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# *Case No COMP/M.3680 - ALCATEL / FINMECCANICA / ALCATEL ALENIA SPACE & TELESPAZIO*

Only the English text is available and authentic.

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

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Article 6(2) NON-OPPOSITION
Date: 28/04/2005

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COMMISSION OF THE EUROPEAN COMMUNITIES

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PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)b & 6(2)
DECISION

To the notifying parties

**Case No COMP/M.3680 ALCATEL / FINMECCANICA / ALCATEL ALENIA SPACE & TELESPAZIO**
**Notification of 07.03.2005 pursuant to Article 4 of Council Regulation No 139/2004[1]**

1. On 07/03/2005, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 (the "Merger Regulation") by which the undertaking Finmeccanica Società per Azioni ("Finmeccanica", Italy) and Alcatel ("Alcatel", France) acquire within the meaning of Article 3(1)(b) of the Council Regulation joint control of the newly created joint venture undertakings Alcatel Alenia Space ("AAS", France) and Telespazio ("Telespazio", Italy), by way of transfer of shares.

2. After examination of the notification, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation and, following submission by the parties of undertakings designed to eliminate competition concerns identified by the Commission, in accordance with Article 6 (2) of the Merger Regulation, does not raise serious doubts as to its compatibility with the common market and with the functioning of the EEA Agreement.

1 OJ L 24, 29.1.2004, p. 1.

## I. THE PARTIES

3. Alcatel is a French industrial company active in the field of telecommunications (fixed, mobile and private communications). Through its subsidiaries, Alcatel produces space systems, such as satellites, subsystems and equipment for civil and military uses and provides space-related services, such as satellite launching.

4. Finmeccanica is a […] diversified engineering company active in six core business areas: aerospace, defence systems, energy, communications, transportation and automation. Through its subsidiaries, Finmeccanica produces space systems, such as satellites, subsystems and equipment for civil and military uses. It is also active in the development of satellite-based services and in space mission management.

## II. THE OPERATION

5. Alcatel and Finmeccanica intend to merge their activities in the space sector through the setting up of two full-function joint ventures, respectively named Alcatel Alenia Space (AAS) and Telespazio, to which their activities relative to space systems will be transferred pursuant to an Alliance Agreement executed by the parties on January 28, 2005. According to the Alliance Agreement, Alcatel will contribute its wholly owned subsidiaries Alcatel Space and Alcatel Espacio, while Finmeccanica will contribute its wholly owned subsidiary Alenia Spazio and Telespazio to the two joint ventures. As a result, Alcatel and Finmeccanica will respectively obtain a 67% and 33% share of AAS's initial capital and a 33% and a 67% of Telespazio initial capital.

6. AAS will be active, through its contributed assets, in the design, manufacture and supply of ground and space systems, including satellites, subsystems and equipment in the commercial, institutional and military fields. Telespazio will be active, through its contributed assets, in the provision of services and end-user applications using or related to satellite-based solutions.

7. It should be noted that Alcatel will not contribute to AAS or Telespazio its shareholding in Skybridge, Eurasiasat and Europe*Star, while Finmeccanica will not contribute its shareholdings in Galileo Avionica, Selenia Communications, Space Software Italia, Elsacom and Avio, which are also active in the space sector.

## III. CONCENTRATION

8. The two joint ventures, AAS and Telespazio, will own various manufacturing and research and development facilities and will have a dedicated management and staff in order to conduct on a lasting basis its business activities. Consequently, it can be concluded that the two joint ventures will have a full-function nature within the meaning of the Merger Regulation.

9. As a result of the proposed transaction, Alcatel and Finmeccanica will acquire joint control over AAS and Telespazio and therefore the operation constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## IV. COMMUNITY DIMENSION

10. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 billion (EUR 12.5 billion for Alcatel and EUR 7.5 billion for Finmeccanica in 2003)[2]. Each of Alcatel and Finmeccanica have a Community-wide turnover in excess of EUR 250 million (EUR […] billion for Alcatel and EUR […] billion for Finmeccanica in 2003) but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension.

## V. RELEVANT MARKETS

### 1. Product markets

11. The joint ventures will be active in the design and manufacture of space systems, related subsystems, equipment and services.

12. In previous decisions[3], the Commission identified two main segments for space systems, (i) the space segment and (ii) the ground segment, the latter including all product and services sold separately from space systems. Each of the space and ground segments may be further divided into (i) launchers, (ii) space transportation and infrastructure, and (iii) satellites. The parties followed the Commission's analysis and the market investigation did not provide any indication that could point to alternative relevant segments.

### 1.1 Launchers and space transportation

13. The parties' activities in the launchers and space transportation and infrastructure, both in the space and ground segments, are limited and there is no horizontal or vertical relationship between the product manufactured and services provided by Alcatel Space on the one hand and Alenia Spazio, Galileo Avionica and Avio on the other hand. Therefore, these segments are not further discussed below.

### 1.2. Satellites prime contracting

*1.2.1 Introduction*

14. Within the satellite segment, the joint venture will be active in the (i) design and manufacture of satellites, (ii) related subsystems, equipment in the space segment and (ii) the design and manufacture of satellite ground systems, related subsystems, equipment and services in the ground segment.

15. With regard to satellites, the Commission distinguished satellites used for military applications and those used for civilian applications. In the civil sector, a further

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2 Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C 66, 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.

3 See Case COMP/M.1185 Alcatel / Thomson CSF-SCS and Case COMP/M.1636 MMS/DASA/Astrium

distinction can be made between the commercial segment and the institutional segment. This approach has been broadly confirmed by the market investigation.

*1.2.2 – Commercial satellites*

16. Commercial satellites are sold to private satellite operators through competitive bids. These satellites are essentially used in the field of telecommunication (fixed telephony, mobile telephony, internet, etc.) and for television broadcasting (direct-to-home television, cable head-end feeds, etc.). Commercial satellites are usually based on a common design to achieve greater cost efficiency completed with mission-specific equipment.

17. Commercial satellites include geosynchronous earth orbit ("GEO") and low earth orbit ("Low Earth Orbit") satellites. According to the parties, the latter category no longer exists.

18. For the purposes of this decision, commercial satellites will be considered as a relevant product market and the question whether it should be further sub-segmented may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.2.3 – Military satellites*

19. Military satellites are ordered by the Ministry of Defence (MoD) or multinational defense organizations such as NATO. Military satellites applications are essentially telecommunication, radar and optical observation satellite and early warning satellites.

20. For the purposes of this decision, military satellites will be considered as a relevant product market and the question whether it should be further sub-segmented may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.2.4 – Institutional satellites*

21. Institutional satellites are sourced by national civil space agencies, such as the National Aeronautics and Space Administration (NASA, US), the European Space Agency (ESA, Europe), the Centre National d'Etudes Spatiales (CNES, France) and the Italian Space Agency (ASI, Italy) through specific procurement procedures. Institutional satellites contain essentially tailor-made payloads intended for specific missions: earth observation, scientific missions, navigation or telecommunication. Earth observation and scientific satellites are equipped with various specific sensors and perform meteorological, mapping or astronomical missions. Navigation satellites are mainly used to locate precisely vehicles, aircraft and ships. In Europe, the GALILEO global positioning system shall be based on a constellation of small satellites.

22. Based on the market investigation, it appears that further sub-segmentations of the institutional satellites market could be envisaged depending on the size of the contract (amount and duration) and the complexity of the mission.

23. For the purposes of this decision, institutional satellites will be considered as a relevant product market and the question whether it should be further sub-segmented may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

### 1.3. Satellites subsystems and equipment

24. Satellites generally consist of (i) a payload comprising the subsystems and equipment designed to perform the satellite's specific mission and (ii) a platform, which constitutes the physical structure of the satellite and performs the control, propulsion, electrical power and thermal control functions. Each of these two parts is composed of various subsystems which are in turn composed of various equipment, incorporating various components and materials. Each of the subsystems and equipment may be designed and manufactured internally by the satellite prime contractor or sourced externally from specialized suppliers.

25. In general, subsystems and equipment used on the platform are more likely to be identical across the three satellite markets while institutional payload are often "one of a kind" and include completely different subsystems and equipment as compared with commercial and military payload. Subsystems and equipment performing similar functions for commercial, military and institutional satellites platforms may be identical or may have slightly different characteristics.

26. In past decisions[4], the Commission defined relevant product markets according to the functions performed by subsystems and equipment due to the lack of demand-side substitutability. The market investigation has confirmed that subsystems and equipment performing different functions do belong to distinct product markets. In addition, the level of supply side substitutability is also limited due to the very high level of reliability and expertise required.

27. Therefore, for the purposes of this decision, satellite subsystems and equipment will be deemed to constitute distinct product markets whenever they perform distinct functions. The characteristics of subsystems and equipment intended for commercial and military satellite payload on the one hand and subsystems and equipment intended for institutional satellite payload on the other hand as well as different features of demand depending on the type of customer (see below) point towards separate product markets.

28. However, the potential sub-segmentation of equipment and subsystems, depending on the satellites' final customer (i.e. commercial, military or institutional), will be assessed on a case by case basis. It is discussed below for subsystems and equipment where the parties have strong market positions.

#### *1.3.1 – Receivers and frequency converters*

29. According to the parties, active micro waves subsystems, including receivers and frequency converters, are in general standard equipment. They argue that receivers, up-converters and down-converters are to be considered as one market as the

4 See Case COMP/M.1185 Alcatel / Thomson CSF-SCS and Case COMP/M.1636 MMS/DASA/Astrium

architecture, building blocks, suppliers and customers are similar for each of these components. They also claim that receivers and frequency converters for commercial and military satellite are "standard" while institutional satellites' requirements for these equipment differ. Almost all respondents to the market investigation agree with the parties' statements and recognize that the supply side substitutability between receivers and frequency converters is high.

30. For the purposes of this decision, receivers and up-converters and down-converters will be considered as one single product market and the question whether commercial and military receivers and frequency converters, on the one hand and institutional receivers and frequency converters on the other hand constitute separate product markets may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.2 – Antenna and antenna reflectors*

31. Satellites incorporate on board various types of antenna depending on the frequency band, the flexibility, the size, the accuracy, etc. The reflector is a key component of the antenna in terms of technology. Due to the various specifications and characteristics of each type of antenna, narrow market definitions for antenna and reflectors could be envisaged depending on the frequency band, the size of the reflector etc. However, it should be noted that there is a degree of both demand side substitutability to the extent customers may have their needs satisfied with different technological solutions, and supply side substitutability to the extent important suppliers of satellite antennas are able to develop and manufacture a broad range of antennas.

32. For the purposes of this decision, the satellite antenna segment product markets will be divided by frequency band (S/L, C/Ku, Ka, etc) and by the size of the reflector and the question whether antennas for commercial, military and institutional satellites and reflectors constitute separate product markets may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.3 – On Board digital processors*

33. Only few telecommunication satellites use digital processors to handle multimedia data (less than 15% according to the parties) but this proportion could increase. Among these digital processors, DVB multiplexer offer the capability to uplink TV Channels with low cost station and to provide efficient channel connectivity between the different coverages of a satellite.

34. For the purposes of this decision, the question whether On Board DVB multiplexer constitute a relevant product market in itself or as part of the larger market for On Board digital processors may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.4 – Travelling Wave Tubes (TWT) and Travelling Wave Tubes Amplifiers (TWTA)*

35. Travelling Wave Tubes (TWT) are one of the components of transponder sub-systems. Combined with Electronic Power Conditioners (EPC), they form Travelling Wave Tubes Amplifiers (TWTA). These subsystems and equipment were analysed by the Commission in a past decision and were considered as two distinct product markets.

