

***Case No COMP/M.4160 -  
THYSSENKRUPP /  
EADS / ATLAS***

Only the English text is available and authentic.

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

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Article 6(1)(b) NON-OPPOSITION  
Date: 10/05/2006

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 10/05/2006

SG-Greffe(2006) D/202495-202496

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PUBLIC VERSION

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

To the notifying parties

Dear Sir/Madam,

**Subject: Case No COMP/M.4160 - ThyssenKrupp/EADS/Atlas  
Notification of 29.03.2005 pursuant to Article 4 of Council Regulation  
No 139/2004<sup>1</sup>**

1. On 29 March 2006 the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 (the “Merger Regulation”). The operation consists in the joint acquisition of *Atlas Elektronik GmbH* (“Atlas”, Germany) by *ThyssenKrupp Technologies AG* (“TKT”, a subsidiary of the German ThyssenKrupp AG) and *EADS Deutschland GmbH* (“EADS”, Germany, belonging to EADS N.V., The Netherlands).

#### **I. THE PARTIES**

2. **TKT** is a 100% subsidiary of the holding company ThyssenKrupp AG, which is active through several subsidiaries in the areas of steel, industrial goods and services. Through its subsidiary ThyssenKrupp Marine Systems AG, TKT is also active in the design and manufacture of non-nuclear submarines, naval vessels and civilian ships.
3. **EADS**<sup>2</sup> (“European Aeronautic Defence and Space Company”) is the legal entity combining the former group activities of Aerospatiale Matra S.A., DaimlerChrysler

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

<sup>2</sup> See Case IV/M.1745-EADS, Commission decision of 11 May 2000.

Aerospace and Construcciones Aeronauticas S.A.. EADS consists of five business units (Airbus, Military Transport Aircraft, Aeronautics, Space and Defence & Security Systems) and is active in the design and manufacture of civil and military aircraft, telecommunications equipment, helicopters, space vehicles and defence electronics, including surface combat management systems.

4. **Atlas** is a German-based supplier of electronics and other equipment in the naval systems sector. It is particularly active in the supply of combat management system solutions for submarines and surface vessels, but also designs and supplies mine counter vessels and naval weapons. In addition, Atlas produces systems for civilian applications (maritime safety and hydrography systems).

## **II. THE OPERATION**

5. TKT and EADS (“the Parties”) will jointly acquire all the shares in Atlas (60% and 40% respectively), currently held by BAE Systems Deutschland GmbH. After the joint acquisition of the shares, the Parties intend to split Atlas into two separate legal entities, one combining Atlas’ submarine business (“SubCo”) and another gathering the business for electronics for surface vessels, naval weapons and maritime safety and security systems (“NavCo”). EADS will only contribute its surface combat management systems and related communications systems, as well as maritime safety and security systems to the joint venture NavCo. Both steps of the operation are closely linked to each other and constitute one single concentration in the light of the Court of First Instance’s judgement in the case “Cementbouw”.<sup>3</sup>

## **III. CONCENTRATION**

6. The transaction consists of the acquisition of *joint control* of Atlas by way of purchase of shares by TKT and EADS pursuant to Article 3(1)(b) of the Merger Regulation.
7. Both entities – SubCo and NavCo - will be jointly controlled as both Parties will have veto rights regarding the business plan and budget in both companies.

## **IV. COMMUNITY DIMENSION**

8. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 billion<sup>4</sup>. Each of them have a Community-wide turnover in excess of EUR 250 million, but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension.

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<sup>3</sup> See case T-282/02, judgment of 23.2.2006 - *Cementbouw Handel & Industrie / Commission*, in particular paragraphs 91-149.

<sup>4</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, p 25). To the extent that figures include turnover for the period before 1.1.1999, they are calculated on the basis of average ECU exchange rates and translated into EUR on a one-for-one basis.

