

***Case No COMP/M.4828 -  
OWENS CORNING /  
SAINT GOBAIN  
VETROTEX***

Only the English text is available and authentic.

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

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Article 6(2) NON-OPPOSITION  
Date: 26/10/2007

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 26-X-2007

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PUBLIC VERSION

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

**To the notifying party:**

Dear Sir/Madam,

**Subject: Case No COMP/M.4828 – OWENS CORNING / SAINT-GOBAIN  
VETROTEX  
Notification of 07.09.2007 pursuant to Article 4 of Council Regulation  
No 139/2004<sup>1</sup>**

1. On 07.09.2007, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 ("the Merger Regulation") by which the undertaking Owens Corning ("OC", USA) acquires within the meaning of Article 3(1)(b) of the Merger Regulation control of parts of the glass fibre reinforcement and composite fabrics activities ("Vetrotex", France) of Compagnie de Saint Gobain ("Saint Gobain", France) by way of purchase of assets.
2. In the course of the proceedings, the notifying party submitted undertakings designed to eliminate the serious doubts identified by the Commission, in accordance with Article 6(2) of the Merger Regulation. In the light of these modifications, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation and does not raise serious doubts as to its compatibility with the common market and with the functioning of the EEA Agreement.

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

## **I. THE PARTIES**

3. **OC** is a US company active worldwide in the production and sale of glass fibre reinforcements, composite fabrics and building materials. OC's worldwide sales in 2006 amounted to € 5,147 million out of which 24% related to glass fibre reinforcements and composite fabrics. OC is active in glass fibre reinforcements and composite fabrics through wholly owned plants in North America, Latin America, the EEA and Asia, jointly owned plants in Korea and India and a production joint venture with Saint Gobain in Mexico.
4. **Vetrotex** consists in the glass fibre reinforcements and composite fabrics activities of the French company Saint Gobain, which is active worldwide in the manufacture and sale of products in five other main segments: flat glass, packaging, construction products, distribution of building materials and high performance materials including reinforcements. Vetrotex activities are carried out through plants in North and Latin America, the EEA and Asia, jointly owned plants in Japan, Italy and Russia and a joint venture with OC in Mexico. Vetrotex worldwide sales in glass fibre reinforcements and composite fabrics amounted to € [...] million in 2006.

## **II. THE OPERATION AND THE CONCENTRATION**

5. On July 26, 2007, OC and Saint Gobain signed a purchase agreement whereby OC acquires Saint Gobain's reinforcement and composite business, with the exception of Saint Gobain's plants in Wichita Falls (USA), Litomysil and Hodonice (Czech Republic) as well as Saint Gobain's activities in glass fibre for textile fabric applications.
6. With the operation, OC will obtain sole control over Vetrotex and the transaction constitutes a concentration within the meaning of Article 3 of the Merger Regulation.

## **III. COMMUNITY DIMENSION**

7. The undertakings concerned have a combined aggregate world-wide turnover of more than € 5 billion<sup>2</sup> (OC, € 5,147 million; Vetrotex, € [...] million). Both have a Community-wide turnover in excess of € 250 million (OC, € [...] million; Vetrotex, € [...] million), but none of the two achieves more than two-thirds of its aggregate Community-wide turnover within one and the same Member State. The notified operation, therefore, has a Community dimension.

## **IV. RELEVANT MARKETS**

### **A. Relevant product markets**

8. The proposed acquisition concerns the production and sale of glass fibre reinforcements and composite fabrics where both OC and Vetrotex are active. In addition, OC is active

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<sup>2</sup> Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25).

in the manufacture of two downstream products of glass fibre reinforcements, i.e. veil<sup>3</sup> and muffler filling.<sup>4</sup>

### 1. Glass fibre reinforcements

9. Glass fibre reinforcements are intermediate products that are combined with resins (polyester, polypropylene, polyurethane, etc) to form “compounds” such as thermosets, thermoplastics or laminates. These compounds have high mechanical performance i.e. stiffness, strength, thermal or chemical resistance and are used in different sectors such as construction, automotive, electronics or aerospace/military.
10. The glass fibre reinforcements are manufactured by melting a glass batch formulation in a furnace and then by drawing it through a multi-hole surface called a “bushing” to create thin filaments. These filaments are then treated by various chemical and physical processes (“sizing”) that alter their properties, making them suitable for a wide range of specific reinforcement uses. The sizing is essential in the manufacturing process as it decides the adherence of the glass fibre reinforcements to different resins and therefore the quality and the properties of the end-use application e.g. if the fibre is to be used in thermoplastics, the sizing makes it have an affinity for polymers.
11. The treated filaments are then either chopped into short pieces (Dry Use Chopped Strands “DUCS” and Wet Use Chopped Strands “WUCS”), wound onto a spool (direct and assembled rovings) or formed into a mat (chopped strand mat “CSM” and continuous filament mat “CFM”), depending on the desired application.
12. In the case COMP/M.3064 – *Ahlström Capital/Capman/Nordkalk*, the Commission has considered the existence of three possible distinct markets within the glass fibre sector: glass fibre reinforcements, glass fibre tissues and woven and specialty reinforcements. However, the precise product market definition was left open.
13. Based on demand- and supply-side considerations, the notifying party submits that the glass fibre reinforcement sector could comprise six distinct relevant product markets: direct rovings, assembled rovings, DUCS, WUCS, CSM and CFM.
14. Within the categories of DUCS, WUCS, assembled rovings and direct rovings, although the notifying party acknowledges that a further distinction may be made according to the final use of the glass fibre product, it is not relevant to define distinct market by application as, on the demand side, different glass fibre reinforcement product lines can be used for the same end applications and on the supply side, manufacturers are able to switch lines and plant settings within a particular product category within short time and with negligible costs.
15. Respondents to the market investigation have broadly confirmed the notifying party's views on the distinction between the glass fibre categories pointing to the fact that there is no demand side substitution between the fibre glass reinforcements. As regards the supply-side substitutability, while respondents indicated that there was a certain degree of supply-side substitution between certain product categories (assembled rovings, some

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<sup>3</sup> Saint Gobain is also active in the production and sale of veil but this activity is not part of the proposed transaction.

<sup>4</sup> OC is also making *de minimis* sales of stone veneer and roofing shingles produced with WUCS.

types of WUCS, DUCS and CSM), this was not true for other product categories such as direct rovings and CFM. In addition, the market investigation confirmed that it was not necessary to define narrower segments within the different fibre glass reinforcements mainly because of the high degree of supply-side substitution.

16. For the reasons detailed below, the Commission has come to the conclusion that the markets for direct rovings, assembled rovings, DUCS, WUCS, CSM and CFM constitute distinct relevant product markets for the purpose of the present case.

### **Direct rovings**

17. Direct rovings are produced by pulling individual glass fibres directly from the bushing and winding them onto a roving package. Direct rovings are used in a variety of manufacturing processes (e.g. weaving, filament winding, pultrusion<sup>5</sup>) to fabricate products such as pipes, turbine blades for wind energy, window and door frames, ladder rails or tool handles.
18. The market investigation clearly indicated that there is no demand side substitution between direct rovings and other types of glass fibre reinforcements.
19. As regards the supply-side substitution, the notifying party argues that there is supply-side substitutability notably between the direct and assembled rovings, especially for the modern facilities, and that the switching production from assembled rovings to direct rovings is well manageable in short time and with relatively low costs.<sup>6</sup> Furthermore, the notifying party explains that both direct and assembled rovings require a drying oven, which can be used interchangeably between the two categories.
20. The market investigation did not confirm the notifying party's submission and on the contrary indicated that there is no supply-side substitution between direct rovings and any other types of glass fibre reinforcements. The vast majority of competitors stated that the switching costs would be significant as the bushings need to be replaced, which requires significant investments and is time consuming.
21. As regards sub-segments of direct rovings i.e. rovings for weaving, rovings for filament winding, rovings for muffler filling, rovings for pultrusion and rovings for thermoplastics, the market investigation confirmed the notifying party's submission that any producer can easily switch between different sub-categories of direct rovings. Producers of direct rovings are capable of producing most or all direct roving product lines on the same equipment and switching between lines takes little time once qualified at the purchasing customer.

### **Assembled rovings**

22. Assembled rovings are continuous glass fibres bonded together into strands without twist. Assembled rovings are created in a two-step manufacturing process in which the

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<sup>5</sup> Pultrusion is a continuous process for manufacturing composites that have a constant cross-sectional shape. The process consists of pulling a fibre-reinforced material through a resin impregnation bath and through a shaping die, where the resin is subsequently cured.

<sup>6</sup> The parties indicate that switching from assembled to direct rovings would cost around €[0-100,000] for a winder of slightly under 1000 metric tons/year capacity and would require [1-20] weeks to be brought into operation.

filaments drawn from the bushing are first wound onto an intermediate package called a cake. Subsequently, several cakes are loaded onto a creel, and the strands from several cakes are wound simultaneously onto the assembled roving package. Assembled rovings are used in a variety of manufacturing processes (e.g. hand lay-up<sup>7</sup>, spray-up<sup>8</sup>, compression moulding<sup>9</sup>, and filament winding<sup>10</sup>) for various end-use applications, including the manufacture of bathtubs and showers, pick-up truck beds, commercial wall panels, automotive exterior panels, boats or urban furniture.

23. The notifying party argues that producers can switch production from direct rovings<sup>11</sup> and CSM<sup>12</sup> to assembled rovings. As indicated above, the vast majority of competitors indicated that the possibility to switch the direct roving to assembled rovings production is uneconomical.
24. As regards the sub-segments of assembled rovings i.e. Centrifugal Casting, GMT Roving, Gun Roving, Panel, Preform/Chopping, Filament winding and SMC/BMC, the market investigation confirmed the parties' submission that any producer can easily switch between different sub categories of assembled rovings. Producers are capable of producing most of assembled roving product lines on the same equipment and switching between lines takes relatively short time.

### **DUCS**

25. DUCS are basic strands cut to certain lengths (typically 3mm) that are used to reinforce thermoplastic and thermoset resins. DUCS are mainly sold to large compounders who process and sell “compounds” to injection molders who use the compounds to mold parts for automotive, business equipment components, domestic appliance components, and casings for power tools, casings for televisions or sporting goods.

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<sup>7</sup> The hand lay-up is a fabrication method in which reinforcement layers, pre-impregnated or coated afterwards, are placed in a mold by hand, then cured to the formed shape.

<sup>8</sup> The spray-up is a technique in which a spray gun is used as an applicator tool. In reinforced plastics, for example, fibrous glass and resin can be simultaneously deposited in a mold. In essence, roving is fed through a chopper and ejected into a resin stream that is directed at the mold by either of two spray systems. In foamed plastics, fast-reacting urethane foams or epoxy foams are fed in liquid streams to the gun and sprayed on the surface. On contact, the liquid starts to foam.

<sup>9</sup> Compression moulding is a technique for moulding thermoset plastics in which a part is shaped by placing the fiber and resin into an open mold cavity, closing the mold, and applying heat and pressure until the material has cured or achieved its final form.

<sup>10</sup> Filament winding is a process for fabricating a composite structure in which continuous reinforcements (filament, wire, yarn, tape, or other), either previously impregnated with a matrix material or impregnated during the winding, are placed over a rotating and removable form or mandrel in a prescribed way to meet certain stress conditions. Generally the shape is a surface of revolution and may or may not include end closures. When the required number of layers is applied, the wound form is cured and the mandrel removed.

<sup>11</sup> The notifying party indicates that switching from direct to assembled rovings would cost around €[0-100,000] for a winder of slightly under 1000 metric tons/year capacity and would take around [...] weeks to implement; in addition, assembled rovings require a creel and winder fabrication step which would cost around €[0-100,000] for a 2,000 ton per year facility and would take around [6-12] months to set up.

<sup>12</sup> The notifying party indicates that the switching process from CSM to assembled rovings would require a creel and winder fabrication step as well as a drying oven.

