EN

Case No COMP/M.1751 - SHELL / BASF / JV - PROJECT NICOLE

Only the English text is available and authentic.

REGULATION (EEC) No 4064/89
MERGER PROCEDURE

Article 6(2) NON-OPPOSITION
Date: 29/03/2000

In electronic form on the EUR-Lex website under document number 32000M1751

Office for Official Publications of the European Communities
L-2985 Luxembourg

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 29.03.2000

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EEC) No 4064/89 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus […]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying parties

Dear Sirs,

Subject: Case No COMP/M.1751 - SHELL/BASF – PROJECT NICOLE
Notification of 15.02.2000 pursuant to Article 4 of Council Regulation No 4064/89

1. On the 15.02.2000, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No. 4064/89, whereby a joint venture between Shell and BASF is established.

2. After examining the notification, the Commission has concluded that the notified operation falls within the scope of Council Regulation (EEC) No 4064/89[1] and, in view of the undertakings submitted by the parties, does not raise serious doubts as to its compatibility with the common market and with the EEA Agreement.

I. THE PARTIES

3. BASF is a multi-national chemical company. Its products range from natural gas, oil, petrochemicals and innovative intermediates to high value-added chemicals, crop protection agents and pharmaceuticals. BASF's polypropylene ("PP") business is currently undertaken by its subsidiary Targor, and its European polyethylene ("PE") business by Elenac, an existing full function joint venture with Shell (Case IV/M.1041).

4. Shell is engaged world-wide in the exploration and production of oil and natural gas, oil products, chemicals, gas and power generation and renewable energy. Shell's PP business is currently undertaken by Montell, and its European PE business by Elenac.

[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).

Rue de la Loi 200, B-1049 Bruxelles/Wetstraat 200, B-1049 Brussel - Belgium
Telephone: exchange 299.11.11
Telex: COMEU B 21877. Telegraphic address: COMEUR Brussels.

II. THE OPERATION

5. The transaction was notified on 15.02.2000. The proposed operation consists of the creation of a jointly controlled full function joint venture between Shell and BASF ("Nicole") to which the parties will contribute all of their world-wide PP and PE interests (i.e. Montell, Targor and Elenac).

6. With regard to PE technology, Nicole will combine the Spherilene technology and licensing business currently conducted by Montell (outside Elenac) and the PE technology and licensing business of Elenac.

7. In relation to PP technology and catalysts, Nicole will be endowed with all Montell's world-wide PP technology (Spheripol) business, including the IP rights, catalyst production facilities, R&D resources and pilot plants etc. BASF will retain control of its Novolen PP technology which will not be contributed to Nicole, however, BASF has indicated its willingness to dispose of its Novolen PP technology. BASF will contribute the IP rights relating to its development of metallocene PP catalysts to Nicole.

III. CONCENTRATION

8. The transaction involves the acquisition of joint control by Shell and BASF of a full function joint venture, Nicole, an operation which constitute a concentration within the meaning of Article 3(2) of the Merger Regulation. Shell and BASF will control the joint venture Nicole on a 50:50 basis. The joint venture will be an autonomous economic entity performing on a lasting basis all the functions normally carried out by undertakings operating on the market.

9. Nicole will not be economically dependent on either of its two parent companies. In addition, Nicole will conduct its business activities under the direction of its own management, i.e. have a management dedicated to its day-to day operations. Nicole will combine all of its parents' PP and PE interests (i.e. Montell, Targor and Elenac) and it will be endowed with all the necessary assets and resources for the manufacture and sale of PP and PE.

10. Only initially Nicole will purchase approximately [10-20] % of its required propylene and [15-25] % of its required ethylene supply from its parents. Finally, Nicole is established for an indefinite duration.

IV. COMMUNITY DIMENSION

11. The combined aggregate world-wide turnover of the undertakings concerned exceeds EUR 5 000 million (Shell: EUR 83 600 million, BASF: EUR 27 500 million) in 1998. The aggregate Community wide turnover of each party exceeds EUR 250 million (Shell: EUR [….] BASF: EUR [….]) in 1998. Furthermore, the parties do not achieve more than two-thirds of their turnover in one and the same Member State. The operation has therefore a Community dimension according to Article 1(3) of the Merger Regulation. It does not constitute a co-operation case pursuant to Article 57 of the EEA Agreement.

V. COMPETITIVE ASSESSMENT

12. Polypropylene (PP) belongs to the category of polyolefins, that is a family of thermoplastics derived from a particular group of base chemicals known as olefins, which also includes polyethylene (PE). Polyolefin based products are derived from basic chemicals (propylene and ethylene) through a process of polymerisation, a process in which monomers (olefins) react with each other to produce long chains of a repeated series of monomers (polymers). Polyolefins are further processed by the plastics industry to manufacture a wide range of consumer goods, including films, fibres, moulded and extruded products.

13. The operation will concern several areas in the polyolefins sector:

- PE resins;
- PE technology;
- PP resins;
- PP compounds; and
- PP technology package licensing.

