

***Case No COMP/M.4005 -  
INEOS / INNOVENE***

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004  
MERGER PROCEDURE**

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Article 6(1)(b) NON-OPPOSITION  
Date: 09/12/2005

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 09/12/2005

**SG-Greffe(2005) D/206743**

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 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 Where possible the information omitted has been replaced by ranges of figures or a general description.

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

PUBLIC VERSION

**To the notifying party:**

Dear Sir/Madam,

**Subject: Case No COMP/M.4005 – INEOS / INNOVENE  
Notification of 04.11.05 pursuant to Article 4 of Council Regulation No 139/2004<sup>1</sup>  
(Merger Regulation)**

1. On 4 November 2005, the Commission received a notification by which the undertaking INEOS Group Limited (“Ineos”, UK) notified its intention to acquire control of Innovene Inc. (“Innovene”, USA) controlled by British Petroleum Group by way of a purchase of shares.

**I. THE PARTIES**

2. INEOS is a UK limited liability company in which Mr James Ratcliffe has a [...] shareholding and which he controls. Ineos has various wholly owned subsidiaries which are active worldwide in the production, distribution, sales and marketing of intermediate and speciality chemicals. It operates currently 46 manufacturing facilities in 14 countries worldwide, including Belgium, France, Germany, Italy, the UK and USA.
3. Innovene is currently a wholly owned subsidiary of the British Petroleum Group and manufactures a range of petrochemicals, including olefins, such as ethylene and propylene, a range of polymers, and various other refined petrochemicals. Innovene currently operates five major complexes in the USA, France, Germany and the UK as well as two large refineries in the UK and France.

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<sup>1</sup> OJ L 24, 29.1.2004 p. 1.

## **II. THE OPERATION**

4. Ineos entered into a binding Share Sale and Purchase Agreement with British Petroleum International Limited regarding the purchase of Innovene. The value of the transaction is [...] billion in cash.
5. The parties have divided the sale into two separate operations. The business comprising the manufacture and sale of ethylene oxide and ethylene glycols at the Innovene plant located in Koeln/Dormagen, Germany, will be excluded from the first operation.
6. The EO/EG Business at Dormagen will be transferred from Innovene to another subsidiary of BP unaffected by the sale of Innovene. The commercial management of this business will be undertaken by BP. Ineos will operate the plants for BP under a management contract. A put and call option deed executed on 7 October 2005, gives BP the right to require Ineos to purchase, and Ineos the right to require BP to sell, the Dormagen EO/EG business within a period of [...].
7. The Commission considers that the put and call option deed, as well as the Operation and Maintenance Agreement and the supply agreements which will be entered into between Ineos and BP with regard to the Dormagen EO/EG Business, do not confer upon Ineos joint or sole control over the Dormagen EO/EG Business within the meaning of Article 3(2) of the Merger Regulation.
8. If the put or call option is exercised the Commission will examine the transaction in accordance with Article 5(2) of the Merger Regulation.
9. The current transaction (the acquisition by INEOS of Innovene without the Dormagen EO/EG business) constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **III. COMMUNITY DIMENSION**

10. The undertakings concerned have a combined world-wide turnover of more than € 5 000 million (Ineos: € 5.6 billion, Innovene: € 14.2 billion) and their aggregate Community-wide turnover exceeds € 250 million (Ineos: € [...], Innovene: € [...]). They do achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The concentration therefore has a Community dimension.

