

***Case No COMP/M.2355 -  
DOW / ENICHEM  
POLYURETHANE***

Only the English text is available and authentic.

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

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Article 6(1)(b) NON-OPPOSITION  
Date: 06/04/2001

*Also available in the CELEX database  
Document No 301M2355*



COMMISSION OF THE EUROPEAN COMMUNITIES

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 Where possible the information omitted has been replaced by ranges of figures or a general description.

Brussels, **06-04-2001**

SG(2001)D/ **287558**

PUBLIC VERSION

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

**To the notifying parties**

Dear Sir/Madam,

**Subject : Case No COMP/M.2355 – DOW CHEMICALS/ENICHEM POLYURETHANES**

Notification of 5.3.2001 pursuant to Article 4 of Council Regulation No 4064/89

1. On 5 March 2001, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89 (“the Merger Regulation”), by which the US company, The Dow Chemical Company (“DOW”), notified its intention to acquire, through an exchange of businesses, sole control of the whole of the polyurethanes business of the Italian company, EniChem S.p.A. (“PU Business”), together with some related assets and technology.
2. Following examination of the notification, the Commission has concluded that the notified operation falls within the scope of the said Council Regulation and does not raise serious doubts as to its compatibility with the common market and the EEA agreement.

**I. THE PARTIES AND THE OPERATION**

3. DOW is a global science and technology-based company that develops and manufactures a portfolio of chemicals, plastics, agricultural, and other specialized products and services. The PU Business offers a full line of products for the polyurethane industry, with some [...] % of its turnover being generated in the EU.
4. The proposed operation is part of the implementation of the commitments given by DOW for its acquisition of the Union Carbide Corporation (“UCC”) in merger case No.

COMP/M.1671– Dow Chemical/Union Carbide, of 22.12.1999, whereby DOW and UCC committed to divest of UCC’s 50% ownership in a joint venture with EniChem S.p.A (“EniChem”), Polimeri Europa S.r.l. (“Polimeri”), to an independent purchaser. This commitment will be fulfilled through an exchange of businesses: EniChem will acquire DOW’s 50% interest in Polimeri, DOW will in return acquire the PU Business and related assets and technology from EniChem.

5. Through the proposed operation DOW will acquire the whole of the PU Business, over which it will thus enjoy sole control.

## **II. CONCENTRATION OF A COMMUNITY DIMENSION**

6. The proposed operation constitutes a concentration within the meaning of Article 3.1.b. of the Merger Regulation.
7. The undertakings concerned have a combined aggregate world-wide turnover of more than €5 billion (DOW, [...] million; PU Business, [...] million). Each of them has a Community-wide turnover in excess of €250 million (DOW, [...] million; PU Business, [...] million), and 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-wide dimension.

## **III. RELEVANT MARKETS**

### **A. Relevant Product Markets**

8. DOW has identified the following relevant product markets, which would constitute horizontally affected markets: Polyether Polyols, MDI (methylenediphenyldiisocyanate), TDI (toluene diisocyanate), Glycol Ethers, and Propylene Glycols. DOW has also identified two Glass Bonding Systems product markets, i.e. one for OEM’s and another for the Aftermarket, both of which would be affected vertically by the proposed operation.

#### Polyether Polyols

9. Polyols are intermediate chemicals which constitute a major component in the production of polyurethane foams and polyurethane non-foams. Two different forms of polyols exist, i.e. polyether polyols and polyester polyols, with different physical properties and produced from different raw materials. DOW and EniChem only produce polyether polyols. DOW considers that, due to their different physical properties and applications, polyether polyols and polyester polyols constitute distinct markets, and this view was confirmed in the Commission’s market investigation in a prior case (No.IV/M.1796 – Bayer/Lyondell of 21.02.2000). Within polyether polyols, DOW submits that a distinction can be made between “short-chain” or rigid polyols (25% of production), used mainly for rigid polyurethane foams, and “long-chain” or flexible polyols (75% of production), used for flexible polyurethane foams; both types are commodity products which can be used in more than one application. Both DOW and EniChem produce “short-chain” and “long-chain” polyether polyols, but given the market position of DOW on the different alternative markets, it is not necessary to define the market for polyether polyols more precisely in the present case.