36. For the purposes of this decision, TWT and TWTA will be considered as two distinct product markets and the question whether TWT / TWTA for commercial, military and institutional satellites constitute separate product markets may be left open, as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.5 – GPS receivers*

37. According to the parties, a distinction needs to be made between commercial, military and institutional GPS receivers. Other market players submit that GPS receivers should rather be sub-segmented by type of mission (orbit restitution, attitude control, etc.) or by class of reliability (low cost receivers for small satellites, high reliability receivers and high accuracy dual frequency receiver for science missions). Suppliers however benefit from technological commonalities and use common building blocks.

38. For the purposes of this decision, GPS receivers will be considered as a relevant product market and the question whether the market should be further sub-segmented by type of product (type of mission and class of reliability) or by type of final customer (commercial, military or institutional) may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.6 – Solar Generators and Solar Generator Photo Voltaic Assembly (PVA)*

39. Solar generators convert solar energy into electric energy for the satellites subsystems and equipment. PVA is the electrical part (electrical interconnection and assembly of solar cells, string forming and lay-down on mechanical substrate) of the solar generator. The parties argue a distinction has to be made between commercial, institutional and military applications but some respondents to the market investigation contradict this view. Although requirements (voltage, type of solar cells, semi-deployable / deployable, etc) may differ depending on the end applications (telecom and others), solar generators and solar generators PVA used in commercial, military and institutional satellites are very similar and derive from the same product line.

40. For the purposes of this decision, solar generators and solar generators PVA will be considered as two distinct product markets and the question whether these markets should be further sub-segmented by type of product or by type of final customer (commercial, military or institutional) may be left open as under any alternative

product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.7 – Power Processing Unit (PPU)*

41. PPU are electronic power control units for satellites electrical propulsion. For the purposes of this decision, PPU will be considered as a relevant product market and the question whether PPU for commercial, military and institutional satellites constitute separate product markets may be left open as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

*1.3.8 – Tracking, Telemetry and Command subsystems (TTC)*

42. TTC equipment provides the essential communication link of the satellite with the ground. Generally, command and ranging information is transmitted from a ground station to a spacecraft via RF uplink carriers and telemetry and ranging information is returned from the spacecraft by other RF downlink carrier.

43. TTC equipment include (i) Command receivers (receiving signals from the ground), also called RX, (ii) Pointing beacons, also called beacons or BX and (iii) Beacon transmitters, also called telemetry transmitters or TX. Beacons and Telemetry transmitter send signals to the ground. The three products perform distinct functions and are not interchangeable from the demand-side. Also, the market investigation has indicated that, specifically for command receivers, there is limited supply-side substitutability. Command receivers are not based on similar technologies as pointing beacons and beacon transmitters and not all beacon suppliers also produce command receivers.

44. TTC equipment is also characterized by the frequency band (S / X / C or Ku and K or Ka). Within a frequency band, TTC equipment is very similar although there are some specific interfaces for each type of platform (Binary or Frequency Shift Key). Satellites intended for different missions generally use TTC with different frequency bands: commercial telecom (C/Ku and K/Ka), military telecom (S/X), earth observation (S/X), scientific (C and K/Ka) and navigation (S).

45. In view of the above, the parties distinguish TTC for commercial, military and institutional satellites. Third parties confirm that TTC equipment and command receivers using distinct frequency bands constitute different products and that within a frequency band, the commonality between commercial and institutional satellites is extremely high.

46. For the purposes of this decision, command receivers constitute a distinct product market that is part of a broader TTC segment. Whether TTC equipment, including command receivers, should be further sub-segmented by frequency band, by interface characteristics or by end customer (commercial, military or institutional) may be left open as the competitive assessment remains unchanged under any alternative product market.

*1.3.9 – Radar Altimeter*

47. Radar altimeters are complex payloads subsystems that are only used in some scientific and Earth resources monitoring institutional satellites. Specification and requirements for each mission are often unique and lead to new developments for each mission. For the purposes of this decision, radar altimeters will be considered as a relevant product market.

### 1.4. Satellite ground segment

48. The parties distinguish satellite ground products and satellites ground services and, within each segment, product and services for satellites command and control on the one hand and products and services for mission exploitation on the other hand. The latter can be further subdivided by type of mission (earth observation and navigation, communication, etc.). This approach is consistent with the previous Commission's decisions analysis.

49. As for satellites subsystems, the relevant product markets for satellites ground products and services may be defined according to the function they perform. This approach is justified by the lack of demand-side substitutability (each product or service is designed to achieve a specific function and cannot be used for other purposes) and the specific competences required to develop and to offer each type of product or services.

50. Similarly, satellite ground products and services markets may also be defined according to the three types of end customers identified above (commercial, military and institutional), given their distinct procurement policies. For the purpose of this decision, it is however not necessary to further define on this basis the relevant product markets for satellites ground products and services, as under any alternative product market, the proposed operation is not likely to give rise to competitive concerns.

## 2. Geographic markets

### 2.1. Satellites prime contracting

*2.1.1 – Commercial satellites*

51. In line with the Commission's approach in previous cases, the parties submit that the relevant geographic market for commercial satellites is worldwide as sourcing takes place on a worldwide basis, given the extremely high value of these products as opposed to small transport costs in relative terms. This has been broadly confirmed by all respondents to the market investigation. Therefore, for the purpose of this decision, the market of commercial satellites will be considered as worldwide in scope.

*2.1.2 – Military satellites*

52. In previous decisions, the Commission viewed the military satellites market as either national or worldwide in scope depending on the procurement policies of each national military authority involved. The parties confirm that the French and Italian

Ministry of Defence source exclusively from, respectively, French and Italian military satellite prime contractors.

53. Some respondents to the market investigation have pointed out that European trans-national military cooperation, such as Helios II, cooperation project between Spain, France and Belgium, could lead to a broader geographic market for military satellites. Although the Commission is carefully following these developments and will assess their impact on the competition in military satellites, the market investigation has confirmed that until now non-national prime manufacturers could not effectively compete for military satellites in countries where national prime manufacturers are active.

54. For the purpose of this decision, the market of military satellites will be considered as national in scope for countries with satellite prime manufacturing capabilities, such as France and Italy, and as worldwide for other countries.

*2.1.3 – Institutional satellites*

55. In previous cases, the Commission defined the institutional satellite market as European in scope due to the specific procurement policy of ESA. The agency's procurement is subject to the geographical repartition rule (otherwise known as the *juste retour*), according to which the industrial share of business awarded to manufacturers in each Member State of ESA[5] should be equal to the financial contribution of each Member State. As a consequence, ESA procures institutional satellites exclusively from European satellite prime contractors.

56. CNES and ASI also procure satellites exclusively from domestic suppliers and European suppliers do not have access to non-European space agencies contracts for the same reasons. Therefore, for the purpose of this decision, the market of institutional satellites will be considered as European-wide in scope and national for demand emanating from national space agencies.

## 2.2. Satellites subsystems and equipment

*2.2.1 –Commercial subsystems and equipment*

57. In its previous decisions, the Commission considered that satellites subsystems and equipment for commercial satellites were sourced globally and that the geographic scope of those markets was worldwide. This fact was confirmed by most respondents to the market investigation.

58. Astrium however suggests that the geographic market for commercial satellites subsystems and equipment is European in scope due to the increasing constraint resulting from the US Export Administration Regulations (EAR) and International Traffic in Arms Regulations (ITAR).

[5] ESA's Member States are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Porugal, Sweden, Switzerland and the United Kingdom. Greece and Luxembourg are expected to become members of ESA in the short term and Canada and Hungary participate in some project under cooperation agreements.

59. The ITAR regulation submits the export of certain US subsystems and equipment to a license or forbids the export of certain subsystems and equipment depending on the end-use country. In addition, ITAR regulation prevents US manufacturers from providing complete design and manufacturing processes of the subsystems and equipment subject to ITAR regulation. The US Department of State is in charge of ITAR's enforcement. EAR is intended to regulate dual use technologies and submits the export of certain US subsystems and equipment to a license.

60. The administrative process required for these subsystems and equipment is claimed to be particularly burdensome and increasingly rigid.

61. The Commission however notes that European countries are not listed as countries subject to ITAR prohibitions and that European prime contractors can source satellite subsystems and equipment from US suppliers provided that final customers are not located in one of the black listed countries. The market investigation has indicated that export licences are routinely granted if the final customer is not located in one of these countries. In addition, the parties contest that the administrative process entailed by ITAR is burdensome enough to amount to a barrier to trade between the US and Europe. As to Export Administration Regulations (EAR), they have little effect on satellite systems, subsystems and equipment which are already subject to ITAR.

62. For the purposes of this decision, the markets of subsystems and equipment for commercial satellites (whenever they constitute relevant product markets), will be considered as world-wide in scope.

*2.2.2 –Military subsystems and equipment*

63. In its previous decisions, the Commission considered that markets for subsystems and equipment for military satellites were national in scope due to the national MoD's purchasing policies. For the purposes of this assessment, the geographic scope of markets of subsystems and equipment for military satellites (whenever they constitute relevant product markets), will be considered as national in scope when national suppliers exist and as European or worldwide in scope when national suppliers do not exist. However, several European initiatives may begin to break down the traditional national defence equipment markets[6]. The Commission will carefully monitor developments and will take account of any progress made in any future assessments of defence equipment markets which will therefore not necessarily follow the same reasoning as in this case.

*2.2.3 –Institutional subsystems and equipment*

64. In its previous decisions, the Commission considered that markets for subsystems and equipment for European institutional satellites were European in scope due to the ESA purchasing policy. The market investigation indeed confirmed that, under ESA procurement rules, all subsystems and equipment for European institutional

6 COM(2003) 113 fin of 11.3.2003 "European defence – Industrial and market issues – Towards an EU Defence Equipment Policy", Green Paper on Defence Procurement (COM(2004) 608 of 23.9.2004) and the establishment of a European Defence Agency on 12.07.2004

satellites had to be sourced from European suppliers, except if they were not available from those suppliers.

65. As a consequence, for the purpose of this decision, the markets of subsystems and equipment for institutional satellites (whenever they constitute relevant product markets), will be considered as European in scope when European suppliers exist and as worldwide in scope when European suppliers do not exist.

### 2.3. Satellite ground segments

66. As for the satellite space segment, the geographic scope of satellites ground products and services depends on the type of customer. Commercial products and services are generally sourced on a global basis by commercial operators, while the geographic scope is more limited for military and European institutional programs.

67. For the purposes of this decision, the markets for satellites ground products and services will be considered as worldwide in scope for commercial satellites, as national in scope for military satellites (when a national supplier exists) and as European in scope for European institutional satellites.

## VI. COMPETITIVE ASSESSMENT

### 1 The competitive landscape

68. This transaction needs to be seen in the light of the specific features of the space industry. First, the worldwide market has been dramatically shrinking as a result of the sharp downturn in the commercial telecom sectors and the stagnation of European institutional budgets. Both the European Commission[7] and ESA have called for the consolidation of the European space industry in order to concentrate research and development efforts. Second, the worldwide market is dominated by US large suppliers, such as Boeing and Lockheed Martin, which have exclusive access to the massive institutional and military satellite funding in the US (the US budget in this field which is entirely devoted to US suppliers is about ten times bigger than the entire European budget) and therefore benefit of significant economies of scale and scope in terms or research and development. Third, the institutional purchasers, such as the European Space Agency or the national agencies, have a strong buying power vis-à-vis their suppliers. Moreover, they often select their suppliers based on principles other than competition on the merit. National agencies choose national suppliers if any, while at European level the principle of *juste retour* applies (see below for further details). Fourth, given the massive investments needed in R&D, the industry is characterised by a certain degree of specialisation and concentration. This aspect is particularly accentuated in Europe, due to the presence of ESA acting as a quasi monopsonist in the institutional market, and typically translates into relations of cooperation and interdependence between suppliers on the market.