## **IV. COMPETITIVE ASSESSMENT**

### RELEVANT PRODUCT MARKET

11. The parties submit that the only product areas involved in this transaction which give rise to horizontally affected markets are those for ethylene oxide (EO) and various EO derivatives.
12. EO is produced by the partial oxidation of the ethylene. EO is a hazardous product, being highly inflammable and explosive as well as toxic and carcinogenic. In order to facilitate a better storage and a more transportable product, EO is mixed with water to produce a mixed ethylene glycol (EG) stream. EG accounts for some 42% of total EEA consumption of EO. It is only produced by integrated EO producers. There are three types of ethylene glycol: mono-ethylene glycol (MEG), di-ethylene glycol (DEG) and tri-ethylene glycol (TEG).
13. An alternative route for processing the EO stream involves its further purification to produce a high grade EO for production of various other intermediates. Most of this EO is consumed on site, either in integrated downstream operations of the EO producers, or by third party customers co-located on site, with the remainder being sold to the merchant market. The principal uses to which the purified EO is put, are: alkoxyates (including ethoxyates - Ax, polyols -POL, polyethylene glycols - PEG and polyalkylene glycols -PAG), , ethylene glycols (EG), ethanolamines (EOAs), glycol ethers (GE), and for a number of speciality chemical intermediates.

14. Both parties sell EO to the third parties. On EO derivatives' market Ineos supplies EG, EOA and GE and also produces a range of alkoxyates. These derivatives are manufactured at its site in Antwerp, Belgium, with the exception of EOAs which are imported from Ineos' facility in the US. Innovene produces EOA and GE at its site in Lavera, France, however EG are not produced there<sup>2</sup>. Hence, the transaction does not give rise to any overlap in respect of EG. The only relevant horizontal overlaps relate to EO, EOA and GE.

EO - ethylene oxide

15. In the previous decision<sup>3</sup> the Commission has identified a separate product market for ethylene oxide. The current market investigation has confirmed that EO constitutes separate market as it is characterized by low substitutability especially when used as a direct raw material in chemical reactions. The parties agree with this definition, although they consider that the close supply-side relationships between EO and ethylene glycols, place competitive constraints on the feasibility of price increases in the EO third party market. However, although as one of the market participants observed EG can have some influence on EO, this relationship does not strongly affect a supplier's decision on whether or not to increase EO prices. As a result, a separate market for ethylene oxide is proposed.

EOAs- ethanolamines

16. EOAs are manufactured by reacting ammonia and EO. The market investigation has largely confirmed that EOAs constitute separate markets from others EO derivatives (for example glycol ethers) due to low demand side substitution and different applications. EOAs are used mainly to produce lubricants, detergents, agricultural, cement and household and personal care products. Glycol ethers applications are mainly: paints, coatings, leather applications and electronics.
17. Three types of EOAs are always produced: mono-ethanolamine (MEA), di-ethanolamine (DEA) and tri-ethanolamine (TEA). MEA is used in ethyleneamines (textiles, detergents and water softeners), in wood preservative products and in oil and gas processing. DEA is also used in oil and gas processing, as well as for glyphosates. TEA is used in esterquats (used as fabric softeners). All three types are used as surfactants feedstock and as metal-working fluids.
18. The parties submit that both supply side and demand side considerations suggest MEA, DEA and TEA form part of a single market. However, the market investigation has indicated a possibility of a further market segmentation for the separate MEA, DEA, and TEA markets. According to some customers EOA cannot be replaced when used as a chemical intermediate. However, when EOAs are used in solvents, the different Ethanolamines appear to be exchangeable. From supply-side substitution MEA, DEA, TEA are inevitably manufactured jointly in one and the same plant. Some competitors noted that switching production between MEA, DEA, and TEA is difficult. As the operation does not raise competition concerns on any reasonable product market the market definition may be left open.

GEs –glycol ethers

19. GEs are oxygenated solvents produced through the reaction of ethylene oxide (EO) or propylene oxide with an alcohol to produce E-series (whereby an alcohol is reacted with ethylene oxide) and P-series glycol ethers (produced through the reaction of propylene oxide with an alcohol) respectively. They have a wide range of applications, including solvents for surface coatings, inks and industrial cleaning fluids, and in non-solvent applications including de-icing agents in jet

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<sup>2</sup> It is to be noted that Innovene produces ethylene glycol at Dormagen which is excluded from the current transaction.