## V. NOTIFICATION OF THE MILITARY PART OF THE TRANSACTION

9. As to the notification of the military part of the transaction, the German Government has, according to Article 296 of the EC Treaty, instructed the Parties to notify the naval part of the transaction only *insofar as no military secrets are concerned*<sup>5</sup>. The scope of the submitted notification, however, allowed the Commission to carry out a complete investigation of the markets affected by the transaction.

## VI. COMPETITIVE ASSESSMENT

### A. Relevant product markets

10. The transaction leads only to marginal horizontal overlaps on two markets<sup>6</sup>, namely the market for Combat Management Systems (CMS) for surface naval vessels and in the market for Maritime Safety and Security Systems (MSS). The combined market share on both markets remains below [10-20]% so that they do not constitute horizontally affected markets.
11. However, the transaction gives rise to a number of *vertically* affected markets. TKT is a leading manufacturer of submarines and surface naval vessels, using a number of products manufactured by Atlas in its ships and submarines. This vertical relationship concerns the markets for CMS for submarines, CMS for surface naval vessels, sonar sensors for surface vessels, heavyweight torpedoes and mine warfare systems from Atlas.

#### 1. Combat Management Systems for submarines vs. Combat Management Systems for naval vessels

12. Combat Management Systems (“CMS”) are technical devices on board of naval vessels, submarines, tanks and military aircraft that analyse and process data from their sensors, radars etc. in order to warn of attacks and to convey strategic information to the operations centre. In other words, the CMS is the electronic “brain” that connects the sensors (“the ears”) and the effectors (“the muscles”) of a submarine, vessel etc. CMS typically consist of hardware (e.g. sensors, computer systems) and software for the analysis, processing and communication of the collected data. Due to the specific characteristics of naval warfare (e.g. use of sonars), *naval* CMS are significantly different from other CMS (e.g. CMS for tanks, aircraft etc.).
13. The Commission has in previous decisions further distinguished between different types of naval equipment, namely between non-nuclear and nuclear submarines on the one hand and surface vessels on the other hand<sup>7</sup>. The Parties therefore suggest that two

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<sup>5</sup> See for a similar approach e.g. case No COMP/M.3596 - ThyssenKrupp/HDW.

<sup>6</sup> The parties also submit that EADS and Atlas are active in the field of “hydrography” (echo-sounders for river and sea cartography). However, EADS’ activity is limited to one project and the overlap is therefore insignificant. In any case, the market can be disregarded for the purposes of the present assessment as the market share remains below 15% and does not constitute an affected market.

<sup>7</sup> See e.g. Commission decisions in Cases COMP/M.1709 Preussag/Babcock/Celsius, paragraph 26, 41; COMP/M.3596 TK/HDW, paragraph 17; COMP/M.3720 BAES/AMS, paragraph 8 and Case IV/M.894 Rheinmetall/British Aerospace/STN Atlas.

different markets for *CMS for non-nuclear submarines* and *CMS for surface naval vessels* be distinguished and provide separate market share data for both markets<sup>8</sup>.

14. The market investigation has confirmed that *CMS for surface naval vessels* and CMS for submarines do not belong to the same product market. Indeed, systems both are designed for different purposes (underwater and surface warfare) and CMS for surface vessels use a larger number of sensors than submarines (not only sonars, but also above-water sensors such as radars, laser, and satellite technology) and require a more complex technology, since they have to integrate more weapons than a submarine.
15. A further possible delineation concerns a distinction between CMS for *nuclear* and for *non-nuclear submarines*. On the one hand, the Commission has, indeed, in previous cases defined separate markets for non-nuclear and for nuclear submarines, due to fundamentally different technologies involved in both products<sup>9</sup>. In a recent decision, the Commission has also considered the possibility of separate markets for CMS for conventional and nuclear submarines.<sup>10</sup> This may be underlined by the fact that Atlas, one of the leading CMS suppliers for non-nuclear submarines, is not active in the market for nuclear submarines. On the other hand, the market investigation has shown that suppliers of CMS for nuclear submarines (e.g. Lockheed Martin) are able to supply CMS also for non-nuclear submarines. For the purpose of this decision the question can, however, be left open, since even under the narrowest possible market definition (CMS for non-nuclear submarines) no competition concerns would occur.
16. The Commission has also considered whether a further differentiation of between CMS (hard- and software) and sonars for submarines might be appropriate. Although the majority of customers indicated that they buy a package of both, sonars and CMS-hard- & software, the question whether there is a uniform product market can ultimately be left open, since it would not affect the competitive assessment of the case.

