

***Case No COMP/M.2079 -  
RAYTHEON / THALES /  
JV***

Only the English text is available and authentic.

**REGULATION (EEC) No 4064/89  
MERGER PROCEDURE**

---

Article 6(1)(b) NON-OPPOSITION  
Date: 30/03/2001

*Also available in the CELEX database  
Document No 301M2079*



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 30.03.2001

SG (2001) /D287250-287251

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EEC) No 4064/89 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

**To the notifying parties**

Dear Sirs,

**Subject: Case No COMP/M.2079 – RAYTHEON/THALES/JV**

Notification of 15.02.2001 pursuant to Article 4 of Council Regulation No 4064/89

1. On **15.02.2001**, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89<sup>1</sup> by which the undertakings Raytheon Company (“Raytheon) and Thomson-CSF (“Thales) acquire within the meaning of Article 3(1)(b) of the Council Regulation joint control of a newly created company constituting a joint venture.
2. After examination of the notification, the Commission has concluded that the notified operation falls within the scope of Council Regulation (EEC) No 4064/89 and does not raise serious doubts as to its compatibility with the common market and with the EEA Agreement.

**I. THE PARTIES' ACTIVITIES AND THE OPERATION**

3. Raytheon is a USA-based company, principally active in defence and commercial electronics, as well as business and special mission aircraft.
4. Thomson-CSF, which has recently changed its name into “Thales”, is a French company active in professional electronics and engineering for related commercial and defence

---

<sup>1</sup> OJ L 395, 30.12.1989 p. 1; corrigendum OJ L 257 of 21.9.1990, p. 13; Regulation as last amended by Regulation (EC) No 1310/97 (OJ L 180, 9. 7. 1997, p. 1, corrigendum OJ L 40, 13.2.1998, p. 17).

markets. It is jointly controlled<sup>2</sup> by Thomson SA (a holding company wholly owned by the French State, and also having interests in consumer electronics) and by Alcatel (active in communications, transportation and energy infrastructure).

5. The notified transaction consists in the creation of a joint venture between Raytheon and Thales in the field of ground-based air operations command and control (“AO/C2”) and battlefield systems.

## II. CONCENTRATION

### *Joint control*

6. The joint venture’s activities will be performed through three distinct companies, namely a central company (“JV Company”) incorporated in Ireland and responsible for the strategic management of the joint venture, and two operating companies (respectively based in the USA and in France) which will carry out the day-to-day management of the joint venture business.
7. JV Company will be jointly controlled by Raytheon and Thales, which will each own 50% of equity and voting rights in, and will appoint an equal number of representatives at the board of directors of JV Company. Each of Thales and Raytheon will also have veto rights over the strategic decisions (including the adoption of or any material modification to the business plan) of JV Company, since (i) these decisions will require the affirmative vote of both a majority of Raytheon representatives and of a majority of Thales representatives, and (ii) the quorum for meeting of the board of directors will be at least two directors from each parent.
8. The parent companies will also each control the two operating companies. This is so because (i) certain strategic decisions of those companies (such as the adoption of their respective business plans) will require the approval of the JV Company board, where each of the parent companies have veto rights; and (ii) more generally, the operating companies will have to operate in a manner consistent with the management and operating guidelines to be approved by the JV Company board.

### *Full function joint venture*

9. The joint venture will concentrate the relevant businesses of Thales and Raytheon in the fields of AO/C2 systems and battlefield systems. It will be established for an indefinite term, and will be directly responsible for the design, development, marketing, sale, testing, assembly, integration and support of AO/C2 and battlefield systems worldwide.
10. It will also have sufficient resources since the parent companies will contribute all assets (including premises, machinery, equipment, intellectual property rights, etc.), employees (including sales force) and contracts required.

---

<sup>2</sup> See case IV/M.1121-Alcatel/Thomson SA – Thomson-CSF

## *Conclusion*

11. In the light of the above, it is concluded that the joint venture will be jointly controlled by Raytheon and Thales, and that it will perform, on a lasting basis, all the functions of an autonomous economic entity. It follows that the notified transaction is a concentration pursuant to Article 3 of the Council Regulation.

