EN

Case No COMP/M.1636 – MMS /DASA / ASTRIUM

Only the English text is available and authentic.

REGULATION (EEC) No 4064/89
MERGER PROCEDURE

Article 8(2)

Date: 21/03/2000

Commission Decision

of 21.03.2000

declaring a concentration compatible with the common market

and the EEA Agreement

(Case No IV/M.1636 – MMS/DASA/ASTRIUM)

(Only the English text is authentic)

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings[1], as last amended by Council Regulation (EC) No 1310/97[2], and in particular Article 8(2) thereof,

Having regard to the Commission decision of 3 December 1999 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations,

WHEREAS :

1. On 29 October 1999, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89 (hereafter "Merger Regulation") by which Matra Marconi Space N.V. (MMS) and

1. OJ L 395, 30.12.1989, p. 1; corrected version OJ L 257, 21.9.1990, p. 13

2. OJ L 180, 9.7.1997, p. 1.

DaimlerChrysler Aerospace AG (DASA), via its subsidiary DASA Dornier Raumfahrt Holding GmbH (DDRH), acquire joint control of Astrium, a newly created company active in the space sector, to which all of MMS' and most of DASA's activities relative to space systems will be transferred.

2. By decision dated 3 December 1999, the Commission found that the notified operation raised serious doubts as to its compatibility with the common market. The Commission accordingly initiated proceedings in this case pursuant to Article 6(1)(c) of the Merger Regulation.

I. THE PARTIES AND THE OPERATION

3. MMS is jointly controlled by Matra Hautes Technologies S.A.S. (MHT) and by Marconi Electronic Systems Limited (Marconi). The principal activities of MMS are the manufacture and supply of space systems, including satellites and their payloads, sub-systems for launchers and manned space flight vehicles, ground stations and various sub-systems and technologies.

4. MHT is part of Aérospatiale-Matra, a French company primarily engaged in commercial and military aerospace, guided weapons, information and telecommunications. In the space sector, and in addition to its stake in MMS, Aérospatiale-Matra owns, notably, controlling interests in companies active in launchers, space infrastructure and spacecraft equipment. Aérospatiale-Matra is controlled by the French State and Lagardère, a French group also active in the automotive and media sectors.

5. Marconi, formerly owned by the General Electric Company ("GEC"), has been merged with and into British Aerospace plc, now renamed BAe Systems plc ("BAe Systems"). BAe Systems is a UK-based group, which primarily operates in commercial and military aircraft, guided weapons, marine engineering and naval architecture, and defence electronics. In the space sector, and in addition to its stake in MMS, BAe Systems owns controlling interests in a number of companies active in spacecraft equipment.

6. DDRH is exclusively controlled by DASA, a German company which combines the activities of the Aviation and Space Systems Division of the DaimlerChrysler group. In the space sector, and in addition to the activities that will be contributed to Astrium, DASA owns, in particular, controlling interests in Eurockot Launch Services GmbH, which operates in the field of launch services. DASA belongs to the Daimler Chrysler group, which also operates in the automotive and service sectors.

7. Pursuant to a Shareholders' Agreement, Astrium will be a 50:50 joint venture of MMS and DDRH. Astrium will combine all of MMS' activities (supply of space systems and sub-systems) and all the DASA activities currently performed in its subsidiary Dornier Satellitensysteme GmbH (supply of satellite systems and sub-systems) and its division Raumfahrt-Infrastruktur (supply of space infrastructure and launchers). Astrium will be managed as one single multinational entity with cross-border business divisions, and it will mainly operate through three legal entities located in France, Germany and the United Kingdom.

II. CONCENTRATION

8. Astrium will be jointly controlled by MMS and DASA (hereafter collectively designated as "the parties"). A management board consisting of four members, two proposed by each of the parties, will be appointed by unanimous vote of the shareholders. All major decisions relating to the commercial policy and strategy of Astrium, such as the mid-term plan (equivalent to the business plan), the annual budget and the appointment and removal of legal representatives of the operational companies, require the unanimous approval of MMS and DASA. This confers joint control of Astrium to MMS and DASA, as the parties must reach an agreement on the major decisions concerning the strategic commercial behaviour of Astrium.

9. Astrium will furthermore perform on a lasting basis all the functions of an autonomous economic entity, as it will combine all of MMS' activities and most of DASA's space activities, and will therefore have access to the necessary assets, personnel, manufacturing facilities and commercial and service networks in order to conduct on a lasting basis its business activities.

10. In the light of the above, it is clear that the proposed transaction is a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

III. COMMUNITY DIMENSION

11. The combined aggregate worldwide turnover of the parties to the concentration exceeded EUR 5,000 million[3] in 1998 and each of the undertakings concerned had a Community-wide turnover of more than EUR 250 million. The undertakings concerned did not each achieve more than two-thirds of their aggregate turnover within one and the same Member State. The notified operation therefore has a Community dimension within the meaning of Article 1(2) of the Merger Regulation. It does not constitute a cooperation case under the EEA Agreement.

IV. COMPATIBILITY WITH THE COMMON MARKET

12. Astrium will be active in the manufacture and supply of space systems and their sub-systems and equipment. As indicated in previous Commission decisions[4], space systems generally comprise two main segments : a space segment (satellite, orbital platform, launcher, and so on), and a ground segment, which either commands and controls the space segment (orbit, mission parameters, and so on) or provides an interface (such as transmission of voice and data signals) with the space segment. The space segment can be further categorised into satellites, space infrastructure and launchers.

13. The concentration does not raise competition concerns in the markets for civilian communication satellites, satellite ground segments and launch services.

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3. 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.

4. See, e.g. Case IV/M.437-Matra Marconi Space/British Aerospace Space Systems (OJC 245, 1.9.1994, p.9), or Case IV/M. 1185-Alcatel/Thomson-CSF-SCS (OJC 272, 1.9.1998, p.5)

14. Both parties are active in observation and scientific satellites, probes, space infrastructure and launcher equipment, and the Commission, in its decision of 3.12.1999 under Article 6(1)(c) of the Merger Regulation, had expressed serious doubts on these markets. In that decision, the Commission had also expressed serious doubts on the markets for systems and equipment products for launchers. However, there are, for the reasons indicated in sections A to C below, no competition concerns about these markets.

15. Finally, the parties are also active in certain satellite equipment products and military satellites, and there are strong indications that the operation would create or strengthen a dominant position in :

- mechanical wheels for satellites in Europe[5] (Section A);

- military communication satellites in France (Section C).

5. For the purpose of this decision, "Europe" means the EEA and Switzerland (and therefore includes all the Member States of the European Space Agency)

A. SATELLITES

RELEVANT PRODUCT MARKETS

The prime contracting level

16. Satellites are complex spacecraft orbiting or revolving around a celestial object. As was indicated in previous Commission decisions[6], four main categories can be distinguished: communications satellites, navigation satellites, observation (remote sensing) satellites and scientific satellites. Satellites can be utilised for civilian as well as military applications.

17. Broadly speaking, a standard satellite consists of two basic parts: the platform and the payload. The platform (or bus) is the physical structure of the satellite that ensures its stability and thermal control, while the payload governs the main parameters of the platform and is designed to perform the particular tasks for which the satellite was put in orbit.

18. The satellite sector is often categorised as a commercial segment, comprising those satellites (essentially communication satellites) sold to commercial operators, and an institutional segment (essentially consisting of observation and scientific satellites) essentially sold to space agencies such as NASA, the French Centre National d'Etudes Spatiales ("CNES") or the European Space Agency ("ESA"). Commercial operators usually source satellites based on proven designs, and procure these satellites through global competitive bidding procedures. Conversely, institutional customers often purchase specific (often tailor-made) satellites, and competition is usually restricted to domestic satellite prime contractors. More especially, in the case of ESA, procurement is subject to a geographic "juste retour" principle requiring a balance between the financial contribution of Member States to the ESA and the industrial share of business awarded to manufacturers of these Member States.

19. The parties submit that a distinction should be made between communication satellites and observation and scientific satellites, because they do not involve the same technological skills and do not address the same customers. This view has been widely endorsed by the results of the Commission enquiry, and is further confirmed by the fact that, for the reasons detailed above, the conditions of competition are different between the commercial and the institutional segments. It therefore appears that communication satellites on the one hand, and observation and scientific satellites on the other hand, belong to different product markets.

20. For the purpose of this case, it is not necessary to delineate the relevant product markets for navigation satellites, as this segment is still at an early development stage in Europe and because neither of the parties manufacture such satellites.

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6. See Case IV/M.1185-Alcatel/Thomson-CSF-SCS : footnote 5

21. Commercial communication satellites include either Geosynchronous Earth Orbit (GEO), medium earth orbit (MEO) or Low Earth Orbit (LEO) satellites. According to the parties, an important development in the communication segment is the introduction of multimedia communication satellites, particularly LEO satellite constellations (such as Iridium and Globalstar) financed and operated by private consortia. In an earlier decision[7], the Commission drew a distinction between GEO and MEO/LEO satellites on the basis of cost, function and other factors. However, for the purpose of this case, it is not necessary to further delineate the relevant product markets for commercial communications satellites as in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

22. Institutional customers (primarily the space agencies) essentially procure observation and scientific satellites, and space probes (scientific space vehicles for exploration of the solar system and beyond). These are usually tailor made products designed to perform specific missions, including *inter alia* meteorology, cartography, astronomy, study of solar winds, etc.