## **2. Sonar sensors for surface naval vessels**

17. Atlas produces also sonar sensors for surface naval vessels. These are devices to locate and identify surface and underwater targets; they comprise both, active and passive sonars. The sonars are typically combined with the surface CMS of other manufacturers. Unlike submarines, naval vessels are regularly equipped with CMS and sonars from different suppliers. Sonar sensors for surface vessels should therefore be regarded as a separate product market from CMS for surface vessels.

## **3. Submarine torpedoes**

18. Atlas manufactures also submarine torpedoes. Torpedoes are the main weapons of a submarine and can be further divided into heavyweight and lightweight torpedoes. Atlas produces only heavyweight torpedoes. Despite the fact that heavy- and lightweight torpedoes have significantly different product characteristics, it is not necessary to

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<sup>8</sup> Neither one of the Parties nor Atlas are active in the market for CMS for nuclear submarines.

<sup>9</sup> See Commission decisions in Cases COMP/M.1709 Preussag/Babcock/Celsius, paragraph 26, 41; COMP/M.3596 TK/HDW, paragraph 17; Case IV/M.894 Rheinmetall/British Aerospace/STN Atlas.

<sup>10</sup> See Commission decision in Case COMP/M.3720 BAES/AMS, paragraph 8.

decide whether heavyweight torpedoes form a separate product market, since no competition concerns will arise under either market definition.

#### **4. Mine warfare systems**

19. Finally, Atlas is active in the design and production of mine warfare systems. Mine warfare systems are either actively used as a weapon or passively to detect and disable existing mines. Mine warfare systems comprise typically sensors, electronics and underwater mine disposal vehicles.

#### **5. Non-nuclear submarines, frigates and small naval vessels**

20. TKT, through a subsidiary, is active in the production and design of naval ships and submarines.
21. In line with past Commission decisions, the parties propose to define separate markets for (i) conventional non-nuclear submarines with a replacement of more than 300 tons, (ii) frigates and (iii) small naval vessels (corvettes and patrol boats)<sup>11</sup>. In the past, TKT has also produced mine countermeasure vessels; however, since 1995 no such ships have been built or delivered.
22. These markets, in line with past decisions of the Commission, comprise shipbuilding, including production and delivery of material packages and midlife conversion of ships.<sup>12</sup> The other markets defined by the Commission in past cases, assembly of material packages and repair and smaller conversion, are not relevant for the current case.

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

23. As regards the geographic market definition, the parties propose for all markets to distinguish between countries which have their own domestic producers for defence equipment/subsystems and countries which do not have a domestic supplier for these products. For countries with domestic suppliers, they propose to define national markets, since governments tend to order more or less exclusively from these suppliers. For countries without domestic suppliers, they propose to define worldwide markets<sup>13</sup>. This approach is in line with the Commission's decision practice in previous cases concerning the defence sector<sup>14</sup>.
24. Some factors seem, however, to militate for wider than national markets even for those countries with a domestic supplier: Indeed, the European defence industry is marked by an increasing trend towards a more European-wide procurement policy of national defence agencies. The Commission has launched several initiatives to encourage this

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<sup>11</sup> See most recently Commission decision in Case COMP/M.3596 TK/HDW.

<sup>12</sup> Commission decisions in Case COMP/M.3596 TK/HDW; Case COMP/M.2772 HDW/Ferrostaal/Hellenic Shipyard.

<sup>13</sup> "Embargo States" such as Iran, Sudan etc. which are not accessible for national suppliers have do, however, not belong to the world market for defence goods, see e.g. COMP/M.3596 TK/HDW, paragraph 27.