### **III. COMMUNITY DIMENSION**

12. Raytheon and Thales have a combined aggregate worldwide turnover in excess of EUR 5,000 million<sup>3</sup> (Raytheon, EUR 21,152 million; and Thales, EUR 6,889 million). Each of them has a Community-wide turnover in excess of EUR 250 million (Raytheon, EUR 1,808 million; and Thales, EUR 4,031 million), but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension. It does not constitute a cooperation case under the EEA Agreement, pursuant to Article 57 of that Agreement.

### **IV. RELEVANT MARKETS**

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

##### *Products concerned*

13. The joint venture will be active in AO/C2 and battlefield systems. AO/C2 systems are ground-based surveillance systems used to protect a large geographic area (for instance, a country) against all air threats. More specifically, they perform different functions: (i) the establishment of a recognised air picture over the area concerned, and (ii) the planning, allocation and execution of all missions required for the effective protection of the airspace (including interception missions, intelligence missions and offensive missions). AO/C2 systems therefore usually comprise of two different elements (connected via communication systems), namely long range surveillance radar (collecting the air picture information), and AO/C2 centres (processing the information received from the radar and making appropriate weapon assignment).
14. According to the parties, battlefield systems comprise two distinct types of systems: tactical air defence systems, and weapon locating radar. Like AO/C2 systems, tactical air defence systems also aim to protect a geographic area against air attack. They therefore perform functions similar to those assigned to AO/C2 systems (i.e. surveillance of the airspace concerned, processing of that information in centres, and allocation and execution of the appropriate actions), and consist of the same types of elements as AO/C2 systems (i.e. radar and centres). However, unlike AO/C2 systems, tactical air defence systems only protect a localised area (typically, deployed troupes or assets), so that they present some important differences to AO/C2 systems in terms of scale and mobility. For instance, tactical air defence systems are often based on mobile radar with a range below 40 km,

---

<sup>3</sup> Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25). 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.

while AO/C2 systems are often large and fixed organisations using radar with a range in the area of 400-500 km.

15. In addition to this air defence capability, battlefield systems may also comprise weapon locating radar, which are used to detect and locate the source of incoming ordnance (artillery batteries, rockets and mortars) and to direct counter-fire to suppress that source. Insofar as weapon locating radar do not participate in the same mission as the tactical air defence systems as described above, they are usually independent from and unconnected to these systems, and they are usually procured on a separate basis.

*Turnkey systems vs. separate contracts*

16. As indicated above, each of battlefield systems and AO/C2 systems comprise several distinct elements, namely radar (air surveillance radar and, in the case of battlefield systems, weapon locating radar), communications and computerised centres. Those elements may be sold together in the context of integrated, turnkey contracts, or they may be bought separately. On the basis of the data provided by the parties and of the results of the Commission inquiry, it appears that turnkey contracts are relatively uncommon, and that most sales concern an individual type of equipment.
17. The vast majority of those third parties who responded to the Commission's inquiry considered that, although there was a product market for turnkey contracts, there were also distinct markets for the various elements, because each element carries out a specific function and requires distinct technical expertise and know-how. This is further indicated by the fact that (i) certain suppliers (like Raytheon) do not supply all of the elements concerned, and (ii) in most cases, the various elements are sold separately.
18. Consequently, it is concluded that the products concerned cannot be combined into a product market for AO/C2 systems and a market for battlefield systems; and that, instead, the specific market conditions and definitions for each element have to be examined. However, the results of the investigation suggest that certain groupings may still be made. First, it has been indicated that, in view of significant supply-side substitutability, AO/C2 communication systems and battlefield communication systems could be combined within a broader product market for ground-based military communications. And secondly, as the parties submit, there might be no need to draw a distinction between AO/C2 turnkey systems and centres, or between battlefield air surveillance radar and turnkey systems. For AO/C2 systems, this would be so because (i) the same suppliers are likely to compete in either system or centre sales, (ii) the selection of the radar supplier does not affect who can compete for centres, and (iii) it is extremely rare for turnkey systems to be procured in Europe. And for tactical air defence systems and radar, this would be so because, in turnkey sales, it is the air surveillance radar element which is crucial and which drives the competition.

