# **COMMISSION**

## **COMMISSION DECISION**

of 10 August 2006

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

(Case No COMP/M.4094 — Ineos/BP Dormagen)

(notified under document number C(2006) 3592)

(Only the English text is authentic)

(Text with EEA relevance)

(2007/161/EC)

On 10 August 2006 the Commission adopted a Decision in a merger case under Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (¹), and in particular Article 8(1) of that Regulation. A non-confidential version of the full Decision can be found in the authentic language of the case and in the working languages of the Commission on the website of the Directorate-General for Competition, at the following address: http://ec.europa.eu/comm/competiton/index\_en.html

(3)

(1) On 24 January 2006, the Commission received a notification by which the BP Ethylene Oxide/Ethylene Glycol Business (BP Dormagen Business) controlled by British Petroleum Group (BP) by way of purchase of assets.

No COMP/M.4005 — Ineos/Innovene, the main transaction).

BP Dormagen Business, which consists solely of a plant located in Köln/Dormagen (Germany), is currently controlled by BP and is active in the manufacture of ethylene oxide (EO) and ethylene glycols (EGs or glycols).

- (2) Ineos is a United Kingdom limited company with various wholly owned subsidiaries which are active worldwide in the production, distribution, sales and marketing of intermediate and speciality chemicals. On 16 December 2006, Ineos acquired Innovene, the former olefins, derivatives and refining business of BP (excluding the BP Dormagen Business, the acquisition of which is the subject of this decision) which manufactures a range of petrochemicals, including olefins and their derivatives and a range of refinery products (2). That operation was cleared by the Commission on 9 December 2005 (Case
- (4) The Advisory Committee on Concentrations, at its 143rd meeting of 28 July 2006, delivered a favourable opinion on a draft Decision granting clearance submitted to it by the Commission (3).
- (5) The Hearing Officer, in a report dated 26 July 2006, took the view that the right of the parties to be heard had been respected (3).

(1) OJ L 24, 29.1.2004, p. 1.

<sup>(3)</sup> OJ C 54, 9.3.2007.

<sup>(2)</sup> Innovene operated three sites in the EEA: Grangemouth (United Kingdom), Lavera (France) and Dormagen (Germany). Grangemouth and Lavera were acquired by Ineos as a result of the Main Transaction.

#### I. THE RELEVANT MARKETS

# Background

- (6) In its examination of the main transaction, the Commission assessed the markets for ethylene oxide (EO) and for a number of its derivatives (EODs), in particular, alcohol ethoxylates, glycol ethers (GEs) and ethanolamines (EOAs). The Commission concluded that that main transaction did not raise serious doubts as to its compatibility with the common market on the horizontally and vertically related markets.
- (7) The only products manufactured and sold by the BP Dormagen Business are EO and EGs. Ineos produces a wide range of chemicals including EO and EO-derivatives (including EGs). Consequently, the only horizontal overlaps which arise as a result of the proposed acquisition by Ineos of the BP Dormagen Business relate to EO and EGs. In addition, vertical relationships exist upstream of EO (as regards ethylene) and downstream of EO (as regards EO derivatives).

## Relevant product markets

- EO is a colourless gas, which is produced by the partial (8) oxidation of the ethylene. EO has an ethylene content of 82 % and is a hazardous product, being highly inflammable and explosive. It is also toxic and carcinogenic. EO can be used in the non-purified state to produce EGs or be further purified.
- (9)EGs are intermediate chemicals produced mainly by the non-catalytic hydration of EO. EGs account for 37,5 % of total EEA consumption of EO and are only produced by integrated EO producers.
- An alternative route for processing EO involves its further purification: purified EO can then be used for production of various other chemical intermediates. Most of this purified EO is used captively by the integrated EO producers in downstream operations to produce EO derivatives, the remainder is sold to third parties, which compete with EO producers on the various EO derivatives markets.