<sup>14</sup> See e.g. COMP/M.3596 TK/HDW, paragraph 25-29.

development<sup>15</sup>. The market test has also shown that national Ministries of Defence, although having a certain preference for domestic suppliers, do not automatically buy from their own national supplier of naval equipment. It should be noted that the German Ministry of Defence used to buy the CMS equipment for its submarines from a Norwegian supplier (Kongsberg) and not from its domestic German supplier (Atlas) until recently.

25. However, for the purpose of the present case, it be left open whether national or wider product markets have to be defined, since neither on a national or on a world-wide basis the proposed transaction will lead to competition concerns.

### **C. Impact of the transaction on competition**

26. Due to limited overlaps, the proposed concentration gives rise only to vertically affected markets. Atlas' activities in the markets for submarine CMS, CMS for surface vessels (including the overlap due to EADS' activities in this market), sonars for surface vessels and for heavyweight torpedoes, result in vertically affected markets due to their relation with TKT's activities in the building of submarines and surface vessels.

#### **1. Atlas' activity in CMS submarines**

27. TKT is the leading supplier for non-nuclear submarines. According to the information supplied by the parties, it has a market of more than 50% of the world market and produces all the submarines for the German navy. According to the Parties, Atlas held an average market share of between 40-50% in the open world-market for CMS for non-nuclear submarines in the period from 2001-2005<sup>16</sup>. However, Atlas has not supplied the German navy for the current series of submarines which have been delivered to the German navy in the last year or are being delivered in the next few years. The CMS for those submarines was supplied by the Norwegian company Kongsberg on the basis of an intergovernmental agreement between Germany and Norway. The agreement foresaw that TKT (or its predecessors) was building the submarines for Germany and Norway whereas Kongsberg, as part of the Norwegian side, was supposed to equip them with a CMS.
28. Atlas' main competitors for non-nuclear submarine CMS on the open world market are DCN/Thales (France, holding a market share between 35-45%), Kongsberg (Norway, [0-10]%), Raytheon (USA, [0-10]%), and others (around 15%, including Faba/Lockheed Martin (Spain/USA)). The main competitors of TKT for the production of submarines are DCN (France), Izar (Spain), and Fincantieri (Italy).
29. Despite Atlas' and TKT's high market shares, it is not likely that the transaction, which brings about a vertical integration of Atlas and TKT, will lead to competition concerns due to a risk of foreclosure.

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<sup>15</sup> See e.g. Communication COM(2003) 113 "*Toward a European Union policy for defence equipments*", setting an action plan and the Green Book COM(2004) 608 on "*Public defence markets*"; see also the action 2004/551/PESC from the Council, 12 July 2004, dealing with the creation of a *European Defence Agency* [Official Journal of the European Union, L245/17, 17 July 2004].

<sup>16</sup> Due to the fact that submarines and vessels are not ordered on a yearly basis, market shares for individual years can be highly volatile. The Commission has therefore in previous cases considered market shares for a longer period than one year, see e.g. COMP/M.3596 TK/HDW, paragraph 30 et seq.

