite through calls for tender mainly based on price and do not engage in contracts for more than […] months.

Furthermore they tend to source from several suppliers in order to avoid any dependency, and have several alternatives suppliers to the parties

126. Investigation have also confirmed that the established manufacturers have significant capacity reserves: Tessenderlo ran its plant at [50-75%] capacity in 2001, Caffaro at less than [50-75%] for its two plants and Altaïr at [0-25%]. Procter and Gamble ran its plant at [50-75%] of its capacity.

127. As a conclusion, the existence in Italy and in central Italy of several established competitors with significant spare capacities and the pricing pressure imposed by the customers show that the acquisition of the Bussi production facility by Solvay will not lead to the creation of a dominant position.

H. Hydrochloric Acid

i Relevant Product Market

128. Hydrochloric acid is produced as a by-product of several chemical processes. Solvay and Ausimont both produce hydrochloric acid as a by-product of the production of chlorinated chemical compounds, so-called "technical grade hydrochloric acid". Several manufacturers, among which Solvay, also produce hydrochloric acid as a primary product, in a purer form usually referred to as "premium grade".

129. The parties consider that the two grades belong to the same market. Technical grade hydrochloric acid represents over 90% of the market and the data they have provided relates to the technical grade alone. Technical grade hydrochloric acid can either be used in various production processes or be sold to the merchant market. Premium grades of hydrochloric acid are also used in producing glucose and other foods.

130. Market investigations have not provided a clear understanding on whether there is a single product market for hydrochloric acid. Most of the chemical manufacturers that produce technical grade also produce premium grade: Solvay, Bayer, Akzo, Tessenderlo and Enichem, the largest producers of technical grade, produce and hold similar market shares for both grades. However, Ausimont does not produce premium grade.

131. If it were considered that technical and premium grades constitute two separate markets, the premium grade market would not be affected by the concentration and therefore the competitive assessment would focus on technical grade alone. However, whether the relevant product market is considered to be technical grade alone or technical and premium grades altogether, the competitive assessment of the envisaged case is not altered. Therefore the question of whether technical and premium grades form one single or two distinct product markets can be left open for the purposes of this decision.

ii Relevant Geographic Market

132. Solvay considers that the relevant geographic market is broader than national for numerous reasons, among which the most important is the existence of significant trade flows in the EEA.

133. However, investigation has established that transport costs represent between 20% and 30% of the final price of the product that is rarely transported over distances of more than 400 km. Therefore, for a given user of hydrochloric acid, competition occurs between manufacturers located within a typical 400 km distance.

134. Ausimont's sales of hydrochloric acid are exclusively made in Italy, except for marginal volumes sold in France. As a consequence, the competitive assessment of the envisaged concentration has to focus on Italy.

135. Ausimont has two production sites of hydrochloric acid in northern Italy and one in central Italy. Solvay has two production sites in Italy, one in the north and one in the centre. Among their competitors Enichem has five production facilities spread across Italy, Tessenderlo and Caffaro have production facilities in northern Italy, and Marchi and Altaïr are based in central Italy. Donau, located in Austria, is a competitor for northern Italy, where it holds significant market shares: Donau sales in Italy in 2001 represented [5-10%] of the total Italian market.

136. The location of the plants indicate that northern and central Italy, in which most of the distances represent less than 400 km, can be reached by all of the manufacturers quoted above. For southern Italy, five manufacturers appear to be located to serve this area: Ausimont, Solvay, Enichem, Marchi and Altaïr.

137. For the purposes of this decision it can be left open whether the relevant geographic market is national, i.e. Italian, or are northern and central Italy on the one hand, and the south on the other.

iii Assessment

138. In the whole of Italy, the parties' combined share is [40-50%], Solvay accounting for [10-20%] and Ausimont for [30-40%]. Enichem holds a [20-30%] market share, while Caffaro and Donau have about [5-10%] each.

139. This market structure can be regarded as relevant for northern and central Italy alone: it would not be significantly altered if sales to southern Italy were deducted, as the market in southern Italy is small in comparison.

140. Enichem's production capacity in southern Italy is bigger than that of Ausimont and Solvay together, and there are two other significant competitors.

141. The parties argue that the operation does not raise dominance concerns because: (i) over [40-60%] of their sales are to distributors who source their supplies from many different producers and therefore exert considerable price pressure on producers; (ii) technical grade hydrochloric acid is a by-product which is produced at [very low] marginal cost but which is costly to destroy, therefore they have every incentive to sell at whatever price they can achieve; and (iii) decisions on volumes of hydrochloric acid to produce are driven by decisions in relation to other products.

142. Commission's investigation has shown that distributors select their suppliers of hydrochloric acid through calls for tender mainly based on price and do not engage in contracts for more than one year. Furthermore they tend to source from several suppliers in order to avoid any dependency, and have several alternatives suppliers to the parties.

143. In 2001, prices in Italy varied between […] €/T and […] €/T. In comparison, the disposal cost of hydrochloric acid is evaluated at […] €/T. Manufacturers have disposed small quantities ([…]%) when market conditions prevented them from selling.

144. The investigation has confirmed that all technical grade hydrochloric acid production result from the production of other more valuable chemical products: supply is not adjusted in response to evolutions in demand or moves by competitors. As a result, even with high market shares, a manufacturer would have little incentive to reduce its production of hydrochloric acid, as it would be detrimental the production of other, more valuable, products. Furthermore, the disposal cost of hydrochloric acid would diminish any incentive to reduce the quantity offered on the market by this means.

145. In the light of the foregoing it can be concluded that this transaction does not create a dominant position in the market for hydrochloric acid.

I. Methylene Chloride

i Relevant Product Market

146. Methylene Chloride is a chloromethane that is produced together with carbon tetrachloride and chloroform within a single production process, one which combines several intertwined chemical reactions. The relative amounts of the different chloromethanes produced can be changed by varying the reaction conditions and by recycling the various chemicals produced. According to the parties, production of chloroform drives the production of methylene chloride as a by-product. Methylene chloride can be sold in different grades. The difference between the grades derives from the addition of stabilizers such as amylene, ethanol or epoxy butane, the quantity and mixture of stabilizers determining the grade. The notifying party has argued that there is no specific technical know how that is required in order to mix the stabilizers, and that in practice, several of the distributors of methylene chloride add the stabilizers themselves.

147. Solvay sells the standard grade, as well as two superior grades which it sells under two distinct trademarks. It also uses methylene chloride in-house for the production of pharmaceuticals. Ausimont sells only one grade, the standard grade, and does not use any trademarks.

148. Methylene chloride is used as a solvent. According to the parties it can be used in all applications where an efficient solvent for organic compounds is required. The notification lists the following applications: in the pharmaceutical industry as a solvent; for paint and varnish stripping; as a solvent and as a depressor in the propellant mixture in the production of aerosols; in the production of adhesives; for metal degreasing and as a solvent to extract various substances in food production. For example it is used to decaffeinate coffee.

149. Despite the different grades that exist and the different applications for which it is used, Solvay argues for a single relevant product market on the basis that the different grades are interchangeable for consumers and can be very easily produced from the standard product. They indicate that many of their customers, especially distributors, add their own additives to the standard grade. The results of the market investigation have to a large extent supported the notifying party's conclusion.

ii Relevant Geographic Market

150. The parties argue that this market is EEA-wide. This is on the basis that the product can be easily stored and transported long distances, it can be transported by truck or by combinations of truck and train. The parties provide evidence of significant trade flows across the EEA as support of an EEA-wide market.

151. Were the geographic market to be narrower than EEA-wide, then it would be necessary to examine the market situation in Italy where Solvay and Ausimont are the only two companies that have production facilities. Import and export data presented by the parties shows that imports into Italy represent over [55-65]% of the existing production capacity in Italy, while exports from Italy to other countries represented [5-15]% of the existing production capacity. In response to the Commission's market investigation, the majority of customers and competitors have supported the parties' view of the relevant geographic market.

152. In this light of these arguments, it appears that the relevant geographic markets for methylene chloride are wider than national and are likely to be EEA-wide.

iii Assessment

153. On an EEA-wide basis, the parties' combined market share[17] would be [10-20]% (Solvay [10-20]%, Ausimont [0-5]%), Ineos holds a [20-30]% share, Dow [10-20]%, LII [10-20]%, and Atofina and Akzo [5-10]% each. The parties have also indicated that each of Solvay and Ausimont sell over [50-70]% of their sales to distributors, wholesalers and traders who exert pricing pressure on them by trading with the methylene chloride producers across the EEA.

154. The parties have stated that methylene chloride is a commodity product where competition is focused on price. This has been supported by the Commission's market investigation. In particular, most customers source their supplies of methylene chloride from more than one supplier and they have indicated that they could switch between suppliers without difficulty.

155. In the light of the market structure as described above, the current operation does not threaten to create or strengthen a dominant position as a result of which effective competition would be significantly impeded in relation to the market for methylene chloride.

J. Sulphur Hexafluoride ("SF6")

i Relevant Product Market

156. SF6 is a non-toxic and inert insulation and cooling gas of high dielectric strength and thermal stability. It is produced from sulphur and fluorine. It is produced in two grades: standard grade (purity of more than 99.9%) and electronic grade (purity of more than 99.995%). SF6 is used as an insulating gas in high voltage switch gear and circuit

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[17] The parties have estimated market shares on ECSA's data as collected by the CEFIC Data Processing Centre and the Comext & Ecostat statistics. They are based on sales and not on capacity.

breakers, in the casting process for the magnesium production, in the electronic industry, for adiabatic properties usage and for other uses, including accelerators, optical fibre production and glazing. Both Solvay and Ausimont produce only the standard grade. SF6 is one of the six gases that fall within the scope of the Kyoto Protocol.[18]

157. The notifying party has identified SF6 as a single relevant product market. Solvay considers that there is no meaningful distinction between both grades of SF6 due to strong supply-side substitutability, since a better level of purity can be achieved easily. Moreover, most of SF6 production is standard grade ([90-100]%) and around [75-85]% is used for the same applications (as an insulating gas). Solvay and Ausimont only produce the standard grade, so the focus of the competitive analysis will be on this grade.

158. The market investigation has confirmed partly the notifying party's definition. On one hand the respondents confirm that there are no substitute products for SF6. On the other hand, most of the respondents consider that the two grades (standard and electronic) are not interchangeable since a great level of purity is necessary in some applications.

159. As the electronic grade represents only 3% of the global SF6 production and neither Solvay nor Ausimont produce it, the question on exactly how to define the relevant product market can be left open for the purpose of this decision as the competitive assessment will not be significantly affected.

ii Relevant Geographic Market

160. The relevant geographic market for SF6 is defined by Solvay as being worldwide, for a number of reasons: (i) purchasing behaviour of customers, who require worldwide agreements; (ii) low transport costs, around [<5]% of the selling price; (iii) there are no regulatory barriers to entry into the EEA territory (only an import duty of 5.5%[19]) and (iv) the fact that there are only a few production sites around the world, which leads to important imports and exports flows across the EEA boundaries.

161. On the basis of the data provided by Solvay, imports represent [20-30]% of consumption in the EEA, and conversely, [40-50]% of EEA production of SF6 is exported outside the EEA. Moreover, each manufacturer only has one production site from where sales are made worldwide. The Commission's market investigation has supported the parties' arguments that the market is worldwide.

iii Assessment

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18 The Kyoto Protocol, signed in 1997 by 84 parties and ratified by 39 of them, aims to reduce emissions of greenhouse gases to the atmosphere. The Kyoto Protocol will enter into force after 55 parties, representing 55% of the greenhouse gas emissions, have ratified it. It will impose legally binding targets and timetables on developed countries for cutting emissions of 6 greenhouse gases.

19 This duty is not applied to South Africa due to the preferential tariff agreement between this country and the EU.

162. The market shares after the operation will be [30-40]% on a worldwide basis ([20-30]% for Solvay and [5-10]% for Ausimont), and there will remain three other main competitors with market shares of [30-40]% (Honeywell), [10-20]% (Asahi), [5-15]% (Pelchem/Air Product) and [0-5]% (Halogen).

163. With regard to the conditions of competition, the replies to the market investigation confirm that the SF6 market will remain competitive after the merger. Customers frequently have a dual purchase strategy, buying SF6 from various suppliers. Prices have even gone down in the last years (i.e. average worldwide prices of Solvay have dropped a [10-20]% during the last 4 years) and there is an average capacity utilisation rate in the market of 73%. Moreover, respondents do not expect any change or impact in their business or in the industry as a whole after the merger.