<sup>3</sup> Case No COMP/M.2345 – DEUTSCHE BP / ERDÖLCHEMIE, 26/04/2001

fluids, and in brake fluids. The market investigation has largely confirmed that glycol ethers constitute separate markets from others EO derivatives (like for example EOAs) due to low demand side substitution and different applications.

20. In the previous Commission's decision<sup>4</sup>, the exact market definition was left open, although the Commission stated that according to the parties E-series and P-series glycol ethers were interchangeable from a customer's perspective and supply-side switching was only limited by the need for different raw materials. This view was confirmed by some of the suppliers in the current market investigation. They have confirmed that switching production between E-series and P-series is not difficult and often they are produced at the same plant. Also the parties agree with the proposition that E-series and P-series glycol ethers constitute a separate product market.
21. However, the customers largely favoured separation of E-series and P-series glycol ethers. They have argued that their suppliers of respectively E and P-series of glycol ethers are different, and the feedstock is different (ethylene oxide for E-series and propylene oxide for P-series). Moreover, P-series are more expensive than E-series. From customers' perspective switching between the two series would require a change of formulas. Since the operation does not raise competition concerns on either market definition, the question whether a further separation of glycol ethers into P- and E-series should be made, can be left open.
22. The parties note that for each of the P-series and E-series of GEs, there exists a number of families of products, based on different starting alcohols (e.g. methanol, ethanol or butanol), which can then be further divided into three glycol ether homologues: mono-glycol ether, di-glycol ether and tri-glycol ether.
23. The only overlap within the glycol ethers market between the parties is in butyl glycol ethers ("BGEs"). BGEs are produced by the reaction of EO with n-butanol. These have various applications including as solvents and in brake fluids, applications for which there are a wider range of functionally substitutable products available. The parties do not consider that BGEs should be considered as a separate market. However, according to the market investigation, different types of GEs based on different types of alcohol can constitute separate product markets.
24. The chemical reaction of the ethylene oxide with the butanol proceeds to give a natural ratio between the three types (mono-, di-, tri- butyl glycol) of respectively 50:35:15. Most BGE producers have in-house consumption of both butyl mono-glycol ether and butyl di-glycol ether, which are used to make acetates, and significant internal consumption of butyl tri-glycol ether, which is used in brake fluids. Moreover, mono-butyl glycols constitute the majority (75%) of overall third party sales of BGEs with much lower third party sales of di-BGEs and tri- butyl glycols are essentially a by-product.
25. Some of the respondents to the market investigation were suggesting a further sub-division of BGEs into three glycol ether homologues: mono-butyl glycol ether, di-butyl glycol ether and tri-butyl glycol ether. However, the market investigation was not conclusive on the further sub-division and the parties do not consider the sub-segments of mono-, di- and tri- butyl glycol ethers as separate product markets.
26. Since the operation does not raise competition concerns on either market definition, the question whether a separate product market exists for BGES and whether it should be further subdivided can be left open.

#### RELEVANT GEOGRAPHIC MARKET

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<sup>4</sup> Case No COMP/M.2355 – DOW/ENICHEM POLYURETHANE, 2001, sec.12, p. 3

## EO - ethylene oxide

27. In the previous decision<sup>5</sup> the Commission has considered geographic dimension of ethylene oxide market as Western Europe (defined as EEA plus Switzerland) although the Commission left the exact market definition open. The parties submit that EO markets are EEA-wide as EO is transported over 400-600 km and prices across EEA are similar. The market investigation has confirmed that transport of EO is relatively costly due to the product hazardous characteristics. Therefore, producers and consumers aim to minimize any risks by avoiding transportation as far as possible. According to the market participants the higher differences in prices of EO than the EO's derivatives are due to transport costs. However, most of the market investigation respondents confirmed that either they source or sell EO on European level. Although many arguments tend to support European dimension of the EO market, for the purpose of the present transaction it does not appear necessary to conclude whether the relevant geographic market is regional (Northern or Southern Europe) or EEA-wide.