1 PE RESINS

14. In its earlier decisions[2], the Commission decided that the geographical scope of the various PE resins markets is Western Europe. This was confirmed in the current investigation. The parties' European PE resins businesses are already combined in an existing 50/50 joint venture ("Elenac") which was cleared by the Commission in 1998[3]. Elenac subsequently acquired the PE business of Hoechst[4]. The only change arising from the current operation will be the addition of Shell's North American PE resin production facilities which are held by its subsidiary, Montell. These facilities

---

[2] Case No IV/M.1287 Elenac/Hoechst: OJEC nº 405 of 24.12.1998, p.15; Case No IV/ M.1041 BASF/Shell(II): OJEC nº C 81, of 17.3.1998, p.5

[3] Case No IV/M. 1041 – BASF/Shell (II)

[4] Case No IV/M. 1287 – Elenac/Hoechst

do not deliver the products in question to Western Europe. There is therefore no need to decide on the relevant product market or markets for PE resins as the operation will not create any overlap.

2 PE TECHNOLOGY

Relevant product markets – PE technology

15. In the Union Carbide/Enichem decision[5], the Commission concluded that there is a PE technology market distinct from the market for the production and sale of PE, owing to the fact that most PE producers that have developed their own PE production technology offer it for license. Therefore a large number of PE producers operate under technology license, and licensing is organised as a distinct business activity. Within the PE technology, a distinction can be made between high pressure process and low pressure process, the latter including solution, slurry and gas phase technologies. In the above-mentioned Union Carbide/Enichem decision, the Commission, taking into account the future demand trends for PE products, made a distinction between high-pressure and low-pressure processes.

16. For the purposes of the present case, it is not necessary to decide whether these segments constitute relevant product markets, because irrespective of the precise market definition to be adopted in this respect, the assessment of the notified concentration would not change.

Relevant geographic markets – PE technology

17. In the Union Carbide/Enichem decision[6], the Commission came to the conclusion that the PE technology market has a world-wide geographic dimension. No evidence was received to justify taking a different approach in the present case: licensors remain active world-wide and there appears to be no geographic constraints on the licensees' choice of supplier.

Assessment – PE technology

18. For Shell, the operation will have no impact in relation to PE technology. However, BASF would acquire joint control of Montell’s Spherilene PE technology which, however, does not in itself raise market power.

Conclusion

19. This aspect of the concentration does not raise any serious doubts as to its compatibility with the Common Market.

---

5 Case No IV/M.550 – Union Carbide/Enichem: OJEC n^{o} C123, of 19.05.1995, p.3

6 Case No IV/M.550 – Union Carbide/Enichem

3 PP RESINS

Relevant product markets – PP resins

20. PP resins have a balance of properties and processing characteristics which make them suitable for the production of a wide range of articles using a variety of processes. In their natural state, PP resins are colourless, odourless and translucent. However, PP resins have a number of different properties which can be varied, in particular their hardness and abrasion resistance, rigidity, heat resistance, impact strength, density and moisture barrier properties.

21. There are three main types of PP resin: homopolymers (which represented 60% of European PP resin consumption in 1998), random copolymers (7%) and impact (or block) copolymers (33%).

22. Homopolymers are more rigid and have better resistance to high temperatures than copolymers, but their impact strength is inferior. As they are more rigid than copolymers, they permit the design of thinner sections for equivalent stiffness. Homopolymers are widely used by the packaging industry as film, containers and closures, and as fibre for carpets and disposable non-wovens.

23. Random copolymers are transparent and very tough at ambient temperatures, and are easier than homopolymers to process in sealing and welding. Random copolymers are mainly used in films, as document folders, for food packaging, and heat sealable layers. They can also be used in other injection moulding (e.g. cassette cases) and blow moulding (e.g. rigid food packaging).

24. Impact (or block) copolymers can be classified according to their rubber content as medium impact, high impact, super high impact, or thermoplastic elastomers. Impact copolymers are used in automotive exteriors (e.g. spoilers, protective strips, mud flaps, etc) and more sophisticated industrial applications.

25. On the supply-side, homopolymers and random copolymers can be produced in the same reactor. For the production of impact copolymers, an additional reactor is needed. Production facilities equipped with the additional reactor can be used to produce all three types of PP resins. Since not all reactors are fitted with the facilities needed to produce impact copolymers, the Commission previously[7] argued that there were grounds for considering that there were two separate relevant markets: that for homopolymers and random copolymers together; and that for impact copolymers. However, in that case the market definition was left open on the grounds that it did not affect the assessment of the merger. For the same reasons the product market definition was left open in the Commission decision in BASF/Hoechst[8].

---

[7] Case No IV/ M.269 Shell/Montecatini, June 1994, OJEC nº L 332, of 22.12.1994, p. 48-70

[8] Case No. IV/ M. 845 BASF/Hoechst, June 1997, OJEC nº C 232 of 31.7.1997, p. 4

26. Since the Shell/Montecatini decision in 1994, there has been an increase in the proportion of resins capacity that is equipped to produce all three types of resins. However, it is not necessary to consider whether the additional scope for supply-side substitutability in the production of PP resins means that a single relevant market for PP resins should be defined rather than separate relevant markets because the assessment of the concentration would be unaffected.

Relevant geographic market – PP resins

27. The parties have claimed that there is a global aspect to the market and that this is becoming more significant as major customers increasingly purchase globally. However, imports from outside Western Europe represent only 6% of the volumes purchased on the free market in 1998. Tariffs on imports from suppliers in Japan and North America are significant at 9.5%, and sources from these suppliers would also incur significant transport costs. The vast majority of respondents indicated that the market for PP resins is Western European. The available evidence therefore does not support the argument that the relevant geographic market for PP resins is world-wide.