164. There is a reasonably high concentration in the buyer side (i.e. the five largest customers of both Solvay and Ausimont represent [40-60]% and [60-80]% of their total sales respectively), mainly through the distributors and the original equipment manufacturers, which usually have worldwide purchase agreements.

165. In the light of the above, the current operation does not threaten to create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market.

K. Hydrochlorofluorocarbon 22 ("HCFC 22")

i Relevant Product Market

166. HCFC 22, also known as Chlorodifluoromethane (CHClF2), is a non-flammable, colourless and nearly odourless gas, which is produced using hydrogen fluoride and chloroform. The three main applications of HCFC 22 are: (i) as a blowing agent to produce plastic foams, (ii) as a refrigerant in cooling systems, and (iii) as a feedstock to produce tetrafluoroethylene (TFE), which is in turn used to produce fluoropolymers, fluoroelastomers and fluorofluids. TFE is an intermediate product and cannot be stored, transported or sold, so there is no market for it.

167. With the Regulation 2037/2000 the use of HCFC 22 as a blowing agent has been prohibited as for 1 January 2002, and the use as a refrigerant in cooling systems has been limited[20]. The analysis of the merger has therefore focused on the uses of HCFC 22 as a refrigerant in cooling systems and as a feedstock to produce TFE.

168. The notifying party submits that these two uses correspond to two different market conditions, with two distinct sets of customers and different stages of market maturity. Most replies to the commission's market investigation confirm the definition given by the notifying party; however, some replies consider that a high level of purity is necessary when HCFC 22 is used as a feedstock. Since considering one or two separate

[20] The consequences of this Regulation is that by 1 July 2002, the use of HCFC 22 as a refrigerant will be restricted to reversible air-conditioning/heat pump system equipment (which will be prohibited from 1 January 2004 in all equipment produced after 31 December 2003) and to service and maintenance (which will be prohibited from 1 January 2010).

product markets does not affect to the competitive assessment, this question can be left open for the purpose of this decision.

ii Relevant Geographic Market

169. With regard to the relevant geographic market, Solvay considers that for both uses of HCFC 22, the relevant geographic market is European-wide for a number of reasons: (i) internal flows within Member States, (ii) transport cost are quite low and do not constitute a entry barrier ([<5]% of the selling price) and (iii) the level of prices is similar in the Member States. The Commission's market investigation as revealed that most of the respondents consider the market to be at least European.

iii Assessment

170. As a feedstock to produce TFE, the demand for HCFC 22 depends on the demand for the target products fluoropolymers, fluoroelastomers and fluorofluids. In Europe, only four companies produce these target products. Ausimont is not active in the market for HCFC 22 as a feedstock and only produces it for its own production of TFE. Solvay, by contrast, does not use any HCFC 22 internally. Consequently, on the market segment HCFC 22 as feedstock, there is today no overlap between the parties.

171. As refrigerant, the market for HCFC 22 is declining, since majority of its uses will be prohibited by Regulation 2037/2000 by 2003. On an EEA basis, the parties market shares after the operation will be [20-30]% ([10-20]% for Solvay and [10-20]% for Ausimont). There will remain three main competitors with markets shares of [20-30]% (Atofina), [20-30]% (Du Pont) and [10-20]% (Ineos).

172. Market of HCFC 22 as a whole: in this case, the global market share of the parties after the merger will be [20-30]%. There will remain various competitors, from which the more important would have market shares of [20-30]% (Fluor Chemie), [10-20]% (Ineos), [10-20]% (Atofina) and [10-20]% (Du Pont).

173. In the light of the above, the current operation does not threaten to create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market.

L. Hydrofluorocarbon 134a ("HFC 134a")

i Relevant Product Market

174. HFC 134a is a non-flammable, colourless gas which is mainly used in two applications: (i) in refrigeration and air conditioning systems (domestic, automotive and industrial applications), and (ii) as a propellant for extruded polystyrene foams (XPS). The raw materials for its production are hydrogen fluoride and trichloroethylene. Although HFC 134a is not an ozone depleting substance, it is considered to be a greenhouse gas, and is one of the six gases that fall within the scope of the Kyoto Protocol.

175. There are two grades of HFC 134a, pharmaceutical and standard grades. Solvay is developing a pharmaceutical grade and the commercial production is expected to start in [the near future], but since Ausimont is not involved either in marketing or in

developing of any pharmaceutical grade, the analysis of the merger has focused on the standard grade.

176. The notifying party has identified HFC 134a as a single relevant product market. It considers that, although the end-use applications are different, there is a single product market. Both Solvay and Ausimont market HFC 134a under their own single trademarks, regardless of the application, and a substantial portion of sales are made through distributors ([20-40]% for Solvay and [20-40]% for Ausimont), which sell the product for all end applications. The market investigation has confirmed the definition submitted by Solvay and most respondents consider that standard grade can be used for both main applications (as a refrigerant and as a blowing agent). There is no substitute for it. The reason is that, although there are other products that could be used instead of HFC 134a, they have different chemical and physical properties and the equipment that use it is also different for each product. Once an equipment as been designed, it is very difficult to change from one refrigerant to another.

ii Relevant Geographic Market

177. The relevant geographic market for HFC 134a is defined by Solvay as being worldwide, for a number of reasons: (i) many manufacturers have only one production site from which they supply customers all over the world, (ii) low transport costs, around [0-10]% of the selling price, (iii) price levels are similar in the different territories over the world, and (iv) there are no regulatory barriers to entry into the EEA or any other territories. The Commission's market investigation has confirmed the position of the notifying party. Moreover, the data provided by the parties show that imports into the EEA represent [35-45]% (volume) of consumption in the EEA, and conversely, [20-30]% (volume) of EEA production is exported outside the EEA.

178. Irrespective of that, since the planned operation does not raise serious doubts as to its compatibility with the common market regarding the HFC 134a, it is not necessary to precisely conclude whether the relevant geographic market is worldwide or the EEA.

iii Assessment

179. On a worldwide market, the combined market share after the operation would be [10-20]% ([0-10]% for Solvay and [0-10]% for Ausimont). There would remain three main competitors with market shares of [25-35]% (Du Pont), [25-35]% (Ineos) and [20-30]% (Atofina) and a number of other small competitors.

180. On an EEA basis, the market shares after the operation would be [20-30]% ([10-20]% for Solvay and [5-15]% for Ausimont), and there would remain three other main competitors with market shares of [20-30]% (Atofina), [20-30]% (Ineos) and [10-20]% (Du Pont) and a number of other small competitors.

181. In the light of the above, the current operation does not threaten to create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market within the meaning of Article 2(2) of the Merger Regulation.

VI. COMMITMENTS

182. On 15 March 2002 Solvay offered certain commitments to remove the competition concerns as regards the markets for (A) persalts and (B) non-coatings PVDF. The commitments are summarised and assessed below. The full text of the commitments is set out in Annex I and II.

A. Persalts

183. Solvay undertakes to divest Ausimont's 50% shareholding in MedAvox S.r.l., the JV company over which Ausimont has joint control together with Degussa, to an independent purchaser approved by the Commission. Furthermore, Solvay undertakes, as a going concern, to divest the PBS business and the PBS manufacturing plant located at Bussi to an independent purchaser approved by the Commission. This business operates a Toll Manufacturing Agreement for the manufacture of PBS for MedAvox. If divestment is not possible, Solvay undertakes to procure that Ausimont modifies the toll manufacturing agreement so that no competition concerns arise.

184. Moreover, Solvay undertakes to divest, as a going concern, the H2O2 production facility at Bussi to an independent purchaser approved by the Commission. The Bussi H2O2 business manufactures hydrogen peroxide for sale to MedAvox and third parties. The divestment will include all relevant tangible and intangible assets, all necessary production, technical and administrative staff located at Bussi as well as the Bussi natural gas hydrogen steam reformer and associated natural gas supply assets. Solvay will also enter into a hydrogen supply contract with the purchaser on normal commercial terms, whereby Solvay will supply hydrogen produced in the Bussi site's chlor-alkali electrolysis units. The purchaser will be required to enter into an agreement to supply natural gas to Solvay for use by it in its retained activities at the Bussi site.

185. Solvay undertakes to modify or amend various agreements under which Ausimont provides services to MedAvox at the Bussi site, in order to remove any competition concerns arising thereunder.

i Assessment

186. The competition concern identified by the Commission is that the acquisition by Solvay of Ausimont and the links it would establish with Degussa would raise serious doubts as to its compatibility with the common market.

187. The dissolution of the JV with Degussa by the divestment of Ausimont's 50% shareholding in MedAvox to an independent buyer, approved by the Commission will fully remove the overlap with respect to PCS and PBS and cut the structural link that would have arisen between Solvay and Degussa as a result of the overlap.

188. Solvay has agreed to divest Ausimont's H2O2 plant at Bussi, including the Bussi natural gas hydrogen steam reforming unit supplying part of the hydrogen for this plant. This will remove MedAvox' dependence on the supply with critical feedstock by Solvay. The sale of the natural gas hydrogen steam reforming unit supplying parts of the hydrogen for the Bussi H2O2 plant contributes to MedaVox's independence. The remaining hydrogen supply contract on normal commercial terms between the buyer of the H2O2 plant and Solvay/Ausimont for a part of the hydrogen peroxide needs of the plant does not impede MedAvox's independence from Solvay/Ausimont in the persalts

market. If the buyer deems necessary, it may consider an expansion of the transferred hydrogen production (the steam reforming unit) to supply the H2O2 plant.

189. The divestment of the Bussi PBS business and manufacturing plant (including the toll manufacturing agreement for MedAvox) will also ensure that MedAvox does not depend on Solvay as its competitor for the supply of PBS and that Solvay/Ausimont does not have access to competitively sensitive information regarding Medavox' operation in the persalts market.

190. The modification or amendment of various other agreements under which Ausimont provides services to MedAvox ensures that competitively sensitive information of MedAvox is protected against disclosure to Solvay/Ausimont while the assistance for the construction of the PCS plant necessarily to be rendered by Ausimont may still be supplied. Furthermore, site services which are often sourced externally at shared chemical production sites (e.g. site safety and medical services, staff canteen, etc.) may also in future be supplied by Solvay/Ausimont to the extent that those services have no impact on the competitive relationship between Solvay/Ausimont and MedAvox or Degussa.

191. The result of the market test was positive. The respondents confirmed that the remedy will resolve the competition concerns resulting from the transaction in the market for persalts.

ii Conclusion

192. It is concluded that the commitments offered by Solvay will remove the structural links with MedAvox and Degussa and that the commitments represent a sufficient remedy to eliminate the serious doubts raised by the transaction as regards the creation of a collective dominant position on the market for persalts in the EEA. Therefore, the undertakings are sufficient to eliminate the serious doubts as to the concentration's compatibility with the common market.

B. PVDF

193. Solvay undertakes to divest the entire PVDF business carried on by it at Decatur, U.S.A. as a going concern, whether by way of a share sale or an asset sale, to a purchaser approved by the Commission. This business includes the following:

- divestment of the business for the production and sale of PVDF based at Decatur and related tangible and intangible assets and personnel (being production, technical, administrative and sales staff);[21]
- a complete list of all customers and customer records;
- a paid-up non-exclusive licence to use the intellectual property rights currently used at Decatur and for which the Decatur plant is designed, for the manufacture sale and use of PVDF;[22]

[21] Some of the non-production personnel are presently based at Solvay's principal U.S. offices in Houston, Texas.

- a paid-up non-exclusive licence to use the SOLEF® trademark and tradenames worldwide for a transitional period; and

- the provision by Solvay of technical assistance and research assistance for a certain period.

194. Furthermore, Solvay will divest its 50% shareholding in Alventia to a purchaser approved by the Commission. Alventia operates a VF_2 production facility at Decatur and supplies VF_2 to Solvay and the other shareholder, Dyneon LLC.

i Assessment

195. The competition concern identified by the Commission that this commitment is designed to address is that the acquisition by Solvay of Ausimont raises serious doubts that it will lead to a collective dominant position of Solvay/Ausimont and Atofina in the worldwide market for non-coatings PVDF. An element in this assessment is the elimination of Ausimont as an independent competitor in this market.

