

Decision of 2 October 1991  
declaring the incompatibility with the common market  
of a concentration

(Case No. IV/M053 - Aerospatale-Alenia/de Havilland)  
Council Regulation (EEC) No. 4064/89

(Only the English, French and Italian texts are authentic)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Regulation (EEC) No. 4064/89 of 21 December 1989 on the control of concentrations between undertakings<sup>(1)</sup>, and in particular Article 8(3) thereof,

Having regard to the Commission Decision of 12 June 1991 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations<sup>(2)</sup>,

Whereas:

## I. BACKGROUND

### The nature of the proceedings

1. These proceedings concern a proposed operation which was notified on 13 May 1991 pursuant to Article 4 of Council Regulation (EEC) No. 4064/89 (the "Merger Regulation") consisting of the joint acquisition by Aerospatale SNI (Aerospatale) and Alenia-Aeritalia e Selenia Spa (Alenia)

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<sup>(1)</sup> OJ No. L 395, 30.12.1989, p.1, rectified version OJ No. L 257, 21.9.1990, p.13

<sup>(2)</sup> OJ No. C

of the assets of the de Havilland division (de Havilland)  
from Boeing Company (Boeing).

2. On 4 June 1991 the Commission decided to continue the suspension of the concentration pursuant to Article 7(2) of the Merger Regulation and on 12 June 1991, the Commission initiated proceedings in this case pursuant to Article 6(1)(c) of this Regulation.

#### The parties

3. Aerospatiale is a French company active in the aerospace industries. Its product range includes civil and military aircraft and helicopters, missiles, satellites, space systems and avionics. Alenia is an Italian company predominantly active also in the aerospace industries. Its product range includes civil and military aircraft, satellites, space systems, avionics, and air and maritime traffic control systems. Aerospatiale and Alenia jointly control the Groupement d'Intérêt Economique (GIE) Avions de Transport Régional (ATR) which was set up in 1982 in order jointly to design, develop, manufacture and sell regional transport aircraft. There are currently two ATR regional turboprop aircraft on the market.
4. De Havilland, which is a Canadian division of Boeing, only manufactures regional turboprop aircraft. The former de Havilland Corporation (DHC) was nationalised by the Canadian government in 1982 and sold to Boeing in 1986. There are currently two de Havilland regional turboprop aircraft on the market.

#### II. CONCENTRATION

5. The notified operation is a concentration in the form of a concentrative joint venture within the meaning of Article 3 of the Merger Regulation since:
  - de Havilland will be run by an operating company which will be jointly controlled by Aerospatiale and Alenia, and
  - the activities of Aerospatiale and Alenia in regional turboprop aircraft (commuters) have already been concentrated in the GIE ATR since 1982.

#### III. COMMUNITY DIMENSION

6. The combined aggregate worldwide turnover of Aerospatiale, Alenia and de Havilland exceeds 5 billion ECU (Aerospatiale: 4.7 billion ECU, the Finmeccanica group, to which Alenia belongs: 5.2 billion ECU, de Havilland: 0.5 billion ECU). Aerospatiale and Alenia each achieve a Community-wide turnover of more than 250 million ECU. Furthermore, the undertakings concerned do not achieve more than two-thirds of their Community-wide turnover within one and the same

Member State. Thus the concentration has a Community dimension within the meaning of Article 1(2) of the Merger Regulation.

#### IV. ASSESSMENT UNDER ARTICLE 2 OF THE MERGER REGULATION

7. The operation has as its effect that Aerospatiale and Alenia which control the world and European leading manufacturer of regional aircraft (ATR) acquire the world and European number two (de Havilland) as explained below. Regional aircraft (commuters) are aircraft in a range of between 20 and 70 seats intended for regional carriers and have an average flight duration of approximately one hour. The regional transport market is mainly characterised by low density traffic where turboprop engined aircraft are, as a general rule, less expensive to operate than jet aircraft. Although the market has for the time being and will have until the mid-90s a relatively high growth rate, the commuter market is comparatively small in terms of aerospace markets generally (total worldwide value of deliveries of new commuter aircraft in 1990: \$2.3 billion, which is estimated at less than 2% of the value of the total aerospace industry).

##### (1) Relevant product markets

8. The relevant product markets affected by the proposed concentration are those of regional turboprop aircraft.

Regional jet aircraft currently being developed (Canadair's 50-seat CL601 RJ jet) cannot be included in these markets. The commuter manufacturers and the airlines questioned on this issue have stated almost unanimously that it is unlikely that regional jet aircraft will compete with traditional turboprops of a similar capacity. Regional jet aircraft have significantly higher acquisition and operating costs, and furthermore the time-saving which a regional jet would offer compared to turboprops is not significant until routes of 400 - 500 nautical miles are involved. The average distance operated by turboprops is less than half of this, and according to the parties' own figures as many as 85% of all regional transport aircraft flights are in fact below 400 nautical miles. It is considered therefore that there is no significant overlap of turboprops and regional jets.