## EOAs- ethanolamines

28. The parties submit that the market for EOAs is global, since they are easily transportable, and imports into the EEA of some 57 kt per annum in 2004 represented around 24% of the total merchant market in the EEA. Major exporters to the EEA include the US, Mexico, Brazil, the Middle East and Asia.
29. The respondents to the market investigation tend to agree with the global market dimension. Producers supply EOAs all over the world and their main competitors are active on global and not on regional basis. Customers admit that in the case of price increase they can source EOAs from outside the EEA. However, they consider that transport costs are an important obstacle. Also, in the case of TEA there are significant regulatory barriers.
30. Although many arguments tend to support global dimension of the EOAs market, for the purpose of the present transaction it does not appear necessary to conclude whether the relevant geographic market is limited to the EEA or global.

## GEs –glycol ethers

31. In the previous decision<sup>6</sup> the Commission concluded that GEs market has an EEA-wide geographic scope since general conditions of competition are broadly homogenous, prices do not differ appreciably, there is substantial cross border trade, and transport costs are not significant.
32. The parties submit that the market for GEs should be considered as a global market. Europe, Russia and the Americas are net exporters of the product (although imports into Europe also account for around 10% consumption). Most of the exported material goes to the Asia-Pacific region, particularly China, which is a net importing region. Production tends to be based on world-scale units with materials being shipped to markets across the globe.
33. According to the market investigation, the GE market is globalized to a much higher extent than the EO market. Main suppliers are active on worldwide basis and although risk-related transport costs remain important obstacle for the limiting of geographic dimension, they are lower than for EO.

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<sup>5</sup> Case No COMP/M.2345 – DEUTSCHE BP / ERDÖLCHEMIE, 26/04/2001

<sup>6</sup> Case No COMP/M.2355 – DOW/ENICHEM POLYURETHANE, 26/04/2001

34. Although many arguments tend to support global dimension of the GEs market, for the purpose of the present transaction it does not appear necessary to conclude whether the definition of the relevant geographic market is limited to the EEA or global.

#### ASSESSMENT - HORIZONTAL OVERLAPS

##### EO - ethylene oxide

35. The parties note that comprehensive data on EO consumption in Europe is not readily available, since the majority of EO production is consumed within the downstream operations of the integrated producers. However, Ineos estimates the 2004 ethylene oxide equivalent (EOE) consumption in Western Europe (including Switzerland) between 2.920 and 2.967 kt. On the basis of EEA capacity of 3.260 kt per annum this suggests EO capacity utilisation of some 90%.
36. According to the parties the merged Ineos/Innovene entity will account, in the EEA plus Switzerland, for some [20-30]% of all third party EO supplies (Ineos: [10-15]%, Innovene: [10-15]%) followed by Shell with [20-25]%, Clariant with [10-15]%, La Seda (IQA) with [5-10]%. The combined market shares for production capacity are lower ([15-25]%).
37. Although, the market investigation has shown that EO has rather low demand side substitution, in case of a price increase a majority of customers consider that they would be able to find alternative suppliers. Moreover, price increases of EO and EO's derivatives could be constrained by buyer power as the main customers constitute large proportions of sales. Furthermore, in case of price increase of EO, vertically integrated producers might switch from derivative production to supply the merchant EO market.
38. The parties claim that a distinction needs to be made between long term arrangements for supply of EO to customers whose derivative plants for conversion of EO are co-located on the EO supplier's site and supplies to off-site customers which are contestable in a meaningful sense. True merchant market contracts; tend to be made on the basis of a relatively limited duration contracts, typically around 1 to 3 years, in contrast to on site contracts. These customers have no realistic prospect of switching to a different supplier in the short term. The advantages here are sharing the costs of operators, infrastructure and support services, reduction of cost and risk in handling the transport and logistics, etc. These arrangements are typically for 10 to 15 years or longer, moreover, price arrangements tend to reflect the closely integrated nature of the relationship between supplier and customer. The distinction between on site and off side contracts was confirmed by the market investigation.
39. The merged Ineos/Innovene entity will have a market share of the off-site EO merchant market in the EEA and Switzerland area of some [20-30]% (Ineos: [10-15]%, Innovene: [10-15]%), followed by Shell with [20-25]%, Clariant with [15-20]%, PKN with [5-10]%, Sasol with [5-10]%).
40. Even if the narrower geographic market definition were established the transaction does not present any competition concerns on EO market. On the Northern Europe market, the parties would have a combined market share of [15-25]% of third party market and [15-25]% on off-side merchant market. On the Southern Europe market, the parties would have a combined market share of [40-50]% of merchant market and [40-50]% on off-side merchant market but with a very limited overlap ([0-5]% Ineos).
41. For the above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on the market for EO.