*Development programmes vs. catalogue sales*

19. In line with previous decisions<sup>4</sup>, the parties also submit that a further distinction may be drawn between new programmes (usually initiated by countries with indigenous capability

---

<sup>4</sup> See, case COMP/M.1745-EADS

such as the USA, France, Germany, Italy or the United Kingdom) and “off-the-shelf” or “catalogue” procurements.

20. In the case of programmes, military customers have the industry develop and produce a new product, tailor-made to the customer’s specific requirements; in exchange, customers have to fully or partially fund the design, development and industrialisation of these products; furthermore, due to the extensive work required for these activities, a substantial period of time often elapses between the moment when the specifications are defined and the actual delivery of the product concerned. By contrast, customers procuring military products through catalogue sales purchase available products or designs (usually resulting from previous programmes), although customers may obviously require certain that certain adjustments be made to these products.
21. The parties submit that the conditions of competition for programmes and catalogue sales will differ: in the case of programmes, any company with the required competence and experience will, subject to national security requirements and national preference, be in a position to compete. That is say, the procuring agency is capable of inviting bids from all those companies with the relevant technical expertise. By contrast, in the case of catalogue sales, competition will be between those companies with a developed product which meets the specification of the procuring authority, so that the range of options may be narrower.
22. The results of the Commission’s investigation broadly support this segmentation, especially in the case of radar. In particular, it appears that, for catalogue sales, each of AO/C2 radar, battlefield air surveillance radar and weapon locating radar constitute distinct product markets, because (i) on the demand side, each product type cannot be substituted by another one; and (ii) on the supply side, it would be difficult, costly and time consuming for radar suppliers without a product type in a given category to develop and start competing for radar in that category. By contrast, in the case of new development programmes, most third parties indicated that suppliers with sufficient expertise in other types of radar could credibly and competitively compete in AO/C2 radar, battlefield air surveillance radar and weapon locating radar. On balance, this would suggest the existence of (i) distinct product markets for each of AO/C2 radar, battlefield air surveillance radar and weapon locating radar procured through catalogue sales, and (ii) a broader product market for military radar procured through new development programmes.
23. However, it also appears that the situation may be more complex in the case of centres because, in any battlefield centre or AO/C2 centre procurement, the centre would need to be tailored to the specific needs and structure of the procuring agency. In particular, according to the data provided by the parties, approximately 50% of the system cost is specific to the particular project concerned. This would imply that there are no catalogue sales for battlefield centres, AO/C2 centres and communication systems, and that the procurement of these systems may be akin to development programmes in each case. In line with the Commission’s findings in previous cases<sup>5</sup>, certain third parties have also indicated that, in that context, there was no need to draw a distinction between any type of command and control system, so that AO/C2 and battlefield centres could be included in a broader market including all military Command, Control and Information (“C2I”) systems. However, this view was contested by the parties and other competitors, who consider that,

---

<sup>5</sup> See e.g. case COMP/M.1858-Thomson-CSF/Racal (II)

in practice, previous experience in AO/C2 centres or battlefield centres plays an important role for the selection of the relevant supplier.

*Possibility for narrower segmentations*

24. On the basis of the above discussion, it appears that each of the following sectors would belong to a distinct product market (with the exception of AO/C2 centres and tactical air defence centres, which, according to a minority of third parties, might belong to a broader market for military C2I systems):

Catalogue sales	Programmes
AO/C2 radar	Ground-based radar
Battlefield air surveillance radar and systems	
Weapon locating radar	
AO/C2 centres and systems	
Tactical air defence centres	
Military ground based communication systems	