23. The parties submit that observation and scientific satellites and space probes (hereafter collectively designated under "institutional satellites") can be combined into a single product market. This view is supported by the fact that there appears to be substantial supply-side substitutability between these product categories, as European-based satellite prime contractors are usually active in all segments; and also by the fact that the conditions of competition within institutional markets are essentially similar, with all products being purchased by the same customers and through similar procurement processes. Conversely, there appears to emerge a specific commercial market for observation satellites, and, for the reasons indicated above, there appears to be no demand-side substitutability between the various product categories. However, for the purposes of this decision, it is not necessary to further delineate the relevant product markets for civil institutional satellites as, in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

24. Communication and observation satellites may be used for civil or military applications. It appears from the results of the Commission investigation that military satellites usually use the same platforms as civilian satellites, but require specific adaptations related to satellite integrity, data protection, and so on. There are also indications that the conditions of competition are different as between military and civil applications, since, in particular, governments may seek to restrict military expenditures to national suppliers. Consequently, the results of the Commission enquiry appear to be in favour of distinct product markets for military applications.

The equipment level

25. As was indicated in paragraph 17, a standard satellite essentially consists of a platform and a payload. The platform is the physical structure of the satellite, and typically ensures its stability and thermal control, maintains its orbit, and supplies electrical energy. The payload governs the main parameters of the platform and is

7. See Case IV/35.518 – Iridium, OJ L16, 18.1.1997, p. 87.

designed to perform the particular tasks for which the satellite was put in orbit. As a result, the same platform may be used for several applications, while the payload is usually specific to the mission to be carried out by the satellite.

26. Both the platform and the payload are in turn composed of a number of sub-systems (such as propulsion units or Attitude and Orbit Control Systems for the platform, or the main instruments for the payload) and equipment (such as earth and star sensors, solar generators, and antennae). It appears from the results of the Commission enquiry that each of these products might constitute a distinct product market.

27. In particular, there would appear to be a distinct product market for mechanical wheels, which are used for the stabilisation of the satellite attitude. This is because, although other equipment products (namely propulsion systems and magnetic wheels) may be used for the same purpose, none of them would appear to be substitutable for mechanical wheels.

28. First, although propulsion systems can be used to control the satellite attitude, their use implies consuming the fuel stored in the satellite. Given that limited quantities of fuels are available in the satellite, and that mechanical and magnetic wheels rely instead on the electricity produced in sufficient quantities by the solar generators, propulsion systems are in practice only adapted to very short lifetime systems (less than one year) and are therefore rarely used. Propulsion systems are also based on very different technologies and know-how from mechanical and magnetic wheels, and usually are not produced by the same manufacturers.

29. Secondly, although magnetic and mechanical wheels function on the same basic principles, it appears that magnetic wheels have substantially higher performance and costs than mechanical wheels, and therefore are essentially used for those applications (for example, observation satellites) which require very accurate attitude control. Magnetic and mechanical wheels also rely upon different technologies and know-how, and, in Europe, are often not produced by the same manufacturers.

30. Overall, in the light of the results of the Commission investigation, there appears to be a distinct product market for mechanical wheels.

RELEVANT GEOGRAPHIC MARKETS

Commercial communication satellites

31. In previous Commission decisions[8], the markets for communication satellites and communication satellite equipment were considered to be global, as commercial customers purchase these products without being subjected to geographic considerations. The parties submit that the conditions of competition in the communication satellite sector are sufficiently homogeneous for the geographic market to be considered worldwide, as customers request quotations from, and place orders with, a variety of suppliers in Europe and the USA.

8. See Case no IV/M.437 – Matra Marconi Space/British Aerospace Space Systems : footnote 5

32. As was stated in the *Aérospatiale/Matra*[9] decision of 28 April 1999, satellites, space components and sub-systems produced by USA-based companies are subject to an export licence arrangement managed by the Department of Defense in the USA. A recent change in the U.S.A International Traffic in Arms Regulation (ITAR) has changed this export licence system, transferring the export of commercial communication satellites and equipment back to the jurisdiction of the Department of State from the Department of Commerce. It is necessary to examine whether this change can affect the conditions of competition for commercial satellites.

33. Some of the third parties which replied to the Commission enquiry expressed some concerns that this amounted to a tougher export licence system, which might cause delays in the supply of satellite components from the USA and might therefore make it more risky and difficult for non-USA prime contractors to use such components. Others indicated that a tougher export licence system might also make it more difficult for European suppliers to offer certain components to USA customers, because the specifications of the products to be procured by USA-based prime contractors might not easily be made available to non-USA equipment suppliers.

34. However, on balance, it appears at this stage that such a change cannot be considered an effective barrier to trade between Europe and the USA (except for certain sensitive technologies), and most of the third parties which responded to the Commission enquiry indicated that they still considered the markets for communication satellites and components for communication satellites to be worldwide. It can therefore be concluded that the markets for communication satellites and components for communication satellites are worldwide.

Civil institutional satellites

35. As was indicated at paragraph 22, observation and scientific satellites and space probes are primarily purchased by space agencies, and competition is usually restricted to domestic satellite prime contractors.

36. Especially, in the case of ESA, procurement of satellites and equipment products is subject to a geographic "juste retour" principle enshrined in the ESA Convention requiring ESA (i) "to grant preference to the fullest extent possible to industry in all [ESA] Member States", and (ii) "to ensure that all [ESA] Member States participate in an equitable manner, having regard to their financial contribution". It follows that there appears to be a European market for observation and scientific satellites and space probes, as well as for the related equipment markets (including mechanical wheels).

37. There might also be national markets for observation and scientific satellites and space probes in those Member States where national space agencies apply similar procurement procedures at the prime contractor level. And there might also be a worldwide market for observation satellites sold to commercial operators or to institutional customers where a domestic producer does not exist (as in Asia), as these customers seem to obtain these systems through global competitive procurement. However, for the purposes of this decision, it is not necessary to further delineate these

9. See case no IV/M.1309 – Matra/Aérospatiale

geographic markets nor those for the satellite equipment products, because, in the case of national or worldwide markets, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

Military satellites

38. Finally, the parties submit that the geographic markets for military satellites are at least EEA-wide, owing, in particular, to a development of European bilateral and multilateral programmes (such as the military reconnaissance satellite Helios 1, involving France, Italy and Spain). Similarly, it appears that certain Member States procure military satellites through open competitive processes involving prime contractors in Europe and the United States : for instance, in communication satellites, Hughes seems to have been engaged in all competitions for the Spanish Hispasat I satellites, while Lockheed Martin participates in the competition for the supply of the UK Skynet 5B satellite.

39. However, on the other hand, certain Member States would appear to continue sourcing military satellites from domestic producers. In particular, the French MOD indicated that it procured military satellites through open competition between MMS and Alcatel Space Industries (Alcatel Space). Given that the conditions of competition would be restricted to domestic prime contractors, there appears still to be a national geographic market in France for the supply of military satellites.

40. As far as the equipment for military satellites is concerned, it appears that there is no strict "juste retour" rule (except for some specific and critical products). In particular, military satellites usually use the same platform as civilian satellites, and platform products procured by the prime contractor may be purchased from the same suppliers as for civilian applications. Therefore, depending on the equipment concerned, the geographic markets for military satellite equipment would appear to be either national or worldwide. However, for the purposes of this decision, it is not necessary to further delineate these geographic markets because, in all alternative geographic market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area

COMPETITIVE ASSESSMENT FOR COMMERCIAL COMMUNICATION SATELLITES

41. There are no overlaps between the parties' (and their parent companies') activities in communication satellites, whether at the prime contractor level (where only MMS is active) or at the equipment level (where all of Aérospatiale-Matra, MMS and DASA are active, but each sells different equipment). However, the operation will result in a vertical integration between MMS' activities at the prime contractor level, and DASA's activities at the equipment level.

42. Some third-party suppliers have indicated that the vertical aspects of the operation could lead to a foreclosure of competing equipment suppliers or competing prime contractors. However, at the prime contractor level, MMS' average market shares (in value) between 1994 and 1998 do not exceed [10-15%][*], and Astrium will remain

[*] *Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets.*

ubject to the competition from other large manufacturers, especially USA-based Hughes, Loral and Lockheed Martin; and, at the equipment level, DASA's average market shares during the 1995-1997 period do not exceed [20-30%]* worldwide on any satellite equipment market.

43. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position in communication satellites and equipment, as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

COMPETITIVE ASSESSMENT FOR INSTITUTIONAL SATELLITES

44. Both MMS and DASA are active as prime contractors for observation and scientific satellites and probes sold to national space agencies and ESA in Europe. Aérospatiale-Matra, MMS and DASA also produce certain equipment for those systems, including chemical thrusters (used in chemical propulsion systems), solar arrays (used in solar generators), mechanical wheels and earth and sun sensors.

45. The operation will therefore lead to a horizontal integration at the prime contractor level, and to a vertical integration between the prime contractor level and the parties' and Aérospatiale-Matra's activities at the equipment level.