28. The parties claim that the market is broader than Western Europe and should also include Eastern Europe (in particular the adjacent countries Poland, Hungary, and the Czech and Slovak Republics). The investigation has not supported this argument. Imports from Eastern Europe represent just 3% of the volumes of PP resins purchased on the free market in Western Europe. In addition, respondents to the PP resins investigation replied that in general they have not bought PP resins from East European suppliers because the Eastern European suppliers do not yet offer resins of the required quality to meet the standard of the customers' ISO norms. Other customers indicated that East European suppliers provide less technical support and that they also represent a greater logistic/supply risk than Western European suppliers.

29. The Commission has therefore concluded that there is no reason to change the view expressed in a previous decision[9] that the relevant geographic market for PP resins (however defined) is Western Europe.

Assessment – PP resins

30. Nicole's free market shares are given in the table below. The combined market shares are [35-45]% overall and between [30-40]% for homopolymers and random copolymers and [35-45]% for impact copolymers. The nearest competitor for homopolymers and random copolymers would be around a third of Nicole's size. For impact copolymers, Nicole would be twice the size of its nearest competitor.

9 Case No. IV/M. 269 - Shell/Montecatini

Table 1 – Free market shares, 1998, Western Europe, by volume

	Homo + Raco %	Impact %	Total %
Shell	[15-25]	[15-25]	[15-25]
BASF	[15-25]	[10-20]	[15-25]
Nicole	[35-45]	[30-40]	[35-45]
Borealis/PCD	[5-15]	[10-20]	[5-15]
Totalfina	[5-15]	[0-10]	[5-15]
DSM	[5-15]	[10-20]	[5-15]
Appryl	[5-15]	[5-15]	[5-15]
BP Amoco	[0-10]	[5-15]	[5-15]
Repsol	[0-10]	[0-10]	[0-10]
Solvay	[0-10]	[0-10]	[0-10]
Exxon	[0-10]	[0-10]	[0-10]
Dow	[0-10]	[0-10]	[0-10]
Polychim	[0-10]	[0-10]	[0-10]

31. The Commission's investigation has identified competition concerns in PP resins arising from the operation. Some customers mention that for some specific grades of PP resins there are already only a limited number of suppliers, in some cases three or less, and that the merger would significantly reduce the customers possibilities of dual sourcing. Therefore, they argue that the transaction could reduce customers' negotiating power in relation to the parties and could consequently lead to higher prices.

32. The market position of Nicole would be strengthened by Nicole's upstream integration into PP technology. This enables the parties to use their technology in a way that could further strengthen Nicole's position in the downstream market(s) for resins. Nicole will be a significant supplier of technology to other PP resins producers, thereby enabling it to control, at least to a certain degree, the technologies and the developments to the technologies, that are available to competitors. Nicole's large installed base of in-house PP resin production capacity provide a large source of potential innovation for Nicole's technology. It may also provide opportunities to Nicole to trial catalyst and/or other technological developments, opportunities which other producers may not have. This could strengthen its resins business since it enables Nicole to introduce new PP resins to the market before releasing the technology advance to licensees. Therefore, Nicole's technology business is likely to reinforce its resins business.

33. In addition, Nicole will draw benefits from its downstream integration into compounds. It has an assured outlet for a significant part [15-25]% of its resins

output. Through its compounds business it has close contact with end-users and this enables it to react quickly and flexibly to changes in end users' requirements.

34. Even though competitors to Nicole are also vertically integrated, albeit to differing degrees, they are not in the same strong position in the upstream market for PP technology as Nicole.

Conclusion - PP Resins

35. The transaction raises serious doubts as to its compatibility with the Common Market as it may lead to the creation of a dominant position in Western Europe under any of the possible PP resin product market definitions.

4 PP COMPOUNDS

Relevant product market – PP compounds

36. PP compounds are PP resins which have been blended with other materials to change the performance characteristics of the product. PP compounds are mainly used in the automotive sector and to produce electrical appliances. The parties have differentiated between 'commodity' compounds and higher value, 'sophisticated' compounds which are often tailor-made to a customer's requirements. According to the parties the sales in Western Europe (see following paragraph) of commodity compounds were [700-800] kT and were [300-400] kT for sophisticated compounds, both in 1998. Total sales were [1000-2000] kT. The categorisation proposed by the parties has received broad support in the market investigation. However, it is not necessary to decide whether there is a single relevant market for all PP compounds or two separate relevant markets, because concerns about the effects of the concentration arise however the markets are defined.

Relevant geographic market – PP compounds

37. The parties argue that the geographical scope of the market for PP compounds is Western Europe because customers are based all over Western Europe and they purchase PP compounds from suppliers who are also established in several Member States. The parties also state that they are not aware of any imports of PP compounds into Western Europe. This definition has been supported in the Commission's investigation. The Commission has therefore concluded that the relevant geographic market for PP compounds (however defined) is Western Europe.

Assessment – PP compounds

38. Overall, Shell's [10-20] % market share of PP compounds would be combined with BASF's [20-30] %, giving Nicole a combined share of [40-50] %. The next largest competitor would be less than a third of Nicole's size. The parties best estimates of market shares for all PP compounds are given in the table below. Serious concerns about the effect of the operation were raised by a large majority of respondents to the Commission's market investigation in relation to the overall market for PP compounds. Given these market shares and structure, as well as the fact that Nicole's vertical integration would bring it advantages, particularly in relation to assured

supplies and access to economies in logistics, the concentration gives rise to serious doubts as to the compatibility of the operation in relation to compounds overall.