25. It is now necessary to examine whether each of the above categories must be further segmented into narrower product markets. As indicated above, there are indications that communication systems might be further segmented into AO/C2 communication systems and battlefield communication systems, or that turnkey systems could constitute distinct product markets. However, it is not necessary to further delineate those relevant product markets because, in all alternative product market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of it.
26. In addition, based on the data submitted by the parties, it appears that existing weapon locating radar (possibly offered for future catalogue sales) are differentiated products, which might be classified into the following four categories:

Category	Range	Products concerned
Short range	<10 km	Thales Cymbeline (no longer produced)
Medium range	10-30 km	Raytheon AN/TPQ-36 Ericsson Arthur Toshiba MPQ Strela Zoopark
Long range	30-50 km	Raytheon AN/TPQ 37 Euroart COBRA
Very long range	>50 km	Raytheon AN/TPQ 47

27. In that context, it is necessary to examine whether this categorisation might lead to narrower product market definitions for weapon locating radar. In particular, it appears that there are significant differences between medium range products and long range products, both in terms of performance, mobility and price (medium range products costing less than 10M\$, and longer range products typically costing between 15M\$ and 20M\$).
28. However, the results of the Commission's investigation indicate that there is no need to draw a distinction between these two categories (or between any other category). First, it appears that range is not the only criterion taken into account by customers, and that other factors, such as mobility and operational deployment, also play an important role in the

customer's decision.. Given that, for some of those factors (especially mobility), medium range systems have been recognised to offer better capability than long range systems, this suggests that competition between the two product categories may be more important than range differences would imply.

29. Furthermore, customers have indicated that medium range radar could offset a significant part of their range gap with longer systems through a different deployment. In particular, the results of the Commission's investigation indicate that, being more mobile than long range systems, medium range radar would typically be deployed close to the battlefield, where they would move with the artillery; while long range radar would usually be placed at some distance (approx. 10-20 km) behind the battlefield. This implies that, by using a higher number of (cheaper) medium range products positioned close to the battlefield, a military customer might be in a position to achieve most of the work performed by a smaller number of (more expensive) long range products positioned at the rear.
30. It follows from the above that medium range products may effectively compete with long range products in a number of occasions. This is further indicated by the fact that medium range systems (such as Ericsson's Arthur) have effectively bid in the recent past, or are even currently bidding, against long range products (such as Raytheon's AN/TPQ37 or Euroart's Cobra).
31. Furthermore, third parties have indicated that, even in those cases where customers would have a preference for products from one category, they would be able to make those products subject to the competitive pressure from other radar. Given that, as indicated above, a larger number of shorter range products can constitute a credible alternative to longer range systems, customers could (and sometimes apparently do) only define their need in terms of a "problem to solve", and not specify the characteristics of the products they want to buy. In that context, products from different categories can be offered, thereby effectively providing for an effective competitive procurement.
32. On that basis, it appears that products within one category of weapon locating radar are competitively constrained by products from other categories. There is therefore no need to draw a distinction between the different categories above, and it is concluded that all weapon locating radar may be combined within a single product market for weapon locating radar.

## **B. Relevant geographic markets**

33. The notifying parties submit that in those countries where there is no domestic supplier of the products concerned (and who usually purchase their products through catalogue sales), competition takes place at worldwide level (subject to export restrictions or barriers connected with national security). The parties also submit that, for those countries where a national supplier exists (and where customers traditionally procure programmes awarded to a domestic supplier) competition is in transition from a national to an international basis. In particular, the parties refer to the internationalisation of procurement policies, the increasing interoperability of defence products, the growing number of transnational companies, etc.
34. The results of the Commission's investigation broadly support the conclusions that catalogue sales take place through an international bidding process and that, for programme sales, recent developments have resulted in some opening of formerly protected markets.



35. However, a vast majority of third parties indicated that, despite the internationalisation of procurement policies, they still considered certain countries to essentially procure on a national basis. In particular, reference has often been made to the USA, France, Germany, Italy and the United Kingdom. This would imply that those countries still constitute national markets. Furthermore, it appears that, for catalogue sales, export restrictions or barriers connected with national security may significantly restrict the origin of those suppliers effectively competing on the market. In particular, a vast majority of third parties indicated that, for most contracts let in the EEA, competition is actually limited to Western producers.
36. However, it is not necessary to further delineate the relevant geographic markets because, in all alternative geographic market definitions considered, effective competition would not be significantly impeded in the EEA or any substantial part of that area.