Market characteristics

46. Observation and scientific satellites and space probes are usually designed, developed, produced and launched in the context of phased projects, where competition takes place at certain steps. Institutional satellites are therefore bidding markets, and competition in these markets is determined by the presence of bidders with a capacity to offer credible alternatives to the parties' products.

47. Another important characteristic of these markets is that, as was indicated at paragraph 36, ESA procurement is subject to a geographic "juste retour" principle. Broadly speaking, this principle requires ESA (i) preferably to procure from companies in ESA Member States, and ii) to strike a balance between the financial contribution of Member States of ESA and the industrial share of business awarded to manufacturers of those Member States.

48. Some flexibility is allowed for each individual programme. For instance, in the case of scientific satellites and probes, the "juste retour" principle is applied on the basis of three-year periods : this means that each satellite or mission within this period need not be entirely geographically balanced, as long as a minimum return is achieved at the end of each three-year period. Similarly, in the case of observation satellites, although "juste retour" targets are set for each mission, the actual return contained in the industrial offers can deviate by up to 20% from the initial targets.

49. However, overall, this flexibility is limited insofar as any imbalances will have to be offset and that, over a certain period of time, average national industrial shares will have to follow the "juste retour" contributions of the Member States concerned.

Market players

50. It is generally recognised that only four companies in Europe can compete for the prime contracting of large or complex satellites : MMS, DASA, Alcatel Space Industries (Alcatel Space, a French company whose capital is shared between Alcatel, a telecommunication equipment group, and Thomson-CSF, a defence and professional electronics group), and Alenia Aerospazio (Alenia, an Italian company belonging to the Finmeccanica group). For smaller projects, other possible prime contractors include Kayser-Threde, OHB Systems, and SSTL. At worldwide level, there remain a number of major competitors, such as the USA-based companies TRW, Lockheed, and Ball Aerospace.

Impact of the operation in possible national or worldwide markets

51. If there were national markets at prime contractor and/or equipment level for observation and scientific satellites in those Member States where national space agencies procure institutional satellites on a national basis, the operation would create no overlaps, as DASA and MMS are not active in the same Member States. For the same reasons, vertical integration arising from the operation would not raise competition concerns either.

52. Similarly, if there were world markets for the supply of observation satellites to commercial operators or to institutional customers where a domestic producer does not exist, the parties' market shares (in terms of volumes ordered) would not exceed [25-35%]*, and they would remain subject to the competition from other large satellite prime contractors including TRW [60-70%]*.

53. In the light of the above, as far as national or worldwide markets for institutional satellites are concerned, it appears that the notified operation does not create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

Impact of the operation at the prime contractor level in Europe

54. Given the small number of observation and scientific satellites and probes launched each year in Europe, market shares calculated over a short period of time may not adequately reflect the actual market positions of the competing prime contractors. For this reason, average market shares (in terms of value) were calculated over the 1994-1998 period.

55. On that basis, Astrium will clearly be the leading prime contractor for institutional satellites. In terms of value, Astrium's members accounted for [45-55%]* of sales of institutional satellites between 1994 and 1998 (MMS : [25-35%]*, and DASA : [15-25%]*), the next largest competitors being Alcatel Space [30-35%]* and Alenia Aerospazio [5-10%]*.

Alenia will be an effective competitor, albeit for a limited number of projects

56. It appears from the Commission investigation that there is a limit to the number of ESA projects where Alenia can act as a prime contractor. This is because the average Italian contribution (12%) to ESA institutional satellite programmes is much lower than the usual workshare (20-25%) attributed to a prime contractor, and because the

"juste retour" principle requires that the national industrial return be in line with the contribution to the relevant programme. Although actual returns (and thus Alenia's capacity to compete at the prime contractor level) may fluctuate from one mission to another and may deviate from the return targets, the overriding conclusion is that Alenia will have only limited capacity to compete at the prime contractor level for ESA institutional satellite missions.

57. However, it also appears that Alenia will still be able to compete successfully for a number of European institutional satellites. This is because Alenia will still be able to perform both major tasks (such as payload or platform integration) for ESA institutional satellite programmes, and also to act as a prime contractor for Italian programmes (placed under the aegis of the Italian space agency). These activities appear to be sufficient for Alenia to maintain its competitiveness and to stay in the market, as is further indicated by the fact that Alenia was awarded the prime contracting of the ESA science satellite Integral (to be launched in 2001).

Alcatel Space will be an effective competitor to Astrium for most projects

58. In the light of the above, competition will essentially be between Alcatel Space and Astrium, but Alenia will still be able to compete as a prime contractor for certain ESA programmes.

59. It also appears that Alcatel Space has the capacity to be an effective competitor to Astrium : first, Alcatel Space currently has the necessary core abilities to act as a prime contractor for every kind of satellite; and secondly, this capacity will not be restricted by the application of the "juste retour" principle, as the French contribution to ESA institutional satellites programmes (approximately 23%) is close to the average workshare performed by a prime contractor.

No possibility of raising rivals' costs through the "juste retour" rule

60. It has been argued that Astrium might be in a position to substantially raise its rivals' costs for ESA institutional programmes. This reasoning is based on the grounds (i) that in view of the "juste retour" principle, a certain proportion of each contract value will have to be carried out in Germany and the UK (together approximately 29%); (ii) that Astrium's position in these Member States would be such as to make other prime contractors dependent on contributions from Astrium for these German and UK returns; and (iii) that Astrium could raise its prices for these contributions, thereby either making its competitors' offers non-competitive or forcing its rivals' margins down to such an extent as to make these offers non-viable.

61. There is no indication that Astrium would be in a position to effectively raise Alenia's costs through this mechanism. This is so because, first, in those cases where Alenia would compete at the prime contractor level, its share (and thus the Italian return) would match or even exceed the workshare allocated to a prime contractor (20-25%). In those cases, therefore, the Italian contribution would exceed the average share of 12% to be reached overall. Given that the parties are not active in Italy and would depend on Alenia for most of the Italian return, this implies that the parties would depend on a contribution from Alenia for most of the 20-25%. On the other hand, Alenia would be able to source the French return from Alcatel Space; and Alenia would also be able to source a certain proportion of the UK and German contributions from certain third-party suppliers in those Member States. Altogether,

Alenia would therefore not depend upon Astrium for more than 20% of the total contract value. It follows that, in such cases, Astrium would depend more on Alenia than Alenia would depend on Astrium, and Astrium would therefore not be in a position to raise Alenia's costs.

62. The situation might be different for Alcatel Space. This is because Alcatel Space will have to source a certain share of the German and UK returns from Astrium, while Astrium will subject to the same constraints to a much lesser extent, since it can source the French return internally (through the former MMS-France). However, overall, the argument that Astrium could substantially raise Alcatel Space's costs has to be rejected in this present case.

63. First, it should be noted that, in view of the "juste retour" rule and the substantial presence of Alcatel Space in certain ESA Member States (such as Belgium, Spain, Denmark or Norway), Astrium will also have to seek a contribution from Alcatel Space. This will also make Astrium dependent on Alcatel Space for a certain share of its contracts, and will therefore reduce the scope for Astrium to increase its rivals' costs (as Alcatel Space could also raise Astrium's costs, albeit to a lesser extent).

64. Secondly, although institutional satellites are often tailor-made contracts where overall prices may be difficult to assess, it appears that ESA has sufficient experience and control over the breakdown of prices, as well as cost assessment models, to detect any substantial price rise. This capacity is further enhanced by the fact that, as was indicated in paragraph 46, ESA missions are carried out in the context of phased projects, where price estimates are provided at successive steps of the process. In such a case, ESA would also have sufficient countervailing buying power to be in a position to force prices down. This would further restrict Astrium's capacity to raise its prices for the German and UK contributions and thus raise Alcatel Space's costs.

65. Overall, it appears from calculations based upon the data provided in the course of the Commission investigation that, were Astrium in a capacity to raise Alcatel Space's costs, any possible rise would have limited effects (about 2-3% of the total contract value). This would be unlikely to substantially undermine Alcatel Space's competitiveness, and, given that a prime contractor's margin usually reaches […]* of the total contract value, a price rise of this type could be compensated by Alcatel Space. Consequently, it appears that Astrium will not be in a position to substantially raise Alcatel Space's costs.

No possibility of foreclosing the markets to other prime contractors

66. It has also been argued that Astrium would be a major supplier of certain equipment products (such as solar array networks, mechanical wheels, chemical thrusters, cryostats). To the extent that other prime contractors need to source the equipment products from the open market, it is therefore necessary to examine whether, after the operation, Astrium would be in a position to shut out those competitors.

67. It should be noted that Astrium will not be in a position to restrict supplies to competing prime contractors : given that the selection of suppliers often takes place after that of the prime contractor, Astrium would not appear to have any incentives to do so, as any restriction of supply would have no repercussion on the selection of the prime contractor and would instead reduce Astrium's sales; and, in any event, ESA would probably detect and remedy any restriction of supplies on the part of Astrium.

It follows that the main potential effect of the transaction would concern Astrium's capacity to raise its rivals' costs through higher equipment prices.