196. The Decatur plant is a very modern facility, opened by Solvay during 2000. The plant is "state of the art" and incorporates all of Solvay's PVDF manufacturing technology. As presently technically configured, the plant has the ability to produce approximately [50-70] grades of non-coatings PVDF. The commitment ensures that the purchaser will obtain all the necessary intellectual property to be able to produce all the grades of non-coatings PVDF that the plant was designed to produce, even if it does not currently produce those grades.

197. The Decatur PVDF plant has a nameplate capacity of 2,300 tonnes per annum, which represents approximately [20-30]% of present worldwide non-coatings PVDF production capacity. Production in 2001 was approximately […] tonnes (giving a capacity utilisation rate of approximately [25-30]%). Decatur's output already accounts for over [5-10]% of non-coatings PVDF sold worldwide and its output will increase in the future. This volume is greater than the additional volume of non-coatings PVDF that Solvay will acquire through its acquisition of Ausimont. The commitment also provides for the purchaser to be able to extend the facility at Decatur (in the space available on site). It also provides for the future construction and operation of a PVDF non-coatings manufacturing facility at any other location in the world. The purchaser of the plant will therefore not be constrained in any way by restrictions on its ability to use the intellectual property associated with the plant. This is a vital factor for the ongoing viability and development of the business in the future.

198. The commitment also provides for a technical assistance agreement and a research assistance agreement (including training) to enable the purchaser to develop an effective product development capability. The importance of this ability to be able to continue to develop the products has been emphasised by the Commission's market investigation, with a number of respondents highlighting the importance that a buyer of this business is already experienced either in producing fluoropolymers or in producing other speciality chemicals.

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[22] Solvay will also grant a further licence for any use at any extension of the Decatur PVDF plant and/or for the purchaser to build a new PVDF plant anywhere in the world.

199. The principal raw material for the production of PVDF is VF_2. VF_2 at the Decatur plant is currently obtained under a long-term supply contract from Alventia. Alventia is a production-only joint venture between Solvay and Dyneon. [Description of contact between Solvay, Dyneon and Alventia]. The market investigation has confirmed that for the remedy to be effective, a guaranteed source of VF2 is essential. The inclusion of Solvay's rights to the Alventia production only joint venture provides such a guaranteed source of VF2.

200. The Commission's market test of the proposed remedy has not raised any issues that suggest the remedy would not be viable.

ii Conclusion

201. It is concluded that the commitments offered by Solvay will represent a sufficient remedy to eliminate the serious doubts raised by the transaction as regards the creation of a collective dominant position on the market for non-coatings PVDF. Therefore, the undertakings are sufficient to eliminate the serious doubts as to the concentration's compatibility with the common market.

VII. CONDITIONS AND OBLIGATIONS

202. Pursuant to the second subparagraph of Article 6(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the common market.

203. The requirement for achievement of each measure that gives rise to the structural change of the market is a condition, whereas the implementing steps, which are necessary to achieve this result, are generally obligations on the Parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the common market no longer stands; where the undertakings concerned commit a breach of an obligation, the Commission may revoke its clearance decision, acting pursuant to Article 6(3)(b) of the Merger Regulation[23].

204. In view of the foregoing, the Commission's decision in the present case must be conditional upon full compliance with the divestment of Ausimont's shareholding in MedAvox, the divestment of Ausimont's Bussi PBS business and PBS plant, and the modification and amendment of services agreement between MedAvox and Ausimont. These conditions are set out in sections 2-5 of the commitments set out in Annex I, since only by fulfilling them the structural change on the relevant markets may be achieved. The other undertakings constitute obligations, since they concern the implementing steps necessary to achieve the structural change intended.

205. Furthermore, the Commission's decision in the present case must be conditional upon full compliance with the divestment of the PVDF non-coatings business currently operated by Solvay fluoropolymers at Decatur, Alabama, United States and of the

[23] cf. the Commission Notice on remedies acceptable under Council Regulation (EEC) No 4064/89 and under Commission Regulation (EC) No 447/98.

divestment of Solvay's shareholding in Alventia. These conditions are set out in sections 2-4 of the commitments set out in Annex II, since only by fulfilling them the structural change on the relevant markets may be achieved. The other undertakings constitute obligations, since they concern the implementing steps necessary to achieve the structural change intended.

VII. CONCLUSION

206. For the above reasons, the Commission has, subject to full compliance with the submitted undertakings, decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) and 6(2) of Council Regulation (EEC) No 4064/89.

For the Commission

Signed by
Mario MONTI
Member of the Commission

SOLVAY S.A.

PROPOSED ACQUISITION
OF
AGORÀ S.p.A.

CASE COMP/M. 2690 SOLVAY/AUSIMONT

**COMMITMENTS OFFERED BY SOLVAY S.A.
TO THE COMMISSION OF THE EUROPEAN
COMMUNITIES
IN RESPECT OF THE EEA PERSALTS MARKET**

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15 March 2002

FRESHFIELDS BRUCKHAUS DERINGER

CASE COMP/M. 2690 SOLVAY/AUSIMONT

COMMITMENTS OFFERED BY SOLVAY S.A. TO THE COMMISSION OF THE EUROPEAN COMMUNITIES IN RESPECT OF THE EEA PERSALTS MARKET

WHEREAS

(1) On 21 February 2002 Solvay notified to the Commission the proposed acquisition by it of sole control of Agorà under Article 4(1) of the Merger Regulation;

(2) The Commission has indicated to Solvay that it may have serious doubts as to the compatibility of the Notified Concentration with the common market and the functioning of the EEA Agreement in respect of the EEA market for persalts;

(3) Pursuant to Article 6(2) of the Merger Regulation, Solvay hereby provides the Commitments in order to restore effective competition on a lasting basis in the market for persalts in the EEA, and thereby enable the Commission to declare the Notified Concentration compatible with the common market and the functioning of the EEA Agreement by adopting the Decision;

(4) These Commitments are given by Solvay without prejudice to its position, as stated in the Form CO Notification and elsewhere, that the Notified Concentration does not, with respect to either persalts or hydrogen peroxide, create or strengthen a dominant position within the common market or a substantial part of it and is therefore compatible with the common market and the functioning of the EEA Agreement; and

(5) These Commitments shall take effect upon the date of adoption of the Decision by the Commission, provided that if completion of the Notified Concentration does not subsequently take place for any reason and is thereby abandoned, Solvay shall not be bound by these Commitments.

DEFINITIONS

1. In these Commitments, the following expressions shall have the following meanings:

Agorà means Agora S.p.A., a company organised and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with registered number 47425/97;

Ancillary Agreements bears the meaning ascribed to that term in the MedAvox Joint Venture Agreement;

Ausimont means Ausimont S.p.A., a company organized and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with number 145484;

Bussi H2O2 Business means the hydrogen peroxide manufacturing and sales business currently operated by Ausimont at the Bussi Plant, and all related human resources and tangible and intangible assets as more particularly described in **Schedule 1**;

Bussi PBS Business means the sodium perborate business presently carried on by Ausimont at the Bussi Plant being the toll manufacturing of sodium perborate for MedAvox under the Toll Manufacturing Agreement;

Bussi PBS Plant means the sodium perborate plant currently operated by Ausimont at the Bussi Plant and all related human resources and tangible and intangible assets as more particularly described in **Schedule 2**;

Bussi Plant means the chemical manufacturing plant currently operated by Ausimont located at Bussi sul Tirino (PE), Italy;

Commission means the Commission of the European Communities;

Commitments means the undertakings given by Solvay that are set out in paragraphs 2 to 9;

Decision means the decision adopted by the Commission under Article 6(1)(b) of the Merger Regulation declaring that the Notified Concentration is compatible with the common market and the functioning of the EEA Agreement;

Degussa means Degussa A.G., a company organised and existing under the laws of Germany, with its registered office at Karl-Arnold-Platz 1, D-40474 Düsseldorf, Germany;

Divestment Businesses means the Bussi H2O2 Business, the Bussi PBS Business and the Bussi PBS Plant or any of them;

Divestment Shares means Ausimont's 50% shareholding in MedAvox;

Divestment Trustee means one or several legal or natural persons (such as an investment bank, auditing firm or other consultant), independent from the Parties, which is approved by the Commission and appointed by Solvay, which has received from Solvay the irrevocable and exclusive mandate to sell the Divestment Businesses and the Divestment Shares to a Permitted Purchaser or Purchasers at no minimum price;

Extended Divestment Period means the period from the date of expiration of an applicable First Divestment Period (or any extension thereof) within which the Divestment Trustee shall have an irrevocable and exclusive mandate from

Solvay to sell the Divestment Businesses and the Divestment Shares or any of them at no minimum price;

First Divestment Period means the period within which Solvay can propose a Purchaser or Purchasers for the Divestment Businesses and/or the Divestment Shares and/or any of them;

Form CO Notification means the Form CO dated 21 February 2002 by which Solvay notified the Notified Concentration to the Commission under Article 4(1) of the Merger Regulation;

Hold Separate Manager means the person employed by each Divestment Business, who will be in charge of the day-to-day running of the relevant Divestment Business under the authority of the Monitoring Trustee;

Implementing Regulation means Commission Regulation (EC) No. 447/98;

Key Personnel means all Personnel necessary to maintain the viability and competitiveness of the Divestment Businesses, which are listed by the Monitoring Trustee in its first report and is subject to the prior approval of the Commission;

Longside means Longside International S.A., a company organised and existing under the laws of Belgium, with its registered office at avenue Louise 522, B-1050 Brussels, Belgium and registered with the Register Commercial de Bruxelles with number 650575;

MedAvox means MedAvox S.r.l., a company organised and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with number 1665459;

MedAvox Joint Venture Agreement means the Joint Venture and Quotaholders' Agreement dated 31 August 2001 between (1) Degussa and (2) Ausimont;

Monitoring Trustee means one or several natural or legal persons (such as an investment bank, auditing firm or other consultant), independent from the Parties, which is approved by the Commission and appointed by Solvay, which has the duty to monitor and to ensure that Solvay complies with the conditions and obligations undertaken by it pursuant to the Commitments;

Montedison means Montedison S.p.A. a company organised and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with number 00168420396;

Notified Concentration means Solvay's proposed acquisition of sole control of Agorà, which owns 100% of the share capital of Ausimont;

Parties means Solvay, Agorà, Ausimont, Montedison and Longside or, where relevant, any combination of them;

Permitted Purchaser means one or more persons identified to and approved by the Commission under paragraphs 20 to 22 as a viable acquirer of the Divestment Businesses or the Divestment Shares, who shall possess the financial resources and proven expertise and have the incentive to develop the Divestment Businesses in competition with Solvay and other competitors. For the avoidance of doubt there may be more than one Permitted Purchaser for each of the Divestment Businesses and/or the Divestment Shares;

Personnel means all personnel retained by the Divestment Businesses, including secondees and shared personnel;

Purchaser means one or more persons proposed by Solvay to purchase the Divestment Businesses or the Divestment Shares, as the case may be;

Solvay means Solvay S.A., a company organized and existing under the laws of Belgium, with its registered office at rue Prince Albert 33, B-1050 Brussels, Belgium and registered with the Register Commercial de Bruxelles with number 5554; and

Toll Manufacturing Agreement means the Ausimont Perborate Toll Manufacturing Agreement dated 20 September 2001 between (1) Ausimont and (2) MedAvox.

THE COMMITMENTS

The Divestment Shares

2. Solvay undertakes in accordance with the provisions set out in paragraphs 6 to 42 below:

   (a) to divest or procure the divestment of the Divestment Shares to a single Permitted Purchaser as set out below:

      (i) if […]; and

      (ii) if […], Solvay shall divest or procure the divestment of the Divestment Shares to a single Permitted Purchaser;

   (b) pending completion of the divestment of the Divestment Shares it shall, for so long as Ausimont is a shareholder in MedAvox:

      (i) procure that Ausimont renounces all of its rights under the MedAvox Joint Venture Agreement save to vote at shareholders' meetings at which it shall vote in accordance with the views of the other shareholder, save where the exercise of Ausimont's shareholder rights otherwise than in this manner is strictly necessary to secure its financial investment in MedAvox;

(ii) procure that Ausimont complies with any obligations under the MedAvox Joint Venture Agreement in respect of the financing of MedAvox;

(iii) procure that Ausimont does not appoint any director, employee or officer of Solvay or of Ausimont as a director of MedAvox and shall procure that any such person who is at the date of the Decision a director of MedAvox shall resign his appointment as a director of MedAvox and shall procure that Ausimont appoints one or more persons who are independent of Solvay and/or Ausimont as directors in his or their place; and

(iv) to neither demand nor receive and to procure that Ausimont shall not demand or receive from MedAvox any confidential information relating to MedAvox, save where this information is required for any statutory, tax, legal or regulatory reporting reason or to fulfil any contractual obligation to MedAvox or for the purpose of the divestment of the Divestment Shares, provided that such confidential information is used solely for the purpose for which it was disclosed.