PP compound free market shares 1998, by volume in Western Europe

	%
BASF	[20-30]
Shell	[10-20]
Nicole	[35-45]
Borealis	[10-20]
DSM	[5-15]
Appryl	[0-10]
TotalFina	[0-10]
BP Amoco	[0-10]
Repsol	[0-10]
Solvay	[0-10]
Independents	More than 25

39. For commodity compounds the situation would be similar. BASF had [25-35]% of the Western European market in 1998 against Shell's [10-20]% (combined [35-45]%). The next largest competitor had less than 15% of the free market sales and would be less than a third of the size of Nicole.

40. For sophisticated compounds, Shell had a [25-35]% Western European market share in 1998 against BASF's [5-15]% (combined [35-45]%). After the operation there will be two main suppliers in the market, Nicole with [35-45]% and Borealis with an estimated market share of [30-40]%. In contrast to the situation for commodity compounds where the competition was fragmented, the combined entity will face competition from a competitor which in terms of market share comes close to the parties' combined share. However, a number of respondents to the Commission's investigation indicated that the parties were each other's closest competitors for the supply of certain sophisticated compounds, particularly to the automobile industry. It is not necessary to decide whether this raises any concerns in relation to sophisticated compounds, as the remedies proposed for the overall market and the market for commodity compounds would automatically resolve any problems for sophisticated compounds.

PP compounds conclusion

41. The transaction raises serious doubts as to its compatibility with the Common Market as it may lead to the creation of a dominant position in the Western European market for PP compounds, however the product market(s) are defined.

5 PP TECHNOLOGY PACKAGE LICENSING

Relevant product market – PP technology

42. PP technology to manufacture PP requires a process, the hardware, and a suitable catalyst. A PP process technology is the enabling technology to produce PP resins in a plant of specific design. All PP processes are capable of producing homopolymer and random copolymer PP and all processes require one or more additional reactors to produce impact copolymer.

43. A polymerisation catalyst is a metal complex that enables polymerisation to take place inside the process reactor. The catalyst system and the monomer combine to define the polymer's resulting molecular structure and properties. Virtually all PP resins are currently produced with technology based on conventional, Ziegler-Natta ("Z/N"), or multi-site, catalysts. However a new family of PP catalysts are under development which will lead to commercial production of PP resins on the basis of single-site catalysts. The most significant single-site catalysts for PP resins are metallocene catalysts.

44. The Commission held in a previous decision[10] that the relevant market for "PP technology is the market for the licensing of advanced process technology plus catalyst", together referred to as the market for "PP technology package licensing". The Commission's investigation in the present case has confirmed that this market definition remains valid.

Relevant geographic market – PP technology

45. In its previous decision[11], the Commission concluded that competition in the PP technology package licensing market took place on a world-wide basis. Licensors of PP technology can compete for business wherever a potential customer seeks to license technology and these licensors can offer their technology to customers located anywhere in the world. The Commission's investigation in this case has fully supported the argument that the relevant geographic market for PP technology package licensing remains global.

Assessment – PP technology

46. Both BASF and Shell currently own technology licensing businesses based on Z/N catalysts. Shell's Spheripol technology is the leading global technology, accounting for [45-55]% of the world-wide capacity licensed to third parties between 1993 and 1999 and [45-55]% of the licenses awarded. BASF's Novolen technology was the third largest player over the same period in terms of the number of licenses awarded [5-15]%, and the fourth largest player in terms of capacity licensed [5-15]%. Over a 15 year period (1984-1999), Spheripol licenses represented [35-45]% of capacity licensed to third parties, and Novolen [5-15]%.

---

10 Case IV/M.269 – *Shell/Montecatini*, 08.06.1994

11 Case IV/M.269, *ibid*

47. The Commission and the majority of respondents to the investigation consider that Shell already has a dominant position on the market for advanced PP technology package licensing with its Spheripol technology.

48. Through Targor, BASF holds a powerful suite of patents covering all levels of metallocene catalyst use in the production of PP (catalyst characteristics, catalyst support, use of catalysts in production facilities, the products produced by the use of these catalysts) and that these patents prevent other licensors or producers from developing these catalysts. The strength of BASF's patent suite has been borne out by the market investigation.

49. The parties argue that the current patent situation is too complicated for any metallocene-based PPs to reach the market in the immediate future. In addition to Targor's patent suite, other players, for example, ExxonMobil and TotalFina also hold broad and overlapping patents. The interdependence of the different patents held by different companies has a blocking effect. As a result, none of the patent owners is free to use or license metallocene catalyst without the consent of the other patent owners.

50. Despite the blocked position in relation to the patents, industry forecasts indicate that within five years or so, the volume of metallocene-based PP resins produced and sold might overtake the volume of random copolymers that is sold. Furthermore, respondents to the market investigation indicated that they consider that future access to a metallocene capability from their technology licensor is an important factor in their current decisions about PP technology.

51. The combination of BASF's metallocene patents with Shell's position in the PP technology market is therefore a vital part of the assessment of the concentration. In its originally notified form, the concentration would mean that Nicole would have a combination of the dominant Z/N technology and possession of a suite of patents that effectively blocks any other party's attempts to develop a metallocene technology. This would provide Nicole with both the incentives and the ability to restrict the development of metallocene technology and in turn would strengthen Nicole's dominant position particularly by enabling it to maintain its dominance in the supply of PP technology package licenses and conventional catalysts. While certain competitors may hold blocking metallocene patents, they do not have the same incentives as Nicole has to delay the development of metallocene catalysts.