68. Firstly, however, it appears that most of the equipment products concerned (such as solar array networks, chemical thrusters, cryostats, and mechanical wheels[10]) are only produced within Astrium by DASA or MMS or Aérospatiale-Matra). Given that both MMS and DASA are also already active at the prime contractor level, the operation will not materially affect the conditions of competition for these equipment products.

69. Secondly, some of the products concerned (such as cryostats) are actually not standard equipment products to be fitted in all satellites, but instead are highly specific products resulting from ESA technological R&D programmes. For these products, it appears that Astrium will not be in a position to shut out competing prime contractors, as ESA may either require that the results of these technological R&D programmes be made public to all tenderers or decide to purchase direct the product concerned and deliver it to the prime contractor selected.

70. Finally, there is no indication that Astrium could shut out other prime contractors through any product where there would be no alternative competitive supplier to Astrium in Europe. This is because these products are standard equipment products where usual price conditions already prevail, and where the parties could not substantially raise their prices without ESA detecting and remedying the behaviour. And this is also because, in any event, those products represent only a minor share of the value of a satellite.

71. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position in institutional satellites at the prime contractor level in Europe as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

Impact of the operation at the equipment level in Europe

72. As was indicated at paragraph 44, MMS, DASA and Aérospatiale-Matra manufacture some equipment products for institutional satellites (such as solar array networks, mechanical wheels, chemical thrusters, or cryostats). The operation will create no overlaps at the equipment level, as the parties and Aérospatiale-Matra do not supply similar products. However, the operation will result in a vertical integration between the parties' activities on the upstream markets for satellite equipment, and their activities on the downstream markets for institutional satellites.

73. It is therefore necessary to examine the impact of the notified transaction at the equipment level. In particular, some third party suppliers have voiced concerns that the merged entity (both a major customer and a competitor to them) would be in a position to weaken their competitive position, for instance by favouring in-house suppliers for those contracts where Astrium would act as a prime contractor, and/or by imposing tougher contractual conditions on third party suppliers.

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10. See discussion in paragraphs 78 to 83 below

Equipment other than mechanical wheels

74. These concerns may potentially relate to all equipment which one of the parties or their parent companies currently produces and which the other party (or both parties) also purchases from independent suppliers. Such equipment includes mechanical wheels, solar generators, earth and sun sensors, chemical propulsion equipment (apogee boost motors, tanks, thrusters), and so on. However, except for mechanical wheels, there is no indication that the operation could create a dominant position by the parties.

75. First, any attempt by Astrium to favour in-house suppliers would be seriously limited by the fact that, according to ESA procurement rules, the selection of suppliers usually follows an open competition monitored by ESA. Any favouring of in-house suppliers would be all the more difficult as, should the prime contractor wish to bid for any equipment, the selection of the supplier of the equipment concerned will usually be taken away from the prime contractor and instead is placed under the responsibility of an evaluation panel appointed by ESA.

76. Secondly, most of the products concerned are also supplied by companies outside France, Germany and the UK (where Astrium operates). Given the application of the "juste retour" rule governing ESA procurement, which demands that a certain share of the contract value be placed with suppliers within all participating countries, Astrium's capacity to favour in-house suppliers or impose unjustified contractual conditions would be seriously limited for the equipment concerned.

77. Finally, it appears that, for most of the products concerned, certain suppliers currently do not primarily sell to MMS and DASA. These suppliers would therefore remain competitive even if Astrium managed to favour in-house suppliers. It is even likely that the competitive stance of the suppliers will be further enhanced after the operation, since competing prime contractors (such as Alcatel Space and Alenia) will probably prefer to procure from independent suppliers.

78. In the light of the above, and taking into account the combined effect of the three elements as described above, it appears that the notified operation does not create or strengthen a dominant position in the European markets for satellite equipment apart from mechanical wheels, as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

Mechanical wheels

79. At European level, only two producers of mechanical wheels can be found: MMS, which does not sell mechanical wheels but uses them for its own purposes, and Teldix, a German company which sells to most European prime contractors (as well as customers outside Europe).

80. Teldix achieves a substantial share of its sales through the parties, and indicated that economies of scale were important in mechanical wheels. Consequently, it appears that, should the merged entity decide to restrict purchases to Teldix and instead source from MMS, Teldix's competitiveness would be seriously undermined.

81. It also appears that Teldix would not be substantially protected by the ESA procurement rules (as most of Teldix's sales are for communication satellites, where

ESA rules do not apply), nor by the application of the "juste retour" principle (Teldix being a German company).

82. Consequently, the Commission identified serious risks that, after the operation, the parties could substantially undermine the competitiveness of their only competitor in the field of mechanical wheels. This would lead to the creation of a dominant position in the sales of mechanical wheels in Europe, as a result of which effective competition would be significantly impeded in the EEA.

83. When these concerns were communicated to the parties, the parties offered a remedy which is laid out in detail in the Annex. The remedy consists of MMS's divesting itself of its mechanical wheels business (including tangible assets, supply and sales contracts, intellectual property rights and personnel).

84. This remedy will eliminate MMS's activities in mechanical wheels. Consequently, the undertaking, if implemented, will remove the Commission's concerns that the proposed concentration would create a dominant position in the market for mechanical wheels in Europe.

COMPETITIVE ASSESSMENT FOR MILITARY SATELLITES AND EQUIPMENT

85. Military satellites usually perform similar missions to commercial or institutional satellites. They usually use the same platforms as civilian satellites, but require specific adaptations related to satellite integrity, data protection, etc. Given this technical proximity, the low sales volumes of military satellites and the presence of substantial economies of scale in the space sector, it appears that being competitive at the prime contractor level for military satellites usually requires substantial activities in the equivalent civil applications. This is especially so in military communication satellites, which are usually based on the same platforms as civil products, and where, due to the use of "standardised" solutions, economies of scale are particularly important.

86. For the same reasons as those indicated above, there is no indication that the operation could have adverse consequences on competition in military observation and scientific satellites or on the open market for military communication satellites. There is also no indication that the operation could create or strengthen a dominant position at the equipment level. First, given that MMS and DASA do not operate in the same Member States, the operation will not materially alter the conditions of competition for those products (essentially critical equipment products) where the geographic market is national. Secondly, for those equipment products where the geographic market is worldwide, the parties' market shares do not exceed [20-30%]*.

87. However, the Commission has identified serious risks that the operation could create or strengthen a dominant position by MMS on the French market for military communication satellites, where procurement is based on open competition between MMS and Alcatel Space at the prime contractor level.

88. In that market, Alcatel Space's current designs are based on a standard platform called Spacebus 3000. DASA supplies a number of subsystems and equipment products for this platform, and in particular appears to be the sole source of supply for

on-board management systems[11], unified propulsion systems[12] and chemical thrusters[13].

89. It appears from the Commission investigation that finding an alternative source of supply for the above products could be difficult for Alcatel Space (especially in on-board management systems, which are not usually sold on the open market but which are usually designed directly by the prime contractor as a part of its system activities), and/or would involve significant additional costs and delays. In the short term, Alcatel Space is therefore dependent upon supplies by DASA for its military communication satellites business.

90. After the operation, the merged entity would therefore become both a supplier and a competitor to Alcatel Space. This would provide incentives for DASA to restrict, raise the price or reduce the quality of its supplies to Alcatel Space, thereby weakening its competitive position and potentially foreclosing the prime contracting level to Alcatel Space. Given that Alcatel Space is MMS' only competitor at the prime contractor level in France, there would be no alternative left to Astrium after the operation. There are strong indications that this would lead to the creation of a dominant position in military communication satellites in France, as a result of which effective competition would be significantly impeded in that Member State.

91. When these concerns were communicated to the parties, the parties offered a remedy which laid out in detail in the Annex. The remedy consists of DASA's granting non-exclusive licences for the manufacture and sale of on-board management systems, unified propulsion systems and chemical thrusters.

92. This remedy will permit the creation of an alternative source of supply for the products concerned, and will avoid the possible adverse effects of the transaction. Consequently, this undertaking, if implemented, will remove the Commission's concerns that the proposed concentration would create a dominant position in the French market for military communication satellites.

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11. The on-board management system includes software and hardware for processing information concerning the satellite Attitude and Orbit Control System. It is an important part of the platform, and is usually considered to be part of the core technologies necessary for the prime contractor to keep in order to remain competitive.

12. The unified propulsion systems is the propulsion sub-system of a satellite. It moves the satellite into orbit and is used to correct its attitude and orbit during its lifetime. The propulsion sub-system is in turn composed of a number of equipment products, including motors, thrusters and tanks.

13. Chemical thrusters are a part of the propulsion subsystem.

B. SPACE INFRASTRUCTURE

RELEVANT PRODUCT MARKETS

93. Space infrastructure comprises manned and unmanned space systems which are used several times for different mission purposes, mainly in the field of research under space conditions (microgravity, vacuum, radiation) but also for in-orbit applied technology and tests. Unlike satellites, space infrastructure systems are not designed for one specific mission but for several successive missions with the same basic systems, and in some cases (such as manned space stations) must allow for a human operating presence. Given that space infrastructure is mainly used for scientific purposes and rarely has direct commercial applications, customers for space infrastructure are essentially space agencies such as NASA, ESA or European national agencies.