Jet aircraft of around 100 seats developed for short and medium haul flights (in particular the Boeing 737, the Fokker 100 and the British Aerospace BAe 146) are also not in competition with regional turboprop aircraft. These jet aircraft cost around twice as much as the largest turboprop aircraft, and are used on longer routes or routes with high density. The Commission has therefore followed the market definition of the parties, and all the competitors and customers contacted, by excluding jet aircraft from the relevant product markets.

9. The parties exclude turboprop aircraft of below 20 seats from the overall commuter market. This is generally accepted by the industry and by the customers. Aircraft below 20 seats are subject to different type certification standards from the 20-70 seat aircraft. For aircraft of 19 seats and below, the certification security requirements such as crash-worthiness, systems reliability, fatigue resistance, damage tolerance, heat release of cabin materials in case of fire, etc, are much more lenient. These aircraft are physically smaller to the extent that the level of comfort is not comparable (for example, most do not provide toilet facilities, many are unpressurised, and normally passengers cannot stand up in the aircraft). Most of these aircraft are not developed specifically for commercial passenger transport, but are derived from general aviation aircraft. All documentation obtained in the Commission's enquiry regarding forecasts of the development of the overall commuter market, manufacturers' marketing comparisons, and strategic planning analyses deal only with commuters within the range of 20-70 seats.

10. The parties in the notification, the customers and the competitors in their replies to the Commission's enquiry all identified distinct markets within the overall commuter market of 20-70 seat aircraft. The division into different relevant markets within the overall market is considered correct by the Commission.

A relevant product market comprises in particular all those products which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use.

It would not appear, for example, that a 60-seat commuter is interchangeable or substitutable with a 30-seat commuter. They are used on routes with a significantly different density. The prices vary significantly, [...].<sup>(\*)</sup>

11. According to the Commission's analysis three relevant product markets exist. The segmentation which realistically reflects the different conditions of competition in the overall market distinguishes between commuters with 20-39 seats, 40-59 seats and 60 seats and over.

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(\*) Within a range of between \$6 million and \$13 million

In the published version of the Decision some information constituting business secrets has been deleted in accordance with Article 20(2) of Regulation (EEC) No. 4064/89.

12. In terms of the types in current production or in development

this would show direct competition as follows:

- 20-39 seats

British Aerospace J41	(27 seats)
Embraer 120	(30 seats)
Dornier Do 328	(30 seats)
Saab 340	(33 seats)
de Havilland Dash 8-100	(36 seats)

- 40-59 seats

Casa CN235	(44 seats)
ATR 42	(48 seats)
de Havilland Dash 8-300	(50 seats)
Fokker 50	(50 seats)
Saab 2000	(50 seats)

- 60 seats and over

British Aerospace ATP	(64 seats)
ATR 72	(66 seats)

13. This analysis is based in particular on the following:

- The segmentation above is generally consistent with the views of the overwhelming majority of customers and competitors which replied to the Commission's enquiries. 86% of these customers considered that the segment of 20-39 seats formed a separate relevant product market. 68% of customers considered that above this segment there was a further break as defined above. The other customers (14%) proposed that the overall market of 20-70 seats be divided into at least two relevant product markets, although not broken in the same way as suggested by the majority.

As to the competitors of ATR and de Havilland, the segment of 20-39 seats was also identified as a separate relevant product market by Saab, Embraer, Fokker, British Aerospace and Dornier. Saab, Fokker and Embraer further distinguished the aircraft competing in the middle segment of 40-59 seats and those competing in the segment 60 seats and above as competing in separate relevant product markets. Only Casa identified the relevant product markets in a significantly different way, proposing three segments of 15-30 seats, 31-49 seats and 50-70 seats.

- The table at point 12 shows that there are distinct clusters of aircraft around 30 seats, 50 seats and 65 seats. It is generally accepted within the industry concerned and amongst customers that the different aircraft types in these clusters compete directly against one another. For the ATR42 for example, the strongest competition is from the de Havilland Dash 8-300 and the Fokker 50. For the de Havilland Dash 8-100 for example, the strongest competition is from the Saab 340 and the Embraer 120. The segmentation therefore shows the groups of aircraft which are usually evaluated against each other by airlines.
  
- This segmentation is plausible given that it shows that ATR, de Havilland, Saab and British Aerospace have developed types which compete in a different segment to their original type. It cannot be expected that a commuter manufacturer would develop a new type to compete directly in normal circumstances with another type of its existing product range. Alternative segmentations which would suggest that the two de Havilland types, for example, would directly compete are not considered realistic.

14. As to possible supply-side substitutability between segments there may be some possibility in the medium-term for the commuter manufacturers to modify existing types (to "stretch"), so as to develop a new competing product in a higher segment, e.g. ATR 42 to ATR 72. This does not affect the analysis that a type in one segment would not be substitutable for a type in another segment. Furthermore, according to a study carried out for the parties, it would take considerable time, longer than three or four years, for manufacturers for example of 30-seat aircraft to switch their facilities to produce 50-seat aircraft, to the extent that these facilities already exist.