## **V. IMPACT OF THE TRANSACTION**

### **A. Dominance**

#### *AO/C2 systems and elements*

37. Thales and Raytheon are both active in AO/C2 centres and systems, and Thales also supplies AO/C2 radar through its “Master” family. The operation will therefore have two effects, namely (i) the combination of Thales and Raytheon’s activities in centres and systems, and (ii) the combination of those activities with Thales’s radar business.

#### Combination of Raytheon and Thales’ activities in centres and systems

38. Thales and Raytheon offer AO/C2 centres and systems both individually and together through specific partnerships. In particular, Thales and Raytheon are joint partners in Air Command Systems International (“ACSI”), a 50/50 joint venture which obtained in 1999 the contract for the NATO Air Command and Control System Level of Capability 1. Through that programme, which concerns the replacement of the existing NATO air command and control system installed in the 1970s, ACSI has received contracts for new AO/C2 centres to Belgium, France, Germany and Italy; and it is likely that it will also equip all the other NATO countries (with the exceptions of the USA, the United Kingdom and probably Luxembourg).
39. In that context, and given the parties’ successes on the international market, the joint venture will become the clear market leader in AO/C2 centres and systems. In particular, according to the data provided by the parties, Thales and Raytheon (either alone or with a joint partner) have collectively won 10 of the 15 AO/C2 centre/system contracts procured through international competition since 1994, the next largest competitor being Northrop Grumman (4 contracts). This picture would not significantly change if centres and systems were considered to constitute distinct product markets, because the parties collectively won 3 of the 5 system sales and 7 of the 10 centre contracts since 1994, Northrop Grumman having won the 2 other system sales and 2 of the 3 other centre contracts.
40. However, in the international market, AO/C2 centres and systems are procured through bidding markets, where the conditions of competition are determined by the presence of credible suppliers, able to offer competitive alternatives to the parties’ products. In that context, even relatively high market shares may not necessarily translate into market

power, and it is necessary to examine whether the competitive behaviour of the joint venture would remain sufficiently constrained by the presence of other competitive bidders. In the present case, a vast majority of the third parties which responded to the Commission's investigation indicated that the joint venture would remain subject to the competition from other credible suppliers, such as Northrop Grumman, Lockheed Martin, EADS or Alenia Marconi Systems.

41. In particular, it should be noted that Northrop Grumman has successfully competed with each of Raytheon and Thales in the recent past, such as in Thailand (where it beat Raytheon) or in Argentina (where, in combination with Alenia, it beat Thales). Furthermore, it appears that size does not confer significant economies of scale or additional competitive in AO/C2 centres and systems, because those systems need to be tailored in every case to the specific command structure of the procuring country so that contract-specific work represent an important proportion (approximately 50%) of total cost of each contract.
42. Furthermore, there is no indication that the transaction would materially affect the conditions of competition in those Member States which traditionally procure on a national basis. In particular, it appears that, with the exception of ACSI (the centres of which will probably be sold to most NATO countries), the parties' activities do not materially overlap in any of France, Germany, Italy and the United Kingdom.

#### Thales's AO/C2 radar business

43. As indicated above, Thales is also active in the supply of AO/C2 radar. However, it has only obtained 4 of the 36 radar contracts awarded since 1994, and it has lost to competition in more than 60% of cases where it submitted a bid.
44. In that context, there is no indication that Thales's activities in AO/C2 radar could materially enhance the joint venture's competitive position in AO/C2 systems. Given the parties' competitive position in centres and systems, it is also necessary to examine whether the joint venture could successfully obtain additional radar sales through turnkey contracts for complete AO/C2 systems. However, system sales are few when compared to the total number of radar contracts (5 contracts out of 36), and other radar suppliers (especially Northrop Grumman, who obtained more than 10 radar contracts since 1994) appear to have much stronger positions than Thales in AO/C2 radar, so that those effects would not risk to materialise.
45. In the light of the above, it is concluded that the proposed concentration does not create or strengthen a dominant position in AO/C2 systems and elements as a result of which effective competition would be significantly impeded in the EEA or a substantial part of it.