26. The notifying party argues that production changes from any glass fibre reinforcement to DUCS are relatively straightforward and inexpensive. All that is required is to install a chopper onto the line after the filaments are drawn from the bushing.<sup>13</sup> The switch from WUCS, according to the notifying party, would be particularly easy as both DUCS and WUCS use a chopper after the filament is drawn from the bushing; the difference being that the DUCS are dried after chopping and therefore require a drying oven that is not required for WUCS.<sup>14</sup>
27. In their response to the market investigation, competitors mainly confirmed that there is a certain degree of technical supply-side substitutability between DUCS and WUCS. However, WUCS market is very small and therefore the capacities available in this market extremely limited.<sup>15</sup> Besides, DUCS is a product where sizing is playing a major role.<sup>16</sup> The sizing for DUCS and any other glass fibre reinforcement, including WUCS, significantly differ. The market investigation also suggested that the supply-side substitution between different sizing formulations is limited as normally the final DUCS product, which main characteristics are given by the sizing are furthermore qualified with the customers and sometimes even by the final client in a sometime very lengthily and cost intensive process.<sup>17</sup>
28. As regards the sub-segments of assembled rovings i.e. DUCS for milled fibre, DUCS BMC, and DUCS TPA (which can be further broken down into DUCS for polyamide, DUCS for polyester, DUCS for polypropylene, and DUCS for other specialty resins) the market investigation confirmed the notifying party's submission that producers can easily switch between different sub-categories of DUCS. Producers of DUCS are capable of producing most of DUCS product lines on the same equipment and switching between lines takes relatively short time.

### WUCS

29. WUCS are basic strands cut to certain lengths (typically 25mm) that are used wet in a paper-like process, which consists of mixing WUCS with water to make slurry, which is then transformed into a mat. WUCS are used in mats and reinforcement veils to make printed circuit boards, roofing shingles, acoustical tiles, vinyl-coated flooring or asphalt roofing. They are available in a variety of diameters and lengths and provide strength, dimensional stability, and chemical resistance for end-use applications.

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13 The cost of an inline chopper of 5,000 metric tons per year capacity is around €[200,000-500,000], and would require about [6-12] months to be brought into operation.

14 The notifying party indicates, the cost of an oven with 15,000 ton per year capacity is around €[200,000-500,000], and would require about [0-6] months to be brought into operation.

15 Volume of WUCS estimated by the notifying party is 11,270 metric tons in 2006 compared to the volume of the DUCS market of 314,583 metric tons.

16 Sizing formulations for DUCS consist typically of Silanes, Polyurethanes and other speciality chemicals and these formulations vary for different types of resins (e.g., Polyamide, Polypropylene, Polybutylene, polyester). Its main property is the resistance (e.g. some resists over temperature of 1500 degrees Celsius) and is essentially applied to protect the surface of the fibres from damages.

17 The market investigation indicated that qualification process, especially in the automotive and electric /electronic industries can take up to 24 months and for sensitive applications, e.g. crash relevant parts in automotive notification the minimum costs account for 50k EUR per trial for at least half a year.

30. As described above, the notifying party argues that especially between WUCS and DUCS, there is a high degree of supply-side substitution as there are no relevant barriers to switching (e.g., patents), the know-how being readily available, the production processes being very similar and the same equipment being used.
31. The market investigation indicated that there is indeed a certain degree of supply-side substitutability i.e. DUCS producers would be able to switch production to WUCS. Nevertheless, the fact that the WUCS market is structurally very different from that of DUCS in terms of final use, qualification processes and size therefore limits the DUCS manufacturer incentive to switch to WUCS.<sup>18</sup>
32. As regards potential sub-segments of WUCS i.e. WUCS for gypsum (used for plasterboard reinforcement) and WUCS for glass mat veil (used for shingles, etc.), the market investigation confirmed the notifying party's submission that producers can easily switch between different sub categories of WUCS and that there is full supply-side substitutability.

### **CSM - chopped strand mat**

33. CSM consists of chopped glass fibres bonded together using a binder. The mats are designed to be compatible with unsaturated polyester and vinyl ester. CSM is used as gel-coat backups and standard laminate reinforcements for most contact moulding applications, including boats, surfboards, panels and tanks.
34. The notifying party indicates that there is a certain degree of supply-side substitutability between CSM and some glass fibre reinforcements notably assembled rovings. CSM requires a winder capable of making intermediate packages (same as for assembled rovings), as well as a CSM fabrication line. Regarding the winding operation, switching costs are the same as for switching to assembled rovings. Regarding fabrication, a CSM line of 4,000 metric tons per year capacity would cost around [€200,000-600,000] to install, and would require around [12-18] months to bring into operation.
35. The market investigation showed that some competitors could theoretically switch to CSM, some other competitors however pointed out to substantial investments which would be needed for such a change.

### **CFM - continuous filament mat**

36. CFM is a non-woven mat made by spreading continuous glass fibres uniformly across a surface and applying an insoluble binder. CFM is particularly suitable for compression molded electrical and non-electrical laminates, as well as for use in pultrusion processes.
37. The notifying party's submission according to which this product constitutes a separate relevant market has been fully confirmed during the market investigation.

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<sup>18</sup> In Europe, over 85% of WUCS produced are used for captive purposes (i.e., consumed internally by mat producers); the merchant market for WUCS is therefore small.



## 2. Downstream products

### Composite fabrics

38. Composite fabrics are mainly manufactured from direct rovings and are best defined as mats that have oriented fibres that are held in place by physical linkage such as weaving, knitting or stitching.<sup>19</sup> Composite fabrics are used to produce high-strength, structurally demanding solid composite applications such as shipping containers, ballistic armor, wind generator blades, and less demanding applications including composite doors and marine boat hulls.
39. Based on their construction methodology, there are four main types of composite fabrics: Woven Fabrics, which are composed of direct rovings woven into a fabric or tape; Knitted Fabrics, which are composed of direct rovings stitch-bonded together; Combination Fabrics which are composed of a combination of fabrics with other fabrics, mats (CSM or CFM), or chopped glass bonded together either with stitching or by powder-bonding and Dimensional (3D) Fabrics which are composed of two layers of choppable roving stitched together with a core that functions as a thickness-providing layer.
40. The notifying party submits that there is one relevant product market of composite fabrics which includes different segments accordingly with different manufacturing processes. Although the market investigation pointed towards some considerations that may limit the substitutability between the four types of composite products, the majority of the respondents also consider that composite fabrics may be defined as a distinct market, including the four categories.

### Veil

41. Veils are thin sheets of non-woven glass fibre strands bound together by synthetic resin binders used at the outermost layer of a composite in order to improve surface characteristics. They can be wet-processed from WUCS or dry processed from long fibres (about 1 metre length) that are produced in a dedicated (textile) furnace.
42. The wet processed veils are made in a process very similar to paper manufacturing i.e. WUCS are slurred in water and the slurry is collected on a fine mesh belt. The wet mat is then impregnated with a synthetic resin binder and is subsequently dried and reeled into rolls of 2 to 4 meters wide.
43. Wet- and dry processed veils have different performance characteristics and therefore may be used in different applications. However for some end uses such as asphalt, foam panels, plastic reinforcement mat and bitumen waterproofing, both wet- and dry produced veil are suitable.
44. In line with the parties' submission the market investigation indicated that for some final applications e.g. water proofing, technically there is a certain degree of substitution between the two types of veil. However, products wet processed have a higher uniformity of the fibre distribution and are much lighter. Were a dry processed veil to be used instead of wet processed veil, this would result in a quality loss of the membrane

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<sup>19</sup> Glass fibres are processed into composite fabrics with common textile technologies, such as weaving, needling, knitting or chemical fixation.

resistance. The prices and the availability are important as well and some customers indicated that veil made with dry process is more restricted in terms of availability and in terms of width; the price has been indicated as higher for dry processed. For other types of applications e.g. flooring the market investigation indicated that there is no substitutability.

45. Nevertheless, as the concentration does not raise different competitive concerns under any alternative market definitions, the exact definition of the veil market can be left open.

### **Muffler filling**

46. Muffler fillings are made from direct rovings. Muffler filling is a thick wool-like, fluffy, resilient mattress made of blown glass fibre roving, mineral wool mats, or mineral fibre wool that fills the silencer chambers of automobiles' exhaust system. Muffler filling is used in absorptive muffler systems, which represent around 40% of total muffler systems in the automotive industry (the other type being the reflective muffler systems).
47. Absorptive muffler systems may use three different absorptive fillings: (i) fibreglass, (ii) biosol mineral wool and (iii) basalt. Glass fibre-based muffler filling is produced using a particular high tex direct roving product that facilitates fibre texturization.
48. As the proposed concentration does not raise different competitive concerns under any alternative market definition, the exact definition of the muffler filling market, including all different types of absorptive material or only fibreglass muffler filling can be left open.

### **B. Relevant geographic markets**

49. In a previous decision<sup>20</sup>, the Commission had assessed glass fibre products (reinforcements, tissue and woven and specialty) markets on a basis of an EEA wide market. In the present case, the notifying party considers that the geographic market should include at least the EEA Member States as well as Serbia, Montenegro, Croatia and Turkey. Moreover the notifying party submits that for some specific glass fibre reinforcements (assembled rovings, CFM and CSM), the market may be wider and global is cope. The notifying party bases its view on the level of imports and on the fact that OC's sales of assembled rovings and CSM are imported in Europe and all OC's production of CFM is in Europe.
50. Several factors clearly point to a European<sup>21</sup> wide geographic definition of the markets for glass fibre reinforcements. Firstly, data submitted by the notifying party shows that there is a low price correlation between Europe and other regions of the world for glass fibre reinforcement products. Secondly, although sales from market players outside of Europe, and from Asia in particular, are increasing, their share is still limited compared

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20 Case COMP/M.3064 - Ahlström Capital/ Capman/ Nordkalk.

21 For the purpose of this assessment, Europe includes the EEA Member States as well as Serbia, Montenegro, Croatia and Turkey.

to the sales of market players located in Europe.<sup>22</sup> Thirdly, transport costs and duties on imports to Europe<sup>23</sup> are rather high, as they amount to between 20% and 25% of an average glass fibre reinforcement price.

51. In addition, the market investigation broadly confirmed that the markets for glass fibre reinforcements are still for the time being European in scope with the possible exception of assembled rovings. Customers tend to procure on a continent basis, given the need to have regional suppliers with production capacity close to their production facilities, able to ensure prompt delivery and good quality customer service. Several respondents explained that glass fibre reinforcements, with some exceptions, are products with specific characteristics (sizing) designed for their needs. Therefore it is important for customers to have a close relationship with their suppliers, to ensure that the correct product is developed and supplied.
52. Even large international customers, in particular of direct rovings and DUCS, which look for global suppliers able to supply the same product around the world, submitted that they required to be delivered promptly and therefore asked their supplier to have production plant/warehouse close to their own plants in Europe.
53. As regards imports from Asian suppliers, and Chinese in particular, market respondents submitted that although they were purchasing part of their glass fibre reinforcements requirement from those suppliers, they could not replace the bulk of their purchases. Although low production costs may allow Asian producers to offer price competitive products, customers still do not consider them as possible main suppliers for the reasons mentioned above, such as lead time and service proximity. Moreover, Chinese supplies tend to cover mostly the lower end of the glass fibre reinforcement spectrum (e.g. spray up). For high end applications where the qualification process is more important, Chinese imports have made fewer inroads.
54. Finally, some respondents indicated that imports from China may be constrained in the coming years by several factors among others a sustained growth in internal demand, in particular linked to the further development of the automotive and wind industries in China, and the increase of importing costs in Europe as well as variation of currency rates.
55. As regards assembled rovings, indications from the market investigation indeed corroborate the notifying party's claim that the geographic scope of the assembled rovings market may be wider than European for two main reasons. Firstly, assembled rovings are mainly nearly commodity products and therefore the need to have a close relationship with the supplier to develop a specific product is not as important as for other glass fibre products. In addition, assembled rovings production is labour intensive<sup>24</sup> and therefore it is more economical for a supplier to have plants in lower cost

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22 Sales of non European based suppliers represent 3% of total WUCS sales, 10% of CSM sales, 11% of assembled rovings sales, 15% of DUCS sales and 20% of direct rovings sales.

23 The notifying party submits that glass fibre producers trade freely within the EEA and the greater European region, as defined above. This is due not only to the absence of customs duties but also the absence of other non-tariff barriers to trade.

24 Unlike the other fibre glass reinforcement products, assembled rovings cannot be manufactured directly from bushing but require a two-step manufacturing process in which the filaments drawn from the

countries. OC itself stopped producing assembled rovings in Europe in 2002 and imports from its plants in low cost countries. However the precise geographic market definition can be left open since it would not materially change the competitive assessment should the market for assembled rovings be defined as European or global.