The Bussi PBS Business and the Bussi PBS Plant

3. Solvay undertakes in accordance with the provisions set out in paragraphs 6 to 42 below to divest or procure the divestment of the Bussi PBS Business to a Permitted Purchaser as a going concern and to divest to the same Permitted Purchaser the Bussi PBS Plant, either:

(a) by way of outright sale of the Bussi PBS Plant; or

(b) by way of lease of the Bussi PBS Plant for the duration for which it is operational for the purpose of performing the Toll Manufacturing Agreement.

If the disposal of the Bussi PBS Business and the Bussi PBS Plant to the same Permitted Purchaser is not possible, Solvay undertakes to procure the modification of the Toll Manufacturing Agreement so that it does not raise any concerns on the part of the Monitoring Trustee or the Commission.

The Bussi H2O2 Business

4. Solvay undertakes in accordance with the provisions set out in paragraphs 6 to 42 below to divest or procure the divestment of the Bussi H2O2 Business to a Permitted Purchaser as a going concern by way of outright sale [...].

Transitional provision by Ausimont of services to MedAvox under various contracts between Ausimont and MedAvox

5. Solvay undertakes in accordance with the provisions set out in paragraphs 6 to 42 to amend or modify the terms of the Ancillary Agreements to the extent necessary to remove any concerns that the Monitoring Trustee or the Commission may have in relation to Ausimont's performance of its obligations under such Ancillary Agreements including, without limitation by making arrangements for sub-contractors to provide the services or by putting in place appropriate measures to allow Ausimont to continue to provide any goods or services required by MedAvox whilst protecting against the disclosure of competitively sensitive confidential information of MedAvox. In all cases, any amendments or modifications to the Ancillary Agreements shall be subject only to the approval of the Commission.

Transfer of personnel

6. The Divestment Businesses shall each be divested as a going concern. Solvay commits to transfer to the Permitted Purchaser all the Personnel.

7. This transfer will be achieved in the following manner:

   (a) the Hold Separate Manager will, in co-operation with the Monitoring Trustee, identify a framework for a complete organisation that includes the number of required resources by skill set;

   (b) ensuring the compliance with all applicable labour and employment laws, in particular (where relevant) with the Council Directives on collective redundancies,[24] on safeguarding employees rights in the event of transfers of undertakings[25] and on informing and consulting employees[26] as well as with national provisions implementing these Directives and any other applicable provisions of national law;

   (c) the Hold Separate Manager will, in co-operation with the Monitoring Trustee, establish objective criteria to complete the matrix of functions and specific skills required for the business;

   (d) Solvay shall and shall procure that Ausimont shall, subject to customary confidentiality assurances, permit prospective purchasers of the Divestment Businesses to have reasonable access to the Hold

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24 Council Directive 98/59/EC of 20 July 1998 on the approximation of the laws of the Member States relating to collective redundancies.

25 Council Directive 77/187/EC of 14 February 1977 on the approximation of the laws of the Member States relating to the safeguarding of employees rights in the event of transfers of undertakings, businesses or parts of a business as amended by Council Directive 98/50/EC.

26 Council Directive 97/45/EC of 22 September 1994 on the establishment of a European Works Council or a procedure in Community-scale undertakings and Community-scale groups of undertakings for the purposes of informing and consulting employees, as amended by Directive 97/74/EC.

Separate Manager to discuss the transfer of the Personnel on the basis of the result of the work described under (a), (b) and (c) 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 Divestment Businesses;

(e) Solvay shall and shall procure that Ausimont 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;

(f) Solvay shall and shall procure that Ausimont shall waive all contractual rights concerning the Personnel of the Divestment Businesses in order to facilitate the immediate transfer of the Personnel; and

(g) Solvay shall take all reasonable steps, including appropriate incentive schemes, to cause all Key Personnel as currently employed by the Divestment Businesses to remain with the Divestment Businesses. The incentives shall be approved by the Commission upon recommendation of the Monitoring Trustee and after having heard the Hold Separate Manager. The incentives shall be determined on the basis of industry practice.

8. To the extent that Solvay (or the Divestment Trustee) and the Purchaser agree that all or any of the Personnel shall not be transferred, Solvay shall ensure that the Monitoring Trustee or the Divestment Trustee (as appropriate) indicates to the Commission why the Purchaser has agreed that any non-transferring Personnel shall not be transferred to the Purchaser.

206.1.Related Commitments

206.1.1. Preservation of the viability, marketability and competitiveness of the Divestment Businesses

9. Solvay undertakes to preserve from the date of the adoption of the Decision the full economic viability, marketability and competitiveness of the Divestment Businesses until the closing of their respective divestments, in accordance with best commercial practice, as shall be monitored by the Monitoring Trustee. In this regard Solvay undertakes to reduce to the minimum any possible risk of loss of competitive potential of the Divestment Businesses resulting from the uncertainties inherent to the transfer of a business. Pending divestiture, Solvay shall enable and shall procure that Ausimont shall enable the Hold Separate Manager of each Divestment Business to manage the Divestment Business in the best interest of the business. In particular, Solvay undertakes not to carry out any act upon its own authority which may have a significant negative impact on the economic value, the management or the competitiveness of the Divestment Businesses until the closing of their respective divestments. Solvay also undertakes not to

carry out upon its own authority any act, which may be likely to alter the nature of or the scope of activity of the Divestment Businesses, or the industrial or commercial strategy or the investment policy of the Divestment Businesses. Sufficient resources shall be made available for the Divestment Businesses to develop until the closing of their respective divestments, based on the approved strategic and business plans.

206.1.2. Ring-fencing

10. Solvay shall implement and shall procure that Ausimont shall implement all necessary measures to ensure that it shall not after the date of the Decision obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature (other than any information that is already in the public domain or already known to Solvay) relating to the Divestment Businesses or MedAvox with the exception of information reasonably necessary for the divestment of the Divestment Businesses or the Divestment Shares or otherwise required for any statutory, legal, tax or regulatory reporting reason or to fulfil any contractual obligation. The Monitoring Trustee, after having heard Solvay and the Hold Separate Manager, shall decide on the exercise of this exception.

206.1.3. Holding apart the Divestment Businesses

11. Following the adoption of the Decision and pending the closing of the divestments envisaged in paragraphs 2 to 4 above and the performance by Solvay of its undertakings under paragraph 5 above, Solvay commits:

(a) to ensure that the Divestment Businesses are held separate and isolated administratively from the retained businesses of Solvay and Ausimont as independent and distinct, economically viable, competitive and marketable businesses and are pending divestment managed on an independent basis by the Hold Separate Manager(s) in the best interests of the respective businesses and in accordance with existing business plans and practice; and

(b) to ensure that all relevant assets, tangible and intangible, are maintained, pursuant to good business practice and in the ordinary course of business, and in particular:

(i) to use all reasonable efforts to ensure that the Divestment Businesses' production capacities and sales activities are conducted pursuant to good business practices and that all contracts necessary to preserve the Divestment Businesses are entered into or continued in accordance with their terms, consistent with good business practice and the ordinary course of business;

(ii) implement all necessary measures to ensure that the know-how and commercial information of a confidential or proprietary nature of the Divestment Businesses (such as business secrets, know-how, commercial information and other information of a confidential or proprietary nature, other than any information that is already in the public domain or already known to Solvay) are maintained pursuant to good business practice and in the ordinary course of business and are not disclosed to either Solvay or Ausimont, save in respect of the Bussi H2O2 Business (with the exclusion in this case of any customer information in relation to the Bussi H2O2 Business) where this is in the opinion of the Monitoring Trustee strictly necessary in order to maintain the commercial and economic viability of that business within Ausimont's larger hydrogen peroxide business or, in respect of any Divestment Business where disclosure is strictly necessary for the divestiture of the relevant Divestment Business;

(iii) to ensure that the employees of the Divestment Businesses – including the Hold Separate Manager - of each Divestment Business have no involvement in any of the retained businesses of Ausimont or Solvay and vice-versa other than employees who are also employed in the retained businesses of Solvay and Ausimont, provided that in such circumstances all necessary measures to ensure that the know-how and commercial information of a confidential or proprietary nature of the Divestment Businesses is protected pursuant to paragraph 11(b)(ii) above; and

(iv) to use all reasonable efforts to effect that the necessary sales staff and research, production and management and the administrative personnel who are sufficiently commercially and technically competent to operate the Divestment Businesses as going concerns are maintained.

Non-solicitation of employees

12. Solvay undertakes not to and undertakes to procure that its subsidiaries do not, for a period of […] from the date of divestiture of the relevant Divestment Business, in respect of any Key Personnel of the Divestment Businesses who are transferred to a Permitted Purchaser, offer these persons contracts of employment in the merged entity.

Enhancing the commercial viability of the Divestment Businesses

13. In order to enhance the commercial viability of the Divestment Businesses to prospective purchasers, the Divestment Businesses will include, to the extent permitted by law or contract, unless not required by, and agreed to with the Purchaser(s):

(a) the assignment to the Purchaser(s), to the extent permitted by law or contract, of all existing contracts, and all contracts entered into between the date of these Commitments and the closing of the divestment of the Divestment Businesses, which are related to, or associated with, the Divestment Businesses. With respect to existing non-assignable contracts, Solvay shall use its best efforts to assist in the transfer to the Purchaser(s) of such contracts;

(b) a complete list of existing H2O2 customers of the Bussi H2O2 Business; and

(c) a paid-up or royalty-free non-exclusive licence of intellectual property rights which are listed as assets of the Divestment Businesses in Schedules 1 or 2 as the case may be.

THE DIVESTMENT PROCEDURE

The First Divestment Period

14. Solvay undertakes, subject to the provisions set out below:

(a) to effect or procure the divestment of the Divestment Shares within […] of the completion of the Notified Concentration, conditional only upon the Commission's approval under paragraphs 20 to 22 and any applicable regulatory approvals;

(b) to effect or procure the divestment of the Divestment Businesses within […] of the completion of the Notified Concentration to a Permitted Purchaser approved by the Commission, conditional only upon the Commission's approval under paragraphs 20 to 22 and any applicable regulatory approvals; and

(c) to fulfil its obligations under paragraph 5 within […] of the completion of the Notified Concentration by entering into binding agreements for the amendment or modification of the relevant Ancillary Agreement(s).

15. Solvay shall be deemed to have complied with the time limits set out in paragraph 14 if, within the First Divestment Period:

(a) it has entered into a binding contract or contracts for the sale of the Divestment Businesses (or any of them) or the Divestment Shares to a Permitted Purchaser, provided that such sale is completed within […] of the date of the contract or such other time limit as may then be agreed by the Commission; or

(b) in respect of its commitments under paragraph 5, has concluded binding agreements for the amendment or modification of the relevant Ancillary Agreement(s).

The Extended Divestment Period

16. If Solvay is not able to enter into a binding agreement for the sale of the Divestment Businesses (or any of them) and/or the Divestment Shares or the fulfilment of its commitments under paragraph 5 in accordance with paragraph 14 above, the First Divestment Period shall be extended by another […] from the date of the expiration of the First Divestment Period. Solvay undertakes to give the Divestment Trustee an irrevocable and exclusive mandate to sell the Divestment Businesses (or any of them) and/or the Divestment Shares or to enter into agreements necessary to fulfil Solvay's commitments under paragraph 5 within the Extended Divestment Period at, in relation to any divestment, no minimum price.

REPORTING

17. Solvay shall report in full in writing in English to the Commission and the Monitoring Trustee on developments in the negotiations with potential purchasers of the Divestment Businesses and the Divestment Shares within 10 days after the end of every month following the date of the Decision (or otherwise at the Commission's request).

18. Solvay shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation, on the preparation of the information memorandum and on the due diligence procedure. Solvay shall submit to the Commission for prior approval a copy of the draft information memorandum prepared for the sale of the Divestment Businesses and/or the Divestment Shares to allow the Commission to verify the information memorandum's consistency with the terms of these Commitments.