94. Space infrastructure can be broken down into five main product categories: (i) unmanned reusable/retrievable platforms (such as capsules for microgravity R&D); (ii) manned or man-tended laboratories or habitats (such as space stations); (iii) servicing systems (such as systems used to supply space stations with equipment or consumables); (iv) payload facilities (such as experimental facilities used for research activities under space conditions and used within a space system); and (v) outpost infrastructure (such as infrastructure elements for manned planetary and interplanetary explorations, such as habitats, rovers, and so on.).

95. The parties submit that space infrastructure belongs to product markets which have to be distinguished from satellites, as space infrastructure, unlike satellites, is designed for repeated use, and therefore must allow for maintenance or for special security requirements in the case of manned space systems. This view has been widely confirmed by the results of the Commission enquiry.

96. The parties also submit that there is no need to establish a distinction between the above product categories, since all market players are able to act as prime contractors in all of these segments.

97. However, while it appears that the major prime contractors (e.g. MMS, DASA and Alenia) have the capacity to be active in all product categories, the results of the Commission investigation suggest that a distinction should be made between the smaller product categories (unmanned reusable/retrievable platforms and payload facilities, with a total contract value usually below EUR 50 million) and the larger product categories (especially manned or man-tended laboratories or habitats, with a contract value often exceeding EUR 500 million). This is so because prime contractors active in the smaller product categories (for example, Kayser-Threde, Carlo Gavazzi or OHB system) may not have the capabilities or the financial resources necessary for the production of larger systems, and usually concentrate their prime contractor business in the smaller product categories. This is also because the conditions of competition seem to be different between larger products and smaller products: in particular, while contractors of smaller infrastructure products appear to be selected through open competitive procurement, the selection of prime contractors of larger elements appears to be largely based on national industrial policy considerations.

98. However, for the purposes of this decision, it is not necessary to further delineate the relevant product markets for space infrastructure, since, in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

RELEVANT GEOGRAPHIC MARKETS

99. As was indicated in paragraph 93, the customers for space infrastructure are space agencies, especially ESA. The procurement of space infrastructure systems and equipment is therefore subject to the "juste retour" principle, and competition between suppliers of space infrastructure systems is organised on the basis of European-wide programs.

100. Consequently, it appears that the markets for space infrastructure are European. However, for the purpose of this case, it is not necessary to further delineate the relevant geographic markets for space infrastructure because, even if the geographic markets were national, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

COMPETITIVE ASSESSMENT

101. Space infrastructure systems usually concern tailor made products developed and manufactured for highly specific applications through national or international programmes procured by space agencies. In practice, all present and approved future space infrastructure programmes by ESA are related to the development of the International Space Station (ISS) by the United States, Russia, Europe, Japan, Canada and Brazil. In particular, ESA will procure the Columbus Orbital Facility (a man-tended laboratory) for the ISS. The first parts of the ISS were launched and assembled in December 1998, and the station is expected to be completed by 2005.

102. Space infrastructure markets share a number of common features with institutional satellite markets. First, as space infrastructure products are developed and produced through phased projects procured by space agencies, these are bidding markets, and competition is determined by the presence of bidders with a capacity to offer credible alternatives to the parties' products. Secondly, like institutional satellites, space infrastructure programmes are subject to the geographic "juste retour" rule.

103. However, space infrastructure markets may also differ from those for institutional satellites in a number of ways. Firstly, it appears that the application of the "juste retour" principle is less flexible than in institutional satellites, and that national contributions may be much higher than in institutional satellites (up to 59% for the Netherlands' contribution to the European Robotic Arm). Overall, this means that the possibility for prime contractors in several Member Sates to compete is more limited than in institutional satellites. This is further confirmed by the fact that, according to the results of the Commission investigation, the role of competitive procurement in the ISS development programme was actually limited to feasibility studies, smaller infrastructure elements, and services.

104. Furthermore, it also appears that space infrastructure programmes (especially larger products such as manned habitats) are much fewer and larger (up to EUR 700 millions) than institutional satellite programmes. The space infrastructure products to be manufactured or developed within the foreseeable future will therefore result from

the few existing or upcoming ESA programmes, and the competitive impact of the transaction therefore needs to be assessed in the context of these programmes.

Larger space infrastructure systems

105. MMS, Aérospatiale-Matra and DASA supply most of the major European elements related to the ISS (for instance, DASA is the overall prime contractor for the Columbus Orbital Facility). For these reasons, the parties and Aérospatiale-Matra collectively accounted for [60-70%]* of the value of European space infrastructure programmes during the period from 1996 to 1998. Other prime contractors are Alenia (approximately 30%), also capable of offering products in all categories, and, to a lesser extent, Kayser Threde, OHB Systems, Fokker Space and Carlo Gavazzi for smaller products (mainly payload facilities).

106. However, in the first place, it appears that the role of competitive procurement in the ISS development programme was actually limited to feasibility studies, smaller infrastructure elements, and services. In particular, for the larger systems, the selection of the prime contractors seems to have been based on national policy considerations and the relation of new to previous work rather than on open competition. In that context, it seems that the parties' and Aérospatiale-Matra's combined shares of sales essentially reflect the level of the French and German contributions to the ISS development programme [65-75%]*, rather than highlight past competitive success.

107. In the second place, the operation does not appear to have any adverse consequences on existing programmes for larger space infrastructure products, where the prime contractors and suppliers have already been selected and where the contractual conditions have already been defined. The competitive impact of the operation therefore needs to be assessed in the context of future products, to be developed through existing development programmes and forthcoming development programmes within the foreseeable future.

108. In the third place, the operation will not affect the conditions of competition at the prime contractor level for forthcoming European programmes, because, according to ESA, the distribution of prime contractor responsibilities for these programmes is already predetermined. The larger space infrastructure programmes likely to be ordered until 2005 concern the exploitation of the ISS and the development of a crew return vehicle. It appears that a consortium has been formed for the ISS exploitation programme between the major ISS development prime contractors (Aérospatiale-Matra, DASA, MMS and Alenia), and that other parts of these programmes are in effect a continuation of previous programmes.

109. Finally, the operation would not seem to reduce ESA's choice for other possible programmes. This is because, according to past practice, the selection of the nationality of prime contractors will probably be based on national policy considerations (and Aérospatiale-Matra and MMS on the one hand, and DASA on the other hand, are not incorporated in the same Member States) and the relation of new to previous work.

110. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position on the markets for larger space infrastructure systems

as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

Smaller space infrastructure systems

111. As was indicated at paragraph 97, the conditions of competition for smaller space infrastructure systems appear to be different from those for larger space infrastructure products, and in particular seem to rely on open competition to a larger extent. Within these systems, the operation will create overlaps in payload facilities, where, according to the data provided by the parties, the parties and Aérospatiale-Matra collectively accounted for [35-45%]* (in terms of volume) and [55-65%]* (in terms of value) of ESA development contracts awarded since 1996.

112. However, first, the operation does not appear to have an adverse impact on existing programmes, as the industrial organisation and the contractual conditions for these programmes have already been defined.

113. Secondly, for those future products where the application of the "juste retour" rule allows for some competition to take place, the parties will remain subject to competitive bids from other prime contractors, including Alenia ([20-25%]* of contract volume, and [20-25%]* of contract value) as well as Carlo Gavazzi, OHB and Kayser-Threde. All of those companies appear to have sufficient know-how and capabilities to bid as prime contractors for payload facilities, and all of them have recently been awarded prime contracts in this field.

114. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position on the markets for smaller space infrastructure systems as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

C. LAUNCHERS AND LAUNCH SERVICES

RELEVANT PRODUCT MARKETS

Launch services

115. Space systems are carried into stable orbit through rocket propelled multiple-stage launchers using liquid or solid propulsion systems. In general, two types of launchers can be distinguished: expendable launch vehicles (ELVs) which are consumed during the launch process, and partially or fully reusable launchers (RLVs). ELVs may also be categorised into three product groups, depending on the payload mass that the launcher is able to deliver in orbit : small launchers can place up to 2000 kg of payload into LEO ; medium launchers can place payloads with a weight between 2000 kg and 6000 kg into LEO and MEO ; and heavy lift launchers can place payloads of more than 4000 kg into GEO or launch several small satellites into LEO.

116. In the *Astrolink* decision[14] (of 25 June 1999), the Commission concluded that commercial launches had to be distinguished from captive military or other governmental launches, which are ordinarily not available for open competition, even though the vehicles used are similar. The Commission also indicated that the markets for commercial launch services were likely to correspond to worldwide markets, as commercial launch awards are granted through global bidding processes.

117. Some of the third parties which replied to the Commission enquiry submitted that the launch services performed respectively by the small launchers, the medium launchers and the large launchers constituted distinct product markets. In particular, they stated that launch services for GEO satellites required very powerful launchers, with a weight between 500 and 800 tonnes.

118. However, for the purposes of this case, it is not necessary to delineate further the relevant product markets for launch services, as in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

Launcher systems, sub-systems and equipment

119. Aérospatiale-Matra, MMS and DASA are active in the supply of systems (such as stages), sub-systems (such as propulsion equipment, attitude control products, and so on) and equipment products for the Ariane launchers. The parties submit that there is no market for these systems or subsystems, on the grounds that these products are designed specifically for Ariane, and that therefore there is no open market for them.