52. Although the Novolen PP technology will not be contributed to Nicole, BASF would have joint control of the Spheripol technology and complete control of the Novolen technology. In this situation there would be no real competition between the Spheripol and Novolen technologies. This would further strengthen Spheripol's dominant position.

53. The Commission's concerns about the effect of the concentration on competition are reinforced by the extent of vertical integration exhibited by Nicole. In particular, technology licensors need to have showcase resins facilities to prove to prospective purchasers of the technology that the technology works at a commercial scale. Such facilities are also needed in order to provide new licensees (i.e. resins producers) with batches of resins while the licensed production facilities are under construction to

them to establish their resins business. In addition, wide-scale use of the technology provides further benefits to the licensor. In-house production facilities also provide a source of innovative ideas for the technology owner that is not time-limited – as such feedback arrangements are in the licenses to third parties.

Conclusion - PP technology

54. Consequently, the transaction would give rise to serious doubts as to its compatibility with the Common Market as it threatens to strengthen a dominant position on the market for PP technology package licensing as a result of the addition of BASF/Targor's metallocene patents to Shell's previously dominant position and the fact that BASF also controls the Novolen technology.

VI. COMMITMENTS PROPOSED BY THE PARTIES

55. In order to resolve the competition concerns raised by the Commission the parties have offered to enter into the following commitments (consolidated version of 27 March 2000, see Annex 1):

- Divestment of PP resins plant with a capacity to produce [at least 600] kT of PP resins, including all assets used in conjunction with the plant, all licenses, permits and authorizations pertaining to such operations, personnel, supply agreements, and goodwill;

- Divestment of PP compounds plant with a capacity to produce [at least 130] kT of PP compounds, including all assets used in conjunction with the plant, all licenses, permits and authorizations pertaining to such operations, personnel, supply agreements, and goodwill;

- To divest BASF/Targor's Novolen PP technology business, including all patented and unpatented know how related to the Novolen technology and PTK catalyst, the R&D activities related to the technology and catalyst, all existing licenses and support agreements, all existing supply agreements, a semi-commercial plant and the catalyst plant in Tarragona, catalyst stock and inventory;

- To license or not to assert the BASF/Targor metallocene patent rights on non-discriminating, arm's length terms and conditions to all interested third parties, with the right for licensees to grant sublicenses, without the requirement that licensees grant reciprocal rights.

56. For PP resins, Nicole's free market share would be reduced from [30-40]% overall to [<30]%. The plants to be divested are [….]. The market investigation has confirmed that these are all competitive plants that operate under advanced process licences and that are equipped to produce the full range of PP resins. The Novolen plant would be offered first to the purchaser of the Novolen technology.

57. For PP compounds overall, Nicole's free market share would be reduced from [35-45]% overall to [<35]%. By itself, the output from the capacity to be divested represented [<10]% of the market, making the purchaser at least the 3rd largest player in the market. As far as commodity PP compounds are concerned, the divestiture of

the [….] plant will give the opportunity for reducing Nicole's market share so as to at least eliminate, on the basis of the production in 1998, all of the overlap arising from the operation. As the facilities can be used to produce both commodity and sophisticated compound, it is not possible to predict the exact impact the market shares because this will depend on precisely how the divested capacity will be used by its new owner. [….]. The Commission's market test of this remedy indicated that provided the goodwill associated with the plant to be divested was included in the divestment, and that the compounds facility was integrated upstream into PP resins supply, then divestment of this amount of capacity would enable the purchaser to compete effectively in the market(s). Both these conditions are fulfilled. In addition to removing the serious doubts raised by the operation in relation to commodity compounds and compounds overall the remedy will have the side effect of eliminating any possible concerns for sophisticated compounds. This is confirmed by the fact that the parties which had indicated concerns in relation to certain sophisticated products for the automobile industry considered that the remedy as proposed would resolve any concerns in this area.

58. The divestment of the Novolen technology will eliminate one element of the direct overlap that the concentration would have created and avoiding the strengthened dominant position that BASF would otherwise have obtained. The undertakings will also ensure that Nicole will be obliged to make the metallocene technology (BASF/Targor) fully available to the purchaser of the Novolen technology. If required, the technology purchaser will be able to purchase the [….] plant which uses Novolen technology. In addition, the Novolen license that Nicole will agree with the Novolen purchaser will oblige Nicole to share developments to the Novolen technology and/or catalysts with the Novolen purchaser for a minimum of 3 years.

59. Nicole's commitment to license or to enter into agreements not to assert its metallocene patents to or against any third party that wants access to the patents fully addresses the concern that Nicole would be able to prevent the development of the metallocene technology.

60. The Commission therefore considers that, taken together, this package of remedies addresses its concerns about the effects of the concentration on competition in the markets for polypropylene.

VII. CONCLUSION

61. For the above reasons, and on condition that the undertakings described in the annex to this decision are fully complied with, the Commission has 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 and Article 57 of the EEA Agreement.