Ethylene oxide

(11) The Commission has examined ethylene oxide in previous cases (4). It identified a separate product

market for EO as it is characterised by low substitutability especially when used as a direct raw material in chemical reactions. The investigation in this case confirmed this product market definition.

- As only purified EO is sold to third parties, the competition assessment in this case concentrated on the market for purified EO. At a late stage of the proceedings, Ineos submitted that the purified EO could be further subsegmented into high-grade EO (HG-EO) or low-grade EO (LG-EO) depending on the level of impurities (mainly the content of aldehydes). However, the market investigation confirmed that it was not necessary to further sub-divide relevant product market according to purity levels of the purified EO as only H-G EO was sold to the third parties.
- The Commission also investigated whether a distinction needs to be made between long term arrangements for supply of EO to customers whose plants are located on, or adjacent to, the EO supplier's site and connected via pipe line (on-site) and supplies to other customers (offsite) which are served by other means such as truck or rail. The Commission found that there were some differences in price levels, contract lengths, and quantities purchased between these two supply methods. However, the Commission did not have to make a decision on this issue, given that the transaction would not significantly impede effective competition, irrespective of whether onsite and off-site supplies are considered to constitute a single or two separate markets.

Ethylene glycols

- Ineos submitted that EGs constitute a separate product market, in line with a previous Commission Decision (5). However, in a subsequent decision (6), the Commission had noted that demand-side considerations might make it necessary to distinguish between the different types of EG. These are: mono-ethylene glycol (MEG), di-ethylene glycol (DEG) and tri-ethylene glycol (TEG). MEG accounts for the great majority of the production (about 90 %), with the remaining production divided between DEG (about 9 %) and TEG (about 1 %).
- In this case, the majority of market participants indicated that EGs should be further segmented into three markets, for MEG, DEG and TEG, because they are used in very different applications and are not substitutable to any extent. However, from the supply-side point of view, MEG, DEG, TEG are invariably manufactured together

<sup>(4)</sup> Case COMP/M.2345 — Deutsche BP/Erdölchemie, 26 April 2001 and Case COMP/M.4005 — Ineos/Innovene, 9 December 2005.

<sup>(5)</sup> Case COMP/M.2345 — Deutsche BP/Erdölchemie, 26 April 2001. (6) Case COMP/M.3467 — Dow Chemicals/Pic/White Sands JV, 28 June

and are always produced in very similar proportions. The exact market definition was left open as the transaction would not significantly impede effective competition with respect to EGs under any of the alternative product market definitions.

## Relevant geographic markets

Ethylene oxide

- In previous decisions (7) the Commission has considered the geographic dimension of the EO market to be probably Western Europe (defined as the EEA plus Switzerland) although the exact market definition was left open. In this case the relevant production plants are located in Antwerp (Belgium), Lavera (France) and Dormagen (Germany). Ineos submitted that the market is EEA-wide as EO from these plants is transported over long distances (according to Ineos' data, in some cases more than 1 000 km, although the majority of deliveries are within 600 km). However, the great majority of customers and at least half of the competitors consider the geographic market to be regional. Shipping distances appear to be between 0 km to 800 km with the large majority between 0 to 600 km, due to transport costs and the hazardous nature of the product.
- (17)According to the limitations on transport distance, the Commission identified possible regional markets for EO as: (i) United Kingdom and Ireland, (ii) Nordic countries (Norway, Sweden and Finland), (iii) Mainland North-West Europe, or MNWE (the Netherlands, Denmark, Belgium, Luxemburg, Germany, Austria, Central and Northern France), (iv) the Mediterranean basin (Italy, Portugal, Southern France, and Spain), and (v) Central and Eastern Europe. In addition, the Commission found out that regional price differences and limited trade flows tend to confirm this geographic market segmentation. However, it was not necessary to conclude as to the exact geographic market definition for EO as the Commission found out that the transaction would not significantly impede effective competition on either possible geographic market (an EEA-wide geographic wide or a MNWE market, the only regional market where both parties were active).