## MDI

10. MDI is a type of diisocyanate used – in combination with polyether polyols (or polyester polyols) – as a raw material for the production of rigid insulation foams, structural foams, CASE applications (coatings, adhesives, sealants, elastomers) and thermoplastic polyurethane. There is a second type of diisocyanate, TDI, which DOW contemplates as a distinct product market, due to its different manufacturing processes, different physical properties, different degree of versatility of use, different end applications, and limited degree of interchangeability. As the Commission's market investigation broadly confirmed DOW's view with regard to distinct markets, the Commission has considered MDI separately from TDI for its assessment in the present case.

## TDI

11. TDI, the second type of diisocyanate, is mainly used, together with polyether polyols, for the production of flexible PU foams for furnishing, mattresses, packaging foam, and auto seatings, which constitute together some 90% of its usage. The remainder of production is used to manufacture CASE applications. For the reasons given under MDI above, the Commission has retained TDI as a relevant product market (distinct from MDI) for its assessment of the competitive impact of the proposed operation.

## Glycol Ethers

12. Glycol ethers are active solvents and coupling agents for solvent-borne and water-borne formulations. DOW submits that, while a distinction can be made between the P-series and E-series glycol ethers, both are to a certain degree interchangeable from the customers' perspective, and supply-side substitution is only limited by the need of different raw materials. In any case, EniChem is not active in the P-series and given DOW's market position after the proposed operation on the other alternative markets, it is not necessary to define the glycol ether market more precisely in the present case.

## Propylene Glycols

13. Propylene glycols are mainly used for the production of unsaturated polyester resins, anti-freeze and de-icing fluids, food, drug and cosmetic uses, liquid detergents, functional fluids, pet foods, paints and coatings, tobacco and plasticisers. DOW submits that, within propylene glycols, mono-propylene glycols could be distinguished from di-propylene glycols, with the former constituting some 90% of the overall production. However, given the market position which DOW will achieve through the operation on the different alternative markets, no more precise market definition is necessary in the present case.

## Glass Bonding Systems

14. Glass bonding systems are adhesive systems for direct glazing which are downstream of polyether polyols and MDI. They are used to attach windshields and rear windows to all types of vehicles, and are sold (mainly) to OEM's and, as spare parts, to the aftermarket for automotive components. DOW submits that the OEM and aftermarket constitute distinct product markets, given the different conditions of competition in terms of customers, production, packaging and delivery. As DOW's market share varies very little on the different alternative markets, and it concerns a vertically affected market, on

which EniChem is not active, there is no need for a more precise market definition in the present case.

## **B. Relevant Geographic Market**

15. DOW submits that the geographic market for each of the above-described horizontally affected product markets is at least EEA-wide, and refers to the Commission's position in this sense in previous cases in the sector (e.g. Bayer/Lyondell). DOW contends that throughout the EEA the general conditions of competition are broadly homogeneous, prices do not differ appreciably, there are substantial imports/exports into/from the different member states, transport costs are not significant, and large producers tend to have several plants throughout the EU, from which they deliver to customers' plants all across Western Europe.
16. In the case of the vertically affected glass bonding systems, DOW submits that the geographic dimension is Western European as there are no technical standards or other regulatory barriers to trade within Europe for automotive components and systems, and this geographic dimension is in line with the Commission's position in previous decisions in the sector (e.g. Case No.IV/M.1196 – Johnson Controls/Becker).
17. Given the above-mentioned arguments of DOW, and the position of the Commission in previous cases in the sector, and, as the market investigation in the present case has not provided any evidence of a narrower geographic scope for any of the above-mentioned product markets, the Commission has retained an EEA-wide geographic scope for the purposes of its competitive assessment in the present case.