#### *Tactical air defence systems and elements*

46. As indicated above, tactical air defence systems consist of centres, radar and communication systems. They are used to detect and track threat aircraft, helicopters and missiles, to allocate those threats to relevant weapon systems and to activate weapon control orders. As a result, tactical air defence systems are usually connected (and sometimes sold together) with surface to air weapon systems (especially surface to air missile systems and guns).

47. Thales and Raytheon are both active in battlefield air surveillance radar, and Thales also supplies tactical air defence centres and systems. Furthermore, each of the parties is also active in the supply of surface to air missile systems. It is therefore necessary to examine the possible effects of (i) the horizontal integration of Thales and Raytheon's radar, (ii) the combination of those radar activities with Thales's centre business, and (iii) the possible linkup of those tactical air defence system activities with the parties' respective surface to air missile system businesses.

#### Air surveillance radar

48. There is no indication that the operation could materially affect the conditions of competition for new radar programmes. First, the parties' activities do not overlap in any of those Member States which traditionally procure on a national basis. And secondly, for those programmes procured through international competition, it appears from the Commission's investigation that the joint venture will remain subject to the competition from other credible suppliers such as EADS, Lockheed Martin, Ericsson or BAe Systems.

49. According to the data provided by the parties, very few catalogue sales for battlefield air surveillance radar are effectively made through competitive bidding processes: out of the 19 contracts awarded since 1994, only 6 involved some competition. Most of the others were based on US FMS procedures<sup>6</sup> (often financed through US government loans) and therefore concerned US (mostly Raytheon) products.

50. In that context, and especially in view of the very limited number of competitions organised since 1994, market shares on the "open" market will not necessarily constitute relevant indicators of market power. Given the bidding character of catalogue sales procured through international competition, what needs to be examined is whether, for future contracts, the joint venture will remain subject to the competition from other credible alternatives.

51. It appears that, at least in the short to medium term, the joint venture's products would face competition from 3 other air surveillance radar: those are Ericsson's Giraffe, Lockheed Martin's PSTAR and EADS's TRML/TRMS. It appears that those are modern and capable products. In particular, Lockheed Martin's PSTAR and Ericsson's Giraffe have each successfully competed in the recent past against the parties' radar. Furthermore, the competitiveness of those products has been broadly confirmed by the results of the Commission's investigation, since a vast majority of third parties indicated that those radar constituted credible and competitive alternatives to the parties' products.

#### Tactical air defence centres and systems

52. According to the data provided by the parties, sales of battlefield centres and systems are relatively scarce: since 1994, only 5 contracts of that type have been let worldwide (to 4 different suppliers including Thales). Furthermore, it appears that those centres may often be relatively simple products, possibly produced and offered by smaller, local suppliers.

---

<sup>6</sup> Foreign Military Sales ("FMS") is a method whereby export customers source products and services from a US supplier with the US Government acting as a contracting agent for the export customer.

53. In that context, there is no indication that Thales's centre or system activities, which are mainly for the complex and larger products, could significantly strengthen the joint venture's position in radar. Nor is there any indication that the joint venture's activities in radar could materially affect the conditions of competition for centres or systems, since there has only been one turnkey contract since 1994 where the centre supplier also provided the relevant radar.