#### EOAs- ethanolamines

42. The combined market share for EOAs on an EEA wide market amounts to [20-30]% (Ineos: [5-10]%, Innovene: [15-20]%), with the main competitors BASF with [40-45]%, Dow with [10-15]%, Sasol with [5-10]%. On a worldwide geographic market, the parties market share would amount to [10-20]% (Ineos: [10-15]%, Innovene: [0-5]%), competing with Dow ([25-30]% market share), Huntsman ([10-15]%), BASF ([5-10]%) and Optimal ([5-10]%). The market investigation has confirmed that there is low demand side substitution of EOAs. However, a majority of customers confirmed that in the case of a price increase by one of their existing suppliers they would change the supplier. For above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on this market.

#### MEA - mono-ethanolamine

43. The combined market share for MEAS on an EEA wide market amounts to [15-25]% (Ineos: [5-10]%, Innovene: [10-15]%) competing with BASF (with [40-45]%), DOW ([5-10]%), Sasol ([5-10]%) and Kazanorgsyntex ([5-10]%). On a worldwide geographic market, the parties market share would amount to [15-25]% (Ineos: [15-20]%, Innovene: [0-5]%), competing with Dow ([25-30]%), Huntsman ([15-25]%), BASF ([5-10]%) and Optimal ([5-10]%). For above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on on this market.

#### DEA - di-ethanolaminie

44. The combined market share for DEAs on an EEA wide market amounts to [15-25]% (Ineos: [0-5]%, Innovene: [15-20]%) competing with BASF ([40-45]%), Akzo ([15-20]%), DOW ([15-20]%), and Sasol ([5-10]%). On a worldwide geographic market, the parties market share would amount to [15-25]% (Ineos: [10-15]%, Innovene: [0-5]%), competing with Dow ([30-35]% market share), Huntsman ([10-15]%), BASF ([5-10]%) and Optimal ([5-10]%). For above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on on this market.

#### TEA - tri-ethanolamine

45. The combined market share for TEAs on the EEA wide market amounts to [15-25]% (Ineos: [0-5]%, Innovene: [15-20]%) competing with BASF with [35-40]%, DOW (US) [15-20]%, Kazanorgsyntex with [5-10]% and Sasol with [0-5]%. On a worldwide geographic market, the parties market share would amount to [15-25]% (Ineos: [10-15]%, Innovene: [5-10]%), competing with Dow ([15-20]% market share), BASF ([15-20]%), Huntsman ([5-10]%), and Optimal ([5-10]%). For above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on this market.

#### GEs –glycol ethers

46. The parties note that Ineos only manufactures E-series GEs, whereas Innovene produces both E-series and P-series GEs. Their combined market share of GEs on an EEA wide market is [15-25]% (Ineos: [0-5]%, Innovene: [15-20]%), competing with Dow with [20-25]%, followed by Lyondell with [15-20]%, Shell with [15-20]% and BASF with [15-20]%. On a world wide market their combined market share amounts to [5-15]% (Ineos: [0-5]%, Innovene: [5-10]%), competing with Dow with [30-35]%, Lyondell with [15-20]%, Shell with [5-10]%, BASF with [5-10]%.  
47. The parties' combined market share of E-series GEs (comprising E-series of methyl glycol ethers, ethyl glycol ethers and butyl glycol ethers) on an EEA wide market is [25-35]% (Ineos: [5-10]%, Innovene: [20-25]%), competing with Dow with [15-20]%, followed by BASF with [15-20]%, Shell with [10-15]% and Sasol with [10-15]%. On a world wide market their combined market share amounts to [10-20]% (Ineos: [0-5]%, Innovene: [10-15]%), competing with Dow with [25-30]%, Eastman with [10-15]%, BASF with [10-15]%, and Shell with [5-10]%.