56. The market investigation broadly confirmed the notifying party submission that the markets for composite fabrics and veil are European (EEA Member States as well as Serbia, Montenegro, Croatia and Turkey) in scope, given the need of regional suppliers with production capacities close to their production facilities, able to ensure fast delivery and quality customer service.

## **V. COMPETITIVE ASSESSMENT**

57. The proposed concentration would give rise to horizontally affected markets in glass fibre reinforcements and composite fabrics and to vertically affected markets, where both parties are supplying glass fibre reinforcements which are used in the production of veil and muffler fillings.

### **A. Horizontal aspects**

#### *1. Direct rovings*

58. According to the data provided by the parties, European sales in volume for direct rovings amounted in 2006 to [200,000-250,000] metric tons. The parties did not provide figures in value due to the difficulty in estimating prices charged by competitors. On the basis of OC and Vetrotex average prices in the EEA, the Commission estimates that the total value of sales at around € [250-300] million.
59. The market volumes and shares estimates by the parties are reported in the table below, as well as production capacity data.<sup>25</sup>

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bushing are first wound onto an intermediate package called a cake. Subsequently, the strands from several cakes are wound simultaneously onto the assembled roving package.

<sup>25</sup> Data collected during the market investigation globally confirms the parties' data.

2006	Sales in Europe		Production capacity installed in Europe	
	Volume (t)	Share	Volume (t)	Share
OC	[60,000-70,000]	[30-40]%	[110,000-120,000]	[40-50]%
Vetrotex	[20,000-30,000]	[5-10]%	[40,000-50,000]	[10-20]%
<b>Combined</b>	<b>[90,000-100,000]</b>	<b>[40-50]%</b>	<b>[160,000-170,000]</b>	<b>[50-60]%</b>
PPG	[30,000-40,000]	[10-20]%	[50,000-60,000]	[10-20]%
Johns Manville	[20,000-30,000]	[10-20]%	[20,000-30,000]	[0-10]%
Camelyaf	[0-10,000]	[0-10]%	[10,000-20,000]	[0-10]%
Ahlstrom	[0-10,000]	[0-10]%	[10,000-20,000]	[0-10]%
Oschatz	[0-10,000]	[0-10]%	[0-10,000]	[0-10]%
Chinese	[40,000-50,000]	[10-20]%	-	-
Others	[10,000-20,000]	[0-10]%		-
Total	<b>[200,000-250,000]</b>		[250,000-300,000]	

60. After the transaction, the combined market share of the new entity would be [40-50]% (OC, [30-40]%; Vetrotex, [5-10]%) and the HHI index based on 2006 data would be 2,331 with an increment of 660.
61. Compared to data submitted by the parties for 2005, the parties combined market share has remained basically constant (for 2005, Owens Corning, [20-30]% and Saint-Gobain [10-20]%) in a growing market ([150,000-200,000] metric tons in 2005, equivalent to a [10-20]% growth).
62. With the transaction, the merging parties would also combine the largest production capacities for direct roving in Europe, reaching a total capacity of [160,000-170,000] metric tons year, which, according to the Commission's estimate, equates to [50-60]% of the total European installed capacity of [250,000-300,000] metric tons.
63. The difference between capacity and merchant sales is largely explained by the fact that a large portion of direct roving are used in house by glass fibre producers who are also active downstream in the production of composite fabrics (for which direct roving are the most important input). Even if the internal consumption was taken into account and excluded from the total capacity to only keep the capacity available for the merchant market, the picture would remain the same and the parties would still have the far largest capacity available on the market with [50-60]% of the total production capacity available for third party sales.

64. In the EEA, besides the parties, vertically integrated producers include Ahlstrom and Oschatz, which transforms in-house a significant part of their direct rovings production. As regards the parties, OC sources the [0-10,000] metric tons<sup>26</sup> of direct rovings required for its fabrics business internally while Vetrotex purchases a small part (less than [10-20]%) of its requirements from third parties (approximately [0-5,000] metric tons).
65. The merger would therefore combine the number one and number four in terms of sales (number three in terms of production capacity) in the direct rovings market to create a significantly larger market leader. The combined entity's merchant sales would be more than twice as large (and in capacity between three and four times larger) than number two PPG. Johns Manville, which has recently significantly increased its production capacity in Europe, would be the only other credible alternative supplier as all of the other competitors would have a market share below 5%. These are either smaller regional competitors (Camelyaf and Ahlstrom) having limited production capacity or Asian competitors (Chinese CPIC, Jushi, Taishan and smaller ones) with limited sales in Europe. In addition, all the competitors are running at almost full capacity ([...]% capacity utilisation rate) and only the parties enjoy significant free capacity ([...]% capacity utilisation rate).
66. During the market investigation, concerns were raised by customers. A majority of respondents thus indicated that they expected a significant deterioration of their bargaining position and important price increases as a result of the transaction. This is due to several factors, which are summarised below and contradict the notifying party's contention that direct rovings' customers have strong buyer power and can switch easily between suppliers.
67. Firstly, the creation of a market leader with significantly higher sales and capacity than any other competitors would, according to customers, significantly reduce the possibility to switch supplier in case of a price increase. On this aspect, it should be noted that there are a number of European customers which purchase relatively high quantities of direct rovings (in the order of several thousand metric tons). These customers, whenever possible, qualify more than one supplier for their needs, but typically choose a preferred supplier for the bulk of their consumption in order to obtain better price conditions and homogeneous product characteristics. Only a small part of the consumption, usually for less critical applications, is sourced from smaller regional suppliers or from Asian players.
68. For these customers, the transaction would reduce the available options for the bulk of their supplies from four (the merging parties, PPG and to a smaller extent so far Johns Manville) to three. Indeed, the other players are too small in Europe to play this role on the market. Such reduction would, in the opinion of customers, lead inevitably to price increases.
69. Secondly, direct rovings are heterogeneous products, to the extent that they are produced in different sizes (the diameter of the single filament) and by impregnating the filaments with different chemical compositions (sizings). The suitability of the direct roving for a specific application depends crucially on these parameters. On this aspect,

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<sup>26</sup> 2005 data. The parties submit that they are unable to provide the equivalent 2006 data but that the picture is unlikely to have changed significantly.

customers' feedback to the market investigation is that both OC and Vetrotex are suppliers capable of offering a high variety of high quality products. The two companies are consistently indicated as the closest competitors (e.g. by customers in the wind energy industry), sometimes together with PPG. OC and Vetrotex are also indicated as the most responsive partners to the specific needs of customers in terms of product customisation (e.g. for the development of a new sizing for particular needs).

70. Thirdly, respondents do not believe overall that Chinese producers can exert a sufficient competitive pressure sufficient to allay the risk of price increases post merger. Competitors generally recognise that Chinese supplies have grown from a very low base in recent years and have exerted a downward pressure on price, notwithstanding significant additional costs linked to transport and tariffs. Customers are also aware that Chinese producers are expanding fast their production capacity in Asia. However, most customers are extremely reluctant to become dependent from suppliers with no European base and prefer to source from Asia only a minor part of their needs. Indeed, Asian suppliers are not always able to guarantee high and consistent quality for their products, especially for the most sensitive applications. Additionally, Chinese supplies involve risks linked to higher logistics complexity and exchange rate fluctuations. Customers are reluctant to become overly exposed to such risks, which can result in additional costs significantly higher than short term savings.
71. Fourthly, the market investigation revealed that OC and Vetrotex are generally considered as the leading innovators in the industry, with high quality R&D departments capable of developing entirely new products to suite customer needs. A very clear example of this is given by OC's and Vetrotex' research to satisfy the need of customers in the wind energy industry to produce longer and lighter blades for windmills. Both OC and Vetrotex have carried out research into alternative glass formulations that would allow achieving this goal. Both companies have developed entirely new glass types (HiPer-tex for OC and H-glass for Vetrotex) that can be produced according to the high volume direct melt technology and that constitute an alternative to traditional E-glass and to high price carbon fibre for new wind blade designs.
72. Based on these elements, the Commission considers that the proposed concentration raises serious doubts that the merged entity would hold a dominant position in the production and sale of direct rovings and would thus give it the ability and incentives to raise prices to the detriment of customers. The Commission, therefore, concludes that, in the absence of appropriate remedies, the proposed transaction raises serious doubts as to its compatibility with the common market for what regards direct rovings.

## 2. *DUCS*

73. The market volumes and shares estimates by the parties are reported in the table below, as well as production capacity data<sup>27</sup>.

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<sup>27</sup> Data collected during the market investigation globally confirms data submitted by the the notifying party. However, the notifying party may have slightly underestimated the production capacity of its competitors, but not in such way to alter the competitive assessment.

DUCS (2006)	Sales in Europe			Production capacity installed in Europe	
	Volume	Share	Volume (t)	Share	Utilization rate
OC	[80,000-90,000]	3[20-30]%	[80,000-90,000]	[30-40]%	[90-100]%
Vetrotex	[70,000-80,000]	[20-30]%	[90,000-100,000]	[30-40]%	[70-80]%
<b>Combined</b>	<b>[160,000]</b>	<b>[50-60]%</b>	<b>[180,000-190,000]</b>	<b>[60-70]%</b>	<b>[80-90]%</b>
PPG	[30,000-40,000]	[10-20]%	[20,000-30,000]	[0-10]%	[90-100]%
NEG	[20,000-30,000]	[0-10]%	-	-	-
Johns Manville	[20,000-30,000]	[0-10]%	[20,000-30,000]	[0-10]%	[100-110]%
Lanxess	[0-10,000]	[0-10]%	[30,000-40,000]	[10-20]%	n.a.
Camelyaf	[10,000-20,000]	[0-10]%	[10,000-12,000]	[0-10]%	[90-100]%
Oschatz	[0-10,000]	[0-10]%	0	0%	[90-100]%
Taiw Glass	[0-10,000]	[0-10]%	-	-	-
Chinese	[10,000-20,000]	[0-10]%	-	-	-
Others	[0-10,000]	[0-10]%	-	-	-
Total	<b>[250,000-300,000]</b>		[250,000-300,000]		

74. After the transaction, the combined market share of the new entity would be [50-60]% (OC, [20-30]%; Saint Gobain, [20-30]%) and the HHI index would be 3,512 with an increment of 1,583. Such market shares and HHI levels are already indicative of potential concerns on the market for DUCS. In addition, the merging parties have already individually the largest production capacity installed in Europe, far ahead of their next competitor, and post merger would, according to the Commission's estimate, hold [50-60]% of the total European installed capacity, four times the size of their next competitor, PPG<sup>28</sup>.

75. The merger would therefore combine the number one and number two in terms of sales and production capacity in the DUCS market to create an unrivalled market leader. The combined entity's merchant sales and production capacity would be more than four times as large as the next competitor, PPG. Johns Manville, which has recently significantly increased its production capacity in Europe, would be the only other European supplier, but with limited production capacity compared to the new entity. Other competitors include the Japanese NEG, which main focus is Asia as well as

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<sup>28</sup> Although, Lanxess has a total installed capacity higher than of PPG, it is partly for captive use and therefore can not fully be considered as available for the merchant market.



smaller regional competitors (Camelyaf and Lanxess) or Chinese competitors (CPIC, Jushi and Taishan) with limited sales in Europe.

76. During the market investigation, the vast majority of customers responding to the market investigation heavily complained about the potential effects of the planned transaction on their purchase of DUCS as pre-merger, OC and Vetrotex were the two main sources of DUCS in Europe. Customers fear that the combined entity would be in such bargaining position that it would have the power to impose higher prices.
77. Indeed, DUCS customers are manufacturers of thermoplastic compounds which are used for several applications in the automotive, electronic and consumer goods industries. Main DUCS customers of OC and Vetrotex include BASF, Rhodia, DSM, Basell and General Electric. DUCS is a strategic raw material which represents the second most important cost within the total raw material costs of thermoplastics compounds.
78. As DUCS customers purchase large quantities of DUCS, in the range of several thousand metric tons, they need to rely on producers able to supply large volumes. Post merger, PPG would remain the only sizeable alternative to the combined entity but will still not be in a position to respond to the overall demand. Therefore several DUCS customers complained that the parties would enjoy a considerable market power, as the unique supplier in terms of capacity and quality products.
79. Furthermore, DUCS customers prefer to rely on suppliers located close to their production facilities and therefore considered suppliers from outside Europe only for a minor proportion of their purchases. Indeed, several customers explained that while a non European supplier such as NEG offers good quality products, it is not as competitive as European suppliers as its plants are too far from the customers' plants, which translate in higher transport costs and additional costs in order to ensure reliability of supply (inventories, lead time management). As regards sourcing from Chinese suppliers, customers raised several issues that explain their limited share of supply in Europe for now, in particular the long time of delivery, the quality and consistency of their DUCS production which is not yet suitable for all the requirements of DUCS applications and the fluctuating price's competitiveness depending on exchange rates.
80. Moreover, customers explained that switching between suppliers is a long and costly process as it is of paramount importance to guarantee to final customers that the thermoplastic compounds have consistent technical characteristics. This consistency must be achieved at each step of the production process: in the supply of raw materials, in the combination of different raw materials and in the production process. Consistency in the supply of raw materials can only be achieved by sourcing consistently the same type of glass fibre. Therefore any change of DUCS requires a complete re-qualification and test of both the compound and of the final product. This means that the compound manufacturer has first to test DUCS internally and to approve it and then it has to be approved by the final customer of the thermoplastic compound, e.g. the automotive component manufacturer. In addition, any change of raw material may lead to change of manufacturing recipes and additional cost. Overall, the qualification process usually takes between 1 and 2 years.