### *Market for submarine CMS*

30. With regard to competition concerns on the market for submarine CMS due to a potential foreclosure of competing suppliers of CMS for non-nuclear submarines, it is not likely that the merger will significantly change the present competitive structure on the CMS market. Already in the period of the last five years, Atlas supplied the CMS for all of the submarines built by TKT except for those four submarines built for the German navy. On the German market, it is for the German Ministry of Defence to specify for the next series of submarines whether the German navy should be continued to be supplied with CMS from Kongsberg or whether it should be supplied with Atlas CMS. It could be envisaged that Germany, currently using a Norwegian CMS in its main submarine type, may change its CMS supplier for the next generation of submarines and choose Atlas as a new supplier. However, such a change would only have limited effects on the market. The turnover generated with the German navy accounts in any case only for around [10-20]% of Atlas' CMS turnover. Even if non-integrated suppliers such as Kongsberg might suffer from losing an actual customer, competition in the CMS market would not be significantly impeded. In the event that Kongsberg were excluded from the market for CMS submarines as it could no longer supply TKT, there would still be a sufficient number of other competitors (e.g. DCN/Thales, Faba/Lockheed Martin, Raytheon) which would be able to supply submarine shipyards also after the transaction. Furthermore, there are also other producers of submarines which could be supplied by non-vertically integrated CMS suppliers such as Kongsberg. Recently, the Spanish producer Navantia has chosen Lockheed Martin as the supplier for the S80 submarine program after a competition in which also Atlas participated. The Italian shipyard Fincantieri has already been supplied by Kongsberg for its submarines being built according to TKT design.
31. Furthermore, it should be noted that the German Government might even absent the merger switch to a German CMS supplier, since the contract with the Norwegian supplier was the result of an exceptional inter-governmental agreement between Germany and Norway. While the merger might increase the likelihood of TKT being supplied by Atlas, the market investigation also showed that the decision which CMS to use is not necessarily taken by TKT, but that the respective Ministry of Defence, ordering the submarine, can specify the CMS to be used by the prime contractor supplying the submarine itself. It is therefore not excluded that the German navy could, despite the vertical integration resulting from the transaction, specify that the CMS should be delivered by another supplier either due to its enhanced capabilities and price considerations or in circumstances similar to those in which Kongsberg was chosen as CMS supplier for German submarines.
32. This shows that it is not likely that the present transaction will lead to competition concerns in the market for submarine CMS due to a risk of foreclosure of competing suppliers. This assessment does not only apply to the German market, but also on a world-wide level, where the position of TKT's competitors is even stronger.

### *Market for submarines*

33. The proposed transaction does also not raise competition concerns on the market for non-nuclear submarines arising from a risk by TKT of foreclosure of competing shipyards from access to CMS. Also in this relation, it is not likely that the merger will change the present competitive structure to a significant extent. In recent years, Atlas achieved already around [80-90]% of its CMS submarine turnover with TKT. The other



[10-20]% of Atlas' CMS submarine turnover were generated by retrofit orders for "old" submarines outside Germany so that Atlas, according to the information supplied by the parties, did not deliver any CMS for a new submarine built in a shipyard outside Germany in the last five years. The present transaction does not seem to establish any incentive for TKT not to carry out such retrofit orders in the future. It should also be noted that none of the potentially affected customers has raised concerns in this regard.

34. Furthermore, even if TKT would refuse to grant competitors access to Atlas CMS, there would still be a number of strong and established CMS suppliers available to which competing shipyards (such as DCN/Thales, Izar, Fincantieri) can switch. Some of these competitors, such as DCN/UDSI (a joint venture between DCN and Thales), are already vertically integrated and able to source their CMS for submarines internally. Furthermore, according to the parties and confirmed by the market investigation, the Spanish submarine supplier Navantia, as already indicated above, chose Lockheed Martin as the supplier for non-nuclear submarine CMS which has been adapted in cooperation with Navantia/Faba. This shows that also US companies are serious competitors for CMS for non-nuclear submarines. For a different type of submarine, the Spanish shipyard is supplied by the French UDSI. This might indicate that also vertically integrated suppliers of submarines have an incentive to also supply submarine CMS separately.
35. Given this market structure, it seems unlikely that there would be an incentive for TKT to foreclose competing shipyards from Atlas' CMS. In any case, Atlas' supplies to other shipyards are very limited, as indicated above.

#### *Conclusion*

36. Given the above, it can be concluded that the proposed transaction does not raise competition concerns on the markets for submarines CMS or on the markets for non-nuclear submarines arising from a risk of foreclosure of competing CMS suppliers or shipyards from access to CMS. This assessment applies not only to the German market, but - given the even stronger position of the competitors outside Germany - also to the open world-market.