48. Although the combined market share of E-series GEs exceeds 25%, some respondents to market investigation pointed out that imports from the Middle East would exert increasing competitive pressure on the European market. Especially the new capacities coming on-stream in the Middle East during the next years can be expected to contribute to an oversupply. This will limit the influence of domestic European producers on the pricing process. Moreover, according to some of the market investigation respondents, there is a significant number of suppliers that could be alternative in the case of unilateral price increase. For the above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on this market.

#### BGEs - butyl glycol ethers

49. The parties' combined EEA market share of BGEs amounts to [25-35]%, and the parties are followed by Dow with [15-20]%, BASF with [15-20]%, Shell with [10-15]%, Sasol with [10-15]%. However, the actual market share accretion is only [0-5]% (Ineos).
50. Moreover, according to the parties there is a significant in-house consumption by many producers (including the named competitors) of BGEs (and all its homologues) with whose downstream products merchant market consumers must compete. The BGE products sold at the downstream level are also competing against other formulated products, as well as other forms of GEs. According to the market investigation, European suppliers are also constrained by significant imports from the US.
51. If the market for BGEs were further sub-divided into three glycol ether homologues: mono-butyl glycol ether, di-butyl glycol ether and tri-butyl glycol ether the combined parties shares would be lower than 25% for mono-BGEs and higher than 25% for di- and tri – BGEs at the EEA-level (respectively [40-50]% and [75-85]%). However, since mono-butyl glycols constitute the majority (75%) of overall third party sales of BGEs, the higher market shares for di- and tri- BGEs do not constitute competition problem. Tri is essentially a by-product and as it is produced in a larger proportion than its current share of the merchant sales the other producers could easily produce it to counter any price rise by the parties. Moreover, as production of butyl glycol ethers is carried out according to the natural mono:di:tri ratio for the chemical reaction between ethylene oxide and butanol the merchant market position for each competitor is therefore strongly affected by the level of in-house consumption of each product. There is significant in-house consumption by many competitors, including Dow, BASF and Sasol. In the case of mono- and di- glycol ethers, in-house consumption is mainly for the production of the corresponding glycol ether ester. For the tri-glycol ether, in-house consumption is mainly for the production of brake fluid formulations. As neither Ineos nor Innovene consumes tri-butyl glycol ethers internally, this explains their high combined share in this sector.
52. The combined market share of BGEs on a world wide market is [10-20]% (Ineos: [0-5]%, Innovene [10-15]%), competing with Dow with [25-30]%, Eastman with [10-15]% and Shell with [5-10]%. If the market for BGEs was further sub-divided into three glycol ether homologues: mono-butyl glycol ether, di-butyl glycol ether and tri-butyl glycol ether the combined parties' shares would not exceed 25% on any of these sub-markets.
53. For above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on this market.