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7 White Paper, Space: A new European Frontier For An Expanding Union: An Action Plan For Implementing The European Space Policy, COM 2003: 673

## 2. Horizontal effects

### 2.1 Prime contracting

#### *2.1.1 Commercial satellites*

69. Alcatel and Alenia are both active in the commercial satellite market, although Alenia's market share over the last three years has been marginal. The new entity will have combined market share[8] of [10-20]% (Alcatel [10-20]% and Alenia [0-5]%), compared to Astrium with [5-15]% and the three main US competitors: Boeing ([15-25]%), Loral ([10-20]%) and Lockheed Martin ([10-20]%). The market investigation confirmed that the proposed transaction would have little impact on the worldwide commercial satellite market due to the competitive nature of the market, the presence of large alternative suppliers and Alenia's modest market position.

#### *2.1.2 Military satellites*

70. Alcatel Space and Alenia are respectively active on the French and Italian military satellites markets. French military satellites are supplied by two main players, Alcatel Space and Astrium, with Alcatel Space holding a [55-65]% market share over the 2001-2003 period. Alenia Spazio is the only Italian supplier of military satellite equipment. As the merging parties are active in distinct geographic markets, there are no competitive overlaps that result from the merger[9].

#### *2.1.3 Institutional civil satellites*

71. In the institutional civil satellite markets, demand emanates from either national space agencies or the European Space Agency ("ESA"). As national space agencies select only national suppliers, there are no competitive overlaps that result from the merger.

72. ESA accounts for the vast majority of demand for institutional civil applications. For such European institutional programs, the merger will reduce the number of main players from 3 to 2. Post merger, only the new entity and Astrium will be able to act as the prime contractor for large satellites. Whilst the German OHB Systems and British SSTL are increasingly participating in tenders for small satellites, taken together, they do not account for more than [0-10]% of the European civil institutional prime contractor satellite market. Over the 2001 to 2003 period, Astrium accounted for [40-50]% and this compares to the [40-50]% for the parties combined (Alcatel [20-30]% and Alenia [15-25]%). Whilst the merger eliminates a player capable of assuming a prime contractor role, based on the market investigation, it appears that the impact of this will be limited. This is due to the specifics of competition in this market.

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8 As market shares fluctuate significantly, all market shares provided are value averages over a three year period (2001-2003).

9 Cf. paragraph 63 regarding the developments in defence equipment markets.

73. Firstly, there is the very strong bargaining power of the European Space Agency ("ESA") as the monopsonist buyer for institutional applications. In particular, following the merger between DASA and Matra Marconi Space, which created Astrium, ESA has significantly increased and formalised its countervailing power by introducing best practices as described below for institutional sub-system procurement. ESA's ability to force suppliers into competitive tendering and to monitor costs throughout the process can be considered as sufficient to counter-balance the concentration on prime contractor level.

74. Secondly, the geographic return rules ("juste retour") are a determining factor in selecting to which company contracts will be attributed. The geographic return balances the financial contributions of the Member States with contracts for their local industry. This implies that contracts over time are awarded to different players according to the contribution of their home countries.

### 2.2 Satellites subsystems and equipment

75. After being selected, the Prime contractor will select the suppliers of the sub-systems, or produce these in-house, and integrate these systems according to the agreed specifications. Sub-systems can be either mission specific or can be considered as commodities, in the sense that there is a high degree of specification-commonality between different satellite platforms.

#### *2.2.1 TTC equipment*

76. TTC equipment consist of i) command receivers, and ii) other TTC equipment comprising pointing beacons and beacon transmitters. Alcatel and Alenia have historically developed strong positions on satellite electronics. As a result of the merger the new entity would have a nearly uncontested worldwide market position for certain Telemetry Tracking and control electronics (TTC) which are a critical system on all satellites. Whilst the Japanese suppliers Melco and NecToshiba Space (NTS) are established players for pointing beacons and beacon transmitters, the market investigation has indicated that the merger would lead to a monopoly for command receivers when assessed on the basis of historic market shares and that supra competitive price increases would result from the merger.

77. The market investigation has also indicated that NTS has recently launched a new range of TTC products. In 2005 NTS was able to win [more than one] out of four competitions for command receivers. However, firstly its current product is not capable of operating with the Binary Shift Key interface that is required by most satellite manufacturers. Secondly, apart from further development work and subsequent certification, NTS will need to obtain track record for its equipment. Certain satellite operators, which order these commercial satellites, require that space equipment has 3 years of flight heritage before it can be selected by the satellite prime contractor.

78. Therefore, whilst NTS may become a potential viable competitor in the medium term, at present it cannot be considered yet a competitive short term alternative to the parties' offering. Also, even a fully established NTS may not be able to

compensate the reduction in competition in the TTC market that results from the loss of the aggressive price positioning of Alenia. […]

79. In the light of the above, the recent entry of NT Space does not constitute a sufficiently strong competitive constraint to the parties' market power stemming from the merger in the market for command receivers and other TTC equipment.

80. The concerns identified for TTCs in the commercial market, are also relevant in the institutional market. Whilst ESA has far more countervailing power than the commercial satellite manufacturers, […] ESA's procurement policy does not allow for non-ESA Member equipment to be selected unless there is no capable supplier available. […]

81. In conclusion, based on the above considerations, the merger raises serious doubts as to its compatibility with the Common market with respect to the markets for command receivers and other TTC equipment in both the commercial and institutional satellites segments.

*2.2.2 Radar Altimeters*

82. With regard to the civil institutional market, based on the information collected in the market investigation, it appears that the concentration will combine the suppliers with the most extensive system expertise and acquired know-how for radar altimeters, which constitute the highest value equipment of the payload used on institutional satellite platforms for certain missions of earth observation.

83. The parties argue that Astrium has the competences to develop radar altimeter equipment in-house. In this respect, the parties point to the fact that for most satellites that have used radar altimeters in the past, Astrium was the prime contractor. This has allegedly allowed Astrium to obtain radar altimeter expertise which it could replicate in subsequent competitions on the equipment level. Still according to the parties, radar altimeters are tailor-made systems and such would render previously acquired experience of relative importance.

84. The market investigation has not confirmed this view. First, it appears that Astrium expertise in the field of radar altimeters is rather upstream, i.e. at the level of equipment interface and its integration in the satellite. Conversely, Astrium has not developed expertise as regards the manufacturing capabilities of the equipment.

85. Moreover, acquiring and further developing know-how in this field would require significant time and investments. In turn, massive R&D spending can only be justified present a reasonable chance to win future competitions. However, competitions for radar altimeter equipment are rare (ESA plans only one mission in the next three years), and chances for a new entrant to win against the merging entity would be very meagre.

86. In the light of the above, it appears that the merger would consolidate the present expertise in radar altimeters in one supplier, while potential competition from Astrium does not seem to constitute a sufficiently significant competitive constraint. Even if ESA would see a benefit in creating a new independent supply source for the

future, it would be difficult and costly for Astrium to gain radar altimeter expertise without having access to the expertise of either Alcatel or Alenia, which were prior to the merger available as independent teaming partners. ESA would thereby be confronted to a single source of supply, and even taking into account ESA's level of countervailing power, there would be no alternative that could act as a reference point to which the parties' prices and product performance could be compared to.

87. Therefore, it can be concluded that the merger gives rise to serious competition concerns in the institutional market for radar altimeters, where the parties will combine their unique competences at the level of manufacturing and execution of the equipment.

### 2.3 Satellite ground segment

88. The activities of Alcatel Space and Alenia Spazio for satellites ground products and services overlap only to a limited extent.

#### *2.3.1 Satellite ground products*

89. For navigation ground products, Alcatel has been selected as prime contractor of EGNOS, the only significant program over the last years, and Alenia Spazio is a first tier subcontractor with Thales and Astrium. Given that suppliers have already been selected for the single active program, the proposed operation is not likely to have any impact in this area.

90. Both Alcatel and Alenia Spazio are active in the market for broadband telecommunication ground products, but their combined market share at a worldwide level is below [5-15]%. As such, the proposed operation is not likely to have any impact in this area.

91. Both Alcatel Space and Alenia Spazio are active in the satellite military ground segment, respectively in France and Italy but as these constitute two distinct geographic markets, the transaction is not likely to affect competition in this area.

#### *2.3.2 Satellite ground services*

92. Alcatel Space and Alenia are active in the provision of satellite command and control services for commercial, military and institutional satellites. However, their combined market share does not exceed [10-20]% in the commercial and institutional segment whilst the parties compete in different countries for the military segment (France and Italy).

## 3. Vertical effects

### 3.1 Commercial satellites market

#### *3.1.1. TTC equipment*

93. As described above, post merger, the parties would obtain a near monopoly for TTCs and specifically command receivers. The merging parties' TTC and command receivers customers, all competing with the parties in the satellite prime contracting

markets, have raised the concern that, apart from supra-competitive pricing, the merged entity could delay or refuse access to TTCs and command receivers. It should however be noted that TTC subsystems account for a very limited proportion of satellites' total manufacturing cost (less than [0-5]%) and that the parties could therefore not raise their rivals costs to a significant extent. A complete denial to supply is also not a realistic threat. Indeed, when a satellite manufacturer orders TTCs and command receivers, it has already won the satellite prime contracting competition. A combined Alcatel / Alenia would therefore have no incentive to forego sales of TTCs and command receivers when a denial of access will not increase its chances of winning the platform competition. For the same reasons, delaying supply would bring little benefit to the merged entity other than in an attempt to damage its competitors' reputation over the long term. When assessing such strategies over the longer term, it needs to be taken into account that the parties' customers could progressively develop internal capabilities (Boeing has internal capabilities for these subsystems although it is not active on the merchant market) in reply to such actions. Moreover, in the medium term and specifically for command receivers, NT Space is likely to become an established alternative in the commercial market.

94. In any event, as it will be explained further below, the remedies offered by the parties designed to address the horizontal competition concerns resulting from the merger in this market also dispel any risk of vertical foreclosure.

*3.1.2. Other equipment and subsystems*

95. Concerns have been voiced by a competitor that the merged entity could engage in foreclosure strategies in a number of areas. These would include (i) Ka-band antenna and associated front-end electronics; (ii) On-board DVB multiplexer equipment, which offers the capability to uplink TV channels with low-cost stations and to provide efficient channel connectivity between the different coverage of a satellite; (iii) 3 and 4 Axis Steerable Antenna for commercial telecom satellites; (iv) Large antenna reflectors. It is claimed that the new entity's exclusive control over these key subsystems and equipment would seriously impede competition at the prime contracting level, as these subsystems and equipment are fundamental for prime contractors to design their satellite systems. The market investigation has not confirmed this view.

96. Firstly, the merged entity's strong position in these markets does not result from significant competitive overlaps. Secondly, in most instances, the merging parties were already each of them vertically integrated prior to the merger. Thirdly, alternative credible suppliers exist for each of these markets. These findings are developed in detail below for each of the above cited equipment.

*Ka-band antenna*

97. Ka-band antenna and associated front-end electronics have up to now only be implemented on commercial satellites. Whilst Alenia has acquired expertise mainly with Ka-band antenna on the Hotbird VI and Astra 1K satellites, it has not sold such solutions on the open market for the reference period 2001 – 2003. As Alcatel does not market Ka-band antenna solutions, there are no competitive overlaps. Also, there

are strong and credible competitors to Alenia, such as EMS Canada which has supplied Astrium (Anik F3 telecommunication satellite) and Boeing (Anik F2 telecommunication satellite) with Ka-band antenna solutions. As Canada is an associate Member of ESA, EMS is also a viable supplier for European institutional programmes. NTSpace, in Japan, is also an established player on the worldwide market for Ka Band RF electronics. In Europe, Astrium is developing Ka-band antenna expertise with ESA funding and support and Saab Ericsson is seen as another capable supplier with regard to Ka-band antenna and associated front-end electronics.