## **2. Atlas' activities in heavyweight torpedoes**

37. The market for heavyweight torpedoes for submarines might be considered vertically related to the market for non-nuclear submarines. Atlas' average market share for the period 2001 – 2005 on a worldwide market was approximately [35-45]%. The competitors included Raytheon (with a market share of [10-20]% on a worldwide market), WASS (with a market share of [15-25]%), and Saab Bofors (with a market share of [0-10]%). Others had, according to estimations of the parties, shares of [15-25]% and included DCN and BAE Systems<sup>17</sup>.
38. Given the market shares and the strong competitors, no concerns regarding a risk of foreclosure arise. In any case, according to the parties, national governments and navies are the direct customers for heavyweight torpedoes and not the prime contractors for the submarines. This reduces further any risk of foreclosure.

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<sup>17</sup> BAE Systems has been selling torpedoes independently from Atlas and will continue to do so after Atlas has been sold off.

39. The competitive situation does not change for the German market following the proposed concentration. Atlas has been the only supplier of heavyweight torpedoes for the German navy in the past and TKT has been the only supplier for submarines. The situation will not change in the future. Similarly, no competition problems are likely to occur on a world-wide market, where TKT faces even more competition.

### **3. Atlas' and EADS' activities in CMS surface vessels and surface sonars**

40. Atlas and EADS are both active in the supply of CMS for surface vessels. According to estimations by the parties, Atlas had an average 2001-2005 market share of around [0-10]% and EADS of approximately [0-10]% of the worldwide market. Atlas further has a share of approximately [5-15]% of the worldwide market for surface sonars; EADS and TKT are not active on this market.

41. These markets are vertically related to the production of surface ships by TKT, specifically frigates and small naval vessels, with average market shares for the period 2001 – 2005 of [10-20]% for both products according to the information of the parties, on the basis of both delivery and orders. On the German market for such ships, TKT has market share of [90-100]% for the delivery of frigates for the period 2001 – 2005 (no orders given in this period) and a share of [25-35]% of the orders for small naval ships (no deliveries taken place in the period).

42. The main competitors in the field of CMS for surface ships, according to the information of the parties, Lockheed Martin (with a market share on the world-market of [20-30]%), Thales/DCN (with [15-25]%), BAE Insyte ([10-20]%), Raytheon ([10-20]%), Saab ([5-15]%) and Finmeccanica ([0-10]%). Competitors on the worldwide market for sonars for surface vessels include, according to the parties, Thales (35% on a worldwide market), Raytheon (20%), EDO (10%) and L3 (5%).

43. Given the low market shares of Atlas and EADS in the up-stream markets, on the one hand, and TKT's limited market shares on downstream markets for the *worldwide* supply of frigates and small naval ships, no competition concerns due to possible risk of foreclosure of competing suppliers of CMS for surface ships or competing shipyards arise.

44. Also on the *German* market no competition concerns arise. The market investigation showed that the German Ministry of Defence may specify a supplier even if the prime contractor proposes a certain supplier of CMS. The German Ministry of Defence may therefore continue with Thales, which is according to the parties the CMS supplier for most of the German warships, and for the supply of surface CMS and surface sonars or choose to be supplied by TKT and Atlas in a package.

### **4. Atlas' activities in mine warfare systems**

45. The market for mine warfare systems, in which Atlas is active, could also be considered as vertically related to TKT's shipbuilding activities. Although TKT can no longer be considered active in the production of special mine counter vessels, according to the parties, mine warfare systems will in future be used in other naval vessels such as frigates and corvettes. According to the parties, Atlas has a market share of around [25-35]% in the world-wide market for mine warfare systems. Its competitors are Thales (with a share of [10-20]% of the worldwide market), Lockheed Martin ([10-20]%), Raytheon ([0-10]%), BAE Insyte ([0-10]%), Saab/Saab Bofors ([0-10]%), WASS ([0-10]%) and L3 ([0-10]%).

46. Given the limited market shares of TKT in the downstream shipbuilding markets and the strength of the competitors, no foreclosure concerns arise in a *worldwide market* for mine warfare systems.

47. In a *German* market for mine warfare systems, Atlas has been the only supplier of mine warfare systems in the past. The situation does not change in this respect.

## **VII. CONCLUSION**

48. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EC) No 139/2004.

For the Commission,  
signed  
Neelie KROES  
Member of the Commission