For the Commission,

Romano PRODI, President (signed)

Shell Petroleum NV / BASF AG (Project Nicole) - case IV/M.1751

COMMITMENTS SUBMITTED BY THE PARTIES ON 8 MARCH 2000

CONSOLIDATED VERSION OF 27 MARCH 2000

Pursuant to Article 6(2) of Council Regulation (EEC) No 4064/89 (as amended; "the Regulation"), BASF AG ("BASF") and/or Shell Petroleum N.V. ("Shell"), will comply and will procure that their respective Affiliates comply with the commitments set out below, given in the context of the proposed creation of a joint venture code named "Nicole" to which BASF and Shell will contribute all of their world-wide polypropylene ("PP") and polyethylene ("PE") interests, in order to take account of concerns raised by the European Commission as regards anti-competitive effects of the proposed concentration in relation to the PP technology market, the PP resins and the PP compounds markets. "Affiliates" for this purpose means Targor GmbH ("Targor") and Montell N.V. ("Montell") and the proposed concentration holding company Nicole NV ("Nicole").

These commitments shall take effect on receipt of the European Commission's decision declaring the creation of the Nicole joint venture compatible with the common market pursuant to Article 6(1)(b) of the Regulation ("the Decision") and are all expressed subject to the formation of Nicole.

1 BASF's COMMITMENT TO DIVEST TARGOR'S NOVOLEN PP TECHNOLOGY BUSINESS

1. Targor's PP technology business ("Novolen" or the "Business") will not be contributed to Nicole and will be divested. Novolen operates in licensing BASF's/Targor's proprietary PP catalytic polymerisation process technology, which is a gas phase process with a vertically stirred powder bed ("Novolen Technology"). The Business offered for sale comprises:

   (a) all patented and unpatented know-how of BASF and Targor exclusively related to the Novolen Technology, and a worldwide, exclusive and transferable license to use the Novolen Technology under such know-how and patents which do not relate exclusively to the Novolen Technology, both subject to a royalty-free standard non-exclusive license for Targor/Nicole for the operation of its current plants, including an exchange of improvements

for a period of three years, provided that improvements received by Targor/Nicole are used only in Targor's/Nicole's plants.

(b) all patented and unpatented know how exclusively related to PTK Catalyst, which is a specific Ziegler-Natta catalyst used in the Novolen process;

(c) a worldwide, exclusive and transferable license for the manufacture, marketing, use and sale of PTK Catalyst under know-how and patents which do not relate exclusively to PTK Catalyst;

(d) the R&D activities relating to the Novolen Technology and the PTK Catalyst;

(e) all existing license and technical support agreements and other agreements, if any, regarding the Novolen Technology;

(f) all existing catalyst supply agreements regarding the PTK Catalyst;

(g) economic ownership, (i.e. where the transfer of legal title is not possible for legal and/or practical reasons, contractual rights which establish a position of the purchaser as close as possible to obtaining legal title, i.e., beneficial ownership including the right to use and operate the respective assets, to receive all necessary goods, services and utilities and to share the infrastructure) of the semi-commercial PP plant in Ludwigshafen, Germany;

(h) economic ownership (as defined above) of the PTK Catalyst plant in Tarragona, Spain;

(i) stock of PTK Catalysts (finished products);

(j) Inventory (raw materials and intermediates) relating to PTK Catalysts;

(k) subject to commercial and legal viability, the right to grant an option for future Novolen Technology licensees of the purchaser to be supplied by Targor (Nicole) with Metallocene Catalyst Systems (as defined in the Metallocene commitment) under terms and conditions to be agreed;

(l) a non-exclusive licence, on a paid-up basis, with the right to grant non-transferable sub-licences to existing and future Novolen licensees under the Metallocene Patents (as defined in the Metallocene commitment) and to other sub-licensees under the same terms and conditions as outlined under point 3 of the Metallocene commitment, for the manufacture and use of Metallocene Catalyst Systems for the purpose of manufacturing PP Resins (as defined in the Metallocene commitment) and the use and sale of PP resins thus manufactured (including the use of PP Resins in PP compounds).

The R&D activities referred to in (d) above are currently conducted by BASF for Targor on the basis of a R&D contract. The purchaser of the Business will have the

option to take over all related assets and employees. Until such transfer, that contract might be transferred to and continued with the purchaser at its request for an interim period of up to six months.

Furthermore, due to § 613a BGB (the German Civil Code) - transfer of undertakings - all employees currently working in the business(es) to be sold are automatically transferred to the buyer, i.e. in particular also the key personnel of the business to be sold.

2. BASF will seek to complete the divestiture of the Business within a period of [ ] months following the notification of the Decision.

3. The purchaser of the Business will be a viable existing or prospective competitor which is expected to constitute an active competitive force in the PP technology market who has or will have access to a commercial scale Novolen plant and will be independent from and unconnected to BASF and Shell.

4. In addition to the transfer of the Business as described under 1(a) to (l) above, and to the extent the purchaser does not already have it, Nicole shall either provide the purchaser with suitable access to a sufficient portion of capacity in a commercial Novolen plant or offer Targor's [ ] plant for sale to the purchaser of the Business in line with the PP resins and PP compounds divestment commitment set out below. This is to enable the purchaser to perform all activities expected from a viable licensor in that Novolen capacity in addition to the semi-commercial plant listed under 1(g) above, such as demonstrating the full-scale process, training of licensees' personnel, evaluation of new developments, catalyst testing, availability of pre-marketing quantities of products when required by the purchaser or his licensee(s).