#### ASSESSMENT – VERTICAL RELATIONSHIPS

54. The vertical relationships which arise between EO and the horizontal affected EO derivatives do not raise competition concerns since neither Ineos nor Innovene purchase EO on the third party market for use in their downstream EO derivatives businesses.
55. Additionally, the other vertical relationships between upstream propylene oxide (produced by Innovene) and downstream alkoxyates (produced by Ineos); and upstream 2EH (manufactured from propylene and produced by Innovene) and downstream PVC plasticizers (produced by Ineos); are not considered problematic as in both cases Ineos purchases de minimis volumes of upstream products.
56. Vertical relationships between upstream ammonia (produced by Innovene) and downstream EOAs (produced by both parties) do not raise competition concerns as Innovene has only a [0-5]% share of the European merchant market for ammonia, and Ineos does not source any of its ammonia requirements for its US production of EOAs from within the EEA.
57. Similarly, vertical relationships between upstream styrene (produced by Innovene) and downstream polystyrene (produced by both parties) do not raise competition concerns as Ineos is not active in the downstream market in the EEA
58. Additionally, the other vertical relationships between ethylene (produced by Innovene) and dichloroethylene (produced by Ineos) is not considered problematic as Ineos uses all of its production in-house and is consequently not active in the merchant market.
59. On the narrow product market of silica for catalyst support in polyolefin production there are only three suppliers who have plants in both Europe and the USA. WR Grace is the leader with a global market share of [70-75]% whereas Ineos has only [20-25]%. Innovene's consumption of silica on global level is less than 5% of the total global consumption. As a result, any attempt of foreclosure would be certainly unlikely to succeed.
60. There are several vertically related markets where the relationships between the parties are more significant; namely ethylene (Innovene) and polyvinyl chloride and trichloroethylene and perchloroethylene (Ineos); propylene, benzene and cumene (Innovene) and phenol and acetone (Ineos); butanol (Innovene) and butyl acetate esters (Ineos); butadiene (Innovene) and ethylidene norbornene (Ineos); ethanol (Innovene) and ethylglycol ethers (Ineos).
61. The vertical relationship between upstream ethylene and downstream polyvinyl chloride (PVC) and trichloroethylene and perchloroethylene does not raise competition concerns as Innovene has only [0-5]% of EEA merchant market and is already a net purchaser of ethylene in Europe. Even with Ineos' higher EEA market shares of supply in downstream markets ([15-20]% in PVC, [45-50]% in trichloroethylene), Ineos' limited [5-10]% share in European demand for ethylene, does not appear to be problematic.
62. Concerning the vertical relationship between upstream butanol and downstream butyl acetate esters Innovene has [10-15]% of the EEA merchant market for butanol. Although Ineos accounts for a [20-25]% EEA market share of supply in downstream market (butyl acetate esters) its demand for butanol constitutes [5-10]% of overall demand in Europe. As both Ineos and Innovene are relatively small purchasers on this market accounting together for only around [5-10]% of the European merchant market, this vertical relationship does not raise competition concerns.
63. The vertical relationship between upstream butadiene (with Innovene's EEA merchant market share below 25%) and downstream ethylidene norbornene (where Ineos is active) does not raise competition concerns as Ineos represents only [0-5]% of demand for butadiene. Similarly, vertical relationship between upstream ethanol (with Innovene's EEA merchant market share of [10-15]%) and downstream ethylglycol ethers (Ineos with [35-40]% of EEA production share) does not raise competition concerns as Ineos' demand for ethanol is de minimis.

64. Finally there is a complex vertical relationship between the upstream propylene and benzene markets (Innovene) and the downstream phenol and acetone markets (Ineos). Benzene and propylene are the input materials for the manufacture of phenol. Acetone is produced as a by-product. Innovene supplies [5-10]% of European merchant market and [0-5]% of global market of benzene. Innovene supplies only [0-5]% EEA merchant market for propylene (also used for production of phenol).
65. Although the combined entity will have high market shares for phenol ([45-50]% in the EEA and [20-25]% globally) and for acetone ([40-45]% EEA and [20-25]% globally) the low market shares on the upstream markets will prevent them from foreclosing the markets for raw materials to their competitors.
66. The operation will therefore not give rise to competition concerns in relation to relationship between Innovenes' supply of benzene and propylene and Ineos' production of phenol and acetone.
67. For above reasons, the proposed concentration does not raise serious doubts as to its compatibility with the common market on above mentioned vertically related markets.

## **V. CONCLUSION**

68. 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 (EC) No 139/2004.

For the Commission, signed,  
Jan Figel  
Member of the Commission