81. Finally, a number of customers complain that the merger would risk reducing innovation in the DUCS market as DUCS are technically demanding products in terms of sizing<sup>29</sup>, which constitutes the main scope for product innovation. The results of the market investigation showed that OC and Vetrotex were viewed by customers as the closest competitors and leading innovators. [...]
82. Based on these elements, the Commission considers that the proposed concentration would allow the merged entity to hold a dominant position in the production and sale DUCS and will give it the ability and incentives to raise prices to the detriment of customers. The Commission therefore concludes that, in the absence of appropriate remedies, the proposed transaction raises serious doubts as to its compatibility with the common market for direct rovings.

### 3. *CFM*

83. After the transaction, the combined market share of the new entity would be [90-100]% (OC, [30-40]%; Saint Gobain, [60-70]%) and the HHI index would be 9,535 with an increment of 4,348. Post merger, the new entity would hold a quasi monopolistic position and during the market investigation customers unanimously expressed their concerns that the new entity would be in a position to increase prices.
84. Therefore the proposed transaction raises serious doubts as to its compatibility with the common market for the European market for CFM.

### 4. *Assembled rovings*

85. The market volumes and shares estimates by the parties are reported in the table below, on a European basis as well as on a global basis.

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<sup>29</sup> The sizing is the chemical formulation which gives the technical characteristics to the fibre glass and is considered proprietary know how of the glass fibre manufacturer.

Assembled rovings (2006)	European sales		Global sales	
	Volume	Share	Volume (t)	Share
OC	[10,000-20,000]	[10-20]%	[110,000-120,000]	[10-20]%
Vetrotex	[50,000-60,000]	[30-40]%	[100,000-110,000] <sup>30</sup>	[10-20]%
<b>Combined</b>	<b>[70,000-80,000]</b>	<b>[40-50]%</b>	<b>[220,000-230,000]</b>	<b>[20-30]%</b>
Johns Manville	[30,000-40,000]	[10-20]%	[40,000-50,000]	[0-10]%
PPG	[10,000-20,000]	[0-10]%	[40,000-50,000]	[0-10]%
Camelyaf	[10,000-20,000]	[0-10]%	[10,000-20,000]	[0-10]%
Chinese Big 3	[10,000-20,000]	[0-10]%	[180,000-190,000]	[20-30]%
Others in Asia Pacific	[0-10,000]	[0-10]%	[150,000-160,000]	[10-20]%
Others	[0-10,000]	[0-10]%	[70,000-80,000]	[0-10]%
Total				

86. After the transaction, the combined market shares of the new entity would be [40-50]% (OC, [10-20]%; Vetrotex, [30-40]%) at European level and [20-30]% (OC, [10-20]%; Vetrotex, [20-30]%) at global level.<sup>31</sup> The HHI indexes would be 2,692 with an increment of 798 at European level and 2,785 with an increment of 795 at global level.

87. By contrast to the other products mentioned above, despite the market position of the parties at European level, the feedback from the market investigation did not reveal substantial concerns as regards the impact of the planned transaction on the market for assembled rovings. This can be explained for the following reasons.

88. Firstly, data submitted by the parties show that only about a third of the parties' largest customers of assembled rovings purchase simultaneously from both OC and Vetrotex and that no European customers dual-sourced assembled rovings exclusively from the parties, although the vast majority multi-source their requirements of assembled rovings. Moreover, during the market investigation, a majority of customers confirmed that they did not view OC and Vetrotex as closest competitors for assembled rovings. When asked to rank the assembled rovings suppliers, 21 respondents (out of 40) cited Vetrotex as the best placed, while only 5 customers mentioned OC.

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<sup>30</sup> Excluding sales of production from Saint Gobain plant in Wichita Falls which is not acquired by OC and is subject to a separate sale process by Saint Gobain.

<sup>31</sup> This figure includes specialty assembled rovings produced by OC in its Battice plant representing [...]%

89. Secondly, a comparison of OC and Vetrotex European sales of assembled rovings show that the overlaps between the parties' activities are limited to few lines of assembled products.<sup>32</sup> As shown in the table below, while Vetrotex' portfolio covers the whole range of assembled rovings, OC only competes on few assembled rovings. Therefore the proposed transaction will not change the competitive landscape as regards the segments of assembled rovings sold for centrifugal, panel and GMT applications, where OC was not active before the merger.

European sales of assembled rovings, 2006	Centrifugal	Gun	Panel	Preform	SMC/BMC	GMT
SG	X	X	X	X	X	X
OC		X		X	X	
Johns Manville		X		X	X	
Camelyaf		X	X	X	X	X
PPG		X		X	X	
Chinese	X	X	X	X	X	
Share of total sales of assembled rovings	4%	29%	9%	12%	30%	5%

90. As regards the overlapping activities of the parties in assembled rovings, no concerns were raised as regards gun rovings and preform rovings. These types of assembled rovings are generic products which are widely available from numerous suppliers. Customers indicated that switching suppliers is fairly easy and that they usually have more than one qualified supplier. European players such as Johns Manville, Camelyaf (which, by contrast, is not a significant player in direct rovings) and PPG appear to exert a significant constraint in the market. Finally, as assembled rovings for gun rovings are the most commoditised product, Chinese suppliers exert some competitive constraint on the market (even if it were defined as European). Indeed, customers submitted that they were already partly sourcing these types of assembled rovings from suppliers located outside of Europe and that they could easily increase such imports, should they need to do so.

91. However, during the market investigation, some customers initially expressed concerns about some specific "Class A" assembled rovings used for the manufacture of BMC (Bulk Moulding Compounds) and SMC (Sheet Moulding Compounds), which represent a small fraction of the SMC/BMC assembled rovings<sup>33</sup>. These customers, which are manufacturers of composite parts, explained that until recently only OC and Vetrotex were qualified for assembled rovings used for certain automotive parts.

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<sup>32</sup> Depending on the product's specific intended use (bathtubs and showers, pick-up truck beds, commercial wall panels, automotive exterior panels, boats, doors and urban furniture), different lines of assembled rovings are produced: roving for centrifugal casting; panel, perform and choppable rovings; gun rovings; roving for compressing moulding (SMC/BMC); rovings for glass mat thermoplastic (GMT) and rovings specialties

<sup>33</sup> The notifying party submits that OC Class A SMC/BMC assembled rovings represent [0-10]% of its sales of SMC/BMC assembled rovings sales, which in turn represent [30-40]% of its total assembled rovings sales.

92. Additional information gathered in the course of the market investigation in the present case nevertheless shows that customers of "Class A" assembled rovings have been able to qualify new suppliers. This is consistent with the comments received from some other customers of "Class A" assembled rovings, which already indicated at an early stage that alternative suppliers, such as Johns Manville, which sales represent more than half of the assembled rovings for SMC/BMC and Chinese suppliers such as Jushi, were offering suitable Class A assembled rovings. Customers submitted that these alternative suppliers were currently supplying them with other types of assembled rovings and that they could qualify them for class A applications.
93. Therefore, although a technology license for Class A SMC/BMC was proposed by the notifying party to alleviate initial doubts, information obtained during the market investigation show that the transaction does not raise serious doubts even on the segment for SMC/BMC products, and in any event on the market for assembled rovings at European level.
94. Finally, should the market for assembled rovings be defined as global, the combined entity would have a market share of [20-30]% in terms of sales and [30-40]% in terms of production capacity. Information received in the course of the market investigation show that the parties' market position will decline in the coming years as the parties do not plan to increase their production capacity. By contrast, other suppliers, in particular each of the Chinese Big 3 (Jushi, Taishan and CPIC) are currently making major investments and their worldwide capacity will, on aggregate, grow from [20-30]% in 2006 to [30-40]% in 2009. In view of the current and projected market position of the parties and their competitors, the proposed transaction does not raise serious doubts on a possible global market for assembled rovings.

##### 5. *WUCS*

95. WUCS are glass fibre reinforcement products which are either transformed into mats and reinforcement veils or used to reinforce gypsum used for plasterboard reinforcement. In Europe, 85% of WUCS production is used for captive purposes, i.e. consumed internally by mat and veil producers, mainly OC, Vetrotex, Ahlstrom and JM. Therefore the merchant market is fairly small, with a volume estimated by the notifying party of [10,000-20,000] metric tons in 2006, out of which approximately [0-10,000] metric tons are used for gypsum.
96. On the European WUCS market, OC was pre-merger the second market player with a [30-40]% market share. Post merger, OC will remain the second market player with a combined market share of [30-40]% (OC, [30-40]%; Vetrotex, [0-5]%)<sup>34</sup>. The largest player is Johns Manville ([40-50]%) and PPG is also active ([10-20]%). Moreover, this market data does not take into account the captive sales of WUCS producers such as Ahlstrom which are not currently active in the merchant market but have production capacity.
97. Data submitted by the parties and confirmed by the market investigation show that customers of WUCS usually multi-source their requirements of WUCS. Respondents to the market investigation, either customers of WUCS for veil or for gypsum, did not express concerns as regards the impact of the planned transaction on their supply of

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34 Delta HHI= 327.

WUCS. Indeed respondents submitted that they did not consider Vetrotex as the closest competitor to OC, as Johns Manville, as well PPG, were rather named as first alternatives to OC. In addition market participants indicated that OC and Johns Manville were the leading innovators for WUCS. Finally customers submitted that they could easily, within a few months, switch between suppliers of WUCS.

98. In view of the absence of concerns raised by the market investigation, the fact that there will remain strong competitors such as Johns Manville and PPG and the limited change brought about by the proposed transaction, the Commission concludes that the proposed transaction does not raise serious doubts as to its compatibility with the common market for what regards WUCS in Europe.

## 6. CSM

99. CSM are mats of chopped glass fibres used in a variety of hand lay-up applications to mould many types of composites with both polyester and vinylester resins for use in the transportation, recreation, marine and construction sectors.

100. The market volumes and shares estimates by the parties are reported in the table below, as well as production capacity data.

<u>CSM</u> (2006)	Sales in Europe		Production capacity installed in Europe	
	Volume	Share	Volume (t)	Share
OC	[0-10,000]	[0-10]%	-	-
Vetrotex	[20,000-30,000]	[20-30]%	[30,000-40,000]	[30-40]%
<b>Combined</b>	<b>[20,000-30,000]</b>	<b>[30-40]%</b>	<b>[30,000-40,000]</b>	<b>[30-40]%</b>
Ahlstrom	[10,000-20,000]	[10-20]%	[10,000-20,000]	[10-20]%
Johns Manville	[0-10,000]	[0-10]%	[10,000-20,000]	[10-20]
Camelyaf	[0-10,000]	[0-10]%	[10,000-20,000]	[10-20]%
PPG	[0-10,000]	[0-10]%	[0-10,000]	[0-10]%
Oschatz	[0-10,000]	[0-10]%	[0-10,000]	[0-10]%
Chinese	[0-10,000]	[0-10]%	-	-
Others	[0-10,000]	[0-10]%	[0-10,000]	[0-10]%
Total	<b>[80,000-90,000]</b>		[80,000-90,000]	

101. On the CSM market, the proposed transaction will combine the leading supplier of CSM, Vetrotex, with the fifth market player, OC. Post merger, the combined entity will have a market share of [30-40]%<sup>35</sup> (OC, [5-10]%; Vetrotex, [20-30]%) in sales. However, as regards production capacity, OC is importing its European sales of CSM from India, Korea and Canada and has no manufacturing capability in Europe. Therefore, post merger, the combined production capacity will remain the current production capacity of Vetrotex, which amounts to [30-40]% of the installed production capacity of CSM in Europe.
102. There are a number of other regional market players on the European CSM market including Ahlstrom with [10-20]% market share and Johns Manville, Oschatz and PPG with market shares equivalent to OC, between [0-10]%. During the market investigation, respondents confirmed that they were multi-sourcing their requirements of CSM and that Ahlstrom and Oschatz are considered as the best alternative to Vetrotex CSM, both in terms of quality and price.
103. In view of the post merger market structure, in particular the presence of a significant number of alternative suppliers and the absence of concerns raised during the market investigation, the Commission concludes that the proposed transaction does not raise serious doubts as to its compatibility with the common market for what regards CSM in Europe.