19. Solvay shall also inform the Commission and the Monitoring Trustee on the identification of possible Purchasers and submit to the Commission a list of potential buyers, which have expressed a clear interest in acquiring the Divestment Businesses (or either of them) and/or the Divestment Shares.

THE PURCHASERS

20. The Purchasers shall each be a viable existing or potential competitor, independent of and unconnected with the Parties, each possessing the financial resources, proven expertise and having the incentive to maintain and develop MedAvox and/or the Divestment Businesses (or one of them, if a Purchaser acquires only one of them), as appropriate, as an active competitive force in competition with Solvay and Ausimont 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 Divestment Shares and/or the Divestment Businesses. Solvay must be able to demonstrate to the Commission that the Purchaser meets the requirements of these Commitments and that the Divestment Businesses Shares and/or the Divestment Businesses are sold in a manner consistent with these Commitments. In order to maintain the structural effect

of these Commitments, Solvay will not subsequently directly or indirectly acquire influence over the whole or part of the Divestment Businesses or MedAvox (as appropriate) unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Businesses or MedAvox (as appropriate) is no longer necessary to render the proposed concentration compatible with the common market.

21. When Solvay has or is about to reach an agreement with the Purchasers, it will submit a fully documented and reasoned proposal enabling the Commission to verify that the criteria above with regard to the identity of the Purchasers are fulfilled and that the Divestment Shares and/or the Divestment Businesses are sold in a manner consistent with these Commitments. Solvay shall send simultaneously to the Monitoring Trustee a copy of the sale and purchase agreement in order to enable it to perform its duties in accordance with the paragraphs below. The Commission shall indicate if it considers any such Purchaser(s) to be unsuitable.

22. The verification that the Divested Businesses or the Divestment Shares are sold in a manner consistent with the relevant commitment shall include an approval by the Commission of the Purchasers and of the final binding sale and purchase agreement(s).

THE MONITORING TRUSTEE

Appointment

23. Solvay will, as soon as practicable and in any event no later than four weeks after the Commission has notified to Solvay the Decision, appoint one or more Monitoring Trustees who shall be independent of the Parties, possess the necessary qualifications to carry out its mandate and shall not be, or become, exposed to a conflict of interest. Subject to prior approval by the Commission of the identity of the Monitoring Trustees and the terms upon which they are to be appointed, the Monitoring Trustees shall be remunerated by Solvay in such a way as not to impede their independence and effectiveness in fulfilling their mandate.

Proposal by Solvay

24. Solvay shall propose a Monitoring Trustee or a list of proposed Monitoring Trustees and the terms of the mandate for approval to the Commission with adequate information for the Commission to verify that the Monitoring Trustee fulfils the requirements for its appointment. This proposal shall be made within one week of the date of the Decision. The mandate submitted for approval shall be drawn up taking due account of the Commission Standard Monitoring Trustee Mandate and shall include all provisions necessary to enable the Monitoring Trustee to fulfil its duties under these Commitments. Solvay shall also procure that the proposed Monitoring Trustee shall submit to

the Commission a detailed work plan in which it is described how the Monitoring Trustee intends to monitor all aspects of these Commitments.

Approval or rejection by the Commission

25. The Commission shall have the discretion to approve or reject the proposed Monitoring Trustee or Trustees, and to approve the proposed mandate subject to modifications that the Commission deems reasonably necessary for the Monitoring Trustee to fulfil its obligations. If only one name is approved, Solvay shall appoint or cause the individual or institution concerned to be appointed as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Solvay shall be free to choose the Monitoring Trustee to be appointed from among the names approved.

New proposal by Solvay

26. If all the proposed Monitoring Trustees are rejected, Solvay will submit the names of at least two further such 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 Monitoring Trustees as well as all information necessary for the Commission to verify that the proposed Monitoring 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, Solvay shall appoint or cause the individual or institution concerned to be appointed as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one further name is approved, Solvay shall be free to choose the Monitoring Trustee to be appointed from among the names approved.

Monitoring Trustee nominated by the Commission

27. If all further proposed Monitoring Trustees are rejected by the Commission, the Commission shall nominate a suitable Monitoring Trustee, which Solvay will appoint, or cause to be appointed.

Appointment by Solvay

28. As soon as the Commission has given approval to one or more proposed Monitoring Trustees, Solvay shall appoint or cause the Monitoring Trustee concerned to be appointed within one week thereafter, in accordance with the mandate approved by the Commission.

Content of the Mandate

Duties and obligations of the Monitoring Trustee

29. The Monitoring Trustee shall assume its specified duties in order to ensure compliance in good faith with the Commitments on behalf of the Commission and taking into account the legitimate interests of Solvay.

30. The Monitoring Trustee shall in good faith:

(a) oversee the ongoing management of the Divestment Businesses with a view to ensuring their ongoing continued viability and marketability and monitor compliance by Solvay with the conditions and obligations of these Commitments;

(b) in consultation with Solvay, determine appropriate measures to ensure the viability, marketability and competitiveness of the Divestment Businesses and the Divestment Shares and monitor the fulfilment by Solvay of its obligations under paragraph 6, including to ensure the non-disclosure of competitively sensitive information to Solvay or Ausimont (except where strictly necessary to effect the disposal of the Divestment Businesses or either of them or the Divestment Shares) or where this information is required for any statutory tax, legal or regulatory reporting reason or to fulfil any contractual obligation to MedAvox;

(c) monitor the management and operation of the Divestment Businesses in the normal course of business in order to report on their continued viability, marketability and competitiveness. For this purpose, and to the extent necessary for such monitoring, the Monitoring Trustee will have access to the personnel and facilities as well as documents, books and records of the Divestment Businesses;

(d) propose to Solvay such measures as the Monitoring Trustee considers necessary to ensure compliance with the conditions and obligations under these Commitments, in particular the maintenance of the viability or marketability of the Divestment Businesses and the non-disclosure of competitively sensitive information by Solvay, and the Monitoring Trustee shall be entitled to impose such measures (with the approval of the Commission) in the event that Solvay does not comply with the Monitoring Trustee's proposals within the timeframe set by the Monitoring Trustee;

(e) be entitled to impose the measures described in sub-paragraph (d) (with the approval of the Commission) in the event that Solvay does not comply with the Monitoring Trustee's proposals within the timeframe set by the Monitoring Trustee;

(f) provide to the Commission, with a simultaneous non-confidential copy to Solvay, a written report within 10 days after the end of every month concerning the monitoring of the operation and management of the Divestment Businesses in order to assess whether the business is 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 Solvay is failing to comply with any of the conditions or obligations under these Commitments. Solvay shall receive a simultaneous non-confidential copy of any such additional reports;

(g) assess the suitability of the proposed Purchaser and the viability of the Divestment Businesses after the sale to the Purchaser and give its opinion to the Commission on whether the proposed divestment complies with the conditions and obligations under these Commitments.

31. The Monitoring Trustee shall cease to perform its duties as Monitoring Trustee with regard to the Divestment Businesses and/or the Divestment Shares after the last in time of closing or closings (if more than one) of the sale of the Divestment Businesses and/or the Divestment Shares after having requested the Commission for and after having received from the Commission a discharge from further responsibilities. Even after the discharge has been given, the Commission shall have the discretion to require the reappointment of the Monitoring Trustee, if subsequently it appears to the Commission that the relevant commitments might not have been fully and properly implemented by Solvay.

32. Solvay shall provide and shall procure that Ausimont shall provide the Monitoring Trustee with all such assistance and information, including copies of relevant documentation, as it may reasonably require to monitor Solvay's compliance with the conditions and obligations under these Commitments. Solvay shall make available and shall procure that Ausimont shall make available to the Monitoring Trustee one or several offices on their premises. Solvay 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, Solvay shall provide the Monitoring Trustee with access to sites which are being divested. Solvay shall provide and shall procure that Ausimont shall provide all managerial and administrative support that may reasonably be requested by the Monitoring Trustee on behalf of the management of the Divestment Businesses, including all administrative support functions relating to the Divestment Businesses that are currently carried out at Ausimont headquarters level.

33. At the expense of Solvay, the Monitoring Trustee may if it considers it to be reasonably necessary or appropriate for the performance of its duties, appoint external professional advisers (such as corporate finance advisers or lawyers) provided that any fees so incurred are reasonable and are reasonably incurred. The appointment of any external professional advisers shall be subject to Solvay's approval, which shall not be unreasonably withheld. If Solvay should refuse its consent to the appointment of any external professional adviser proposed by the Monitoring Trustee, the Commission may approve the

appointment of such advisers. Only the Monitoring Trustee shall be entitled to issue instructions to any advisers appointed by it. The advisers shall not be liable to Solvay for, and shall be held harmless by Solvay from, any consequences of following the Monitoring Trustee's instructions.

Replacement of the Monitoring Trustee

34. The Commission may, after hearing the Monitoring Trustee, order Solvay to remove the Monitoring Trustee in the event that the Monitoring Trustee has not acted in accordance with the provisions of these Commitments or for any other good cause. The Monitoring Trustee may also be removed by Solvay with the prior approval of the Commission and after the Commission has heard the Monitoring Trustee in the event that the Monitoring Trustee has not acted in accordance with the provisions of these Commitments or for any other good cause. The Monitoring Trustee may be required to continue in its function until a new Monitoring Trustee is in place to whom the Monitoring Trustee has effected a full hand over of all relevant information. Regarding the appointment of a new Monitoring Trustee the same procedure applies as described in paragraphs 23 to 28.

THE DIVESTMENT TRUSTEE

Appointment and duties of the Divestment Trustee

35. Solvay shall appoint one or more Divestment Trustees, subject to approval by the Commission. Solvay's proposal for the Divestment Trustee shall be made within one week from the date of the Decision. Regarding the appointment and the replacement of the Divestment Trustee the same procedure shall apply mutatis mutandis with the appointment and replacement of the Monitoring Trustee. The mandate of the Divestment Trustee shall only come into effect if Solvay is not able to enter into a final binding agreement for the sale of the Divestment Businesses or the Divestment Shares (as the case may be) within the First Divestment Period.

36. The Divestment Trustee shall be independent of the Parties, possess the necessary qualifications to carry out the task and shall not be, or become, exposed to a conflict of interest. The Divestment Trustee will be remunerated in such a way as not to impede its independence and effectiveness in fulfilling the mandate. In particular, the remuneration package of the Divestment Trustee may not contain a clause that provides for a premium for success in selling the Divestment Businesses or the Divestment Shares (as the case may be) that is linked to the final value of the sale.

37. Within the Extended Divestment Period, the Divestment Trustee shall sell at no minimum price the Divestment Businesses or the Divestment Shares (as the case may be) to a Permitted Purchaser in accordance with procedures laid down in paragraphs 20 to 22 above, provided that the Commission has approved both the Purchaser and the final binding sale and purchase

agreement in accordance with the procedures laid down in paragraphs 20 to 23. The provision of paragraph 33 shall apply mutatis mutandis to the appointment of external professional advisers by the Divestment Trustee.

38. The Divestment Trustee shall report in full in writing in English to the Commission on developments in the negotiations with potential purchasers of the Divestment Businesses and/or the Divestment Shares (as appropriate) within 10 days after the end of every month following the expiration of the First Divestment Period (or otherwise at the Commission's request). A simultaneous non-confidential copy of these reports shall be provided to the Monitoring Trustee and to Solvay.

39. The Divestment Trustee shall cease to act as Divestment Trustee only after the Commission has discharged it from its duties, following a request from the Divestment Trustee made after the sale of the Divestment Businesses to a Permitted Purchaser independent of the Parties has been completed. However, the Commission may at any time require the reappointment of the Divestment Trustee if it subsequently appears that the relevant Commitments might not have been fully and properly implemented.

Obligations of Solvay

40. Solvay shall provide the Divestment Trustee with all such as assistance and information as the Divestment Trustee shall reasonably require and Solvay's obligations under paragraph 32 shall apply mutatis mutandis in respect of the Divestment Trustee.

41. In order to accomplish the divestment of the Divestment Businesses and/or the Divestment Shares (as the case may be) and the closing of such divestments, Solvay shall grant to the Divestment Trustee a power of attorney (which shall take effect only at such time as the Divestment Trustee's mandate takes effect pursuant to paragraph 34) or; at the option of the Divestment Trustee, cause the documents required for the divestment of the Divestment Businesses and/or the Divestment Shares (as the case may be) to be duly executed by Solvay.