## **IV. ASSESSMENT**

### *Horizontally Affected Markets*

18. According to the information provided by DOW, and corroborated by competitors during the Commission's market investigation, the operation will lead to a market share for DOW of over 15% in the following product markets, in which both DOW and EniChem are active: polyether polyols, MDI, TDI, glycol ethers, and propylene glycols. As can be seen below, the market shares of DOW will range between [15-25%] and [25-35%] across the different horizontally affected markets.
19. In polyether polyols overall (including "long-chain" and "short-chain"), DOW will have a market share of some [25-35%], after adding EniChem's [5-15%] share. The market leader, Bayer/Lyondell will have [25-35%], Shell and BASF some [5-15%] and Repsol, [1-10%]%. (The market share of DOW will be at the same level in "long-chain" and in "short-chain".)
20. In MDI, after adding EniChem's share of [1-10%], DOW will have some [15-25%]. It will follow the market leader, Bayer, [25-35%] and Huntsman, [20-30%], and still another player, BASF, will have [10-20%].
21. In TDI, with the addition of EniChem's [15-25%], DOW will achieve a [15-25%] market share. Again Bayer, with [25-35%], will be the market leader, and Lyondell and BASF will be present with [20-30%] and [5-15%], respectively, and Shell with [1-10%].
22. In glycol ethers overall (including the E-series and the P-series), with the addition of EniChem's [1-10%], DOW will have [25-35%], but will still be confronted with BP's

[15-25%] and Shell and Arco/Lyondell with some [5-15%]. (In the E-Series, DOW's share would be lower, with [15-25%], and there is no addition of share in the P-Series, where EniChem is not active.)

23. In propylene glycols overall DOW will achieve a [20-30%] market share, after the addition of EniChem's [1-10%]. Lyondell will enjoy a similar share with [20-30%], and three other competitors, BASF, Erdölchemie, and Repsol will be in the [10-20%] range. (At the level of the possible narrower markets, mentioned further above, DOW's market position would be at the same level as in the overall market.)

#### *Vertically affected market*

24. In glass bonding systems, DOW enjoys a market share of some [60-70%] of sales to OEM's, and some [55-65%] in sales into the aftermarket. Its main competitors are EFTEC, Henkel and Sika. DOW (and previously EniChem) is a supplier of polyether polyols and MDI, which constitute two of the main raw materials (most particularly polyether polyols) for glass bonding systems. The Commission examined the possibility of the proposed operation having a significant impact on the supply of these two raw materials to DOW's competitors on the downstream glass bonding systems markets. However, several other important suppliers have a significant presence in the supply of these raw materials (e.g. Bayer/Lyondell with [25-35%], and BASF and Shell with [5-15%] in polyether polyols; Bayer and Huntsman with [25-35%] and [20-30%] respectively in MDI). Indeed, the Commission's market investigation has confirmed the lack of any significant concerns on the part of DOW's competitors in glass bonding systems regarding any possible foreclosure effects as a result of the proposed operation.

#### *Conclusion*

25. With regard to the different horizontally affected markets, given the level of market share which DOW will enjoy after the operation, the number, importance and market position of the competitors it will confront on all of them, and given the lack of conveyance to the Commission of any significant competition concerns during its market investigation, the Commission has concluded that the proposed operation will not result in the creation or strengthening of a dominant position on any of the markets concerned.
26. Likewise, the vertically affected market has not given rise to any concerns of dominance, given the substantial competition present on the upstream market, and the lack of any expression of significant concern by DOW's competitors on the downstream market.

#### **V. ANCILLARY RESTRAINTS**

27. The notifying party has requested that the Commission consider certain clauses of the Purchase Agreement between DOW (the acquirer) and EniChem (the vendor) as restrictions directly related and necessary to the concentration, in accordance with the provisions of Article 6(1)(b), second paragraph of the Merger Regulation.
28. Pursuant to [...], EniChem and its controlled companies are restricted from the manufacturing, marketing and sale of polyurethane products and from the research, development and use of the transferred PO Technology for a period of [...] years from the Transfer Date (non-competition clause). In addition, EniChem is restricted from soliciting the employees of the transferred PU Business for a period of [...] after the Transfer Date (non-solicitation clause). The non-competition clause, limited to the products which form

the economic activity of the business transferred and to the area where the vendor had established the products before the transfer, can be considered as ancillary restraints for a limited period to guarantee the transfer to the acquirer of the full value of the assets transferred, in accordance with the Commission notice regarding restrictions ancillary to the concentration, (chapter III. A). The non-solicitation clause may be evaluated, by analogy to the non-compete obligations, as necessary to guarantee the transfer to the acquirer of the full value of the assets transferred. However, in accordance with Commission experience and practice there are no special circumstances to justify the extension of the duration of either of these clauses for a longer period than [...] years from the date of implementation of the concentration.