#### *7. Composite fabrics*

104. Composite fabrics are manufactured from direct rovings and are used by molders to produce high-strength, structurally demanding solid composite applications such as shipping containers, ballistic armor, wind generators blades and doors.
105. The market volumes and shares estimates by the parties are reported in the table below.

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35 Delta HHI= 426.

Composite fabrics (2006)	Sales in Europe	
	Volume	Share
OC	[0-10,000]	[0-10]%
Vetrotex	[20,000-30,000]	[20-30]%
<b>Combined</b>	<b>[20,000-30,000]</b>	<b>[20-30]%</b>
Saertex	[10,000-20,000]	[10-20]%
Chomarat	[10,000-20,000]	[10-20]%
Ahlstrom	[0-10,000]	[0-10]%
Dipex	[0-10,000]	[0-10]%
Gamma	[0-10,000]	[0-10]%
Oschatz	[0-10,000]	[0-10]%
Others	[10,000-20,000]	[20-30]%
Total	<b>[90,000-100,000]</b>	

106. On the composite fabrics market, the parties' combined market share will be [20-30]% (OC, [5-10]%; Vetrotex, [20-30]%)<sup>36</sup>. The new entity will face competition from two categories of competitors, non vertically integrated producers, such as Saertex and Chomarat with market shares of [10-20]% and [10-20]% respectively and vertically integrated producers, i.e. mainly sourcing their direct rovings from their own plants, such as Ahlstrom and Oschatz with market shares of [0-10]% and [0-10]% respectively.
107. The market investigation did not reveal significant concerns as regards the horizontal effects of the proposed transaction on the supply of composite fabrics. Indeed, alternative suppliers such as Saertex and Chomarat are significant market players. Respondents to the market investigation confirmed that they offer competitive composite fabrics and constitute credible alternative suppliers to the parties.
108. However, some composite fabrics customers expressed concerns as regards the dependency of some of their suppliers on the new entity for their requirements of direct rovings. Those respondents submitted that the impact of the proposed transaction on the market for direct rovings, i.e. an increase of direct rovings prices, may have an impact on the prices of composite fabrics as direct rovings constitute the main input of composite fabrics, accounting for over 50% of the total cost.
109. As explained in the section on direct rovings, the Commission is of the view that the proposed transaction raises serious doubts as regards the direct rovings market. Therefore the concern expressed by some composite fabrics customers will be addressed by any commitment brought to alleviate concerns on the direct rovings market. Indeed, as a result of the divestiture of Birkeland plant which produces direct rovings, the

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36 Delta HHI= 325.



market position of OC in the upstream market of direct rovings would be substantially reduced from a market share of [40-50]% to a [20-30]% market share, so that it would no longer have the ability to profitably raise prices of direct rovings, including for producers of composite fabrics. These customers confirmed that once the "direct roving issue" is solved, their concerns as regards the downstream market would be addressed as well.

110. Thus the Commission concludes that, to the extent that the proposed transaction raises serious doubts as to its compatibility with the common market for what regards composite fabrics in Europe, these serious doubts are in any event removed by the above-mentioned commitment.

## **B. Vertical aspects**

### *1. WUCS for Veil production*

111. The Commission analysed whether in the post merger scenario OC would have the ability and incentive to foreclose downstream competitors in the veil market (including Vetrotex) and concluded the market structure and the change brought by the proposed transaction make such risk remote for the reasons detailed below:
112. As indicated above, the market investigation confirmed that, on the WUCS market, OC would not hold post merger a sufficient share of supply so as to enjoy significant market power. There are other significant competitors in the WUCS market, so that OC would not have the ability to foreclose its downstream rivals as the latter could switch suppliers should prices rise to a significant extent. Indeed other market players include Johns Manville, the leading player in the merchant market which is by far the largest WUCS producer in terms of capacity as it is also producing for internal consumption (as described below) and PPG, which is a smaller player but exclusively producing for the merchant market.
113. On the downstream market for veil, OC market position would remain unchanged as Saint Gobain's veil activities are not part of the transaction. OC's market share in the veil market is estimated by the notifying party at [20-30]%. The leading player in the veil market is Johns Manville with a [30-40]% market share which is vertically integrated in the production of WUCS. In addition, as explained above in the WUCS section, Johns Manville is also the main supplier of WUCS to the merchant market. Therefore Johns Manville leading market position on the veil market will remain unaffected by the proposed transaction as it is not relying on third party for its WUCS requirements.
114. The fourth player in the veil market is Ahlstrom, which holds a [0-10]% market share and is also vertically integrated in WUCS production but is not selling WUCS on the merchant market. Therefore, the proposed transaction will not affect its competitive position on the veil market as it does not rely on third party for its veil requirements. On the contrary, Ahlstrom is producing WUCS and would have the capability to produce additional volumes, should the market request so.
115. As regards non vertically integrated veil producers, the notifying party estimates that their WUCS demand equates to [0-10,000] metric tons, which represents less than [0-10]% of total WUCS demand for veil production. During the market investigation, these WUCS customers/veil producers indicated that they normally multi sourced and that OC and Vetrotex were not the closest competitors. In that respect, market respondents

pointed out to the presence of other important competitors such as Johns Manville and PPG and to potential imports from Russia.

116. Finally, the effect of the proposed transaction is to remove the vertical integration of one market player in the downstream market of veil. Indeed, pre-merger, Saint Gobain was active in the production of WUCS as well as of veil and was producing internally approximately [80-90]% of its WUCS requirements. As OC fully sources its WUCS requirements internally and does not purchase any quantity from the merchant market, OC will sell the WUCS capacity acquired through the planned transaction on the merchant market, to Saint Gobain as well as other veil manufacturers.
117. Therefore the Commission concludes that the proposed transaction does not raise serious doubts as to its compatibility with the common market regards the market for veil.

## 2. *Muffler filling*

118. OC is active in the production and sale of glass fibre-based muffler filling manufactured with direct rovings. Saint Gobain has minimal activities in the muffler filling market. The impact of the proposed transaction will therefore be to increase OC's activities in the production of direct rovings, which is the input of muffler fillings.
119. On the upstream market for direct rovings, OC would acquire through the proposed transaction a market share of [40-50]%.
120. On the downstream market for muffler filling, OC would have a [20-30]% market share on the basis a muffler filling market including fibreglass and other materials, and [40-50]% on the market for fibreglass muffler filling. The main supplier of muffler fillings, active in both segments of fibreglass and biosol mineral wool is DBW, which accounts of [40-50]% of the total market including all types of muffler fillings and [30-40]% on the market for fibreglass muffler filling. Other competitors on the fibreglass muffler filling market include Johns Manville and the Chinese CPIC, with [10-20]% and [0-10]% respectively on the market for all types of muffler fillings and [10-20]% and [0-10]% respectively on fibreglass muffler fillings.
121. Absent any remedies, the new entity would have combined a dominant position in the supply of direct rovings and a strong position in the downstream market for muffler fillings, in particular for fibreglass muffler fillings. However, it must be noted that two competitors on the downstream market for muffler fillings, i.e. Johns Manville and CPIC, are both vertically integrated in the production of direct rovings and therefore do not rely on OC for their requirements of direct rovings. As regards the main competitor, DBW, the information available shows that it sources its input internally and only occasionally purchases small quantities from traders.
122. In any event, as a result of the commitment submitted to solve the Commission's serious doubts on the direct roving market, the merged entity will no longer enjoy a dominant position thereon given that its market share will amount to [20-30]% (instead of [40-50]%) and that the merged entity will face significant competitors on that market. Consequently, Owens Corning would not have the ability to foreclose downstream muffler filling competitors as the latter could switch easily to alternative suppliers.
123. Thus the Commission concludes that, to the extent that the proposed transaction would raise serious doubts as to its compatibility with the common market for what regards

muffler fillings in Europe, these serious doubts are in any event removed by the above-mentioned commitment.

## VI. COMMITMENTS

### A. Procedure

124. In order to address the competition concerns identified by the Commission, OC submitted on 5 October 2007 commitments consisting in the divestment of two OC glass fibre reinforcement products plants located in Battice, Belgium and in Birkeland, Norway ("the Divestment Business")<sup>37</sup>. The Commission carried out an extensive market test among OC and Vetrotex' competitors and customers to assess the effectiveness of the commitments to remove the competition concerns identified. On 22 October 2007, OC submitted a slightly revised commitment package with a view to clarify the conditions of the transfer of some assets<sup>38</sup>, taking into account of comments raised by some market players.
125. The Commission has assessed the improved commitments and has concluded that it is sufficient to remove the competition concerns identified and that the divested businesses constitute independent and economically viable entities able to compete effectively with the combined OC/Vetrotex on the market for the supply of direct rovings, DUCS and CFM in the EEA. The Commission therefore concludes that the commitments, as revised on 22 October 2007, are sufficient to remove the competition concerns brought about by the proposed transaction.

### B. Description of the commitments

126. The revised commitments proposed by OC on 22 October 2007 comprises two production facilities producing glass fibre reinforcement products together with related research and development, commercial and marketing assets. Under the proposed commitments, OC undertakes to divest (together hereinafter referred to as the "Divestment Business"):
- OC's manufacturing facility situated in Battice (Belgium) with its production lines of DUCS, CFM, assembled rovings and direct rovings. The plant consists of three melting furnaces with total melting capacity of [...] metric tons and is self sufficient as regards functions such as inputs, packaging, warehousing and product dispatch. All of the intellectual property rights and assets associated with the production of DUCS, CFM, direct rovings, WUCS and EB8<sup>39</sup> at Battice during 2007 will be made available to the Divestment Business. In addition, the Divestment Business will include a non-exclusive, royalty-free licence to use OC's proprietary Advantex® glass formulation.

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<sup>37</sup> As discussed in the competitive assessment section, OC had initially included in the remedy package a licence for class A SMC/BMC assembled roving, which was subsequently withdrawn as serious doubts were dismissed on the market for assembled rovings.

<sup>38</sup> The divested assets include alloys used in the bushings. OC made clear in the final commitment that it would be at the option of the purchaser to purchase or lease the alloys.

<sup>39</sup> EB8 is a type of assembled rovings.

- OC's manufacturing facility situated in Birkeland (Norway) is dedicated to direct rovings production and has two melting furnaces with a total melting capacity of [...] metric tons. The plant is self sufficient as regards functions such as inputs, packaging, warehousing and product dispatch. All the intellectual property rights and assets associated with this production would be transferred to the Divestment Business, including the Advantex® glass formulation. In addition the Divestment Business will include a non-exclusive, non-transferable, royalty-free, perpetual licence of OC's HiPer-tex® glass formulation and production technology for wind power uses.

[...]

127. OC undertakes to divest all tangible and intangible assets of the two manufacturing facilities, including all manufacturing equipment, personnel, licenses, contracts, agreements, leases, customer lists, intellectual property rights and technical information. OC also undertakes to transfer a sales and marketing team of 11 people, currently employed by OC for the marketing and sales of Battice and Birkeland production and a research & development centre currently operated by OC in Battice, including a team of 20 experienced engineers, chemists and technicians.

128. The two facilities and the related commercial and marketing assets are described in more details below.

#### *1. Battice*

129. OC's plant in Battice is the largest European glass fibre production plant in Europe with a capacity over [...] metric tons. It is mainly producing DUCS which constituted [...] % of its 2006 sales. It is also OC's only CFM plant in Europe with a production capacity of [...] metric tons.<sup>40</sup> Battice is a flexible plant with technical capability to switch production from one glass fibre product to another.