*Three and four axis steerable antennas*

98. Antennas which are on telecommunication satellites' top floor are usually fixed. However, in case a customer requires the flexibility to modify the antenna footprint position, a two-axis steerable antenna allows its positioning along two axes. A 3-axis antenna also allows changes in the shaping of the footprint by rotating an elliptical footprint around its center. Alenia holds a patent on the 3-axis antenna, and as such is the only supplier on the market to manufacture such equipment. The four axis antenna is a derivative which is being developed on the basis of the three axis model. Concerns have been raised by a competitor that the proposed operation might delay or foreclose its access to 3-axis antenna, and thus affect its position as a commercial satellite prime contractor for telecom satellites equipped with 3-Axis steerable antennas. The satellite operator Eutelsat, which initially took a neutral view with regard to the assessed transaction, informed the Commission at a very late stage in the procedure that it considered the competitor's concerns as legitimate as the latter would be fully dependent on Alenia, and in future the merged entity, for this product[10].

99. To begin with, the results of the market investigation do not support the claim that a 3 and 4 Axis Steerable Antennas can be considered to constitute a market in itself separate from two axis antennas or other antennas performing similar functions. Rather, it appears that such a solution was developed according to the specific requirements of a single commercial satellite operator (Eutelsat) for some of its satellites. It is noteworthy in this respect that Eutelsat accounts only for a small portion (less than [5-15]%) of the demand in the worldwide commercial satellite market (telecom satellites account for about [85-95]% of the commercial market) and that only a fraction of Eutelsat satellites are equipped with such antennas ([…] of the [...] satellites Eutelsat has ordered are equipped with a three axis, while the majority is equipped with two axis steerable antenna and fixed antenna). Other satellite operators are instead supplied with different technological solutions securing comparable performances and yet meeting different technical requirements. As a consequence, the competitive advantage of the new entity with regard to 3-axis steerable antenna will not be sufficient to exclude any commercial satellite

[10] On 15/4/2005 the Commission sent a request of information under Article 11 of the EC Merger Regulation to Eutelsat. The following days, Eutelsat informed the Commission by telephone that it had no concerns as regards the transaction and thus no interest in replying to the questionnaire. On 25/4/2005 Eutelsat sent to the Commission a short communication expressing generic concerns regarding the three axis steerabe antenna. On 27/4/2005 Eutelsat submitted a first more articulated submission voicing concerns in this area.

manufacturers from the market, even if Eutelsat would have a clear preference for the Alenia 3-axis steerable antenna solution.

100. As regards, then, the ability of other competitors to manufacture products exactly matching the level of flexibility of the three axis steerable antenna, the evidence is mixed. A satellite manufacturer stated it did not have the capabilities, while another satellite supplier considered it could build a 3-axis steerable antenna meeting Eutelsat requirements and based on a different implementation than Alenia patented approach, although at a cost disadvantage due to non recurring costs. Two specialised antenna manufacturers stated they could for sure develop antennas to meet Eutelsat requirements with other solutions (e.g move the antenna on a certain curve or rotate the main reflector). One of them stated that it was not certain to be as cost-effective as Alenia's approach. In sum, the market investigation shows that while Alenia three axis antenna will provide the new entity with a competitive advantage for Eutelsat satellites, it does not constitute a product market in itself. Eutelsat could revert to other antenna suppliers such as EMS, TRW Space (now part of US defence and space contractor Northrop Grumman), Honeywell, and ComDev who could develop antennas approaching and even matching the three axis antenna performances, and team up with satellite manufacturers to meet Eutelsat requirements.

101. In its oral reply to the Commission, Eutelsat confirmed that, while mainly sourcing from European suppliers on the basis of established commercial relations, this equipment or a similar one could also be sourced from US suppliers. This further corroborates the view that the subsystems markets relating to commercial satellites are worldwide in scope.

102. Finally, it is worth noting that the value of such equipment does not exceed on average [0-5]% of the total value of the satellite ([...] million Euro, as opposed to a total value of a telecom satellite incorporating such antenna solutions of between 100 and 140 million Euro). In the light of the above, besides the unrealistic scenario of a refusal to supply which may also raise other antitrust concerns, due to the negligible value of the equipment at stake, the impact of any price increase of the steerable antenna on the complete satellite system would be anyway minimal and would not threaten a prime contractor's ability to compete for the supply of the satellite as a whole. Therefore, whilst the merger may provide the new entity with a competitive advantage for Eutelsat's satellites using 3-axis (and in future possibly 4 axis) steerable antenna until alternative solutions are developed and have acquired track record, it does not give rise to foreclosure effects detrimental to competition.

*Antenna reflectors*

103. As to antenna reflectors, the market investigation has confirmed that there is no risk of foreclosure. First, It does not appear that Alenia is at present capable to form an alternative to the US suppliers. Whilst it is developing large reflector technology, the development is not yet finalised. Alcatel has no expertise for large antenna reflectors. Secondly, many US suppliers, such as TRW, Honeywell, EMS and Harris, are capable of supplying large antenna reflectors, as used on commercial satellites. For instance, for the INMARSAT 4, Astrium procured the large antenna reflector from the US supplier Astro Aerospace. NTSpace in Japan and NPO-PM in Russia

have also developed alternative products. Finally, there is also European expertise from Chelton Antenna and Saab Ericsson for antenna reflectors, although these players are not capable of producing large reflector antenna. In any case, it should be recalled that commercial satellites subsystems markets are worldwide in scope and that European satellite prime contractors can always source these antennas from US suppliers.

*On-board DVB multiplexer*

For On-board DVB multiplexer equipment, the market investigation has indicated that among the parties only Alenia has expertise. It has developed this expertise in connection to the Skyplex solution for which MMS (now Astrium) was the prime contractor. However the market investigation has shown that DVB multiplexer technology is evolving fast and that, to a certain degree, Alenia's solution has been overtaken by new developments. Moreover, viable alternatives exist for this equipment as EMS Canada has developed a DVB multiplexer solution for the Anik F2 telecommunication satellite (see above). Astrium has also developed equipment performing similar functions for a multi-beam satellite concept in the frame of the program WEST Early Bird, although this equipment has not been qualified in flight yet.

*3.1.3 Conclusion on commercial markets*

104. A competitor questions that with respect to European commercial customers, US suppliers form a credible alternative to European suppliers, due to the fact the former supplies are increasingly limited as a result of more stringent US export restrictions (ITAR regulation). This has not been supported by the market investigation. Whilst it is correct that a more rigid application of ITAR regulations are creating additional administrative burdens, it is a fact that such regulations do not limit US supplies vis-à-vis commercial customers based in Europe. Thus, they cannot be considered as a barrier that would require the market for commercial satellites in Europe to be limited to only European suppliers.

105. Quite apart from the above, it is to be noted that the situation of dependence from one source of supply is a feature not uncommon in the space industry, given the need for rationalisation of costs which in turn call for strong specialisation. For instance, Astrium itself is a strong vertically integrated sub-system supplier with unique capabilities in markets such as power conditioning, propulsion and solar generators. Astrium also supplies Alcatel with chemical thrusters, fuel tanks, tubes, valves, filters and command electronics, and on some of these subsystems there are no or few European alternatives.

106. In light of the above, the Commission concludes that the proposed operation will not significantly impede effective competition on these commercial satellites markets, except for the supply of Command receivers and TTCs.

**3.2 Military satellites markets**

107. A competitor has raised concerns regarding military telecommunication satellites, by submitting that Alcatel, though the Syracuse program in France, and Alenia Spazio, though the Sicral project in Italy, are the only suppliers mastering the Extremely

High Frequency (EHF) technologies and equipment (such as phased array antenna, beam forming network). The market investigation has not supported this as the military satellites markets are to be considered national in scope. As the parties to the concentration do not have overlapping activities in these markets, the proposed operation will therefore not negatively impact the French and Italian military satellites market.

### 3.3 Institutional satellites

108. For institutional satellites, the concentration gives rise to an additional number of vertically affected markets, such as GPS systems and solar power generation. However, as confirmed by the market investigation, there are alternative sources of supply, including EADS Astrium Germany for GPS systems and Dutch Space and EADS for solar power generation.

109. Moreover, and more importantly, in the institutional market, ESA is able to monitor the pricing and supply conditions applied, and thus avoid vertical foreclosure from occurring. In this respect, ESA has developed far reaching best practices, designed to allow ESA taking corrective action, constraining subsystem and equipment suppliers' prices as well as avoiding vertical foreclosure from occurring. As an example, once a prime contractor has been selected, all subsystems and equipment (except those that are at the core of the satellite's mission) are opened for competitive tenders. Each subsystem and equipment supplier proposal is evaluated by a Tender Evaluation Board (TEB), which systematically includes an official from ESA. In addition, the prime contractor is not allowed to take part to the TEB if any affiliated company has made a proposal, in order to avoid conflict of interests.

110. Therefore, ESA is confident that its procurement practices will prevent the merging parties from foreclosing Astrium as a prime contractor, as much as it has prevented any attempt of foreclosure by Astrium vis-à-vis its competitors in the past.

111. As to the market for radar altimeters, Astrium has raised the concern that the merged entity's uncontested position could foreclose it from the prime contractor institutional satellites market. As radar altimeter technology becomes increasingly integrated with other payload systems and is considered a core subsystem, prime contractors are obliged to integrate the radar altimeter in the design of the satellite before they submit their proposal to ESA. According to Astrium, the joint venture could refuse to provide its competitor with the complete required technical information on radar altimeters and this would prevent Astrium from competing effectively with the parties as prime contractor for institutional missions including a radar altimeter. In this specific case, ESA would no longer be in a position to consider the award of the prime contractorship and the radar altimeter as two separate competitions and would therefore not be able to prevent Astrium to be foreclosed from this market.

## 4. Risks of effects of coordination

112. The Commission also investigated the risk that AAS and Astrium could adopt a collusive behaviour as the two companies will be the only two prime contractors for large and complex institutional satellites and will have strong market positions for a number of subsystems and equipment. The market investigation could not indicate

that this risk could materialize due on the one hand to the market characteristics and, on the other hand, to ESA's countervailing power and the geographical repartition principle, that would significantly hinder this conduct. Institutional satellites are complex space systems that often include mission-specific equipment that require new developments funded by ESA. In this context, although prices of past satellites are public, prices of new satellites incorporate non recurring engineering cost, making it difficult for competitors to evaluate competition proposals. In the space markets in question, characterized by innovation and complex technologies, a collusive behaviour is unlikely.

113. ESA's set of rules ensures effective competition is not distorted and enables the agency to closely scrutinize the companies cost structure. The high degree of detail of suppliers' proposals for satellites or for subsystems provides ESA with a complete insight or the suppliers technical approach, new developments and pricing. ESA is hence able to detect potential uncompetitive prices from its suppliers and to open a new tender. In addition, due to ESA's high degree of sophistication and extensive and wide-ranging contacts with AAS, Astrium and their competitors, the likelihood that ESA would be informed of any collusive attempt is high.

### 5. Risks of cooperation under Article 2(4) of the ECMR

114. As explained above, each of the parent companies retain outside the joint ventures some activities in the space sector. In particular, Alcatel will not contribute to the joint ventures its shareholding in: i) Skybridge, a broadband communication service provider, ii) Eurasiasat, an international satellite operator based in Monaco, iii) Europe*Star, a company active in the leasing of wholesale transponder capacity and other communication services. Finmeccanica will not contribute its shareholdings in: i) Galileo Avionica, active in the field of mission electronics, avionics and electro-optics, ii) Selenia Communications, active in the field of satellite communication for military and government related operations, iii) Space Software Italia, active in the design and development of software systems for space, military and civil applications, iv) Elsacom, a satellite service provider in the field of telecommunications, v) Avio, a supplier of aerospace propulsion subsystems.