5. The purchaser will have to be approved by the European Commission. If the European Commission has not formally indicated its disagreement to a prospective purchaser within two weeks after receipt of a report identifying such party, and after the receipt of all information necessary to assess the suitability of the buyer the divestiture to such prospective purchaser shall be free to proceed. The European Commission shall not unreasonably withhold its approval.

6. Pending the divestiture, BASF shall manage the Business on an ongoing and viable basis under the supervision of the trustee, and the Business will be kept separate from Nicole.

7. In order to assist it in the divestiture process, BASF will appoint an independent trustee (the "trustee"). The appointment and the terms of the trustee's mandate are subject to the approval of the European Commission, such approval not to be unreasonably withheld.

The trustee shall

(a) assist BASF in the negotiations with interested third parties with a view to selling the Business;

(b) verify that the Business and in particular the related R&D activities will be continued by BASF on an ongoing viable basis, in accordance with past practice, and that no measures are taken which would have a substantial adverse impact on the Business;

(c) monitor that no competitively sensitive information concerning the Business is disclosed to Nicole; and

(d) report to the European Commission in writing, every two months, on matters falling within its mandate (copies of these reports will be sent to BASF).

8. In the event that the Business has not been divested by the end of the [ ] months period, BASF will give the trustee an irrevocable mandate to find a purchaser for the Business, for the best possible price and other terms, within a period of [ ] months. BASF will provide the trustee with all reasonable assistance and information necessary for the execution of such divestiture, and shall be kept informed by the trustee of all negotiations regarding finding a purchaser.

9. The trustee shall inform the European Commission when a prospective purchaser of the Business has been identified in order to obtain approval of such purchaser by the European Commission. If the European Commission has not formally indicated its disagreement to a prospective purchaser within two weeks after receipt of a report identifying such party (and after the receipt of all information necessary to assess the suitability of the buyer) the divestiture to such prospective

purchaser shall be free to proceed. The European Commission shall not unreasonably withhold its approval.

10. The [ ] months periods referred to in paragraphs 2 and 8 may be extended in exceptional circumstances by agreement between BASF and the European Commission.

11. BASF shall have complied with its divestiture commitment if within the relevant period for divestiture (including any possible extensions) BASF has entered into a binding agreement (subject to the closing of the notified concentration) to sell the Business to a third party approved by the Commission and completed such sale. BASF commits not to reacquire nor acquire the divested Business without the prior authorization of the European Commission.

12. The trustee will cease to perform its duties after the sale of the Business has been completed.

2 UNDERTAKING TO LICENSE OR NOT TO ASSERT THE TARGOR METALLOCENE PATENT RIGHTS

A. Definitions

1. "PP Resins" shall mean propylene homopolymers having at least 40% isotactic pentads according to analysis by ^{13}C NMR or copolymers of propylene and one or more comonomers of ethylene, aliphatic or alicyclic C_4-C_{20} alpha olefin, wherein the comonomers are present in up to 40 mole % or mixtures of such homopolymers and copolymers, both the homopolymers and copolymers having a melt flow rate (MFR) as measured at 230°C with 2.16 kg weight) of less than or equal to 5000 and a flexural modulus of greater than or equal to 100N/mm² (according to ISO R 178).

2. "Metallocene Catalyst System" means a composition of the Catalyst Components which is suitable for the production of PP Resins.

3. "Metallocene Compound" means any single organometallic compounds, having one or more elements of Groups 3 to 7 (new notation) and at least one anionic ligand containing at least one carbon and hydrogen with or without other elements, such ligand being bonded to at least one of the metal atoms via a Π-bond delocalised over at least three atoms of the ligand only (excluding the metal).

4. "Support" means a chemical compound to which is bound or otherwise affixed or deposited one or more other Catalyst Components.

5. "Activator" means a chemical compound which becomes a Catalyst Component when combined with a Metallocene Compound to provide a Metallocene Catalyst System.

6. "Catalyst Components" mean (i) a Metallocene Compound, (ii) an Activator, and (iii) a Support.

7. "Metallocene Patents" mean all patents and patent applications having a filing date on or before the European Commission has approved Nicole (the "Decision date") or are filed afterwards with a priority claim before the Decision Date which cover Metallocene Catalyst Systems as such, the manufacture of Metallocene Catalyst Systems and/or the use of Metallocene Catalyst Systems and owned by Targor GmbH or any of its affiliates (i.e. any entity controlled by, controlling or under common control with Targor on the Decision Date).

B. Undertaking

Nicole will, at the option of the interested party, either

- grant a license as described below under 1 ("License") to any interested party or

- enter into a non-assertion undertaking as described below under 2 ("Non-assert") with any interested party.

1. License Grant

Nicole will grant:

- a non-exclusive, non-transferable license including the right to grant sub-licenses subject to additional payments for each sub-license equivalent to the payments the respective sub-licensee would have had to make to Nicole had it taken a License directly from Nicole;

- under the Metallocene Patents;

- for the manufacture of Metallocene Catalyst Systems, the use of Metallocene Catalyst Systems so manufactured for the manufacture of PP Resins, and the use and sale of PP Resins thus manufactured (including the use of PP Resins in PP compounds.

2. Non-Assert

- Nicole will undertake not to assert - at the discretion of the interested party all or certain of - the Metallocene Patents against that party in respect of the manufacture of Metallocene Catalyst Systems, the use of Metallocene Catalyst Systems so manufactured for the manufacture of PP Resins, and the use and sale of PP resins thus manufactured (including the use of PP Resins in PP compounds).