Ethylene glycols

(18) Ineos submitted, in line with what has been argued in previous decisions (8), that the relevant geographic

(7) Case COMP/M.2345 — Deutsche BP/Erdölchemie, 26 April 2001 and Case COMP/M.4005 — Ineos/Innovene, 9 December 2005.

market for EGs is at least Western Europe and even global. This is because EGs are not hazardous products and, in consequence, they are easily transportable. Prices are comparable at a global level, and imports into the EEA, mainly from Middle East and Russia, represent around 13 % of the total EEA consumption.

(19) The vast majority of the respondents to the market investigation confirmed that the geographic market is at least EEA-wide. However, for the purposes of the decision, the exact market definition was left open as the transaction would not significantly impede effective competition in the common market or a substantial part of it under any alternative geographic market definitions.

### II. ASSESSMENT

Ethylene oxide

- (20) The overall size of the EO market in the EEA, including production for captive use, is around 3 000 ktpa (kilotonnes per annum). The merchant market represents around 18 % of the total production or about 560 ktpa, of which about 33 % by value is accounted for by on-site customers and 67 % by off-site customers.
- (21) In terms of market structure, the transaction is a merger between two of the three largest EO suppliers giving rise to combined market shares above 45 % under any reasonable definition of the relevant product and geographic markets for EO. The combined entity's closest competitor, Shell, represents (15-25) % of the overall merchant market for both on-site and off-site supplies. All the remaining competitors have market shares below 10 % (many below 5 %) for both total and off-site sales.
- (22) However, taking into account that the merchant market represents a fairly small proportion of total production, relatively small changes in the overall production may have a significant impact on the merchant market. As a result, in its assessment the Commission concentrated on the importance of integrated producers' captive use of EO and its impact on sales to third parties. The Commission examined the conditions relating to the supply of EO and, in particular, those factors capable of constraining the behaviour of the combined entity on the merchant market for EO.

<sup>(8)</sup> Case COMP/M.2345 — Deutsche BP/Erdölchemie, 26 April 2001, Case COMP/M.3467 — Dow Chemicals/Pic/White Sands JV, 28 June 2004.

- (23) In order to do so, the Commission identified the main aspects on which the availability of EO on the merchant market depends: the production capacity for EO; the purification capacity; the downstream uses of EO, in particular the split between EGs and other uses; the incentives to use additional EO internally and/or sell to the merchant market.
- (24) First, the Commission assessed whether currently the parties' competitors have sufficient spare EO capacity to supply the merchant market. In this regard, it is the purification capacity that is critical as merchant market sales are only of purified EO. The investigation showed that although the parties' plants represent an important part of the spare purification capacity, their competitors' spare capacity would be able to constrain the parties' anticompetitive behaviour as they represent significant volumes compared to the relatively small merchant market.
- (25) Also, an important part of the Commission assessment in this case was focused on a relationship between the production of purified EO and EGs. A reduction in the production of EGs may enable integrated producers (those producers making both EO and EGs) to increase their purified EO production. This relationship is based on the fact that both products use the same raw material (unpurified EO) and, consequently, a reduction in the production of EGs will release unpurified EO which could be used for the production of additional quantities of purified EO subject to purification capacity constraints.
- (26) Ineos submitted that MEG is used as a swing product allowing EO producers to switch to and from the supply of EO or other EO derivatives depending on market conditions. In order to prove it, Ineos submitted two econometric studies showing that, in the past, the parties' competitors were able to increase their production of purified EO at the expense of the production of glycols in response to outages at the Ineos and BP Dormagen Businesses' plants. It was found that reductions in the EO sales by the affected plants were (to some extent) offset by increased EO sales by competitors.
- (27) The Commission concluded that although these studies had some limitations, they indicated a potential for such competitors to counteract anticompetitive behaviour of the combined entity.