115. However through the cited companies Finmeccanica and Alcatel do not concurrently retain significant activities either in the same markets as the joint ventures, or in markets which are upstream/downstream from those of the joint ventures, or in neighbouring markets related to the markets in which the joint ventures are engaged. In particular, the space related activities retained by Alcatel outside the joint ventures are negligible, while the most significant space activities carried out by Finmeccanica subsidiaries which are not contributed to the joint ventures relate to the military sector which has a national geographic scope. In the light of the above, there are no possible cooperative effects deriving from the transaction within the meaning of Article 2(4) of the merger regulation.

## VII. COMMITMENTS SUBMITTED BY THE PARTIES

116. In the course of the procedure, the Parties have, pursuant to Article 6(2) of the Merger Regulation, offered commitments in order to remove the potential competition concerns identified by the Commission in the course of its investigation.

The commitments were formally submitted on 07 April 2005, and have been amended on 25 April 2005. The full text of the final commitments is attached to this decision and forms an integral part thereof.

## 1. Summary of commitments

### 1.1 Command receivers and other TTC

117. As to the proposed Undertaking for TTC equipment and command receivers, (for further details of the Undertaking, please see in Annexe 1) the parties commit to provide a license (the "technology package") in TTC equipment to another existing supplier of space equipment with an established competence in the field of radio frequency equipment for satellites (the "alternative supplier"). The objective of the license is to significantly reduce the purchaser's efforts and costs required to develop and manufacture TTC equipment, and more specifically command receivers, and to enable it to become over time a credible alternative supplier to the parties. The technology package will consist in the parties' know-how, manufacturing processes and IP rights in the field of TTCs and command receivers.

118. As an ancillary obligation, the parties commit for a transitional period to supply TTC equipment to pre-merger prices unless customers request TTC equipment having significantly different specifications, thus requiring additional development costs. In case of dispute, the European Space Agency (ESA) would be called upon to exercise arbitration powers, given its recognised expertise in the field as well as its impartiality. This obligation will be in force for a limited period of time ending two years after the license has been granted. The purpose of this transitional measure is to make sure that the market players have fair and non discriminatory access to these products from the parties until a third party viable competitor becomes an established player in the market.

### 1.2 Radar Altimeter

119. As to the Undertaking for radar altimeter (for further details of the Undertaking, please see in Annexe 2) the parties commit to sell a technology license, including the parties' know-how and IP rights in the field of radar altimeters (the "technology package"), to another existing supplier of space subsystems and equipment (the alternative supplier). Given the significant research and development required to design satellite radar altimeters, the objective of the license is to significantly reduce the purchaser's investments required to develop a radar altimeter and to enable it to become over time an alternative supplier to the parties.

## 2. Assessment

### 2.1 TTC and command receivers

120. The parties and the Commission initially discussed the possibility to divest Alcatel Space or Alenia Spazio's TTC and command receivers activity. The parties submit that a divestiture would not be feasible due to the fact that the assets used to produce TTC equipment do not constitute "stand-alone businesses" and are too intricately linked to the company's other assets to be carved out. According to the parties, the production equipment used to manufacture TTC and command receivers are also

used for other radio frequency satellite subsystems or equipment, such as active or passive microwave, or data handling and On Board Processors, while TTC equipment only represent a small share of the utilisation load of those production assets. In addition, a divestment of those assets would not be sufficient unless the know-how and the engineering team which develops the TTC product range are also transferred, which would be difficult. ESA, which has a very detailed knowledge of the parties production facilities and processes (through its audits and its extensive monitoring of contracts) confirmed that a divestment would not be feasible as it would be too difficult to carve out the operations that develop and produce TTCs and command receivers from the parties' existing operations.

121. As instead to the divestment of a larger manufacturing unit from the parties, which integrates the production of a number of subsystems and equipment and for which TTC and command receivers account for a negligible part of the turnover, such a remedy would be patently disproportionate to the narrow competition issues identified. This has been confirmed by the market test.

122. In addition, it is to be stressed that the TTC and command receivers markets are small, with each of the commercial and institutional segment accounting for around [...] million euros on a worldwide basis. Seen the limited and stable demand, it is considered that it would be difficult to create a new, independent and viable source of supply as a result of a divestiture commitment as such an entity would not be viable on the market.

123. Finally, a divestment to an existing space supplier would also not entirely solve the issues of certification and track record, which were put forward by the market investigation as important assets for an effective player in this market. All satellite prime contractors require a proven track record for these "key" subsystems of their satellites and some satellite operators require extensive flight heritage of up to 3 years. This is why, as a transitory measure, a temporary supply obligation upon the parties has been coupled with the main commitment.

124. In view of the above, the parties committed to grant a license to an alternative supplier and to transfer in this way a comprehensive technology package for TTC and command receivers equipment. The parties would also provide all the necessary technical assistance to help the alternative supplier manufacturing TTC equipment based on the technology package. Although some national space agencies hold intellectual property rights related to TTC equipment, the parties have taken a firm commitment to license their know how, technologies and manufacturing processes which relate to command receivers, for which competition concerns are more serious. The parties have also committed to make their best efforts to obtain the approval from these space agencies to transfer the IP rights relating to other TTC equipment

125. The market test confirmed that this commitment would be more efficient and easier to implement than a divestment and would entirely remove the competition concern. While the licensing remedy would enable the alternative supplier to benefit from the parties know how in the field of TTC and command receivers, its implementation does no entail the same difficulties as a divestiture as it would require to carve out embedded operations or to transfer key personal. Combined with the technical

assistance of the parties, the technology package would also help mitigating customers concerns related to certification and track record as the products would be very similar to those of the parties. The market investigation also confirmed that the sale of a comprehensive license, which encompass all the parties know how, technology, designs, manufacturing processes and intellectual properties rights, would be preferable to a divestment.

126. The Commission however recognizes that the development of the alternative supplier as a credible and competitive supplier of TTC and command receivers to the parties would take time to materialise. Therefore, an interim safeguard remedy is required which will protect customers from supra-competitive pricing. Such is provided by the parties' supply obligation and price benchmark, which covers both current TTC equipment, including command receivers, and new TTC equipment with different specifications.

127. In the market test respondents essentially validated the appropriateness of this remedy and confirmed that the price restriction would in any case provide them with sufficient protection until an alternative source of supply is established. It should be stressed that these customers are sophisticated buyers and that they are able to evaluate the compliance of the parties with the proposed remedy. Finally, a comparable remedy has been successfully implemented in the space sector in the past (the Travelling Wave Tubes remedy in case n° IV/M.1185 - ALCATEL / THOMSON CSF / SCS) and has prevented the parties to the merger to adopt anti competitive behaviour.

128. As regards the TTC and command receivers institutional market, whilst ESA is considered to have far more countervailing power than the commercial satellite manufacturers, the above remedy could provide ESA with further legitimacy in monitoring future pricing and supply. Also, this would secure a single harmonised solution for both the commercial and the institutional segment.

129. In the light of the above, the Commission concludes that the Commitments originally submitted by the parties on April 7, 2005, and modified on 25 April 2005, are sufficient to eliminate any serious doubts as to the compatibility of the transaction with the common market in relation to commercial and institutional TTC equipment and command receivers.

### 2.2 Radar altimeter

130. The parties submit that their radar altimeter activity cannot be divested due to the very specific characteristics of this product. As explained above, radar altimeters are used only for a few institutional satellite missions and are tailor made to the missions' requirements. Alcatel Space's and Alenia Spazio's essential assets related to radar altimeter are the know-how resulting from the research and development conducted in this area for the previous mission and the engineering teams that worked on these projects. It is therefore clear that the only remedy which could remove the competitions concerns is a licensing arrangement, under which the parties would provide complete technical information and assistance to enable another space supplier to develop this type of subsystem. The parties offered to commit to grant such a license, which is also unconditional to any third party IP

rights. ESA and third parties which expressed concerns with regard to the parties' exclusive know-how for radar altimeters confirmed that the proposed remedy would solve the competition concerns.

131. In the light of the above, the Commission concludes that the Commitments originally submitted by the parties on April 7, 2005, as modified on 25 April 2005, are sufficient to eliminate any serious doubts as to the compatibility of the transaction with the common market in relation to radar altimeters.

## VIII. CONCLUSION

132. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement, subject to the obligations set out in the submitted commitments. This decision is adopted in application of Article 6.1(b) and 6(2) of Council Regulation (EC) No 139/2004 and Art 57 of the EEA Agreement.

For the Commission

signed
Neelie KROES
Member of the Comission

**NON CONFIDENTIAL VERSION**

Alcatel

and

Finmeccanica Società per Azioni

CASE COMP/M.3680

Alcatel/Finmeccanica/Alcatel Alenia Space & Telespazio

# Commitments to the European Commission

April 27, 2005

# CASE COMP/M.3680 – Alcatel/Finmeccanica/Alcatel Alenia Space & Telespazio

## Commitments to the European Commission

Pursuant to Article 6(2), of Council Regulation (EC) No 139/2004 (the "**Merger Regulation**"), Alcatel and Finmeccanica Società per Azioni (the "**Parties**") hereby provide the following Commitments (the "**Commitments**") in order to enable the European Commission (the "**Commission**") to declare the creation of two full-function joint ventures between the Parties (Alcatel Alenia Space and Telespazio) compatible with the common market and the EEA Agreement by its decision pursuant to Article 6(1)(b) of the Merger Regulation (the "**Decision**").

The Commitments shall take effect upon the date of adoption of the Decision declaring the Concentration compatible with the common market pursuant to Article 6(1)(b) of the Merger Regulation.

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

### Section A. Definitions

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

**Affiliated Undertakings**: undertakings controlled or jointly controlled by the Parties, including Alcatel Alenia Space and Telespazio, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in the light of the Commission Notice on the concept of concentration under the Merger Regulation.

**Arbitration Commitment**: the TTC Supply Obligation, the TTC Reasonable Price Obligation and the Arbitration Commitment described in Section D.

**Arbitrator**: a natural or legal person, independent from the Parties, having the required experience, expertise and independence, who is approved by the Commission and who is in charge of the enforcement of the Arbitration Commitment.

**Deputy Arbitrator**: a natural or legal person, independent from the Parties, having the required experience, expertise and independence, who is approved by the Commission and who is in charge of replacing the Arbitrator in the event of absence or incapacity of the Arbitrator.

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

**ESA**: the European Space Agency.

**Existing Customers**: the customers referred to in Paragraph 42 and listed in **Confidential Annexes 3** for Alcatel Space and Alenia Spazio respectively, and the undertakings controlled by or

jointly controlled by or under the same control of these customers, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in the light of the Commission Notice on the concept of concentration under the Merger Regulation.

**Existing Products**: the products defined in Paragraph 42.

**Initial Licensing Period**: the period of […] from the Effective Date during which the Parties may conduct the licensing of the Licensed Products before providing a mandate to the License Trustee.

**License**: irrevocable licenses, on a reasonable lump sum and/or royalty-bearing basis, granting the Licensees a non-exclusive right to use the Technology Package needed for (i) the development, manufacture, marketing, sale and distribution of the Licensed Products as defined in **Annex 1** attached hereto within the Territory, for the Licensed Use and for the License Duration and (ii) the design, integration, validation, verification and sale of the Licensed Products as defined in **Annex 2** attached hereto within the Territory, for the Licensed Use and for the License Duration.

**License Closing**: the transfer of the License to the Licensee, meaning the moment when the agreement granting the License is signed, and after all conditions precedent, if any, are fulfilled.

**License Commitment**: the Commitment relating to the granting of the Licenses.

**License Duration**: the period during which the Licensee is granted the License.

**License Trustee**: one or more than one natural or legal person, independent from the Parties, who is approved by the Commission and appointed by the Parties and who has received from the Parties an irrevocable and exclusive mandate to conduct the granting of the License of one or more Licensed Products […].

**Licensed Products**: the products as defined in **Annexes 1 and 2** attached hereto that the Parties commit to license.