130. Battice plant consists of three melting furnaces: the smallest with a capacity of [...] metric tons/year (CFM, yarns, direct rovings) was rebuilt in 2000, the second has a capacity of [...] metric tons/year (DUCS) and was constructed in 2002 and the third one has also a capacity of [...] metric tons/year (DUCS) and was rebuilt in 1998. 124 bushings are currently in use in Battice.

131. Battice primarily sells its product to molders with cross-industry customers in consumer goods, automotive, construction, electronics and electrical goods. [...] % of Battice sales are shipped to European customers.

#### *2. Birkeland*

132. OC's plant in Birkeland is specialised in direct rovings production with a melting capacity of [...] metric tons and has the capability to manufacture all of OC's direct roving product lines. The plant consists of two melting furnaces: a furnace with a maximum capacity of [...] metric tons, built in 1998 and a smaller furnace of [...] metric tons maximum capacity, rebuilt in 2006/2007 to produce the new high strength HiPer-tex® glass. [...] bushings are currently in use in Birkeland.

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<sup>40</sup> In addition, direct rovings and WUCS were produced in Battice in 2006, representing [...] % and [...] % of its 2006 sales respectively.

133. HiPer-tex® glass was developed to respond to the composite industry's need for high volume production of high performance glass fibre, in particular for the wind blades market. HiPer-tex® glass production started in Birkeland in the first quarter of 2007 and was stopped in August 2007, as the HiPer-tex® product is going through a qualification process by its customers. The furnace was converted back to Advantex® and can be switched again to HiPer-tex® within six weeks.
134. Birkeland direct rovings are reinforcement products for filament winding, long fibre thermoplastics, pultrusion knitting and weaving applications, used for pipes, wind energy collectors, window lineals and pultruded products.

### *3. Sales and Marketing*

135. OC undertakes to transfer to the purchaser of the Divestment Business personnel currently employed by OC to market and sell Battice and Birkeland production. The commercial organisation will be composed of eleven sales and marketing personnel, comprising a sales director, three regional sales leaders and a marketing and communications leader.

### *4. Research & development*

136. OC undertakes to transfer a product Research & Development centre, including a team of twenty experienced engineers, chemists and technicians under the direction of the Research & Development leader and a fully equipped laboratory. The proposed divested centre is currently located in Battice and supports Battice and Birkeland operations.

## **C. Assessment of the commitments**

### *1. Introduction*

137. As explained in the Commission notice on remedies<sup>41</sup>, under the Merger Regulation, the Commission assesses the compatibility of a notified concentration with the common market. Where a concentration raises competition concerns as it could lead to a significant impediment to effective competition, the parties may seek to modify the concentration in order to resolve the competition concerns raised by the Commission and thereby gain clearance of the merger. In assessing whether or not the commitment will restore effective competition, the Commission considers the type, scale and scope of the commitments by reference to the structure of and particular characteristics of the market in which competition concerns arise.
138. Where a proposed concentration threatens to significantly impede effective competition, creating the conditions for the emergence of a new competitive entity or the strengthening of existing competitors via divestiture may be an effective way to restore effective competition. The divested activities must consist of a viable business that, if operated by a suitable purchaser, can compete with OC / Vetrotex on a lasting basis.

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<sup>41</sup> Commission Notice on remedies acceptable under Council Regulation (EEC<sup>o</sup> No 4064/89 and under Commission Regulation (EC) No 447/98.

139. Whenever the notifying parties submit commitments, the Commission has thus to assess whether the commitments will lead to the restoration of effective competition on the relevant markets. In so doing, the Commission has to assess both (i) the independence, the viability and the competitiveness of the divested business on the long term and (ii) the effectiveness of the proposed commitment in removing the competition concerns. In order to carry out this assessment, the Commission may seek the views of competitors and customers on the relevant markets.
140. The Commission's assessment concluded that the proposed commitments, revised by OC on 22 October 2007, addresses all concerns identified during the course of the procedure, and incorporates satisfactorily the comments and suggestions put forward by market participants as regards the first commitments. Therefore, the Commission has concluded that the proposed commitments would be effective in removing all competition concerns brought about by the proposed transaction.

### *2. Independence, viability and competitiveness*

141. The Commission's investigation has confirmed that the Divestment Business would constitute an independent and viable business.
142. Indeed, the market investigation has confirmed that the Battice plant is self-standing business and one of the most modern and efficient glass fibre production facility in Europe. As regards Birkeland, the market test also confirmed that the plant was a viable and stand alone business.
143. As regards commercial and marketing operations, as described above, OC undertakes to divest the commercial organisation through which OC currently supplies Battice and Birkeland customers. Therefore, the Commission estimates that the Divestment Business will be in position to compete effectively with OC / Vetrotex on the markets for direct rovings, DUCS and CFM.
144. As regards research & development, as described above, OC undertakes to divest the research & development centre which presently supports Battice and Birkeland operations. Therefore, the Commission estimates that the Divestment Business will be in position to deliver product innovations and modifications as to compete effectively with OC /Vetrotex on the markets for direct rovings, DUCS and CFM.
145. Finally, during the market test of the proposed commitments, some customers raised the issue that should the purchaser of the divested assets be a customer of glass fibre reinforcements, this may reduce the availability of glass fibre reinforcements and thereby affect competition on the markets for glass fibre reinforcements. Moreover, some respondents to the market test indicated that the suitable purchaser should have already an expertise in the production of glass fibre reinforcements industry.

### *3. Effectiveness of the commitments in removing the competition concerns*

146. The revised commitments entirely eliminate the overlap between OC and Vetrotex in direct rovings, DUCS and CFM in Europe in terms of sales and reduce significantly the capacity overlap.
147. With the divestment of the Birkeland plant, the proposed commitments will remove the overlap brought about by the proposed transaction in terms of capacity as Birkeland's direct rovings production capacity is equivalent to Vetrotex direct rovings

production capacity in Europe<sup>42</sup>. In terms of sales, the direct rovings sales of Birkeland of [20,000-30,000] metric tons in 2006 in Europe slightly exceeded Vetrotex 2006 European-wide sales which amounted to [20,000-30,000] metric tons in 2006. Birkeland plant's divestiture would therefore reduce the parties' combined market share from [40-50]% (OC, [30-40]%; Vetrotex, [5-10]%) to [20-30]% and the combined capacity from [50-60]% (OC, [40-50]%; Vetrotex, [10-20]%) to [30-40]% (OC, [20-30]%; Vetrotex, [10-20]%).

148. Moreover, by giving access to OC's HiPer-tex® glass formulation and production technology for wind power uses, the commitment solves the concern raised during the market investigation that post merger the new entity would have access to the most innovative direct rovings for wind applications.
149. As regards DUCS, the divestment of the Battice plant will remove the overlap brought about by the transaction in terms of sales and capacity as Battice is the only DUCS production facility of OC in Europe. As regards the impact on sales, DUCS sales produced in Battice amounted to [80,000-90,000] metric tons in 2006, which represented a [20-30]% share of European DUCS sales. Battice's plant divestiture would therefore reduce the parties' combined market share from [50-60]% (OC, [20-30]%; Vetrotex, [20-30]%) to [20-30]% (OC, [0-5]<sup>43</sup>%; Vetrotex, [20-30]%) and the combined capacity from [50-60]% (OC, [20-30]%; Vetrotex, [30-40]%) to [30-40]% (OC, 0%; Vetrotex, [30-40]%).
150. As regards CFM, the divestiture of the Battice plant would remove the overlap brought about by the transaction as OC is producing [...] % of the volume of its CFM sales in its Battice plant.<sup>44</sup> The Battice's plant divestiture would therefore reduce the parties' combined market share from [90-100]% (OC, [30-40]%; Vetrotex, [60-70]%) to [60-70]% (OC, [0-5]%; Vetrotex, [60-70]%).
151. Finally, for the sake of completeness and although the proposed transaction does not raise serious doubts on the WUCS and veil markets, it should be noted that, as a result of the divestiture of the Battice plant which will include, for viability issues, the installed WUCS production, the purchaser of the Divestment Business will be a significant supplier of WUCS, with a capacity of [...] metric tons and thereby will be in a position to supply WUCS to veil customers.

#### 4. Conclusion on the commitments

152. The assessment of the proposed commitments carried out by the Commission shows that the manufacturing facilities to be divested, together with the related commercial and marketing assets as well as the research & development assets, constitute stand-alone and viable businesses capable of competing with the new entity OC/Vetrotex on the markets where serious concerns were found, e.g. for the supply of direct rovings, DUCS and CFM. The facilities to be divested account for roughly [100,000-150,000] metric tons in sales in 2006, including [20,000-30,000] metric tons of direct rovings, [80,000-90,000] metric tons of DUCS and [0-10,000] metric tons of CFM, which remove the

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<sup>42</sup> In Europe, Vetrotex produces direct rovings in one plant located in France with a direct rovings capacity of [...] metric tons.

<sup>43</sup> In addition to its production in Battice, OC imports minor volumes from its plants outside Europe.

<sup>44</sup> In addition, OC imports small volumes ([...] metric tons) from one plant in the US that is said to be divested as part of the US antitrust procedure.

entire overlap brought about by the proposed transaction in the three relevant markets. The addition of commercial, distribution and R&D assets provide sufficient guarantees that the Divestment Business will have the capacity to compete with OC/Vetrotex and that competition concerns will be entirely removed.

153. The Commission therefore considers the commitments suitable for remedying the serious doubts on the compatibility of the concentration with the common market and the EEA, which have been established in the previous sections of this Decision.

#### **D. Conditions and obligations**

154. Under the first sentence of the second subparagraph of Article 6(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the common market.
155. The achievement of the measure that gives rise to the structural change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the parties. Where a condition is not fulfilled, the Commission's Decision declaring the concentration compatible with the common market no longer stands. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance Decision in accordance with Article 8(5) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation. In accordance with the basic distinction described above, the Decision in this case is conditioned on the full compliance with Sections B and D of the Commitments submitted by the notifying party on 22 October 2007.
156. The remaining requirements set out in the other Sections of the Commitments submitted by the notifying party on 22 October 2007 are considered to constitute obligations.

### **VII. CONCLUSION**

157. 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 pursuant to Article 2(2) of the Merger Regulation, subject to full compliance with the Commitments annexed to this Decision that form an integral part to this Decision. This Decision is adopted in application of Article 6(1)(b) and Article 6(2) of the Merger Regulation.

For the Commission  
signed  
Neelie KROES  
Member of the Commission



**By hand and by fax: 00 32 2 296 4301**

European Commission

DG Competition

Rue Joseph II 70

B-1000 Brussels

## **Case COMP/M.4828 – Owens Corning / Saint-Gobain**

### **COMMITMENTS TO THE EUROPEAN COMMISSION**

Pursuant to Article 6(2) of Council Regulation (EC) No. 139/2004 (the “*Merger Regulation*”), Owens Corning (“*OC*”) hereby provides the following Commitments (the “*Commitments*”) in order to enable the European Commission (the “*Commission*”) to declare the acquisition by OC of the glass fiber reinforcements business of Saint-Gobain Vetrotex (“*SG*”, and together with OC, the “*Parties*”) (the “*Proposed Concentration*”) compatible with the common market and the EEA Agreement by its decision pursuant to Article 6(1)(b) of the Merger Regulation (the “*Decision*”).

The Commitments shall take effect upon the date of adoption of the Decision.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Community law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice on Remedies.

#### **A. DEFINITIONS**

For the purpose of the Commitments, the following terms shall have the following meaning:

**Affiliated Undertakings:** undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in the light of the Commission Notice on the concept of concentration under the Merger Regulation.

**Battice Divestment Business:** the Divestment Business relating to OC’s wholly owned manufacturing plant for glass fiber reinforcements located at Battice, Belgium.

**Birkeland Divestment Business:** the Divestment Business relating to OC’s wholly owned manufacturing plant for glass fiber reinforcements located at Birkeland, Norway.

**Closing(s):** the transfer of the legal title of the Divestment Businesses to the Purchaser(s).

**Compagnie de Saint-Gobain:** Compagnie de Saint-Gobain, a French company, with its corporate seat at Les Miroirs, Avenue d'Alsace 18, 92096 La Défense Cedex, France, and its Affiliated Undertakings.