120. Ariane launchers are developed through international (government-funded) programmes between certain European states (the Ariane Member States). After the initial R&D and feasibility studies, these programmes essentially consist of a development phase and of a subsequent production and launch phase where Ariane rockets based on the qualified design provide launch services. It was decided that the

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14. See case IV/M.1564 - Astrolink

development phase for these programmes would be placed under the responsibility of ESA, which, for past programmes, has delegated to the CNES the role of design authority; and it was also decided that the Ariane production phase as well as the marketing and launch of the Ariane launchers would be entrusted to Arianespace S.A., a limited private company under French law.

121. Suppliers of systems and sub-systems for Ariane launchers are usually selected during the development phase, and generally remain unchanged for the production phase. Given that the development phase is placed under the responsibility of ESA, the procurement process is therefore governed by the "juste retour" principle, and the suppliers are selected at European level.

122. It appears from the Commission enquiry that, in view of the specific character and the importance of the know-how and investments for critical launcher components (such as engines), system integrators and suppliers of certain sub-systems are not selected through competitive tendering procedures, but on the basis of expertise, know-how, capabilities, and in the light of the financial contributions of the Ariane Member States. This suggests that there might be no open market at the system level or for certain critical sub-systems. However, it also appears that competition may take place at the equipment level as well as for certain sub-systems. It follows that each of the products procured through competitive bidding procedures would appear to belong to relevant product markets.

123. However, for the purposes of this decision, it is not necessary to further delineate the relevant product markets for systems and sub-systems for the Ariane launchers, since, in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

RELEVANT GEOGRAPHIC MARKETS

Launch services

124. The parties submit that the markets for commercial launch services are worldwide, because competition for launch services occurs on a worldwide scale, with customers able to choose between launchers operated by institutional entities (such as Arianespace) or private companies. This conclusion has been broadly confirmed by the results of the Commission enquiry, which indicate that the supply of commercial launch services is carried out on a global basis : for instance, more than two thirds of Arianespace's commercial sales seem to be made for customers outside the EEA. Consequently, the markets for commercial launch services appear to be worldwide.

Launcher systems, sub-systems and equipment

125. As was explained in paragraph 121, the selection of suppliers of sub-systems and equipment for Ariane launchers usually takes place during the development phase, and is governed by "juste retour" principle. It therefore appears that competition for these products takes place at European level.

COMPETITIVE ASSESSMENT

Launch services

126. Aérospatiale-Matra, MMS and DASA are active in launch services through their interests in Arianespace Participations SA (which controls Arianespace SA, the company responsible for the Ariane launcher production phase, and for the marketing and launch of the Ariane launcher family). Furthermore, DASA has joint control over Eurockot Launch Service GmbH, a company created in 1998 to procure launch services for LEO satellites with Russian Rockot small launchers. Finally, Aérospatiale-Matra has joint control over Vega Spazio SpA, a company intended to develop a small launcher in order to complement the Arianespace product range, and holds an equity stake in Starsem, a company created for the commercialisation of launch services by Russian Soyuz medium launchers for LEO and MEO satellites.

127. However, there is no indication that the parties and their parent companies could have joint control over Arianespace. […]*.

128. In that context, if the launch services performed by each of the small launchers, medium launchers and heavy lift launchers constituted distinct product markets, the operation would only create overlaps in small launchers, where Eurockot Launch Service GmbH and Vega Spazio are active. Furthermore, in that sector, Eurockot Launch Service GmbH has just recently started its operations, while Vega Spazio has not developed any launcher yet and seems to be jeopardised after the CNES, a major contributor, recently announced that it was no longer participating in that project.

129. Similarly, if there were only one product market for launch services, the operation would not create a dominant position, as Eurockot's market share (in terms of orders) would be [<10%]* and Starsem's share would be approximately [5-15%]*.

130. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position in the markets for launch services as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

Launcher systems, sub-systems and equipment

131. It appears that two launchers have been developed in Europe for the last 25 years : the Ariane 1 to 4 family (first launched in 1979), and the Ariane 5 launcher (which entered into commercial operations in December 1999).

132. In addition to their equity stake in the Arianespace group, the parties and their parent companies are engaged in a number of activities for the Ariane launchers. First, at prime contractor level, Aérospatiale-Matra is the "architecte industriel" of the Ariane launchers, and especially provides some technical assistance to the CNES (the design authority for the development phase of the Ariane launchers) or Arianespace (responsible for the production, marketing and launch of the Ariane launchers). Secondly, at system level, Aérospatiale-Matra, MMS and DASA are responsible for the integration of most stages of the current Ariane 4 and Ariane 5 launchers. Finally, at sub-system level, Aérospatiale-Matra, MMS and DASA each supplies certain equipment for the Ariane 4 and Ariane 5 launchers.

133. As was explained at paragraph 120, Ariane launchers are developed and produced through international (government-funded) programmes, where suppliers are selected during the development phase and usually remain unchanged for the subsequent production and launch phase. The operation will not have any adverse impact on existing launchers, as suppliers have already been selected during the development phase and the production contracts already exist. The competitive impact of the operation therefore needs to be assessed in the context of future products, to be developed through existing development programmes and forthcoming development programmes within the foreseeable future.

134. As far as existing development programmes are concerned, it appears that the only activity expected in the foreseeable future relates to the recent "Ariane-plus" programme, intended to increase the payload capacity of the Ariane 5 launcher and expected to last until 2006. This programme mainly involves the development of a new cryogenic upper stage (called ESC) for Ariane 5 and the development of a new cryogenic engine (called VINCI) for this stage.

135. It appears that the main responsibilities for this programme (including the selection of the ESC integrator and the VINCI supplier) have already been defined. However, given that some sub-systems and equipment product suppliers remain to be selected, that DASA is the ESC integrator, and that Aérospatiale-Matra is involved in some of the competitions still taking place for the selection of sub-system and equipment suppliers (especially the liquid oxygen tank for the new upper stage and the intertank structure), it is necessary to examine whether the operation could lead to the selection by DASA of Aérospatiale-Matra to the detriment of other competing suppliers and whether this selection could create or strengthen a dominant position.

136. However, there appear to be very limited opportunities for DASA to favour Aérospatiale-Matra. This is because the main opportunities open to DASA for such distortion would concern the definition of product specifications and evaluation criteria favouring in-house suppliers, which is no longer possible as these items have already been defined. Moreover, it seems to be difficult for DASA either to change these criteria or specifications or alter the results of the evaluation, because the selection of equipment suppliers in the development phase is subject to the approval of the CNES, which appears to have sufficient expertise to detect such possible distortions.

137. Finally, in any event (and even for other possible launcher future development programmes), suppliers are subject to a very limited number of sophisticated customers (at present, only CNES and Arianespace for the Ariane launchers), and there appears to be effective competition in the field of launch services, which is confirmed by the strong fluctuations of market shares and by the apparent steep reduction in the unitary launch prices. In that context, CNES and Arianespace appear to have sufficient countervailing buying power to constrain the competitive behaviour of their suppliers, as well as having strong incentives to use this power (which is further confirmed by the current efforts undertaken so as to increase the performance and reduce the costs of the Ariane 5 launcher), and there appears to be no possibility for suppliers either to raise prices or to impose unacceptable contractual conditions.

138. Within the foreseeable future, there might also be some possibilities for the development of an additional launcher in Europe, complementary to the Ariane

family. To date, the most serious opportunity for such a programme is Vega Spazio, a small launcher. Aérospatiale-Matra is active in this programme through its joint control (together with Fiat Avio) of Vega Spazio SpA, the company intended to develop this launcher. However, as was explained at paragraph 128, the Vega Spazio programme is seriously jeopardised as the CNES, a major contributor, has recently announced that it was no longer participating in the project. Furthermore, there is no indication that the operation could have any substantial effect on this programme, as the procurement and selection of suppliers for any new launcher would very likely be subject to "juste retour" considerations, and as neither France nor Germany are participating in this programme any longer. Finally, in any event, the above considerations relating to the presence of effective competition on the downstream markets for launch services also seem to apply to small launchers and would therefore probably seriously limit any exercise of market power by an equipment supplier or system integrator.

139. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position in launcher systems, sub-systems and equipment as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

D. GROUND SEGMENT

RELEVANT PRODUCT MARKETS

140. Ground systems include all the specific ground facilities to support the operations of the space segment. In the case of space infrastructure, such functions include logistics, maintenance and repair, payload integration and operation and space infrastructure control; and, in the case of satellites, they can cover either the command and control of spacecraft, or alternatively the provision of an interface (namely transmission of voice and data signals) with orbiting satellites or vehicles.

141. Although ground systems may be purchased together with the space segment, especially in the context of turn-key offers, ground systems and satellites may also be sold separately : for instance, customers already operating several satellites will often not purchase new ground systems, but simply upgrade existing stations or replace obsolete equipment. Similarly, customers procuring both the space segment and the ground segment may select different suppliers for each segment. Consequently, it appears that the ground segment and the space segment belong to different product markets.

142. The parties submit that a distinction should be made between space infrastructure ground systems and satellite ground systems, because the space infrastructure ground segment has to meet highly specific requirements in terms of communications and safety (especially in the case of systems intended to operation in connection with a man-tended environment), and therefore generally consists of larger systems with specific functionality, application software, user interfaces and equipment.