**Licensed Use**: the scope of application of the License of each Licensed Product as defined in **Annexes 1 and 2** only.

**Licensee(s)**: the entity(ies) approved by the Commission which will be granted, within the Territory, for the Licensed Use and for the License Duration, the right to use the Technology Package needed for (i) the development, manufacture, marketing, sale and distribution of the Licensed Products as defined in **Annex 1** attached hereto and in accordance with the criteria set out in Section C.3; (ii) the design, integration, validation, verification and sale of the Licensed Products as defined in **Annex 2** attached hereto and in accordance with the criteria set ou in Section C.3.

**Monitoring Trustee(s)**: one or more than one natural or legal person, independent from the Parties, who is approved by the Commission and appointed by the Parties, and who has the duty to monitor the Parties' compliance with the conditions and obligations attached to the Decision and who has the duty, in particular, to follow the Parties' efforts with a view to finding a potential licensee during the Initial Licensing Period.

**NASA**: the United States National Aeronautics and Space Administration.

**New Specifications Products**: the products defined in Paragraph 43.

**Technology Package**: the information and intellectual property rights described, for each Licensed Product, in **Annexes 1 and 2**.

**Territory**: the territory defined in **Annexes 1 and 2**.

**Trustee(s)**: the Monitoring Trustee(s) and/or the License Trustee.

**Trustee Licensing Period**: the period of […] from the date of expiry of the Initial Licensing Period within which the License Trustee shall have an irrevocable and exclusive mandate to conduct the license of the Licensed Products.

**TTC Reasonable Price Obligation**: the obligation to supply TTC Equipment at a reasonable price as set out in Section D.

**TTC Supply Obligation**: the obligation to bid for, whenever invited, and supply, if selected, TTC Equipment to any purchaser upon such purchaser's request as set out in Section D.

**Alcatel**: Alcatel is a joint stock company, incorporated under the laws of France, with its registered office at 54 rue de La Boétie, 75411 Paris Cedex 08, France and registered with the Paris Commercial Register under number 333 150 043.

**Alcatel Space**: Alcatel Space and the undertakings controlled or jointly controlled by Alcatel Space, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in the light of the Commission Notice on the concept of concentration under the Merger Regulation.

**Finmeccanica**: Finmeccanica is a joint stock company, incorporated under the laws of Italy, with its registered office at Piazza Monte Grappa 4, 00195 Rome, Italy and registered with the Register of Commercial Companies of Rome under number 00401990585.

**Alenia Spazio**: Alenia Spazio and the undertakings controlled or jointly controlled by Alenia Spazio, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in the light of the Commission Notice on the concept of concentration under the Merger Regulation.

## Section B. Overview of the Commitments

**1.** The Parties commit to grant licences on terms approved by the Commission for TTC Equipment and Radar Altimeters. The Parties also commit to submit to arbitration any dispute relating to the TTC Supply Obligation or to the TTC Reasonable Price Obligation (as defined in Section D below).

**2.** The licences for TTC Equipment and Radar Altimeters shall be granted over either Alcatel Space or Alenia Spazio's products. The choice of the concerned products shall be determined by the Parties ; however, the Parties commit to license the products whose licensing raises fewer or no concerns with regard to third party rights.

As far as TTC Equipment is concerned, it is recalled that TTC Equipment is composed of telemetry transmitters, command receivers, beacons and transponders for commercial and institutional applications (the "**TTC Equipment**"). The Parties shall analyze third

party rights affecting each of these sub-categories of TTC Equipment and for each sub-category shall grant a license in priority on the products whose licensing raises fewer or no concerns with regard to third party rights.

However, the Parties commit unconditionally to license command receivers and Radar Altimeters.

**3.** Where a license is granted and approved by the Commission for the entirety of the TTC Equipment, the Arbitration Commitment provided in Section D shall lapse two years after the date when the Licensee is awarded the License. If a license is granted only for command receivers, or fewer than all other sub-categories of TTC Equipment (telemetry transmitters, beacons and transponders) because of third party rights referred to in Paragraph 2 above, the Arbitration Commitment provided in Section D shall no longer apply to command receivers or such other sub-category(ies) two years after the date the Licensee is awarded the License for command receivers or such other sub-category(ies) respectively.

**4.** The Parties commit to make their best efforts to obtain the relevant authorizations and consents of third parties, where required, in order to comply with the License Commitment.

**5.** Should the Parties fail to implement the License Commitment with respect to telemetry transmitters, beacons and/or transponders because the Parties do not (despite their best efforts) succeed in obtaining any necessary third parties' consent, novation, approval or other form of intervention, the Parties shall continue to be bound by the Arbitration Commitment (as defined in Section D below) for such sub-category(ies) and for an unlimited period of time. This will also be the case if no licensee for telemetry transmitters, beacons and/or transponders is found by the end of the Trustee Licensing Period. For the sake of clarity, this Paragraph 5 does not apply to command receivers and Radar Altimeters, which will be licensed unconditionally.

## Section C. License Commitment

### Section C.1 The Licensed Products

*Commitment to license*

**6.** The Parties commit to grant the Licenses of the Licensed Products at the latest by the end of the Trustee Licensing Period to one or several Licensees and on terms approved by the Commission in accordance with the procedure described in Paragraph 14 below. To carry out the granting of the Licenses, the Parties commit in particular to make every effort to find one or several Licensees and to enter into one or several final binding agreements for the licensing of the Licensed Products within the Initial Licensing Period, while at the same time preserving the objective of obtaining the best possible return on the License. If the Parties have not entered into such an agreement, or procured the

conclusion of such an agreement, at the end of the Initial Licensing Period, the Parties shall grant the License Trustee an exclusive mandate to license the Licensed Products in accordance with the procedure described in Paragraph 27 in the Trustee Licensing Period.

**7.** As concerns TTC Equipment, the Parties commit to make every effort to grant a license for all four sub-categories of TTC Equipment (telemetry transmitters, command receivers, beacons and transponders) to one and the same Licensee or, failing this, one and the same Licensee for commercial applications and one and the same Licensee for institutional applications, in the conditions described in Section B above.

**8.** The Parties shall be deemed to have complied with this License Commitment if, (i) by the end of the Trustee Licensing Period, the Parties have entered into a final binding license agreement in relation to the Licenses, if (ii) the Commission approves the Licensee(s) and the terms of the License in accordance with the procedure described in Paragraph 14 below and if (iii) the License Closing takes place within a period not exceeding […] after the approval by the Commission of the Licensee and the terms of the granting of the License.

*Structure and definition of the Licenses*

**9.** The Parties commit to grant, for adequate remuneration (including the costs incurred in the licensing process and royalties and/or lump sum) and for the License Duration, to the Licensee(s) the Licenses on the Technology Packages defined and described in **Annexes 1 and 2**. The License will include, *inter alia*, the following:

(a) only in so far as the Licensed Use is concerned, where relevant, the existing authorisations for the Licensed Products granted by the competent administrative authorities in the Territory (including the provision of the technical support necessary for the transfer of the authorisations);

(b) where relevant, those trademarks owned by the Parties under which the Licensed Products are marketed for Licensed Use within the Territory;

(c) where relevant, those patents owned by the Parties under which the Licensed Products are developed and produced for Licensed Use within the Territory; and

(d) where relevant, any additional rights or authorisations concerning the Licensed Products.

## Section C.2 Commitments in relation to the Licensed Products

*Preservation of Viability, Marketability and Competitiveness*

**10.** The Parties undertake to preserve the full economic viability, marketability and competitiveness of each Licensed Product until License Closing, in accordance with past commercial practice and normal business practice in the relevant sector. The Parties also undertake to reduce to the minimum any risk of loss of competitive potential of the Licensed Products. In particular, until License Closing, the Parties undertake:

(a) not to carry out any act upon their own authority that would foreseeably have a significant adverse impact on the economic value or the competitiveness of the Licensed Products for their Licensed Use;

(b) to make available sufficient resources for the development and improvement of the Licensed Products for their Licensed Use, on the basis and continuation of the existing business plans;

(c) where relevant, to maintain in force, during the License Duration, the patents, designs and trademarks relating to the Licensed Products for their Licensed Use and to ensure that they are protected in the Territory.

(d) where relevant, to register the patent and/or trademark license of the Licensed Products with the adequate patent and trademark registries, so that it is enforceable against third parties.

*Due Diligence*

**11.** In order to enable potential licensees to carry out a reasonable due diligence of the Licensed Products, the Parties shall, subject to customary confidentiality assurances and dependent on the stage of the Licensing Process, provide to potential licensees sufficient information as regards the Licensed Products for their Licensed Use.

*Reporting*

**12.** The Parties shall submit written confidential reports in English on potential licensees of the Licensed Products and developments in the negotiations with such potential licensees to the Commission and the Monitoring Trustee(s) no later than 10 calendar days after the end of every month following the Effective Date (or otherwise at the Commission's request).

The Parties shall inform the Commission and the Monitoring Trustee(s) on the preparation of the documentation and the due diligence procedure for the Licensed Products and shall submit to the Commission and the Monitoring Trustee(s) a copy of the information describing the Licensed Products before sending such information out to potential licensees.

**Section C.3 The Licensee(s)**

**13.** The choice of the Licensee(s) and the final binding agreement for the Licensed Products shall be submitted to the Commission for approval. In order to be approved by the Commission, each Licensee(s) must:

(a) be a viable third party, independent and financially unconnected to the Parties;

(b) have the financial resources, proven expertise and incentive to produce and market the Licensed Products for Licensed Use within the Territory in active competition with the Parties and other competitors in the sector concerned, without this formulation excluding *a priori* any category of Licensee; and

(c) be likely neither to create, in the light of the information available to the Commission, *prima facie* competition concerns, nor give rise to a risk that the implementation of the License Commitments will be delayed. They must also reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Licenses.

The criteria mentioned in points (a) to (c) above concerning the Licensee shall hereafter be referred to as the "**Licensee Requirements**".

**14.** The final binding license agreement for each of the Licenses shall be conditional upon the Commission's approval. When the Parties will have reached an agreement with a potential licensee, they shall submit a fully documented and reasoned proposal, including a copy of the final agreement, to the Commission and the Monitoring Trustee(s). The Parties must be able to demonstrate to the Commission that the potential licensee meets the Licensee Requirements and that the License is being granted in a manner consistent with the License Commitments. The Commission shall reach a decision regarding the approval of the potential licensee and the final agreement as soon as possible following the date of submission of the proposal and receipt of complete information enabling the Commission to reach a decision.

**Section C.4 The Trustee(s)**

I. Appointment Procedure

**15.** The Parties shall appoint one or several Monitoring Trustee(s) to carry out the functions specified in the License Commitments.

**16.** If the Parties have not entered into a binding license agreement for the granting of the License […] before the end of the Initial Licensing Period or if the Commission has rejected a licensee proposed by the Parties at that time or thereafter, the Parties shall appoint a License Trustee to carry out the functions specified in the License Commitments. The appointment of the License Trustee shall take effect upon the commencement of the Trustee Licensing Period.

**17.** Each Trustee shall be independent of the Parties, possess the necessary qualifications to carry out its mandate and shall neither have been nor become exposed to a conflict of interest. Each Trustee shall be remunerated by the Parties for all services rendered

while accomplishing its tasks. The system of remuneration of each Trustee shall not impede the independent and effective fulfilment of its mandate.

*Proposal by the Parties*

**18.** No later than […] after the Effective Date, the Parties shall submit a list of one or more persons whom the Parties propose to appoint as the Monitoring Trustee(s) to the Commission for approval.

**19.** Where relevant, no later than […] before the end of the Initial Licensing Period, the Parties shall submit a list of one or more persons whom the Parties propose to appoint as License Trustee to the Commission for approval.

**20.** The proposal of Trustee(s) shall contain sufficient information for the Commission to verify that the proposed Trustee(s) fulfills the requirements set out in Paragraph 17 above and shall include the full terms of the proposed mandate, including all provisions necessary to enable the Trustee(s) to fulfill its duties.