- (28) The Commission then estimated how big this potential swing from glycols to purified EO could be, taking into account all capacity constraints. The Commission found that in case of the largest foreseeable reduction in production of glycols the potential swing from glycols to purified EO could, in case of unilateral price increase by the merged entity, bring to the EO merchant market quantities that are significant compared to the current overall size of that market.
- (29) The Commission also took into consideration the impact of new glycols capacity coming on stream in the Middle East and Asia on the market situation in Europe. It found that these new EO production capacities were likely to result in an increase of exports of EGs to the EEA and that as a result a decrease in EG production in the EEA could be expected. This in turn could increase the availability of EO in the EEA for third party sales and the inhouse production of other EO derivatives.
- (30) Accordingly, the Commission considered it appropriate to assess the impact of the operation in a prospective manner, that is in relation to the forecast and reasonably expected developments in the future.
- (31) The Commission's investigation showed that the total spare capacity for the production of EO in the EEA is expected to grow in the coming years and utilisation rates will be lower. Although the spare purification capacity is expected to decrease in the near future, however, as the merchant market is relatively small and is not expected to increase substantially in the near future, the remaining spare purification capacity can still act as a constraint on unilateral increases in prices by the combined entity.
- (32) Additionally, in order to assess the impact of the anticipated increase in imports of glycols from the Middle East on the European EO merchant market, future economic incentives of EO producers to supply the merchant market were taken into account. In order to compensate the predicted downturn in EO consumption for glycols and in order to keep the utilisation rates for EO production at the highest possible levels, EO producers would need to find other outlets for their supply of EO. As all other EO derivatives (apart from glycols) and the merchant market require purified EO, European EO producers would have incentives to increase their current purification capacities.

- (33) The Commission found that expansion in the purification sections of EO production is less expensive and often does not need to be accompanied by other investments across the plant. Assuming that competitors will be able to increase their current purification capacities in order to absorb the expected decrease in production of glycols, the extent of these increases depends upon EO producers' captive use of EO for EODs, their ability to increase their EODs capacities and their incentives to use EO captively or sell it to the merchant market.
- (34) The Commission's investigation revealed that in the near future, the EODs' capacity of integrated producers will be partially constrained due to increased demand for EODs. Increases in EODs production capacity are more costly and take more time than increases in EO purification capacity. Consequently, not all of the purified EO released as a result of the decrease in production of glycols in the EEA will be absorbed by increased production of EODs by integrated producers. It will consequently be available to the merchant market.
- (35) Therefore, a significant impediment of effective competition in the merchant market for EO can be ruled out. EO customers will have supply alternatives which will be sufficient to constrain the combined entity's behaviour.

Glycols

(36) World production and consumption of EG is estimated at some 17 000 ktpa, of which EEA production is around 1 700 ktpa for a demand of some 1 950 ktpa. World demand over recent years has been relatively stable, due in particular to the demand in China and

- the Far East for MEG used for polyester textiles. This has, in turn, stimulated investments in substantial new EG capacity in Asia and the Middle East scheduled to come on stream over the next few years.
- (37) The Commission's investigation indicated that the combined entity's market share on a global merchant market did not exceed 5 % for any possible product market definition. On an EEA-wide merchant market, the combined entity's share did not exceed 20 % for any relevant product market. Also the combined entity would face competition from various strong competitors such as BASF, MEGlobal, Sabic, Shell, Clariant as well as from imports.
- (38) In the light of the combined entity's limited market share, the presence of significant competitors with comparable or larger market shares and the predicted downturn in glycols production in Europe (as a result of increased imports), the Commission concluded that the proposed transaction does not raise competition concerns in the market for EG.

### III. CONCLUSION

(39) For the reasons set out above, the Commission concluded that the proposed concentration does not significantly impede effective competition in the common market or a substantial part of it, in particular as a result of the creation or strengthening of a dominant position. The concentration is therefore to be declared compatible with the common market in accordance with Article 8(1) of the Merger Regulation and Article 57 of the EEA Agreement.