3. Terms and conditions

- The Licenses and Non-Asserts will be granted on non-discriminating, arm's length terms and conditions (taking into account, in respect of the consideration, e.g. potential reciprocal grants and the scope of the Non-Assert) as set out below.

- If no agreement can be reached on the consideration for a License or Non-Assert, such disagreement will be resolved by « pendulum arbitration ». Pursuant to such arbitration each party will submit a single proposal for the consideration for such License or Non-Assert to the arbitration panel which can only decide in favour of one of the two submitted proposals in its entirety. Pending such arbitration, if requested by the relevant interested party, the License or Non-Assert will become effective immediately.

4. Term

The Licence and Non-Assert will be granted for the life of the Metallocene Patents, unless terminated earlier by Nicole for breach of contract or by the other party at its discretion.

5. Novolen Purchaser

The purchaser of the Novolen technology Business will, as a part of that Business, be granted the License on a paid-up basis with the right to grant sub-licenses to existing and future Novolen licensees and to other sub-licensees under the same terms and conditions as outlined under 1 and 3 above.

6. Reporting

- Nicole will report annually for a period of three years in writing to the European Commission on developments in its negotiations with potential licensees and provide copies of concluded license agreements.

3 DIVESTMENT OF PP RESINS AND PP COMPOUNDS CAPACITY

A. Divestment

1. The parties will divest a minimum of 600 kt/a of PP resins capacity in Western Europe. Within this capacity, there will be the capability to produce at least 250 kt/a of impact copolymer and at least 100 kt/a of random copolymer, the remainder being homopolymer.

   The facilities to be divested will be state of the art and will be selected from the attached list (see Attachment 1). If required by the buyer, the parties will be prepared to transfer to the fullest extent possible existing monomer supply contracts with third parties to the facilities to be divested or supply monomers to these facilities on at arm's length commercial terms if these are currently supplied by the parties.

2. The parties will also divest a minimum of 130 kt/a of PP-compounding capacity. The compounding facilities to be divested will have the flexibility to produce «commodity» as well as «sophisticated» compounds and will be selected from the attached list (see Attachment 1).

B. Timing

3. [Party] will seek to complete the divestiture of the [ ] plant(s) within a period of [ ] months following the notification of the Decision.

C. The Purchaser

4. The purchaser of the [ ] plant(s) will be a viable existing or prospective competitor which is expected to constitute an active competitive force in the PP

resins market and will be independent from and unconnected with BASF and Shell to be approved by the European Commission. If the European Commission has not formally indicated its disagreement to a prospective purchaser within two weeks after receipt of a report identifying such party (and after the receipt of all information necessary to assess the suitability of the buyer), the divestiture to such prospective purchaser shall be free to proceed. The European Commission shall not unreasonably withhold its approval.

D. Implementation

5. Pending the divestiture, [party] shall manage the [ ] plant(s) on an ongoing and viable basis under the supervision of the trustee.

6. In order to assist it in the divestiture process, [party] will appoint an independent trustee (the "trustee"). The appointment and the terms of the trustee's mandate are subject to the approval of the European Commission, such approval not to be unreasonably withheld.

The trustee will

(a) assist [party] in the negotiations with interested third parties with a view to selling the [ ] plant(s);

(b) verify that the [ ] plant(s) will continue to be operated by [party] on an ongoing viable basis, in accordance with past practice, and that no measures are taken which would have a substantial adverse impact on the [ ] plant(s), and

(c) report to the European Commission in writing, every two months, on matters falling within its mandate (copies of these reports will be sent to [party]).

7. In the event that the [ ] plant(s) have not been divested by the end of the first [ ] months period, [party] will give the trustee an irrevocable mandate to find a purchaser for the [ ] plant(s), for the best possible price and other terms, within a period of another [ ] months. [Party] will provide the trustee with all reasonable

assistance and information necessary for the execution of such divestiture, and shall be kept informed by the trustee of all negotiations regarding finding a purchaser.

8. The trustee shall inform the European Commission when a prospective purchaser of the [ ] plant(s) has been identified in order to obtain approval of such purchaser by the European Commission. If the European Commission has not formally indicated its disagreement to a prospective purchaser within two weeks after receipt of a report identifying such party (and after the receipt of all information necessary to assess the suitability of the buyer) the divestiture to such prospective purchaser shall be free to proceed. The European Commission shall not unreasonably withhold its approval.

9. The [ ] month periods referred to in paragraphs 4 and 8 may be extended, in exceptional circumstances by agreement between [party] and the European Commission.

10. The parties shall have complied with this commitment if within the relevant period for divestiture (including any possible extensions) [party] has entered into a binding agreement (subject to the closing of the notified concentration) to sell the [ ] plant(s) to a third party approved by the Commission and completed such sale. The parties commit that they will not reacquire the divested [ ] plant(s) without the approval of the European Commission.

11. The trustee will cease to perform its duties after the sale of the [ ] plant(s) has been completed.

ATTACHMENT 1

LIST OF PLANTS

1. **Pernis**

2. **Cologne (MCK)**

3. **Knapsack**

4. **Tarragona (TDP)**

5. **Lillebonne**

6. **Brindisi**

7. **Wilton**

8. **Rozenburg**