**21.** Where relevant, it should be indicated whether the same proposed Trustee is to act as Monitoring Trustee and License Trustee or whether one or two different Trustees are proposed for the two functions.

*Approval or rejection by the Commission*

**22.** The Commission shall approve or reject the proposed Trustee(s) and approve the proposed mandate. The approval shall take place within a period of two weeks from receipt of complete information enabling the Commission to reach a decision regarding these proposals. Should the Commission fail to react within this period, the Initial Licensing Period shall be suspended until the Commission reaches a decision regarding said proposals. If only one name is approved, the Parties shall appoint, or cause to be appointed, the individual(s) or institution(s) concerned as Trustee(s), in accordance with the mandate approved by the Commission. If more than one name is approved, the Parties shall be free to choose the Trustee(s) to be appointed from among the names approved. The Trustee(s) shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

*New proposal by the Parties*

**23.** If all the proposed Trustees are rejected, the Parties shall submit the names of at least two more individuals or institutions within one week of being informed of the rejection, in accordance with the requirements and the procedure set out in Paragraphs 18 to 22 above.

*Trustee nominated by the Commission*

**24.** If all further proposed Trustees are rejected by the Commission, the Commission shall nominate one or several Trustee(s), whom the Parties shall appoint, or cause to be appointed, in accordance with a Trustee mandate approved by the Commission.

II. Missions of the Trustee(s)

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

*Duties and obligations of the Monitoring Trustee(s)*

**26.** The Monitoring Trustee(s) shall:

(a) propose in its first report to the Commission a work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision, in particular those referred to in Section C.2 above;

(b) monitor compliance by the Parties with the conditions and obligations attached to the Decision;

(c) assume the other functions assigned to the Monitoring Trustee(s) under the conditions and obligations attached to the Decision;

(d) propose to the Parties such measures as the Monitoring Trustee(s) considers necessary to ensure the Parties' compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Licensed Products for their Licensed Use within the Territory in the ordinary course of business, pursuant to good business practice;

(e) review and assess potential licensees as well as the progress of the Licensing process and verify, dependent on the stage of the licensing process, that potential licensees receive sufficient information;

(f) provide to the Commission, sending the Parties a non-confidential copy at the same time, a written confidential report within 15 calendar days after the end of every month. The report shall cover the operation and management of the Licensed Products so that the Commission can assess (i) whether the Licensed Products are held in a manner consistent with the License Commitments, (ii) the progress of the licensing process as well as (iii) the main characteristics of potential licensees. In addition to these reports, the Monitoring Trustee(s) shall promptly report in writing to the Commission, sending the Parties a non-confidential copy at the same time, if it concludes on reasonable grounds that the Parties are failing to comply with any of the conditions or obligations under these License Commitments;

(g) within one week after receipt of the documented licensee proposal referred to in Paragraph 14, submit to the Commission a reasoned opinion as to the marketability of the Licensed Product after the granting of the License. The Monitoring Trustee(s)'s opinion must also confirm that the Licensed Products are licensed in a manner consistent with the conditions and obligations attached to the Decision and specify, in particular, if relevant, whether the granting of the License of the Licensed Products for their Licensed Use within the Territory without one or

more of the elements of the Technology Packages affects the maintenance and the marketability of the Licensed Products after the granting of the License, taking account of the proposed licensee(s).

*Duties and obligations of the License Trustee*

**27.** Within the Trustee Licensing Period, the License Trustee shall, on behalf of the Parties, grant each License to a Licensee […], provided that the Commission has approved both the potential licensee and the final binding license agreement in accordance with the procedure laid down in Paragraph 14. The License Trustee shall include in the license agreement such terms and conditions as it considers appropriate for an expedient granting of the License in the Trustee Licensing Period. The License Trustee shall protect the legitimate financial interests of the Parties, subject to the Parties' unconditional obligation to grant the License in the Trustee Licensing Period […].

**28.** In the Trustee Licensing Period (or otherwise at the Commission's request), the License Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the licensing process. Such reports shall be submitted within 15 calendar days after the end of every month with a simultaneous copy to the Monitoring Trustee(s) and a non-confidential copy to the Parties.

III. Duties and obligations of the Parties

**29.** The Parties shall provide and shall cause their advisors to provide the Trustee(s) with all such co-operation, assistance and information as the Trustee(s) may reasonably require to perform their tasks.

**30.** The Monitoring Trustee(s) and the License Trustee shall have full and complete access, during business opening hours, to the Parties' books, records, documents, facilities and technical information relating to the research, regulatory approvals, where relevant patents, development manufacture, distribution and sale of the Licensed Products for their Licensed Use within the Territory, reasonably necessary for fulfilling its duties under the License Commitments.

**31.** Where necessary, the Parties shall provide the Trustee(s) upon request with copies of any appropriate document. The Parties shall make available to the Trustee(s) one or more offices on their premises and shall be available for meetings in order to provide the Trustee(s) with all information necessary for the performance of its (their) tasks.

**32.** The Parties shall provide the Monitoring Trustee(s) and/or procure the provision of the Monitoring Trustee(s) with all managerial and administrative support that it (they) may reasonably request on behalf of the management of the Licensed Product. The Parties shall provide and shall cause their advisors to provide the Monitoring Trustee(s), on request, with the information submitted to potential licensees, in particular give the Monitoring Trustee(s) access to the data room documentation and all other information granted to potential licensees in the due diligence procedure concerning the Licensed Product. The Parties shall inform the Monitoring Trustee(s) on possible licensees, submit a list of potential licensees, and keep the Monitoring Trustee(s) informed of all developments in the Licensing Process.

**33.** The Parties shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the License Trustee to effect the granting of the Licenses and all actions and declarations the License Trustee considers necessary or appropriate to achieve the granting of the License and the License Closing. Upon request of the License Trustee, the Parties shall cause the documents required for effecting the granting of the License and the License Closing to be duly executed.

**34.** The Parties shall indemnify the Trustee(s) and their employees and agents and shall guarantee them against any liability arising out of the performance of the Trustee(s)'s duties under the License Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee(s), its employees, agents or advisors.

IV. Replacement, discharge and reappointment of the Trustee(s)

**35.** If a Trustee ceases to perform its functions under the License Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:

(a) The Commission may, after hearing the Trustee, require the Parties to remove the Trustee; or

(b) The Parties, with the prior approval of the Commission, may remove the Trustee.

In the event of the removal of one or several Trustee(s), the Initial Licensing Period and, where relevant, the Trustee Licensing Period shall be suspended from the date of removal until the date of appointment of a new Trustee following its approval by the Commission.

**36.** The Trustee who is removed according to Paragraph 35, may be required to continue in its function until a new Trustee is in place to whom the removed Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in Paragraphs 15 to 24 above.

**37.** Beside the removal according to Paragraph 35, a Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties, following a request from the Trustee or the Parties, after all the License Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee(s) if it subsequently appears that the relevant remedies might not have been fully or properly implemented.

## Section D. Arbitration Commitment

### Section D.1 TTC Supply Obligation

**38.** The Parties commit to bid for, whenever invited, and supply, if selected, TTC Equipment (comprising telecommand receivers, telemetry transmitters, beacons and transponders)

to any purchaser upon such Purchaser's request in the conditions described below (the "**TTC Supply Obligation**").

**39.** In this respect, the Parties commit to offer to provide the TTC Equipment under normal, transparent and non-discriminatory contractual conditions, at arm's length, following ordinary commercial practice. The supply contracts proposed by the Parties shall contain all necessary terms and conditions allowing for the conclusion of such contracts, including provisions relating to prices, rebates, delivery schedules and conditions, quality standards, and ordinary shipping conditions. The proposed terms and conditions shall be similar to those currently agreed with customers for similar types of contracts.

**40.** In addition, the Parties commit not to grant any purchaser of the TTC Equipment (including Alcatel Alenia Space and the Affiliated Undertakings) preferential conditions which would not be justified and based on objective and verifiable criteria, such as sales volumes.

**Section D.2 TTC Reasonable Price Obligation**

**41.** The Parties commit to supply the TTC Equipment at a reasonable price (the "**TTC Reasonable Price Obligation**"). The Parties commit to initiate the production and deliver the TTC Equipment ordered against a down payment that shall not exceed 20% of the price proposed by Alcatel Alenia Space. In case of a dispute relating to the price of the TTC Equipment ordered, the dispute shall be settled in accordance with the procedure described in Section D.3 below; the production and delivery of the TTC Equipment ordered shall not be suspended by Alcatel Alenia Space while the arbitration procedure is pending.

**42.** For products already in the portfolio of the Parties (the "**Existing Products**"):

(a) For products already supplied or which were proposed by the Parties to a customer, a reasonable price shall not exceed the latest price charged (or the latest price proposed if lower) by Alcatel Space or Alenia Spazio respectively for TTC Equipment presenting the same specifications and for the same quantities (for either single orders or in the framework of LTAs). This latest price will be converted into euros at the exchange rate published by the European Central Bank as applicable at the date of the contract or proposal and adjusted for inflation in accordance with the Harmonised Index of Consumer Prices as published by the European Central Bank. The list of Existing Customers, corresponding prices and applicable references is attached in **Confidential Annex 3** for each specification sold or proposed by Alcatel Space or Alenia Spazio respectively for TTC Equipment.

New generation products, replacing, at the sole initiative of Alcatel Alenia Space, products based on obsolete components or technology, presenting the same specifications as old generation products already supplied or proposed by the Parties to a customer, shall be offered at the same prices referred to in **Confidential Annex 3**.

Minor modifications of the specifications requested in the normal course of business by a customer, when placing a single-flight order or a specific order within the framework of any LTA signed after the Effective Date, which do not result in any significant cost increase, shall not have any impact on the prices referred to in **Confidential Annex 3**.

(b) For any customer asking for a product whose specifications fall within the Qualification Range of an existing product, but which has not been already ordered by this particular customer, the reasonable price shall not exceed the sum of a reasonable recurring price and a reasonable non-recurring price, where

– (i) a reasonable Recurring Price shall not exceed a Reference Recurring Price based on the price list corresponding to a set of generic specifications detailed in **Confidential Annex 4** (adjusted for inflation in accordance with the Harmonised Index of Consumer Prices as published by the European Central Bank); and

– (ii) a reasonable Non Recurring Price for adaptation to the specific customer requirements (in particular to the platform interface in case of a new customer) will not exceed a Reference Non Recurring Price as provided for in **Confidential Annex 4**.

**Confidential Annex 4** shall be sent by registered mail to a list of Existing Customers approved by the Commission within 15 calendar days of the Decision. **Confidential Annex 4** shall be made available to any potential new customer, upon request, by fax and/or email within 2 business days of such request, and by registered mail immediatly thereafter.

Qualification Range, Recurring Price and Non Recurring Price shall have the meaning prescribed in **Annex 5**.

**43.** For products whose specifications fall outside the Qualification Range of any of the Existing Products (the "**New Specifications Products**"), a reasonable price shall not exceed a price to be calculated by comparison with the closest Existing Product, on the basis of the sum of the price of the closest Existing Product; and

– the difference between Recurring Costs of the closest Existing Product and the New Specifications Product and

– the amount of the newly-generated Non Recurring Cost,

increased by a reasonable profit coefficient.

This price will be determined in accordance with the guidelines set forth in **Annex 5**. Following delivery of each order for New Specifications Products, the Parties shall send to ESA references to the corresponding contractual documentation.

**Section D.3 Arbitration Commitment**

***Amicable Settlement of Dispute***

**44.** Should a potential purchaser consider that the Parties are in breach of the TTC Supply Obligation and/or the TTC Reasonable Price Obligation, it may activate the present Arbitration Commitment by notifying to the Parties by registered mail the reasons for the alleged breaches. The Parties shall inform without delay the Commission by forwarding to it a copy of the above notice.