THE REVIEW CLAUSE

42. The Commission may, upon the request of Solvay, showing good cause and after hearing the Monitoring Trustee and/or the Divestment Trustee, and where relevant, allow for:

   (a) an extension of the First Divestment Period and/or the Extended Divestment Period, provided that any such request is made no later than one month before the end of the relevant time period, save in exceptional circumstances;

   (b) the sale of the Divestment Businesses to a Purchaser proposed to the Commission without one or more of the assets, facilities, contracts or other rights and obligations that are part of the Divestment Businesses as described in Schedules 1 and 2;

(c) waive or modify one or more of the conditions and obligations in these Commitments.

For and on behalf of Solvay S.A.

…………………………………..

Dominique Dussard

General Counsel, Europe and Asia-Pacific

15 March 2002

SCHEDULE 1

The Bussi H2O2 Business

Assets

The Bussi H2O2 Business comprises the following tangible and intangible assets:

- H2O2 production units;
- control room;
- hydrogen and nitrogen storage tanks;
- H2O2 storage tanks;
- road tanker and rail tanker loading facilities;
- natural gas (methane) steam reformer and gas supply contract;
- air and hydrogen compressors;
- H2O2 filling station (for filling drums with H2O2);
- production unit for the purification of electronic grade H2O2;
- storage facilities;
- natural gas pipeline and pressure reduction station;
- a paid-up or royalty-free perpetual licence of all necessary intellectual property rights (trademarks and patents) and production know-how currently used by the Bussi H2O2 Business in the manufacture of hydrogen peroxide at the Bussi Plant;
- stocks and inventories;
- existing customer contracts for supply of H2O2 from the Bussi Plant and a complete list of customers served from the Bussi H2O2 Plant; and
- the Ausimont/MedAvox H2O2 Supply Agreement dated 7 November 2001 between (1) Ausimont and (2) Degussa, and the Ausimont/Degussa H2O2 Swap and Supply Agreement dated 7 November 2001 between (1) Ausimont and (2) Degussa.

The land on which the H2O2 production plant is situated can be transferred to the Purchaser under a long-term “diritto di superficie” (an Italian legal concept granting the Purchaser the right to use the land on which it is situated). **Annex 1** contains a site map of the Bussi Plant and clearly identifies all the buildings and other fixed assets of the Bussi H2O2 Business.

Personnel

The Bussi H2O2 Business comprises approximately […] production staff, which work in continuous shift patterns. These production staff will all be transferred to the Purchaser.

If the Purchaser requires, other non-production staff can also be transferred to the purchaser, comprising staff to perform functions such as maintenance (civil, electrical, mechanical and instrumentation), laboratory services, logistics and distribution management, production planning, purchasing and materials procurement, general office administration, etc.

Access to raw materials

At the Bussi Plant, hydrogen used by the Bussi H2O2 Business is produced on site partly from the Bussi Plant's chlor-alkali electrolysis units (which will be retained by Solvay) and partly from a natural gas steam reformer (which will be sold to the purchaser).

The natural gas steam reformer and its associated pipework and pressure reduction station, and gas supply contract will be transferred to the Purchaser as part of the divestment, although the Purchaser will be required to enter into a back-to-back supply agreement with Solvay for the supply of natural gas for the operations being retained by Solvay at the Bussi Plant. Solvay will procure that Ausimont enters into a supply agreement with the Purchaser for the supply of hydrogen produced by the chlor-alkali electrolysis units (which will be retained by Solvay) on normal commercial terms and conditions.

Energy and utilities

Electricity is generated on the Bussi Site from a hydro-electric power station and from a thermal power station operated by Edison. The purchaser will be able to purchase electricity from Edison or from another supply company.

If required, all other utilities (drinking water, process water, demineralised water, steam, sewerage and trade effluent and telecommunications) can be supplied on normal commercial terms and conditions by Ausimont.

Site services

If requested by the purchaser, Ausimont will supply site services to the purchaser, including utilities; maintenance; security; provision and repair of roads, yards and railway tracks; telecommunications; parking; site medical and safety services; staff canteen and social facilities; and effluent treatment and water disposal.

SCHEDULE 2

The Bussi PBS Business and the Bussi PBS Plant

Assets

The Bussi PBS Business comprises the Toll Manufacturing Agreement which will be automatically assigned to the Purchaser under operation of law.

The Bussi PBS Plant comprises the following assets:

- PBS manufacturing plant;
- warehousing;
- PBS storage silos;
- PBS packing facility; and
- a royalty-free, paid-up and perpetual licence of all relevant intellectual property and know-how used at the Bussi PBS Plant for the manufacture.

The property on which the Bussi PBS Plant is situated can be transferred to the Purchaser under a long-term "diritto di superficie" (an Italian legal concept granting the Purchaser the right to use the land on which it is situated).

Annex 2 contains a site map of the Bussi Plant and clearly identifies all the buildings and other fixed assets of the Bussi PBS Plant.

Should the Purchaser not wish to purchase the Bussi PBS Plant, Solvay will procure that Ausimont leases the assets to the Purchaser for such period as the Bussi PBS Plant is operational, to enable the Purchaser to fulfil its obligations to MedAvox under the Toll Manufacturing Agreement.

Personnel

The Bussi PBS Business comprises approximately […] production staff, which work in continuous shift patterns.

If the Purchaser requires, other non-production staff will also be transferred (or, if relevant, made available) to the Purchaser, comprising staff responsible for functions such as maintenance (civil, electrical, mechanical and instrumentation), laboratory services, production planning, general office administration, etc.

Energy and utilities

Electricity is generated at the Bussi Plant from a hydro-electric power station and from a thermal power station operated by Edison. The purchaser will be able to purchase electricity from Edison or from another supply company.

If required, all other utilities can be supplied on normal commercial terms and conditions by Ausimont.

Site services

If requested by the purchaser, Solvay will supply site services to the purchaser, including utilities; maintenance; security; provision and repair of roads, yards and railway tracks; telecommunications; parking; site medical and safety services; staff canteen and social facilities; and effluent treatment and water disposal.

ANNEX 1

MAP SHOWING THE BUSSI H2O2 PLANT

[…]

ANNEX 2

MAP SHOWING THE BUSSI PBS PLANT

[…]

SOLVAY S.A.

PROPOSED ACQUISITION
OF
AGORÀ S.p.A.

CASE COMP/M. 2690 SOLVAY/AUSIMONT

COMMITMENTS OFFERED BY SOLVAY S.A.
TO THE COMMISSION OF THE EUROPEAN COMMUNITIES
IN RESPECT OF POLYVINYLIDENE FLUORIDE

4 April 2002

FRESHFIELDS BRUCKHAUS DERINGER

CASE COMP/M. 2690 SOLVAY/AUSIMONT

COMMITMENTS OFFERED BY SOLVAY S.A. TO THE COMMISSION OF THE EUROPEAN COMMUNITIES IN RESPECT OF POLYVINYLIDENE FLUORIDE

WHEREAS

(1) On 21 February 2002 Solvay notified to the Commission the proposed acquisition by it of sole control of Agorà under Article 4(1) of the Merger Regulation;

(2) The Commission has indicated to Solvay that it may have serious doubts as to the compatibility of the Notified Concentration with the common market and the functioning of the EEA Agreement in respect of PVDF markets;

(3) Pursuant to Article 6(2) of the Merger Regulation, Solvay hereby provides the Commitments in order to restore effective competition on a lasting basis in the PVDF markets within the EEA, and thereby enabling the Commission to declare the Notified Concentration compatible with the common market and the functioning of the EEA Agreement by adopting the Decision;

(4) These Commitments are given by Solvay without prejudice to its position, as stated in the Form CO Notification and elsewhere, that the Notified Concentration does not, with respect to the PVDF markets, create or strengthen a dominant position within the common market or a substantial part of it and is therefore compatible with the common market and the functioning of the EEA Agreement; and

(5) These Commitments shall take effect upon the date of adoption of the Decision by the Commission, provided that if completion of the Notified Concentration does not subsequently take place for any reason and is thereby abandoned, Solvay shall not be bound by these Commitments.

DEFINITIONS

1. In these Commitments, the following expressions shall have the following meanings:

   Agorà means Agora S.p.A., a company organised and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with registered number 47425/97;

Alventia means Alventia LLC a company organised and existing under the laws of the State of Delaware with its registered office at Corporate Trust Center, 1209 Orange Street, Wilmington, Delaware, United States of America;

Alventia Joint Venture Agreement means the joint venture agreement and related agreements dated 19 January 1998 between Solvay Advanced Polymers Inc[27], a subsidiary of Solvay and Dyneon LLC for the production and sale of vinylidene difluoride (VF_2) at Decatur, Alabama, United States of America;

Ausimont means Ausimont S.p.A., a company organized and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with number 145484;

Commission means the Commission of the European Communities;

Commitments means the undertakings given by Solvay that are set out in paragraphs 2 to 10;

Decision means the decision adopted by the Commission under Article 6(1)(b) of the Merger Regulation declaring that the Notified Concentration is compatible with the common market and the functioning of the EEA Agreement;

Divestment Business means the PVDF non-coatings business currently operated by Solvay Fluoropolymers at Decatur, Alabama, USA and related human resources and tangible and intangible assets, as more particularly described in **Schedule 1**;

Divestment Shares means Solvay's 50% shareholding in Alventia;

Divestment Trustee means one or several legal or natural persons (such as an investment bank, auditing firm or other consultant), independent from the Parties, which is approved by the Commission and appointed by Solvay, which has received from Solvay the irrevocable and exclusive mandate to sell the Divestment Business and the Divestment Shares to a Permitted Purchaser or Purchasers at no minimum price;

Dyneon means Dyneon LLC a company organised and existing under the laws of the State of Delaware with its principal place of business at 6744 33rd Street North, Oakdale, Minnesota, United States of America;

Extended Divestment Period means the period from the date of expiration of an applicable First Divestment Period (or any extension thereof) within which the Divestment Trustee shall have an irrevocable and exclusive mandate from

[27] Effective 1 October 2001, Solvay Advanced Polymers Inc became Solvay Fluoropolymers Inc.

Solvay to sell the Divestment Business and the Divestment Shares or any of them at no minimum price;

First Divestment Period means the period within which Solvay can propose a Purchaser or Purchasers for the Divestment Business and/or the Divestment Shares and/or any of them;

Form CO Notification means the Form CO dated 21 February 2002 by which Solvay notified the Notified Concentration to the Commission under Article 4(1) of the Merger Regulation;

Hold Separate Manager means the person employed by the Divestment Business who will be in charge of the day-to-day running of the Divestment Business under the authority of the Monitoring Trustee;

Implementing Regulation means Commission Regulation (EC) No. 447/98;

Key Personnel means all Personnel necessary to maintain the viability and competitiveness of the Divestment Business, which is listed by the Monitoring Trustee in its first report and is subject to the prior approval of the Commission;

Longside means Longside International S.A., a company organised and existing under the laws of Belgium, with its registered office at avenue Louise 522, B-1050 Brussels, Belgium and registered with the Register Commercial de Bruxelles with number 650575;

Monitoring Trustee means one or several natural or legal persons (such as an investment bank, auditing firm or other consultant), independent from the Parties, which is approved by the Commission and appointed by Solvay, which has the duty to monitor and to ensure that Solvay complies with the conditions and obligations undertaken by it pursuant to the Commitments;

Montedison means Montedison S.p.A. a company organised and existing under the laws of Italy, with its registered office at Piazzetta Maurilio Bossi 3, I-20121 Milano, Italy and registered with the Registro delle Imprese di Milano with number 00168420396;

Notified Concentration means Solvay's proposed acquisition of sole control of Agorà, which owns 100% of the share capital of Ausimont;

Parties means Solvay, Agorà, Ausimont, Montedison and Longside or, where relevant, any combination of them;

Permitted Purchaser means one or more persons identified to and approved by the Commission under paragraphs 17 to 19 as a viable acquirer of the Divestment Business or the Divestment Shares, who shall possess the financial resources and proven expertise and have the incentive to develop the Divestment Business in competition with Solvay and other competitors. For the avoidance of doubt there may be more than one Permitted Purchaser for each of the Divestment Business and/or the Divestment Shares;

Personnel means all personnel retained by the Divestment Business;

Purchaser means one or more persons proposed by Solvay to purchase the Divestment Business or the Divestment Shares;

PVDF means polyvinylidene fluoride;

PVDF non-coatings means polyvinylidene fluoride non-coatings;

Solvay means Solvay S.A., a company organised and existing under the laws of Belgium, with its registered office at rue du Prince Albert 33, B-1050 Brussels, Belgium and registered with the Register Commercial de Bruxelles with number 5554; and

Solvay Fluoropolymers means Solvay Fluoropolymers, Inc. (formerly known as Solvay Advanced Polymers, Inc.), a company organised and existing under the laws of the State of Delaware with its principal office at 3333 Richmond Avenue, Houston, TX 77098-3009, United States of America.