29. Pursuant to Article 13.13, DOW and EniChem will enter into a [...] Supply and [...] Purchase Agreement under which the PU Business (to be transferred to the acquiring company DOW) will be supplied with [...] by EniChem and will in return deliver [...] to [...] for a period of [...] from the Transfer Date. DOW has submitted that [...] is an essential raw material for the production of TDI in the Porto Marghera plant (to be transferred to the DOW). EniChem's [...] production is located close to the Porto Marghera plant, and the two plants are connected via pipeline. There are no economically viable alternatives for DOW to operate the Porto Marghera production site, given that as [...] is toxic and difficult to transport, given the level of transport costs to Porto Marghera and the fact that transportation of [...] in industrial quantities is not permitted under the applicable regulations, and given, in addition, that there is no other [...] producer in Italy with the production capacity to supply DOW with the necessary amounts of [...] in Porto Marghera. DOW has submitted that, in other words, it will be dependent on a continuous and long-term supply of [...] from EniChem and would not have entered into the Agreement for the transfer of the PU business without such supply security for the next [...]. DOW has also submitted that the off-take of [...] is equally essential for the operation of the TDI plant since [...] is produced in the TDI reaction, and both [...] and [...] are present and strictly connected.
30. DOW has further submitted that the supply and purchase obligations clearly aim to ensure the traditional lines of supply and purchase of chemicals for TDI plant in Porto Marghera: the flow of chemicals will not change as a result of the transaction. EniChem produces [...] to supply the TDI production plant to be transferred to DOW. As a by-product of the TDI production process, the TDI plant also produces [...] which is a less valuable product when compared to [...]. The [...] produced in the TDI plant is supplied to [...]’s plant, where it is treated and transformed into [...] which is used by [...] to manufacture [...]. This flow of chemicals is in place since [...] and will remain unaffected by the change in ownership in respect of the TDI production plant. The chemical products are still transported via pipeline between the [...], the TDI plant, and [...]. The way of transport will, therefore, remain unchanged. Also, the amount of products supplied and the product specifications will not be affected by the change in the ownership of the TDI plant. Furthermore, DOW has submitted that the [...] Supply and [...] Purchase Agreement does not affect other companies acting in the affected products markets, and the transaction will not lead to a change in the current situation, which has been in place for many years.
31. Given the reasons submitted by DOW, and in accordance with the Commission Notice (Chapter III, C), the above-mentioned clauses of the [...] Supply and [...] Purchase Agreement between DOW and EniChem may be considered necessary for a transitional period, to maintain and to assure the operability of the transferred business in a similar

way to that of before the transfer. According with Commission experience and practice the duration of supply and purchase obligations, ancillaries to an operation, to ensure the continuity of supply and of sales, must be limited to a period necessary for the replacement of the relationship of dependency by one of autonomy in the market. The duration of supply and purchase obligations for complex industrial products, where justified, is normally justified for a transitional period of three years, necessary for the replacement of the relationships. Given the special circumstances herein presented by DOW, a transitional period of [...] can be acceptable in this case for the supply and purchase obligations; this is in line with the period for which supply and purchase obligations have previously been considered ancillary by the Commission in similar situations<sup>1</sup>.

32. In conclusion, limited to the time periods mentioned above, the supply and purchase obligations discussed herein, are considered directly related and necessary to the implementation of the concentration.

## **VI. CONCLUSION**

33. For the above reasons, 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) of Council Regulation (EEC) no 4064/89.

**For the Commission,**

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<sup>1</sup> Case No COMP / M 2269 - Sasol / Condea of 30.1.2001 and Case No COMP/M 612 - RWE/EniChem Augusta of 27.7.1995.