#### Weapon systems

54. Tactical air defence systems are usually integrated, and sometimes sold together with surface to air missile systems. Each of Thales and Raytheon having activities in that sector, it is therefore necessary to examine whether the operation could lead to spillover effects from one side to another.
55. However, the results of the Commission's investigation indicate that such effects are unlikely. In particular, a vast majority of third parties stated that in most cases, the supplier of weapon systems or tactical air defence systems does not confer a competitive advantage for the provision of other elements, because the interfaces between those elements are usually standard. Third parties also indicated that, in any event, customers could defeat any attempt from the parties to bundle or tie the sale of tactical air defence systems and weapon systems, for instance through the launch of separate tenders for the various elements. This is further confirmed by the fact that, in a significant number of past cases where tactical air defence sales were contemporaneous with weapon system sales, the supplier of the tactical air defence system or radar was different from the provider of the weapon system concerned.
56. In the light of the above, it is concluded that the proposed concentration does not create or strengthen a dominant position in tactical air defence systems and elements as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

#### *Weapon locating radar*

57. Each of Thales and Raytheon is active in weapon locating radar: Raytheon produces the Firefinder range of WLR (AN/TPQ36, AN/TPQ37) which will be complemented by the new, longer range, AN/TPQ47 currently being developed; while Thales has a 50% (controlling) stake in the Euroart consortium (together with EADS and Lockheed Martin) producing the Cobra. Furthermore, Thales is active in the upstream market for Travelling Wave Tubes ("TWT", a radar component), which it supplies to Ericsson's Arthur.
58. Pursuant to the agreements, the joint venture will include Raytheon's products, but not Thales's interests in Euroart. Given the parties' activities at the prime contracting level, and Thales's TWT business, the operation will therefore have two distinct effects: (i) the combination of Raytheon's WLR and Euroart's Cobra under Thales's aegis; and (ii) the vertical integration between Thales's TWT activities and the joint venture's WLR business.
59. There is no indication that the operation could create competitive concerns in the programme markets, in view of Raytheon's absence from weapon locating radar programmes in Europe and of the presence of substantial credible alternative suppliers, including current weapon locating radar producers such as Ericsson or the Euroart partners

Lockheed Martin and EADS, or suppliers of other radar such as BAE Systems or Alenia Marconi Systems.

60. The results of the Commission's investigation indicate that, with respect to catalogue sales, the parties will remain subject to the competition from other suppliers. In particular, although Strela and Toshiba have been broadly recognised not to be credible competitors for catalogue sales in Western countries (both because of their respective Russian and Japanese origin and because they do not meet the usual Western country requirements), Ericsson's Arthur has been widely considered to constitute a credible alternative to the parties' products, all the more so since it has recently successfully competed with Raytheon for catalogue sale contracts.
61. Furthermore, it appears that, although supplying TWT to Ericsson, Thales is not in a position to significantly raise Ericsson's costs, or more generally, to weaken Ericsson's competitive position in weapon locating radar. [...]
62. In the light of the above, it is concluded that the proposed concentration does not create or strengthen a dominant position in weapon locating radar as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.

#### **B. Coordination of competitive behaviour**

63. Pursuant to Article 2(4) of the Merger Regulation, a joint venture having as its object or effect the coordination of the competitive behaviour of undertakings that remain independent has to be appraised in accordance with the criteria of Article 85(1) and 85(3) of the EC Treaty. In order to establish a restriction of competition in the meaning of Article 85(1), it is necessary that the coordination of the parent companies' competitive behaviour is likely and appreciable and that it results from the creation of the joint venture be it as its object or its effect.
64. Raytheon and Thales will keep competing businesses in certain neighbouring sectors which are related to those where the joint venture will be active. Those are namely (i) surface radar, (ii) airborne radar, (iii) naval radar, (iv) air traffic control systems and (v) missile systems. All of these sectors are therefore candidates for examination under Article 2(4) of the Merger Regulation.
65. The activities of the joint venture will remain limited to the AO/C2 and battlefield systems, where Thales and Raytheon have agreed not to compete with the joint venture. Therefore, there are no indications that the creation of the joint venture has as its *object* the coordination of the competitive behaviour of the parent companies. It should therefore be examined whether the notified operation might have as its *effect* the coordination of the competitive behaviour of the parents.