THE COMMITMENTS

The Divestment Business

2. Solvay undertakes in accordance with the provisions set out in paragraphs 4 to 40 below to divest the Divestment Business to a Permitted Purchaser as a going concern by way of outright sale (whether by way of an asset sale or a share sale).

The Divestment Shares

3. Solvay undertakes in accordance with the provisions set out in paragraphs 4 to 40 below:

   (a) to divest or procure the divestment of the Divestment Shares to a single Permitted Purchaser as set out below:

      (i) […]; and

      (ii) […], Solvay shall divest or procure the divestment of the Divestment Shares to a single Permitted Purchaser.

Transfer of personnel

4. The Divestment Business shall be divested as a going concern. Solvay commits to transfer to the Permitted Purchaser the Personnel.

5. This transfer will be achieved in the following manner:

(a) Solvay shall 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;

(b) Solvay shall waive all contractual rights concerning the Personnel of the Divestment Business in order to facilitate the immediate transfer of the Personnel; and

(c) Solvay shall take all reasonable steps, including appropriate incentive schemes, to cause all Key Personnel as currently employed by the Divestment Business to stay with the Divestment Business. The incentives shall be approved by the Commission upon recommendation of the Monitoring Trustee and after having heard the Hold Separate Manager. The incentives shall be determined on the basis of industry practice.

6. To the extent that Solvay (or the Divestment Trustee) and the Purchaser agree that all or any of the Personnel shall not be transferred, Solvay shall ensure that the Monitoring Trustee or the Divestment Trustee (as appropriate) indicates to the Commission why the Purchaser has agreed that any non-transferring Personnel shall not be transferred to the Purchaser.

RELATED COMMITMENTS

Preservation of the viability, marketability and competitiveness of the Divestment Business

7. Solvay undertakes, until the closing of the divestment, to preserve from the date of the adoption of the Decision the full economic viability, marketability and competitiveness of the Divestment Business, in accordance with best commercial practice, as shall be monitored by the Monitoring Trustee. In this regard, Solvay undertakes to reduce to the minimum any possible risk of loss of competitive potential of the Divestment Business resulting from the uncertainties inherent to the transfer of a business. Pending divestiture, Solvay shall enable the Hold Separate Manager to manage the Divestment Business in the best interest of the business. In particular, Solvay undertakes not to carry out any act upon its own authority which may have a significant negative impact on the economic value, the management or the competitiveness of the Divestment Business before the closing of the divestment. Solvay also undertakes not to carry out upon its own authority any act, which may be likely to alter the nature of or the scope of activity of the Divestment Business, or the industrial or commercial strategy or the investment policy of the Divestment Business. Sufficient resources shall be made available for the Divestment Business to develop until the closing of the divestment, based on the approved strategic and business plans.

Holding apart of the Divestment Business

8. Following the adoption of the Decision and pending the closing of the divestment and the performance by Solvay of its undertakings under paragraphs 2 to 3 above, Solvay commits:

   (a) to ensure that the Divestment Business is held separate and isolated administratively from the retained PVDF business of Ausimont as an independent and distinct, economically viable, competitive and marketable business and is pending divestment managed on an independent basis by the Hold Separate Manager in the best interests of the business and in accordance with existing business plans and practice; and

   (b) to ensure that all relevant assets, tangible and intangible, are maintained, pursuant to good business practice and in the ordinary course of business, and in particular:

      (i) to use all reasonable efforts to ensure that the Divestment Business production capacities and sales activities are conducted pursuant to good business practices and that all contracts necessary to preserve the Divestment Business are entered into or continued in accordance with their terms, consistent with good business practice and the ordinary course of business;

      (ii) implement all necessary measures to ensure that the know-how and commercial information of a confidential or proprietary nature of the Divestment Business (such as business secrets, know-how, commercial information and other information of a confidential or proprietary nature, other than any information that is already in the public domain or already known to Solvay) are maintained pursuant to good business practice and in the ordinary course of business;

      (iii) to ensure that the employees of the Divestment Business – including the Hold Separate Manager – have no involvement in any of the retained businesses of Ausimont or Solvay and vice-versa, other than employees who are also employed in the retained businesses of Solvay and Ausimont, provided that in such circumstances all necessary measures to ensure that the know-how and commercial information of a confidential or proprietary nature of the Divestment Business is protected pursuant to paragraph 8(b)(ii) above; and

      (iv) to use all reasonable efforts to effect that the necessary personnel who are sufficiently commercially and technically competent to operate the Divestment Business as a going concern are maintained.

Non-solicitation of employees

9. Solvay undertakes not to and undertakes to procure that its subsidiaries do not, for a period of […] from the date of divestiture of the Divestment Business in respect of any Key Personnel of the Divestment Business who are transferred to a Permitted Purchaser, offer these persons contracts of employment in the merged entity.

Enhancing the commercial viability of the Divestment Business

10. In order to enhance the commercial viability of the Divestment Business to prospective purchasers, the Divestment Business will include, to the extent permitted by law or contract, unless not required by, and agreed to with the Permitted Purchaser:

    (a) the assignment to the Permitted Purchaser, to the extent permitted by law or contract, of all existing contracts, and all contracts entered into between the date of these Commitments and the closing of the divestment of the Divestment Business, which are related to, or associated with, the Divestment Business. With respect to existing non-assignable contracts, Solvay shall use its best efforts to assist in the transfer to the Purchaser(s) of such contracts;

    (b) a complete list of all customers and related customers records of the Divestment Business;

    (c) a paid-up (lump sum) non-exclusive licence to use at Decatur the intellectual property rights (patents and know-how) currently used by the Divestment Business and for which the Decatur plant is designed, to manufacture, sell and use PVDF, and further such licences for any expansion of the Divestment Business at Decatur and/or for the future construction and operation of a PVDF non-coatings manufacturing facility at any other location anywhere in the world;

    (d) a paid-up (lump sum) non-exclusive licence to use all trademarks and tradenames currently used by the Divestment Business in the territories of their use for a period of 1 year from the date of divestment of the Divestment Business;

    (e) a fee based technical assistance agreement (on commercial terms and conditions normal in the chemical industry) to provide technical assistance in the production of PVDF at Decatur for a period of 2 years from the date of divestment of the Divestment Business, as more particularly described in **Schedule 2**; and

    (f) a research assistance agreement (including training) to expand the capabilities of the existing laboratory facility of Divestment Business located at Decatur in order to enable the Permitted Purchaser to develop an effective product development capability directly associated with the operation of the Divestment Business for a period of 2 years from the date of divestment of the Divestment Business.

THE DIVESTMENT PROCEDURE

The First Divestment Period

11. Solvay undertakes, subject to the provisions set out below:

    (a) to effect or procure the divestment of the Divestment Shares within […] of the completion of the Notified Concentration, conditional only upon the Commission's approval under paragraphs 17 to 19 and any applicable regulatory approvals; and

    (b) to effect or procure the divestment of the Divestment Business within […] of the completion of the Notified Concentration to a Permitted Purchaser approved by the Commission, conditional only upon the Commission's approval under paragraphs 17 to 19 and any applicable regulatory approvals.

12. Solvay shall be deemed to have complied with the time limits set out in paragraph 11 if, within the First Divestment Period it has entered into a binding contract or contracts for the sale of the Divestment Business or the Divestment Shares to a Permitted Purchaser, provided that such sale is completed within […] of the date of the contract or such other time limit as may then be agreed by the Commission.

The Extended Divestment Period

13. If Solvay is not able to enter into a binding agreement for the sale of the Divestment Business and/or the Divestment Shares in accordance with paragraph 11 above, the First Divestment Period shall be extended by another […] from the date of the expiration of the First Divestment Period. Solvay undertakes to give the Divestment Trustee an irrevocable and exclusive mandate to sell the Divestment Business and/or the Divestment Shares within the Extended Divestment Period at no minimum price.

REPORTING

14. Solvay shall report in full in writing in English to the Commission and the Monitoring Trustee on developments in the negotiations with potential purchasers of the Divestment Business and the Divestment Shares within 10 days after the end of every month following the date of the Decision (or otherwise at the Commission's request).

15. Solvay shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation, on the preparation of the information memorandum and on the due diligence procedure. Solvay shall submit to the Commission for prior approval a copy of the draft information memorandum prepared for the sale of the Divestment Business and/or the

Divestment Shares to allow the Commission to verify the information memorandum's consistency with the terms of these Commitments.

16. Solvay shall also inform the Commission and the Monitoring Trustee on the identification of possible Purchasers and submit to the Commission a list of potential buyers, which have expressed a clear interest in acquiring the Divestment Business and/or the Divestment Shares.

THE PURCHASERS

17. The Purchasers shall each be a viable existing or potential competitor, independent of and unconnected to the Parties, each possessing the financial resources, proven expertise and having the incentive to maintain and develop the Divestment Business as an active competitive force in competition with Solvay 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 Divestment Shares and/or the Divestment Business. Solvay must be able to demonstrate to the Commission that the Permitted Purchaser meets the requirements of these Commitments and that the Divestment Shares and the Divestment Business are sold in a manner consistent with these Commitments. In order to maintain the structural effect of these Commitments, Solvay will not subsequently directly or indirectly acquire influence over the whole or part of the Divestment Business unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the Notified Concentration compatible with the common market.

18. When Solvay has or is about to reach an agreement with the Purchasers, it will submit a fully documented and reasoned proposal enabling the Commission to verify that the criteria above with regard to the identity of the Purchasers are fulfilled and that the Divestment Shares and the Divestment Business are sold in a manner consistent with these Commitments. Solvay shall send simultaneously to the Monitoring Trustee a copy of the sale and purchase agreement in order to enable it to perform its duties in accordance with the paragraphs below. The Commission shall indicate if it considers any such Purchaser(s) to be unsuitable.

19. The verification that the Divestment Shares and the Divestment Business are sold in a manner consistent with the relevant commitment shall include an approval by the Commission of the Purchasers and of the final binding sale and purchase agreement(s).

THE MONITORING TRUSTEE

Appointment

20. Solvay will, as soon as practicable and in any event no later than four weeks after the Commission has notified to Solvay the Decision, appoint one or more

Monitoring Trustees who shall be independent of the Parties, possess the necessary qualifications to carry out their mandate and shall not be, or become, exposed to a conflict of interest. Subject to prior approval by the Commission of the identity of the Monitoring Trustees and the terms upon which they are to be appointed, the Monitoring Trustees shall be remunerated by Solvay in such a way as not to impede their independence and effectiveness in fulfilling their mandate.

Proposal by Solvay

21. Solvay shall propose a Monitoring Trustee or a list of proposed Monitoring Trustees and the terms of the mandate for approval to the Commission with adequate information for the Commission to verify that the Monitoring Trustee fulfils the requirements for its appointment. This proposal shall be made within 1 week of the date of the Decision. The mandate submitted for approval shall be drawn up taking due account of the Commission Standard Monitoring Trustee Mandate and shall include all provisions necessary to enable the Monitoring Trustee to fulfil its duties under these Commitments. Solvay shall also procure that the proposed Monitoring Trustee shall submit to the Commission a detailed work plan in which it is described how the Monitoring Trustee intends to monitor all aspects of these Commitments.

Approval or rejection by the Commission

22. The Commission shall have the discretion to approve or reject the proposed Monitoring Trustee or Trustees, and to approve the proposed mandate subject to modifications that the Commission deems reasonably necessary for the Monitoring Trustee to fulfil its obligations. If only one name is approved, Solvay shall appoint or cause the individual or institution concerned to be appointed as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Solvay shall be free to choose the Monitoring Trustee to be appointed from among the names approved.

New proposal by Solvay

23. If all the proposed Monitoring Trustees are rejected, Solvay will submit the names of at least two further such 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 Monitoring Trustees as well as all information necessary for the Commission to verify that the proposed Monitoring 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, Solvay shall appoint or cause the individual or institution concerned to be appointed as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one further name is

approved, Solvay shall be free to choose the Monitoring Trustee to be appointed from among the names approved.