**Divestment Businesses:** the businesses as defined in Section B and the Schedule that OC commits to divest.

**Divestiture Trustee:** one or more natural or legal person(s), independent from the Parties, who is approved by the Commission and appointed by OC and who has received from OC the exclusive Trustee Mandate to sell the Divestment Businesses to one or more Purchasers at no minimum price.

**Effective Date:** the date of adoption of the Decision.

**First Divestiture Period:** the period of [...] from the Effective Date.

**Hold Separate Manager:** the person appointed by OC for the Divestment Businesses to manage the day-to-day business under the supervision of the Monitoring Trustee.

**Key Personnel:** all personnel necessary to maintain the viability and competitiveness of each of the Divestment Businesses, as listed in the Schedule.

**Monitoring Trustee:** one or more natural or legal person(s), independent from the Parties, who is approved by the Commission and appointed by OC, and who has the duty to monitor OC's compliance with the conditions and obligations attached to the Decision.

**Owens Corning:** Owens Corning, a company incorporated under the laws of the State of Delaware and with its corporate seat at 1 Owens Corning Parkway, Toledo, OH 43659, U.S.A, and its Affiliated Undertakings.

**Personnel:** all personnel currently employed by the Divestment Businesses, as well as the employees listed in the Schedule and including Key Personnel.

**Purchaser(s):** the entity or entities approved by the Commission as acquirer of the Divestment Businesses in accordance with the criteria set out in Section D.

**Trustee(s):** the Monitoring Trustee and the Divestiture Trustee.

**Trustee Divestiture Period:** the period of [...] from the end of the First Divestiture Period.

## **B. THE DIVESTMENT BUSINESSES**

### **Commitment to divest**

1. In order to restore effective competition, OC commits to divest, or procure the divestiture of the Divestment Businesses as going concerns, by the end of the Trustee Divestiture Period to one or more purchasers and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 15. To carry out the divestiture, OC commits to find one or more purchasers and to enter into one or more final binding sale and purchase agreements for the sale of each of the Divestment Businesses within the First Divestiture Period. If OC has not entered into such agreement(s) at the end of the First Divestiture Period, OC shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Businesses in

accordance with the procedure described in paragraph 24 in the Trustee Divestiture Period.

2. OC shall be deemed to have complied with these commitments if, by the end of the Trustee Divestiture Period, OC has entered into one or more final binding sale and purchase agreements, if the Commission approves the purchaser(s) and the terms in accordance with the procedure described in paragraph 15, and if the closing(s) of the sale of the Divestment Businesses takes place within a period not exceeding 3 months after the approval of the purchaser(s) and the terms of sale by the Commission.
3. In order to maintain the structural effect of the Commitments, OC shall, for a period of 10 years after the Effective Date not acquire direct or indirect influence over the whole or part of the Divestment Businesses unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Businesses is no longer necessary to render the proposed concentration compatible with the common market.

#### **Structure and definition of the Divestment Businesses**

4. The Divestment Businesses comprise OC's wholly owned manufacturing plant at Battice, Belgium and OC's wholly owned manufacturing plant at Birkeland, Norway. The present legal and functional structure of each of the Divestment Businesses as operated to date is described in the Schedule. The Divestment Businesses, described in more detail in the Schedule, include:
  - (a) all tangible and intangible assets (including intellectual property rights), which contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Businesses;
  - (b) all licenses, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Businesses;
  - (c) all contracts, leases, commitments, and customer orders of the Divestment Businesses, subject, where legally required, to the consent of the contracting party; all customer, credit and other records of the Divestment Businesses (items referred to under (a)-(c) hereinafter collectively referred to as "Assets");
  - (d) the Personnel; and
  - (e) the benefit, for a transitional period to be agreed with the Purchaser(s), based on the Purchasers' needs, and on terms and conditions equivalent to those at present afforded to the Divestment Businesses, of the current arrangements under which OC or Affiliated Undertakings supply products or services to the Divestment Businesses as detailed in the Schedule, which will not be transferred to the Purchaser(s) but which are necessary to ensure the continued viability of the Divestment Businesses, unless otherwise agreed with the Purchaser(s).

## **C. RELATED COMMITMENTS**

### **Preservation of viability, marketability and competitiveness**

5. From the Effective Date until the Closing(s), OC shall preserve the economic viability, marketability and competitiveness of the Divestment Businesses, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Businesses. In particular, OC undertakes:
  - (a) not to carry out any act upon its own authority that might have a significant adverse impact on the value, management, or competitiveness of the Divestment Businesses or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Businesses;
  - (b) to make available sufficient resources for the development of the Divestment Businesses, on the basis and continuation of the existing business plans;
  - (c) to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Businesses.

### **Hold-separate obligations**

6. OC commits, from the Effective Date until the Closing(s), to keep the Divestment Businesses separate from the businesses it is retaining and to ensure that Key Personnel of the Divestment Businesses – including the Hold Separate Manager – have no involvement in any business retained and vice versa. OC shall also ensure that the Personnel do not report to any individual outside the Divestment Businesses.
7. Until the Closing(s), OC shall assist the Monitoring Trustee in ensuring that the Divestment Businesses are managed as distinct and saleable entities separate from the businesses retained by OC. OC shall appoint a Hold Separate Manager who shall be responsible for the management of the Divestment Businesses, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall manage the Divestment Businesses independently and in the best interest of those businesses with a view to ensuring their continued economic viability, marketability, and competitiveness and their independence from the businesses retained by the Parties.
8. To ensure that each Divestment Business is held and managed as a separate entity, the Monitoring Trustee shall exercise OC's rights as shareholder in the Divestment Businesses (except for its rights for dividends that are due before Closing(s)), with the aim of acting in the best interests of the businesses, determined on a stand-alone basis, as an independent financial investor, and with a view to fulfilling OC's obligations under the Commitments. Furthermore, the Monitoring Trustee shall have the power to replace members of the boards of directors of the respective Divestment Businesses, who have been appointed on behalf of OC. Upon request of the Monitoring Trustee, OC shall cause such members of the boards to resign.

### **Ring-fencing**

9. OC shall implement all necessary measures to ensure that it does not after the Effective Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Businesses. In particular, the participation of the Divestment Businesses in a central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Businesses. OC may obtain information relating to the Divestment Businesses which is reasonably necessary for the divestiture of the Divestment Businesses or whose disclosure to OC is required by law.

### **Non-solicitation clause**

10. The Parties undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Businesses for a period of two years after Closing.

### **Due diligence**

11. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Businesses, OC shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
  - (a) provide to potential purchasers sufficient information as regards the Divestment Businesses;
  - (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

### **Reporting**

12. OC shall submit written reports in English on potential purchasers of the Divestment Businesses and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 calendar days after the end of every month following the Effective Date (or otherwise at the Commission's request).
13. The Parties shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit to the Commission and the Monitoring Trustee a copy of any information memorandum prepared in respect of the Divestment Businesses. Such memorandum shall be submitted to the Commission and the Monitoring Trustee before sending it out to potential purchasers if such memorandum has not already been circulated to potential purchasers prior to the date of these Commitments.

**D. THE PURCHASER(S)**

14. The Divestment Businesses shall be sold to one or more Purchasers. In order to ensure the immediate restoration of effective competition, each Purchaser, in order to be approved by the Commission, must:
- (a) be independent of and unconnected to the Parties;
  - (b) have the financial resources, proven expertise, and incentive to maintain and develop the Divestment Businesses as viable and active competitive forces in competition with OC and other competitors;
  - (c) neither be likely to create, in the light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed, and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Businesses (the before-mentioned criteria for the purchaser hereafter the “Purchaser Requirements”).
15. The final binding sale and purchase agreement(s) shall be conditional on the Commission’s approval. When OC has reached agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. OC must be able to demonstrate to the Commission that each purchaser meets the Purchaser Requirements and that the Divestment Businesses are being sold in a manner consistent with the Commitments. For the approval, the Commission shall verify that each purchaser fulfils the Purchaser Requirements and that the Divestment Businesses are being sold in a manner consistent with the Commitments. The Commission may approve the sale of the Divestment Businesses without one or more Assets or parts of the Personnel, if this does not affect the viability and competitiveness of the Divestment Businesses after the sale, taking account of the proposed purchaser(s).

**E. TRUSTEE**

I. Appointment Procedure

16. OC shall appoint a Monitoring Trustee to carry out the functions specified in the Commitments for a Monitoring Trustee. If OC has not entered into a binding sale and purchase agreement one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by OC at that time or thereafter, OC shall appoint a Divestiture Trustee to carry out the functions specified in the Commitments for a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.
17. The Trustee shall be independent of the Parties, possess the necessary qualifications to carry out its mandate, for example as an investment bank or consultant or auditor, and shall neither have nor become exposed to a conflict of interest. The Trustee shall be remunerated by the Parties in a way that does not impede the independent

and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Businesses, the fee shall also be linked to a divestiture within the Trustee Divestiture Period.

*Proposal by the Parties*

18. No later than one week after the Effective Date, OC shall submit a list of one or more persons whom OC proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period, OC shall submit a list of one or more persons whom OC proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the proposed Trustee fulfils the requirements set out in paragraph 17 and shall include:
  - (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
  - (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks;
  - (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

*Approval or rejection by the Commission*

19. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, OC shall appoint or cause to be appointed, the individual or institution concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, OC shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

*New proposal by the Parties*

20. If all the proposed Trustees are rejected, OC shall submit the names of at least two more individuals or institutions within one week of being informed of the rejection, in accordance with the requirements and the procedure set out in paragraphs 16 and 19.

*Trustee nominated by the Commission*

21. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom OC shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

## II. Functions of the Trustee

22. The Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or OC, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

### *Duties and obligations of the Monitoring Trustee*

23. The Monitoring Trustee shall:
- (i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision;
  - (ii) oversee the on-going management of the Divestment Businesses with a view to ensuring their continued economic viability, marketability, and competitiveness and monitor compliance by OC with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
    - (a) monitor the preservation of the economic viability, marketability, and competitiveness of the Divestment Businesses, and the keeping separate of the Divestment Businesses from the businesses retained by the Parties, in accordance with paragraphs 5 and 6 of the Commitments;
    - (b) supervise the management of the Divestment Businesses as distinct and saleable entities, in accordance with paragraph 7 of the Commitments;
    - (c) (i) in consultation with OC, determine all necessary measures to ensure that OC does not after the Effective Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Businesses, in particular strive for the severing of the Divestment Businesses' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Businesses, and (ii) decide whether such information may be disclosed to OC as the disclosure is reasonably necessary to allow OC to carry out the divestiture or as the disclosure is required by law;
    - (d) monitor the splitting of assets and the allocation of Personnel between the Divestment Businesses and OC or Affiliated Undertakings;
  - (iii) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision;
  - (iv) propose to OC such measures as the Monitoring Trustee considers necessary to ensure OC's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability, or competitiveness of the Divestment Businesses, the holding



separate of the Divestment Businesses, and the non-disclosure of competitively sensitive information;

- (v) review and assess potential purchasers as well as the progress of the divestiture process and verify that, depending on the stage of the divestiture process, (a) potential purchasers receive sufficient information relating to the Divestment Businesses and the Personnel, in particular, by reviewing, if available, the data room documentation, the information memorandum, and the due diligence process, and (b) potential purchasers are granted reasonable access to the Personnel;
- (vi) provide to the Commission, sending OC a non-confidential copy at the same time, a written report within 15 days after the end of every month. The report shall cover the operation and management of the Divestment Businesses so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers. In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission, sending OC a non-confidential copy at the same time, if it concludes on reasonable grounds that OC is failing to comply with these Commitments;
- (vii) within one week after receipt of the documented proposal referred to in paragraph 15, submit to the Commission a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Businesses after the sale and as to whether the Divestment Businesses are sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Businesses without one or more Assets or not all of the Personnel affects the viability of the Divestment Businesses after the sale, taking account of the proposed purchaser.

*Duties and obligations of the Divestiture Trustee*

- 24. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Businesses to one or more purchaser(s), provided that the Commission has approved both the purchaser(s) and the final binding sale and purchase agreement in accordance with the procedure laid down in paragraph 15. The Divestiture Trustee shall include in the sale and purchase agreement(s) such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement(s) such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of OC, subject to the Parties' unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.
- 25. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to OC.