#### *Radar*

66. There is no indication that the operation would lead the parties to coordinate their activities in their other radar activities. Despite some commonality of underlying technologies, it appears that there are significant technical differences between each type of radar, both in terms of application (surveillance, fire control, etc.) and performance (e.g. range or accuracy) requirements and of physical constraints (environment, room and power available, etc.). This will impose that different and specific technical solutions be chosen

for each radar type, so that, in practice, it seems unlikely that the joint venture's presence could create any spillover effect in other radar areas.

67. Furthermore, in any event, Thales and Raytheon remain subject to the competition from other credible suppliers such as BAe Systems, Alenia Marconi Systems or Lockheed Martin.
68. It follows that there are no indications which would allow the conclusion that the setting up of the joint venture will lead to the co-ordination of the parents' competitive behaviour on any of the markets concerned. In any case, in view of the presence of strong competitors, there is no indication that such co-ordination would be appreciable.

#### *Air traffic control systems*

69. Air traffic control systems are used to co-operate civil air traffic, and ensure the safe flow and management of air traffic in a specific air space, the tracking of climbing/descending aircraft, etc. Like AO/C2 and tactical air defence systems, they also essentially consist of radar connected to control centres.
70. However, despite those apparent similarities, these systems are substantially different from those offered by the joint venture. In particular, air traffic control systems are civilian products designed to operate in favourable environment and with co-operative aircraft, while military air surveillance systems are required to detect and track hostile aircraft under highly constraining conditions (such as jamming), to interface with weapon systems, etc. Those differences translate into distinct technical solutions, performance and price, so that, according to the parties, there are usually no common subassembly or software module between military and air traffic control systems. The civilian character of air traffic control systems also makes competition for these products substantially different from those for military products, both in terms of customers, export restrictions, etc.
71. As a result, there is no indication that the operation would create incentives for the parties to co-ordinate their activities in air traffic control systems. In any event, the parties' combined market shares would not exceed 27% (in the EU), and they would remain subject to the competition from other large and experienced air traffic control system suppliers such as Lockheed Martin, Northrop Grumman and Alenia Marconi Systems.
72. It follows that there are no indications which would allow the conclusion that the setting up of the joint venture will lead to the coordination of the parents' competitive behaviour on any of the markets concerned. In any case, in view of the presence of strong competitors, there is no indication that such coordination would be appreciable.

#### *Weapon systems*

73. The parties have overlapping activities in very short range surface to air missiles and medium range surface to air missiles. While there appear to be other credible competitors in very short range systems (primarily Matra BAe Dynamics' Mistral missile), it cannot be excluded that, for catalogue sales of medium range systems, there is no other credible product but (i) Raytheon's Hawk and Patriot systems, and (ii) Eurosam's FSAF family (where Thales is one of the consortium partners).
74. Nevertheless, there is no indication that the operation could lead to a co-ordination of the parties' weapon system activities. First, as indicated above, there is no indication that

spillover effects between AO/C2 or battlefield systems on the one hand, and weapon systems on the other hand, could arise. And secondly, the structure of defence markets usually provides no incentives for defence companies to co-ordinate their competitive behaviour: in defence markets, a limited number of contracts is awarded each year. Most of these contracts are important in value and duration and, given the considerable lifetime (up to 20 years) of military products, they often provide the only opportunity for defence companies to compete for the supply of a given generation of the product concerned to the same customer. Moreover, these contracts are generally not transparent (in terms of price, quantities), and concern differentiated products sold to sophisticated customers.

75. Consequently, it appears that the creation of the joint venture will not lead to any co-ordination of the parents' competitive behaviour in these markets.

## **VII. CONCLUSION**

76. The Commission notes that, on 09 March 2001, the parties submitted remedies aiming to restrict Thales's influence in the joint venture's weapon locating radar activities, and to ensure some separation between Euroart and the joint venture. However, insofar as the operation will not lead to the creation of a dominant position in those markets, the Commission's decision is not conditional on the fulfilment of these commitments, and they have been withdrawn by the parties on 28 March 2001.
77. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EEC) No 4064/89.

For the Commission

*(signed)*  
Romano PRODI  
President