143. In accordance with previous Commission decisions[15], the parties also submit that ground stations fall into two categories: first, those for the command and control of spacecraft and secondly, those providing an interface (transmission of voice and data signals) with the space segment.

144. These definitions have been broadly confirmed by the results of the Commission investigation. However, for the purposes of this decision, it is not necessary to further delineate the relevant product markets for the ground segment, as in all alternative market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

RELEVANT GEOGRAPHIC MARKETS

145. The parties state that ground systems for commercial communication satellites are supplied to satellite prime contractors or satellite operators by European and US suppliers, and therefore submit that the market for ground systems for commercial communication satellites is worldwide. The parties also submit that, in view of the "juste retour" principle governing the supply of space infrastructure or observation and scientific satellites to ESA, the markets for ground systems for space infrastructure or observation and scientific satellites are usually EEA-wide. Finally, the parties submit

15. See, e.g., cases IV/M.496-Marconi-Finmeccanica (OJC 253, 10.9.1994, p.10) or IV/M.1185-Alcatel/Thomson-CSF-SCS (OJC272, 1.9.1998, p.5)

that, in the military sector, ground systems are usually procured on a restricted geographic basis, which may be national or multi-national for certain programmes.

146. This is in keeping with previous Commission decisions[16], where it was found that the main categories of customers for civil ground systems are the national or international space agencies and organisations, as well as private operators, and the main customers for military ground stations are national Ministries of Defence (MODs). While space agencies and organisations, and military customers, usually procure ground systems from domestic prime contractors, commercial operators tend to source their systems on a worldwide basis.

COMPETITIVE ASSESSMENT

147. Satellite control systems consist of two major sub-systems, a satellite control centre (generally located at the satellite operator's premises, and including software, computers and command interfaces), and one or more control stations (providing the link to the satellite, and especially including radiofrequency equipment).

148. In that sector, MMS is active at the prime contractor level, where it supplies integrated control systems, as well as at the sub-system level, where it offers control centres to be included within communication satellite control systems. DASA is also active at the sub-system level, where it manufactures the radiofrequency part of communication satellite control stations through its interest in Nortel DASA Network Systems, a joint venture with Nortel Networks Corporation.

149. The operation therefore leads to a vertical integration between MMS's activities in the supply of control systems for communication satellites and DASA's activities in the radiofrequency part of control system. However, competition for the supply of communication satellites (and therefore ground segments for communication satellites supplied in the context of turn-key offers) takes place at worldwide level, and MMS's share of integrated ground systems and DASA's share of the radiofrequency part each remains below [5-15%]*.

150. The operation may also lead to a conglomerate integration at the sub-system level between MMS's activities in control centres and DASA's activities in the radiofrequency part of control systems. However, on none of these segments does the parties' market shares exceed [5-15%]*, whether at European or worldwide level.

151. As far as the markets for satellite users systems are concerned, the operation will create some overlaps between MMS and Nortel DASA Network Systems in VSATs (which provide the interface to the final subscriber) and mobile terminals (which provide the same service as VSATs but are designed for mobile use). However, on none of these markets does these companies' combined shares of sales exceed [5-15%]*, whether at worldwide or European level.

152. In the light of the above, it appears that the notified operation does not create or strengthen a dominant position on the markets for the satellite ground segment as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

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16. See, e.g. case IV/M.1185-Alcatel/Thomson-CSF-SCS : footnote 16

V. COMMITMENTS AND ASSESSMENT

153. On 24 January 2000, the parties offered certain commitments to remove the competition concerns which the Commission had identified. On 25 February 2000, the parties submitted amended commitments taking into account certain adjustments required by the Commission in view of, in particular, the results of the market test. The full text of the commitments is annexed to this Decision.

154. As described at paragraphs 84 and 92, those commitments, if implemented, will remove the Commission's concerns that the proposed concentration would create a dominant position in the French market for military communication satellites and in the European market for mechanical wheels.

VI. ANCILLARY RESTRAINTS

155. The parties and their ultimate parent companies (Lagardère, Aérospatiale Matra, DaimlerChrysler and BAe) have entered into a non-competition agreement whereby they will not carry on certain activities (such as the manufacture of satellites, space infrastructure and certain satellite components and sub systems) performed by Astrium. This clause applies for so long as the companies concerned hold a share in the Astrium group or any of its parent companies.

156. This restriction underlines the lasting withdrawal of the parties and their parent companies from the scope of business exclusively assigned to Astrium. However, the scope of this agreement appears to exceed what is directly related and necessary to the implementation of the notified concentration, since the non-competition agreement will remain valid even when the parties or their parent companies have only non-controlling interests in Astrium or its parent companies, and therefore in cases where these companies will not have any opportunity to exercise a decisive influence over Astrium.

157. This non-compete agreement is directly related and necessary to the implementation of the notified concentration and therefore covered by this decision only to the extent that the parties or their parent companies have a controlling interest in Astrium or its parent companies.

VII. CONCLUSION

158. The Commission concludes that the undertakings given by the Parties are sufficient to remove the competition concerns identified by the Commission during its investigation of the operation and described above.

159. According to Article 8(2) of the Merger Regulation, and on condition that the commitments described above and annexed to this Decision are adhered to, the operation is, therefore, to be declared compatible with the common market and the functioning of the EEA agreement, since it does not create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the EEA or in a substantial part of it.

HAS ADOPTED THIS DECISION :

Article 1

On condition that the commitments summarised above and laid out in detail in the Annex are fully complied with, the concentration notified on 29 October 1999 consisting of the creation of Astrium is declared compatible with the common market and the functioning of the EEA Agreement.

Article 2

This Decision is addressed to:

Matra Marconi Space N.V
c/o Price Waterhouse Vooren
Konninginnegracht
NL-2514AA The Hague
Netherlands

DaimlerChrysler
D – 70546 Stuttgart
Germany

For the Commission,

Member of the Commission

ANNEX

UNDERTAKING

Subject to the following provisos and without prejudice to their rights under applicable laws and regulations, Dasa Dornier Raumfahrt Holding GmbH ("DDRH") and Matra Marconi Space NV ("MMS") (collectively, the "Parties") give the following undertaking (the "Undertaking") in respect of the Astrium transaction notified to the Commission on October 29, 1999 ("the Transaction").

This Undertaking shall become effective upon receipt of the Commission's decision approving the Transaction ("Effective Date"). The Parties therefore undertake to procure that:

1. Unified Propulsion Systems ("UPS")

Astrium N.V. or any of its subsidiaries ("Astrium") shall grant to a specialised sub-system/equipment manufacturer, […]*, a non-exclusive long-term licence under all relevant Dasa intellectual property rights (including technology, know-how, manufacturing processes, procedures and relevant patents), in accordance with the procedure set out in Annexes 1 and 4, to manufacture and sell UPS, as currently manufactured by Dasa or its affiliated companies, for use on the Spacebus 3000 platform; as part of the licence, the Parties shall procure that Astrium provides at the licensee's request and at cost, during a sufficient period of time after the date on which the licence is granted, all the technical assistance reasonably necessary for the purpose of enabling the licensee to manufacture independently from Astrium the relevant product and/or provide integration services with its own personnel.

2. Chemical Thrusters

As a complement to the UPS licence or separately, Astrium shall grant to a specialised sub-system/equipment manufacturer, […]*, a non-exclusive long-term licence under all relevant Dasa intellectual property rights (including technology, know-how, manufacturing processes, procedures and relevant patents), in accordance with the procedure set out in Annexes 1 and 4, to manufacture and sell bi-propellant thrusters for the same purpose as provided in paragraph 1 hereof; as part of the licence, the Parties shall procure that Astrium provides at the licensee's request and at cost, during a sufficient period of time after the date on which the licence is granted, all the technical assistance reasonably necessary for the purpose of enabling the licensee to manufacture independently from Astrium the relevant product with its own personnel.

3. Mechanical Wheels

Astrium shall divest to a suitable purchaser the mechanical wheels business of MMS in the United Kingdom as described in Annex 2. The divestment will be carried out in accordance with the procedure set out in Annexes 3 and 4. Until such divestment, Astrium shall cause the mechanical wheels business of MMS to be

conducted in the ordinary and normal course of business in accordance with past business practice and with the care of a prudent businessman and that all reasonable measures are taken to protect and preserve the value of the relevant assets.

For a period of […]* following the divestment, Astrium undertakes in respect of the mechanical wheels business not to compete with the purchaser of this business and not to solicit the purchaser's employees.

4. On-board Management Systems

Astrium shall grant under relevant Dasa intellectual property rights (including patents) a non-exclusive long-term licence, in accordance with the procedure set out in Annexes 1 and 4, to a specialised sub-system/equipment manufacturer, […]*, to manufacture (on a "build-to-print" basis) and sell the Dasa Attitude and Orbit Control System (AOCS) used on the Spacebus 3000 platform, including the on-board computer system and the on-board system software used on the Spacebus 3000 platform; as part of the licence, the Parties shall procure that Astrium provides at the licensee's request and at cost, during a sufficient period of time after the date on which the licence is granted, all the technical assistance reasonably necessary for the purpose of enabling the licensee to manufacture independently from Astrium the relevant product with its own personnel.