### **III. Duties and obligations of OC**

26. OC shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance, and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of OC's or the Divestment Businesses' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and OC and the Divestment Businesses shall provide the Trustee upon request with copies of any such document. OC and the Divestment Businesses shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.
27. OC shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Businesses. This shall include all administrative support functions relating to the Divestment Businesses which are currently carried out at headquarters level. OC shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, and in particular shall give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. OC shall inform the Monitoring Trustee on possible purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.
28. OC shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale, the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, OC shall cause the documents required for effecting the sale and the Closing to be duly executed.
29. OC shall indemnify the Trustee and its employees and agents (each an "Indemnified Party") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to OC for any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence, or bad faith of the Trustee, its employees, agents, or advisors.
30. At the expense of OC, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to OC's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should OC refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard OC. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 29 shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served OC during the First Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

**IV. Replacement, discharge and reappointment of the Trustee**

31. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:
- (a) the Commission may, after hearing the Trustee, require OC to replace the Trustee; or
  - (b) OC, with the prior approval of the Commission, may replace the Trustee.
32. If the Trustee is removed according to paragraph 31, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 16-21.
33. Besides the removal according to paragraph 31, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

**F. THE REVIEW CLAUSE**

34. The Commission may, where appropriate, in response to a request from OC showing good cause and accompanied by a report from the Monitoring Trustee:
- (a) Grant an extension of the time periods foreseen in the Commitments, or
  - (b) Waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.

Where OC seeks an extension of a time period, it shall submit a request to the Commission no later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall OC be entitled to request an extension within the last month of any period.

Duly authorised for and on behalf of

**OWENS CORNING**

By: \_\_\_\_\_

Title: \_\_\_\_\_

## SCHEDULE

1. The Divestment Businesses, as operated to date, have the following legal and functional structure:
  - (a) The Battice, Belgium plant is owned and operated by Owens Corning Composites, S.p.r.l., a company organized under the laws of Belgium and a wholly owned indirect subsidiary of OC (“OC Composites”). Except as specified elsewhere in this Schedule, the Battice Divestment Business includes all facilities, including glass furnaces, reinforcements production assets, and all related assets located at Route de Maestricht 67-69, Parc d’activités économiques, B- 4651 Battice, Belgium (collectively referred to hereafter as the “Battice Plant”).
  - (b) The Birkeland, Norway plant is owned and operated by Owens Corning Fiberglas Norway A.S., a company organized under the laws of Norway and a wholly owned indirect subsidiary of OC (“OC Norway”). Except as specified elsewhere in this Schedule, the Birkeland Divestment Business includes all facilities, including glass furnaces, reinforcements production assets, and all related assets located at Tollenes Industry Area, Birkeland N-4760, Norway (collectively referred to hereafter as the “Birkeland Plant”).
  - (c) The research and development centre located at Battice, Belgium (the “R&D Centre”) and the central function that is responsible for OC’s sales, marketing and customer service in Brussels, Belgium, are owned by European Owens-Corning Fiberglass (“EOCF”), a company organized under the laws of Belgium and a wholly owned indirect subsidiary of OC. EOCF operates the R&D Centre and the sales, marketing, and customer service functions relating to both the Divestment Businesses and the remainder of OC’s European operations. Personnel and assets to make up a stand-alone commercial purchasing and sales organisation and a stand-alone R&D centre will be transferred from EOCF to OC Composites as part of the Divestment Businesses.
2. Following paragraph 4 of these Commitments, the Divestment Businesses comprise:
  - 2.1 **The Battice Divestment Business:**
    - (a) all tangible assets owned by OC Composites and EOCF used in the development, production, servicing, and sale of all products and product lines manufactured by the Battice Plant during 2007 (*i.e.*, Continuous Filament Mat (“CFM”), Dry Use Chopped Strands (“DUCS”), direct rovings, the specialty assembled rovings product EB8 (“EB8”), and Wet Use Chopped Strands (“WUCS”) (together the “Battice Business Products”), and specifically including: the real property on which the Battice Plant is located (including the land and building where the R&D centre is presently located, adjacent to the Battice Plant, which will be transferred to OC Composites before Closing); manufacturing and sales assets, including capital equipment,

vehicles, supplies, personal property, inventory, office furniture, fixed assets and fixtures, materials, and warehouses and storage facilities; all licenses, permits and authorisations issued by any governmental organisation; all contracts, agreements, leases, and commitments to which OC Composites is a party; all customer contracts, lists, accounts, orders, credit records; and other records relating to the Divestment Business;

- (b) the following main intangible assets:
  - (i) a non-exclusive, non-transferable, royalty-free, perpetual license, without the right to sublicense, for any intangible asset that has been used in the development, production, servicing, and sale of the Battice Business Products, including but not limited to all patents, licenses and sublicenses, trademarks, trade names, service marks, service names, technical information, computer software and related documentation, know-how, trade secrets, drawings, blueprints, designs, design protocols, specifications for materials, specifications for parts and devices, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, and all manuals and technical information provided to the employees, customers, suppliers, agents, or licensees of the Battice Divestment Business. Notwithstanding the previous sentence, the Battice Divestment Business includes a non-exclusive, non-transferable, royalty-free, perpetual license, without the right to sublicense, for the use of OC's Advantex® glass formulation to manufacture products on a site-specific basis at the Battice Plant, and a royalty-bearing license (a reasonable royalty to be negotiated between licensor and licensee) to manufacture Advantex® products at other plants or operations of the Purchaser within the EEA. The Battice Divestment Business also includes a non-exclusive right to use the Advantex® trademark. All licenses for intangible assets are transferable to any future purchaser of the Battice Divestment Business on the same terms and conditions;
  - (ii) all research data concerning historic and current research and development efforts conducted for the Battice Divestment Business, including designs of experiments and the results of unsuccessful designs and experiments;
- (c) the following main contracts, agreements, leases, commitments, and understandings to which OC Composites is not a party:
  - (i) to the extent that global contracts held by OC or an OC Affiliated Undertaking other than OC Composites, but which also relate to the Battice Divestment Business, have not been renegotiated to document the relationship with the Battice Divestment Business separately, the portion of such contracts (*i.e.*, the current volume) relating to the

Battice Plant, subject where legally required to the consent of the customer. [...]

- (ii) the portion of any other contracts, agreements, leases and commitments, to which OC or an OC Affiliated Undertaking other than OC Composites is a party but which relate to the Battice Divestment Business, subject where legally required to the consent of the other contracting party. OC will use its reasonable best efforts to obtain the consent of such parties to such assignments.
- (d) all customer lists, accounts, orders, and credit records relating to the Battice Divestment Business that are owned by OC or an OC Affiliated Undertaking other than OC Composites.

## 2.2 **The Birkeland Divestment Business:**

- (a) all tangible assets owned by OC Norway used in the development, production, servicing, and sale of the all product lines of regular and high-strength glass Direct Rovings manufactured by the Birkeland plant during 2007 (“Birkeland Business Products”), and specifically including: the real property on which the Birkeland Plant is located; manufacturing and sales assets, including capital equipment, vehicles, supplies, personal property, inventory, office furniture, fixed assets and fixtures, materials, warehouses and storage facilities, and other tangible property or improvements; all licenses, permits and authorisations issued by any governmental organisation; all contracts, agreements, leases, commitments, and understandings to which OC Norway is a party; all customer contracts, lists, accounts, orders, and credit records; and other records relating to the Birkeland Divestment Business;:
- (b) the following main intangible assets:
  - (i) subject to paragraph (ii) below, a non-exclusive, non-transferable, royalty-free, perpetual license, without the right to sublicense, for any intangible asset that has been used in the development, production, servicing, and sale of the Birkeland Business Products, including but not limited to all patents, licenses and sublicenses, trademarks, trade names, service marks, service names, technical information, computer software and related documentation, know-how, trade secrets, drawings, blueprints, designs, design protocols, specifications for materials, specifications for parts and devices, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, and all manuals and technical information provided to the employees, customers, suppliers, agents, or licensees of the Birkeland Divestment Business. Notwithstanding the previous sentence, the Birkeland Divestment Business includes a non-exclusive, non-transferable, royalty-free, perpetual license, without the right to sublicense, for the use of OC’s

Advantex® glass formulation to manufacture products on a site-specific basis at the Birkeland Plant, and a royalty-bearing license (a reasonable royalty to be negotiated between licensor and licensee) to manufacture Advantex® products at other plants or operations of the Purchaser within the EEA. The Birkeland Divestment Business also includes a non-exclusive right to use the Advantex® trademark. All licenses for intangible assets are transferable to any future purchaser of the Birkeland Divestment Business on the same terms and conditions;

- (ii) a non-exclusive, non-transferable, royalty-free, perpetual license, without the right to sublicense, for OC's HiPer-tex® glass formulation and production technology, including in particular all relevant patents and know-how. This license would allow the Purchaser to manufacture products containing HiPer-tex® glass on a royalty-free basis at any facility of the Purchaser located in the EEA, and would allow the Purchaser to sell such products to customers anywhere in the world for wind power applications. The Birkeland Divestment Business will also include assignment of the HiPer-tex® trademark. For the avoidance of doubt, trademarks for OC high-strength glass products that have not yet been commercialised will not be included with the Birkeland Divestment Business;
  - (iii) all research data concerning historic and current research and development efforts conducted for the Birkeland Divestment Business, including designs of experiments and the results of unsuccessful designs and experiments.
- (c) the following main contracts, agreements, leases, commitments, and understandings to which OC Norway is not a party:
- (i) to the extent that global contracts held by OC or an OC Affiliated Undertaking other than OC Norway, but which also relate to the Birkeland Divestment Business, have not been renegotiated to document the relationship with the Birkeland Divestment Business separately, the portion of such contracts (*i.e.*, the current volume) relating to the Birkeland Plant, subject where legally required to the consent of the customer. [...]
  - (ii) the portion of any other contracts, agreements, leases and commitments, to which OC or an OC Affiliated Undertaking other than OC Norway is a party but which relate to the Birkeland Divestment Business, subject where legally required, to the consent of the other contracting party. OC will use its reasonable best efforts to obtain the consent of such parties to such assignments.



- (d) all customer lists, accounts, orders, and credit records relating to the Birkeland Divestment Business that are owned by OC or an OC Affiliated Undertaking other than OC Composites.

### 2.3 **Personnel**

The Divestment Businesses shall include the following Personnel:

- (a) all employees of OC Composites currently located at the Battice Plant (approximately 335 hourly and 50 salaried employees), to the extent still employed on the Effective Date;
- (b) all employees of OC Norway currently located at the Birkeland Plant (approximately 152 hourly and 23 salaried employees), to the extent still employed on the Effective Date;
- (c) the following additional personnel, which have previously provided services both to the Divestment Business and to businesses being retained by OC:

[...]

Following discussions between OC and the Purchaser, it may be agreed that Personnel other than Key Personnel may be excluded from the Divestment Businesses and, if agreed by OC, retained by OC.

- (d) the following Key Personnel

[...]

- 3. In addition to the assets and Personnel comprising the Divestment Businesses as described above, OC is prepared to enter into the following arrangements for the supply of products or services by OC or Affiliated Undertakings to the Purchaser:

- (a) The Divestment Businesses operate on centralised IT systems (*e.g.*, SAP) that are also used by OC's other businesses to handle functions such as order processing, production, invoicing, and logistics. OC will install firewalls to restrict access to confidential information of the Divestment Businesses by OC employees, except to the extent required by law. OC will maintain and support these IT systems as required by the Purchaser(s) in order to facilitate the transition of the Divestment Businesses onto independent IT platforms, for a transitional period of up to 1 year.
- (b) If desired by the Purchaser, OC will make available personnel on a transitional basis to provide supporting services to the Purchaser in the areas of human resources (including payroll and compensation & benefits) and office administration/reception.

- (c) The platinum-rhodium alloy currently used in the Battice Plant and the Birkeland Plant is the property of OC and is leased to OC Composites and OC Norway, respectively. OC is willing to assist the Purchaser(s) in securing necessary alloy for continuing the operations of the Divested Businesses. Such assistance would include, at the Purchaser's option, leasing and/or selling the necessary alloy to the Purchaser at arm's length conditions negotiated between the Purchaser and OC. OC is also willing to provide services related to furnace, bushing, and other equipment design, manufacturing, and refurbishment to the Purchaser(s) at reasonable market rates upon the request of the Purchaser(s).
4. The Divestment Businesses shall not include any right to use the name and trademark Owens Corning or any derivative thereof.