**45.** The Parties and the potential purchaser have a duty to cooperate and use every reasonable effort to settle the dispute and reach an agreement satisfactory for both of them, within a reasonable period of time not exceeding 15 calendar days from the receipt of the notice. The Commission shall be informed of this agreement in writing and without delay.

***Appointment of the Arbitrator***

**46.** Should the Parties and the potential purchaser not reach an agreement according to the procedure described above, the Parties commit to submit any dispute relating to the conclusion of supply agreements for the TTC Equipment to the Arbitrator. The Parties

propose that ESA, and more precisely the Director General of ESA (or any competent person within ESA designated by the Director General of ESA which would not have had any direct or indirect interest in the Parties or their Affiliated Undertakings for the last 5 years) be the Arbitrator.

**47.** In addition, the Parties shall propose that ESA appoint the Deputy Arbitrator within ESA.

**48.** As regards TTC Equipment for commercial telecommunication satellites, any potential purchaser could request that, as an exception to the general rule provided in the two Paragraphs above, in the framework of a specific dispute, the Arbitrator be appointed as follows: The Arbitrator shall be appointed by a joint decision of the Chief of Staff of NASA (or his representative) and the Director General of ESA (or his representative); If the Arbitrator is not appointed within 15 calendar days of the request of the potential purchaser, the Arbitrator shall be appointed by the President of the International Chamber of Commerce in Paris.

***Arbitration Procedure***

**49.** Any purchaser of the TTC Equipment, which would claim to have suffered or to risk suffering a loss in relation to a breach of the TTC Supply Obligation and/or the TTC Reasonable Price Obligation will be able to submit such dispute to the Arbitrator, after having sought to reach an amicable settlement in accordance with the procedure described above.

**50.** The dispute shall be submitted to the Arbitrator by registered mail, specifying the nature of the dispute, the claims of the plaintiff and the plaintiff's acceptance of all the provisions of the Arbitration Commitment. The plaintiff shall simultaneously send a copy of the claims to the Parties by registered mail.

**51.** In the event the plaintiff request that the Arbitrator be appointed in accordance with Paragraph 48 above, the plaintiff shall send to the Chief of Staff of NASA and the Director General of ESA a registered mail, requesting such appointment and specifying the nature of the dispute, the claims of the plaintiff and the plaintiff's acceptance of all the provisions of the Arbitration Commitment. The plaintiff shall simultaneously send a copy of the claims to the Parties by registered mail.

**52.** The Parties shall be given the opportunity to respond to the claims by registered mail for 15 calendar days following their receipt of the registered mail of the plaintiff informing them of the submission of the dispute to the Arbitrator or, as the case may be, 15 calendar days following the appointment of the Arbitrator in accordance with Paragraph 48 above. The Arbitrator shall settle the dispute, without any possibility of appeal whatsoever, within one month following receipt of the registered mail submitting the dispute to the Arbitrator or, as the case may be, one month following the appointment of the Arbitrator in accordance with Paragraph 48 above.

**53.** The Arbitrator shall act within the framework laid down in Articles 1442 *et seq*. of the French *Nouveau Code de Procédure Civile* in application of French law. The language of the arbitration procedure shall be English and the arbitration shall take place in Paris.

**54.** The Parties commit to comply promptly with the arbitration award. The arbitration award shall, in addition to deciding the merits of the claims, determine the Arbitrator's fees and

the arbitration costs (including those incurred by the independent advisors or experts who may be appointed by the Arbitrator). Such fees and costs shall in principle be borne by the Parties; however, in cases of unsubstantiated demand(s), such fees and costs shall be borne by the plaintiff.

**55.** The Arbitrator shall have full and complete access to any confidential information relating to the TTC Equipment that the Arbitrator deems necessary for the performance of its duties. In particular, the Arbitrator shall have access, during business opening hours, to any books, records, documents, management or other personnel, facilities, sites and technical information that it deems necessary. The Arbitrator shall be able to conduct inquiries and audits under ESA procedures relating to the TTC Equipment (including their prices) and necessary for the fulfilment of its missions as laid down in this Arbitration Commitment. The Parties shall provide the documents requested by the Arbitrator without delay and, in any case, within a maximum of 5 business days following the request. The Arbitrator shall be instructed not to disclose confidential information and business secrets. The standards attributed to confidential information and business secrets are those as set out in accordance with European Community competition law.

**56.** The Parties shall provide the Arbitrator with all managerial and administrative support that it may reasonably request for the performance of its duties.

**57.** Should the Arbitrator consider it necessary for the performance of its duties, the Arbitrator shall appoint independent advisors or experts, provided that any fees and other expenses incurred are reasonable, or request the assistance of Alcatel Alenia Space engineers and technicians, which Alcatel Alenia Space shall provide without delay.

**58.** The possibility of such arbitration proceedings shall be mentioned in the general terms and conditions of sale relating to the TTC Equipment.

**59.** The Parties commit to send to the European Commission, as soon as possible, a copy of the letter submitting the dispute to the Arbitrator in the framework of this Arbitration Commitment. The Parties shall also send to the European Commission a copy of the arbitration award without delay.

### Section D.4 Long-Term Agreements

**60.** The Commitments shall not result in the modification of the long-term agreements in force at the Effective Date for the supply of TTC Equipment; such long-term agreements shall remain in full force and effect according to their terms and conditions.

## Section E. General

### Section E.1 Assumption of the Commitments

**61.** The Parties shall procure that, following the effective creation of Alcatel Alenia Space, the Commitments shall be assumed by Alcatel Alenia Space and Alcatel Alenia Space shall fully comply with all the obligations contained herein.

**Section E.2 The Review Clause**

**62.** The Commission may, in response to a request from the Parties showing good cause, and after hearing the Trustee if deemed necessary:

(a) Grant an extension of the time periods foreseen in the Commitments, in particular grant an extension of the Initial Licensing Period; or

(b) Waive or modify one or more of the conditions and obligations under the Commitments, in the event of significant modifications occurring with regard to the market conditions and the competitive situation on the market for the Licensed Products; and/or

(c) Allow the granting of the Licenses, without one or more elements, rights or assets initially planned.

**63.** Where the Parties seek an extension of a time period according to the preceding Paragraph, they shall submit a request to the Commission no later than one month prior to the expiry of that period, showing good cause. Only in exceptional circumstances shall the Parties be entitled to request an extension within the last month of any period.

*****

Date: April 27, 2005

Signed by Pascal Durand-Barthez

General Counsel

Duly authorised for and on behalf of Alcatel

and by Pier Francesco Guarguaglini

Chairman and Chief Executive Officer

Duly authorised for and on behalf of Finmeccanica

**Annex 1**

## TTC

| | |
|---|---|
| **Territory:** | **Worldwide for commercial applications** |
| | **ESA Member States for institutional applications** |
| **Duration:** | **unlimited duration** |
| **Licensed Products:** | **TTC Equipment, comprising telemetry transmitters, command receivers, beacons and transponders, each of which shall be designated as Licensed Products, either as a whole package or separately** |

This non-exclusive Licence shall cover a technology package that contains all information and intellectual property rights enabling the Licensee to manufacture effectively and sell TTC Equipment, as currently manufactured by the Parties, in accordance with the procedure set out in Section C. This technology package includes the technology, know-how, manufacturing processes, procedures, designs and test reports, as well as patents, trademarks, and any additional rights and authorizations related to TTC Equipment.

As part of the Licence, the Parties shall procure that Alcatel Alenia Space 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 and access to the relevant engineering teams reasonably necessary for the purpose of enabling the Licensee to manufacture the Licensed Product(s), independently from Alcatel Alenia Space, and/or provide integration services with its own personnel. Such technical assistance and access to the relevant engineering teams shall be part of the technology package and its costs be included in the terms and conditions of the License.

**Annex 2**

# Radar Altimeters

**Territory:** **ESA Member States**

**Duration:** **unlimited duration**

**Licensed Product:** **Radar Altimeters**

This non-exclusive Licence shall cover all relevant instrument system and engineering know-how to enable the Licensee, in accordance with the procedure set out in Section C, to design, integrate, validate, verify and sell the Radar Altimeters instruments in the same manner as it is currently done by the Parties for ESA programs. More precisely, the know-how which will be transferred shall refer to:

- Architectural Radar Altimeter trade-offs, selection, simulation and performance evaluation
- Apportionment of Radar Altimeter technical parameters to equipment/software specifications
- Testing tools specification and Radar Altimeter subsystem verification and validation.
- Radar Altimeter in orbit verification.

As part of the Licence, the Parties shall procure that Alcatel Alenia Space 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 and access to the relevant engineering teams reasonably necessary for the purpose of enabling the Licensee to design, integrate, validate, verify and sell the Radar Altimeters instruments, independently from Alcatel Alenia Space, and/or provide integration services with its own personnel. Such technical assistance and access to the relevant engineering teams shall be part of the technology package and its costs be included in the terms and conditions of the License.

**Annex 5 - Guidelines for New Specifications Products' Pricing**

New Specifications Products are those products falling outside the **Qualification Range** of Existing Products. The **Qualification Range** of a product is the set of specification parameters for which a product has successfully undergone space qualification procedures (e.g. simulations and tests). In practice, qualification ranges are designed by product manufacturers so as to be large enough to cover most standard specification requirements issued by prime contractors.

The price of the New Specifications Products will be defined as:

**Product Price** = **Product Cost** x (1 + **Reasonable Profit Coefficient**)

Where:

– The **Reasonable Profit Coefficient** is the profit coefficient which is agreed by ESA (currently 8%).

– The **Product Cost** is defined as:

**Product Cost** = **Recurring Cost** + **Non Recurring Cost**.

The **Non Recurring Cost** of a product consists in the newly-generated (by reference to the closest Existing Product) costs incurred prior to the space qualification of a product, regardless of the quantity ordered. It is dependent upon the extent of the difference between the New Specifications Product and the closest Existing Product. It includes:

- the hours spent on engineering development activities, including design reviews with the customer;
- the costs for the manufacturing and testing of a qualification model or costs for additional qualification tests, at the request of the customer;
- the costs for the changes/development of the test set-up, aimed at testing the New Product Specifications.

For the sake of clarity, the **Non Recurring Cost** shall be recovered only once.

The **Recurring Cost** is defined as the costs incurred for the delivery of ordered space-qualified products. It includes:

- the hours spent on all tasks related to the manufacturing, integration and tests of the product;
- the costs of parts and material used for manufacturing purposes;
- the associated production costs (e.g. lot acceptance test of hybrids).

The **Product Cost**'s evolution in time shall also take into account learning curve effects.

Any proposal for New Specifications Product issued by the Parties to the customer shall make reference to the specifications of such closest Existing Product.

The **Non Recurring Cost** and the **Recurring Cost** shall be determined in accordance with the following formula:

**Cost** = **Number of hours** x **Hourly Cost** + **Purchasing Costs** x **Purchasing Coefficients**

Where:

- The **Hourly Cost** is based on the set of hourly rates and overheads, as audited and approved by ESA. In particular, the structure of costs is analysed and agreed according to rules set by ESA, including labor costs, R&D costs, CAPEX, G&A and indirect people costs.
- The **Purchasing Costs** shall include the costs of all goods and services procured in order to satisfy a specific order.
- The **Purchasing Coefficients** are based on the ESA-approved multiplying factors, which normally depend on the category of purchase, e.g. parts, material and others.

The **Recurring Price** referred to in Paragraph 42(b) of the Commitments shall be defined as:

**Recurring Price** = **Recurring Cost** x (1 + **Reasonable Profit Coefficient**)

The **Non Recurring Price** referred to in Paragraph 42(b) of the Commitments shall be defined as:

**Non Recurring Price** = **Non Recurring Cost** x (1 + **Reasonable Profit Coefficient**)