Matra Marconi Space N.V.	Dasa Dornier Raumfahrt Holding GmbH
_____	_____
Name:	Name:
Title:	Title:

ANNEX 1

LICENCES

The Parties agree to grant the licences referred to in paragraphs 1, 2, and 4 of the Undertaking ("the Licences") in accordance with the following procedure:

The Parties shall procure that Astrium enters into the relevant Licence, on a reasonable royalty-bearing basis, with a suitable licensee to be approved by the Commission (the "Licensee") within a period of […]* from the Effective Date.

1. Such Licensee shall have the capability of successfully and independently manufacturing the relevant product and/or provide the relevant integration services. In particular, the potential Licensee shall have sufficient skills, production and testing facilities in the relevant business area.

2. To assist the Commission in determining whether any proposed Licensee is suitable, the Parties shall submit a fully documented and reasoned proposal enabling the Commission to verify that
(i) the Parties do not own a material interest (whether direct or indirect) in the Licensee; (ii) the Licence allows the Licensee to operate as a viable competitive force on the market; and (iii) the Licence is appropriate and sufficient, in particular with respect to its duration and the provision of technical assistance, to enable the Licensee to successfully and independently manufacture the relevant product and/or provide the relevant integration services.

3. The Parties shall obtain the Commission's prior approval to the relevant final draft Licence, such approval not to be unreasonably withheld. The request for approval shall be made at the same time as the request for approval of the Licensee.

4. Within ten (10) days from the Effective Date, the Parties shall appoint an independent and experienced trustee (the "Interim Trustee") to oversee and monitor the Parties' compliance with the terms of this Undertaking.

5. If the relevant Licence has not been granted by the Parties within […]* from the Effective Date, the Parties shall grant to the Interim Trustee an irrevocable mandate, in accordance with the provisions of Annex 4, to grant the Licence at the best conditions available within a period of […]*.

6. As soon as is practically possible after it has been appointed, the Parties shall procure that the Interim Trustee shall obtain the Commission's prior approval of a list of potential Licensees after preliminary discussions with the Parties, based on the criteria specified above in paragraphs 1
and 2. The Parties shall procure that the Interim Trustee will keep the Commission regularly appraised of any on-going discussions with potential licensees.

7. The appointment of the Interim Trustee shall be made in accordance with the procedure set out in Annex 4.

ANNEX 2

(BUSINESS SECRETS)

DESCRIPTION OF MMS' MECHANICAL WHEELS BUSINESS

MMS' Mechanical Wheel Business comprises the following:

1. MMS' dedicated tangible fixed assets for the mechanical wheels business ("the Business"), including:

    - […]*

2. All rights to relevant contracts for such Business, and customers' and suppliers' contact details;

3. All intellectual property rights owned by MMS relating to mechanical wheel design and manufacturing design descriptions as well as manufacturing files and processes for the Business.

4. […]*

ANNEX 3

DIVESTITURE

The Parties agree to implement the commitments referred to in paragraph 3 of the Undertaking in accordance with the following procedure:

1. The Parties shall procure that Astrium divests to a suitable purchaser (the "Purchaser") to be approved by the Commission the mechanical wheels business of MMS (the "Business") within a period of […]* from the Effective Date (period 1).

2. Such Purchaser shall have the capability of successfully and independently manufacturing the relevant product. In particular, the potential Purchaser shall have sufficient skills, production and testing facilities in the relevant business area.

3. To assist the Commission in determining whether any proposed Purchaser is suitable, the Parties shall submit a fully documented and reasoned proposal enabling the Commission to verify that
(i) the Parties do not own a material interest (whether direct or indirect) in the Purchaser; (ii) the sale allows the Purchaser to successfully and independently manufacture the relevant product; and (iii) at the time of completion of the purchase agreement of the Business, the Purchaser has, or reasonably can be expected to obtain, all necessary approvals for the purchase from the relevant competition authorities in the European Community.

4. Within ten (10) days from the Effective Date, the Parties shall nominate an independent and experienced trustee (the "Interim Trustee") to oversee and monitor the Parties' compliance with the terms of this Undertaking during period 1.

5. If a Purchaser for the relevant Business has not been approved by the Commission within […]* from the Effective Date, the Parties shall grant to the Interim Trustee an irrevocable mandate, in accordance with the provisions of Annex 4, for the sale of such Business. This mandate shall have a duration of […]* from the end of period 1 (period 2).

6. As soon as is practically possible after it has been appointed, the Interim Trustee shall obtain the Commission's prior approval of a list of potential Purchasers after preliminary discussions with the Parties. The Interim Trustee will keep the Commission regularly appraised of any on-going discussions with potential Purchasers.

7. The appointment of the Interim Trustee shall be made in accordance with the procedure set out in Annex 4.

ANNEX 4

GENERAL PROVISIONS

1. The Parties shall propose to the Commission the name of an independent and experienced institution that they consider appropriate to be appointed as trustee. Such proposal shall be made within ten (10) working days after the date on which the obligation to appoint a trustee enters into force. The Commission shall have the discretion to approve or reject the proposed institution in accordance with paragraph 10 below. If the proposed institution is rejected, the Parties shall submit the names of at least two further institutions, within five (5) working days of being informed of the rejection. If more than one name is approved by the Commission, the Parties shall be free to choose the trustee to be appointed from among the names approved. If all further names are rejected by the Commission, the Commission shall nominate a trustee to be appointed by the Parties.

2. The trustee shall be appointed within five (5) working days after the Commission's explicit approval or its implicit approval, in accordance with paragraphs 1, 8 and 10 hereof.

3. Along with their request for the Commission's approval of a proposed trustee, the Parties shall submit a proposed draft mandate setting forth in detail the scope of the mandate (including an incentive on the trustee to use its best efforts in arranging a prompt value-maximizing transaction) and the responsibilities to be performed by the institution under the mandate. At the Commission's reasonable request, the Parties shall modify the proposed mandate, in order to ensure that it is in accordance with the provisions of this Undertaking. Once the mandate has been executed, the Parties shall not be entitled to make any changes to such mandate without the Commission's prior approval.

4. The trustee's mandate shall include the following responsibilities:

   (i) to monitor the satisfactory discharge by the Parties of the obligations entered into in this Undertaking (in so far as they fall within the scope of the trustee's mandate);

   (ii)to provide written reports to the Commission on the progress of the discharge of its mandate, identifying any respects in which the trustee has been unable to discharge its mandate. Such reports shall be provided in English within ten (10) working days from the end of every two (2) month period following the trustee's appointment or at such other time(s) or time periods as the Commission may specify, and which shall cover the developments of the previous two-month period. The Parties shall receive simultaneously a non-confidential copy of such trustee reports; and

   (iii) at any time, to provide to the Commission, at its request, a written or oral report on matters falling within the trustee's mandate. The Parties shall receive

simultaneously a non-confidential copy of such additional written reports and shall be informed promptly of the non-confidential content of any oral reports.

5. If this Undertaking requires the mandate of a trustee to include the responsibility to conduct negotiations, and propose a licensee or, as the case may be, a purchaser, the trustee shall:

   (i) notify the Commission as soon as practically possible concerning the identity of potential licensees or purchasers after prior discussions with the Parties and advise the Commission why it believes such licensees or purchasers are suitable, in view of the criteria specified above;

   (ii)end negotiations with any prospective purchaser, if the Commission determines that the negotiations are being conducted with an unsuitable purchaser; and

   (iii) carry out the negotiations with the view to concluding a binding agreement (subject to the closing of the Transaction) that takes into account the financial interest of the Parties (*i.e.*, to obtain the best price and terms possible within the context of the trustee's mandate).

6. The Parties shall provide the trustee with all such assistance and information, including copies of all relevant documents, as the trustee may reasonably require in carrying out its mandate; subject to any security restrictions, the trustee shall have full and complete access to Astrium's personnel, books, records, documents, facilities and technical information relating to the manufacture of the relevant products to be licensed hereunder, or to any other relevant information, as the trustee may reasonably request, subject always to such access being limited to the scope of the trustee's mandate.

7. As soon as the specific remedy with which the trustee has been entrusted has been implemented, the trustee's mandate in respect of that specific remedy shall be terminated subject to the prior approval of the Commission. However, the Commission may at any time require the reappointment of the trustee if it subsequently appears that the relevant remedy might not have been fully and properly implemented.

8. If the Commission has not within fifteen (15) working days following receipt of a fully documented and reasoned request rejected in writing any proposal submitted to it for approval pursuant this Undertaking, the proposal shall be deemed to be approved.

9. In the event exceptional circumstances arise that make the compliance with the timetable provided herein impossible or very difficult, and the Parties provide to the Commission reasonable evidence of such exceptional circumstances, the time periods set forth in Annexes 1 and 3 for the implementation of the Undertaking may be extended by mutual agreement of the Parties and the Commission.

10. Any requests or proposals requiring Commission approval shall be addressed to the Director of Directorate B of the Commission's Directorate General for Competition, 150 Avenue de Cortenberg, 1000 Brussels. Any communications to the Parties shall be addressed to persons to be determined and communicated to the Commission before the Effective Date.