Monitoring Trustee nominated by the Commission

24. If all further proposed Monitoring Trustees are rejected by the Commission, the Commission shall nominate a suitable Monitoring Trustee, which Solvay will appoint, or cause to be appointed.

Appointment by Solvay

25. As soon as the Commission has given approval to one or more proposed Monitoring Trustees, Solvay shall appoint or cause the Monitoring Trustee concerned to be appointed within one week thereafter, in accordance with the mandate approved by the Commission.

Content of the Mandate

Duties and obligations of the Monitoring Trustee

26. The Monitoring Trustee shall assume its specified duties in order to ensure compliance in good faith with the Commitments on behalf of the Commission and taking into account the legitimate interests of Solvay.

27. The Monitoring Trustee shall in good faith:

(a) oversee the ongoing management of the Divestment Business with a view to ensuring its ongoing continued viability and marketability and monitor compliance by Solvay with the conditions and obligations of these Commitments;

(b) in consultation with Solvay, determine appropriate measures to ensure the viability, marketability and competitiveness of the Divestment Business and the Divestment Shares and monitor the fulfilment by Solvay of its obligations under paragraph 4, including to ensure the non-disclosure of competitively sensitive information concerning the Divestment Business to Solvay (except where strictly necessary to effect the disposal of the Divestment Business or the Divestment Shares);

(c) monitor the management and operation of the Divestment Business in the normal course of business in order to report on their continued viability, marketability and competitiveness. For this purpose, and to the extent necessary for such monitoring, the Monitoring Trustee will have access to the personnel and facilities as well as documents, books and records of the Divestment Business;

(d) propose to Solvay such measures as the Monitoring Trustee considers necessary to ensure compliance with the conditions and obligations under these Commitments, in particular the maintenance of the viability or marketability of the Divestment Business and the non-disclosure of competitively sensitive information by Solvay, and the Monitoring Trustee shall be entitled to impose such measures (with the approval of the Commission) in the event that Solvay does not comply with the Monitoring Trustee's proposals within the timeframe set by the Monitoring Trustee;

(e) be entitled to impose the measures described in sub-paragraph (d) (with the approval of the Commission) in the event that Solvay does not comply with the Monitoring Trustee's proposals within the timeframe set by the Monitoring Trustee;

(f) provide to the Commission, with a simultaneous non-confidential copy to Solvay, a written report within 10 days after the end of every month concerning the monitoring of the operation and management of the Divestment Business in order to assess whether the business is 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 Solvay is failing to comply with any of the conditions or obligations under these Commitments. Solvay shall receive a simultaneous non-confidential copy of any such additional reports; and

(g) assess the suitability of the proposed purchaser and the viability of the Divestment Business after the sale to the Permitted Purchaser and give its opinion to the Commission on whether the proposed divestment complies with the conditions and obligations under these Commitments.

28. The Monitoring Trustee shall cease to perform its duties as Monitoring Trustee with regard to the Divestment Business and/or the Divestment Shares after the last in time of closing or closings (if more than one) of the sale of the Divestment Business and/or the Divestment Shares after having requested the Commission for and after having received from the Commission a discharge from further responsibilities. Even after the discharge has been given, the Commission shall have the discretion to require the reappointment of the Monitoring Trustee, if subsequently it appears to the Commission that the relevant commitments might not have been fully and properly implemented by Solvay.

29. Solvay shall provide the Monitoring Trustee with all such assistance and information, including copies of relevant documentation, as it may reasonably require to monitor Solvay's compliance with the conditions and obligations under these Commitments. Solvay shall make available to the Monitoring Trustee one or several offices on their premises. Solvay 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 its task.

At the request of the Monitoring Trustee, Solvay shall provide the Monitoring Trustee with access to sites which are being divested. Solvay shall provide all managerial and administrative support that may reasonably be requested by the Monitoring Trustee on behalf of the management of the Divestment Business, including all administrative support functions relating to the Divestment Business that are currently carried out at Solvay headquarters level.

30. At the expense of Solvay, the Monitoring Trustee may, if it considers it to be reasonably necessary or appropriate for the performance of its duties, appoint external professional advisers (such as corporate finance advisers or lawyers) provided that any fees incurred are reasonable and are reasonably incurred. The appointment of any external professional adviser shall be subject to Solvay's approval, which shall not be unreasonably withheld. If Solvay should refuse its consent to the appointment of any external professional adviser proposed by the Monitoring Trustee, the Commission may approve the appointment of such advisers. Only the Monitoring Trustee shall be entitled to issue instructions to any advisers appointed by it. The advisers shall not be liable to Solvay for, and shall be held harmless by Solvay from, any consequences of following the Monitoring Trustee's instructions.

Replacement of the Monitoring Trustee

31. The Commission may, after hearing the Monitoring Trustee, order Solvay to remove the Monitoring Trustee in the event that the Monitoring Trustee has not acted in accordance with the provisions of these Commitments or for any other good cause. The Monitoring Trustee may also be removed by Solvay with the prior approval of the Commission and after the Commission has heard the Monitoring Trustee in the event that the Monitoring Trustee has not acted in accordance with the provisions of these Commitments or for any other good cause. The Monitoring Trustee may be required to continue in its function until a new Monitoring Trustee is in place to whom the Monitoring Trustee has effected a full hand over of all relevant information. Regarding the appointment of a new Monitoring Trustee, the same procedure applies as described in paragraphs 20 to 25.

THE DIVESTMENT TRUSTEE

Appointment and duties of the Divestment Trustee

32. Solvay shall appoint one or more Divestment Trustees, subject to approval by the Commission. Solvay's proposal for the Divestment Trustee shall be made within one week from the date of the Decision. Regarding the appointment and the replacement of the Divestment Trustee, the same procedure shall apply mutatis mutandis as to the appointment and replacement of the Monitoring Trustee. The mandate of the Divestment Trustee shall only come into effect if Solvay is not able to enter into a final binding agreement for the sale of the Divestment Business or the Divestment Shares (as the case may be) within the First Divestment Period.

33. The Divestment Trustee shall be independent of the Parties, possess the necessary qualifications to carry out the task and shall not be, or become, exposed to a conflict of interest. The Divestment Trustee will be remunerated in such a way as not to impede its independence and effectiveness in fulfilling the mandate. In particular, the remuneration package of the Divestment Trustee may not contain a clause that provides for a premium for success in selling the Divestment Business or the Divestment Shares (as the case may be) that is linked to the final value of the sale.

34. Within the Extended Divestment Period, the Divestment Trustee shall sell at no minimum price the Divestment Business or the Divestment Shares (as the case may be) to a Permitted Purchaser in accordance with procedures laid down in paragraphs 17 to 19 above, provided that the Commission has approved both the Purchaser and the final binding sale and purchase agreement in accordance with the procedures laid down in paragraphs 17 to 19. The provisions of paragraph 30 shall apply mutatis mutandis to the appointment of external professional advisers by the Divestment Trustee.

35. The Divestment Trustee shall report in full in writing in English to the Commission on developments in the negotiations with potential purchasers of the Divestment Business and/or the Divestment Shares (as appropriate) within 10 days after the end of every month following the expiration of the First Divestment Period (or otherwise at the Commission's request). A simultaneous non-confidential copy of these reports shall be provided to the Monitoring Trustee and to Solvay.

36. The Divestment Trustee shall cease to act as Divestment Trustee only after the Commission has discharged it from its duties, following a request from the Divestment Trustee made after the sale of the Divestment Business and of the Divestment Shares (as appropriate) to a Permitted Purchaser independent of the Parties has been completed. However, the Commission may at any time require the reappointment of the Divestment Trustee if it subsequently appears that the relevant Commitments might not have been fully and properly implemented.

Obligations of Solvay

37. Solvay shall provide the Divestment Trustee with all such as assistance and information as the Divestment Trustee shall reasonably require and Solvay's obligations under paragraph 29 shall apply mutatis mutandis in respect of the Divestment Trustee.

38. In order to accomplish the divestment of the Divestment Business and/or the Divestment Shares (as the case may be) and the closing of such divestments, Solvay shall grant to the Divestment Trustee a power of attorney (which shall take effect only at such time as the Divestment Trustee's mandate takes effect pursuant to paragraph 31) or, at the option of the Divestment Trustee, cause the documents required for the divestment of the Divestment Business and/or the Divestment Shares (as the case may be) to be duly executed by Solvay.

THE REVIEW CLAUSE

39. The Commission may, upon the request of Solvay, showing good cause and after hearing the Monitoring Trustee and/or the Divestment Trustee, and where relevant, allow for:

(a) an extension of the First Divestment Period and/or the Extended Divestment Period, provided that any such request is made no later than one month before the end of the relevant time period, save in exceptional circumstances;

(b) the sale of the Divestment Business to a Purchaser proposed to the Commission without one or more of the assets, facilities, contracts or other rights and obligations that are part of the Divestment Business as described in **Schedule 1**; or

(c) waive or modify one or more of the conditions and obligations in these Commitments.

40. If the approval of the Notified Concentration by another competition authority is made subject to requirements, obligations or conditions that are or may be (or may become) inconsistent with these Commitments or that would together with these Commitments result in the divestiture of assets or businesses beyond what is necessary to restore effective competition on the market for PVDF non-coatings, Solvay may request a review and modification of these Commitments (including, without limitation, the Commission's consent to a divestment of the PVDF business carried on by Ausimont at Thorofare, in substitution for the divestment of the Divestment Business and the Divestment Shares, which the Commission shall not unreasonably withhold if it is satisfied that such a divestment would restore effective competition on the market for PVDF non-coatings) in order to avoid such inconsistencies or obligations beyond what is necessary to restore effective competition on the market for PVDF non-coatings.

For and on behalf of Solvay S.A.

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Dominique Dussard
General Counsel, Europe and Asia-Pacific
4 April 2002

SCHEDULE 1

The Divestment Business

Assets

The Decatur PVDF non-coatings business is situated at Decatur, Alabama, USA and comprises the following tangible and intangible assets:

(a) a stand-alone PVDF manufacturing plant commissioned in 2000 with a present nameplate capacity of 2,300 tonnes per annum, including:

- a suspension process polymerisation reactor with a reaction capacity of $8m^3$ and associated finishing equipment;
- upstream reactor equipment, comprising:
  - equipment to feed VF_2 monomer and comonomers to the reactor;
  - equipment to feed demineralised water to the reactor;
  - equipment to prepare, store and feed to the reactor the reactives that are necessary for the polymerisation (such as initiator catalysts, dispersing agents;)
- downstream reactor equipment, comprising:
  - stripping vessel;
  - treatment/washing unit;
  - drying unit;
  - flake storage;
  - pelletising unit;
- monomer recovery unit (for the recovery of unreacted monomers);

(b) administration building containing:

  - control room;
  - quality control laboratory;

(c) maintenance and technical buildings;

(d) storage tanks;

(e) loading and unloading area;

(f) utilities facilities (steam, air, demineralised water, cooling water, refrigeration units, treatment and disposal of aqueous and organic effluents);

(g) stocks and inventories;

(h) existing customer contracts and a complete list of customers of the Divestment Business; and

(i) an assignment of the lease of the land on which the Divestment Business is situated at Decatur, Alabama, United States of America.

Annex 1 contains a site map of the Decatur PVDF Plant and clearly identifies all the buildings and other fixed assets of the Divestment Business.

Personnel

The Divestment Business comprises (i) approximately [...] full time equivalent production staff at Decatur who work in continuous shift patterns (including some involved in the operation of the Alventia VF_2 facility) and approximately [...] technical services staff; and (ii) approximately [...] sales, customers and technical services staff in Houston, Texas (with the exception of [...] staff members who are engaged in other business areas and/or expatriates).

SCHEDULE 2

Technical Assistance Agreement

- Technical assistance to solve any problems relating to the operation and maintenance of the PVDF plant at Decatur;
- Technical assistance to solve any problems relating to the use of PVDF by the processors;
- Meetings to exchange and discuss improvements to the PVDF technology that have been brought to industrial practice before the date of divestment of the Decatur PVDF Business;
- Technical assistance provided to the PVDF plant at Decatur to examine installations and equipment; and
- Assistance in the analysis of any incident at the PVDF plant at Decatur and in the design of any modification to the plant required in connection therewith.

ANNEX 1

MAP OF THE DECATUR PVDF PLANT

[…]