15. The parties do not agree with the Commission's definition of relevant product markets. In the notification the parties propose that the overall market is divided into two distinct segments, one of 20-50 seats and one of 51-70 seats. This segmentation is said to be mainly based on the fact that under the regulations of the major countries a second air hostess is mandatory above 50 seats, and that this change significantly increases the operating costs of the carriers. This proposed segmentation is not however internally consistent. The segments are defined as 20-50 seats and 51 seats and over. In the larger segment, the analysis of the parties includes the 50 seater Dash 8-300, Fokker 50 and Saab 2000 types. According to such an analysis the ATR 42 with 48 seats is in another relevant product market to these three 50 seater types. This does not reflect the market reality since the ATR 42 is considered by competitors and



customers to be the main direct competitor of these 50 seaters.

16. Following the Commission's decision to open proceedings, the parties modified their initial proposal and suggested that the total market (20-70 seats) should be taken as the relevant product market since segmentation is considered to be arbitrary at least to a certain extent. The results of the Commission's enquiry show, however, that there is a broad consensus amongst competitors and customers as to the relevant product markets described above. This does not sustain the parties' contention that the segmentation is arbitrary, or the contention that the markets should be aggregated.
17. The parties contend that the number of seats is not the only factor taken into account by airlines in their decisions as to which aircraft to acquire. Other factors such as technical characteristics and direct operating costs are also cited as relevant. On this basis, aircraft in different size segments are said to compete directly.

The Commission considers that the parties draw an incorrect conclusion from the fact that customers take into account several factors in making their decisions as to which aircraft to acquire:

- When airlines are considering acquiring new aircraft the first stage in their analysis is to identify the characteristics of the routes which the aircraft will service. Route characteristics comprise in particular the expected passenger traffic and the frequency of flights. The analysis must take into account the level of business travel and the number of slots. Traffic and frequency define the ideal number of seats for the routes in question. The principal factor dictating an airline's fleet requirement is thus the approximate number of seats required to suit its route network.
- Once the basic approximate capacity requirement is defined, then the airline will choose between aircraft which are in the required capacity range. The choice will usually be amongst the aircraft grouped together in the relevant product markets defined above. This is shown by the replies of the customers, and the clustering of aircraft types. Having defined the basic capacity requirement, other factors such as price, direct operating costs, technical characteristics and level of comfort, for example, are evaluated. These factors will determine which aircraft of those being considered wins the order.

- The replies of customers to the Commission's enquiry bear out this general analysis. Factors other than seat capacity do not therefore define the relevant product markets, but determine only which is the most suitable aircraft within a given relevant product market.

18. The parties claim that in 8 cases (over an unspecified period) competition existed between two aircraft belonging to different (but adjacent) relevant product markets as defined above for specific orders. These very limited exceptions in themselves are not considered to disprove the general analysis for the reasons outlined below.

In exceptional circumstances a customer may choose between aircraft of significantly different capacities. One hypothetical example would be as follows based on data provided by the parties. For routes of low density, for example an average of 30 passengers but with higher peak numbers, an airline might consider acquiring an ATR 42 with a capacity of 48 seats against an Embraer 120 with a capacity of 30 seats. The break-even point in terms of number of passengers for an average flight (150 nautical miles) is [...]<sup>(\*)</sup>

Against this however, by acquiring the ATR 42, the airline can meet higher demand at peak times should it materialise. There may be some low density routes therefore where a larger plane may be considered by the airline as competitive with a smaller plane. However, for higher density routes, small aircraft are not substitutable for larger aircraft.

Between the segments as identified therefore, there may be some substitutability of smaller planes by larger planes, but there would appear to be no similar substitutability of larger planes by small planes.

The parties have submitted three examples of what is claimed to be substitution by airlines of larger aircraft by smaller aircraft, two of these being US airlines, the other a Scandinavian airline. These examples in fact only show that these airlines did not choose aircraft of exactly the same capacity in replacing very old aircraft of a former generation. This is hardly surprising since route characteristics would not be expected to remain fixed over time. However, as ATR's own study<sup>(3)</sup> of market potential states as a general conclusion, replacement of a given

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(\*) Break-even point comparison

(3) Aerospatiale, Strategic Planning Division, 1990-2009, Regional Transport Market Forecast.

aircraft within a capacity class will be ensured either by aircraft with a similar capacity or by aircraft belonging to a higher seat class category.

19. The parties claim that small aircraft may be substitutable for larger aircraft since carriers could make more frequent flights. This is not considered to be realistic as the following example demonstrates.

The theoretical substitution of a 33-seat Saab 340 for a 66-seat ATR 72 for example would imply that the airline would make twice as many flights with the Saab 340 to carry the same number of passengers on a given route. This would only be feasible if the direct operating costs of the Saab 340 were 50% or less of those of the ATR72<sup>(4)</sup>. According to the parties' figures, however, the direct operating costs of the Saab 340 are [...] of those of the ATR72. This means that a hypothetical airline substituting two flights of the Saab 340 for one flight of the ATR72 would incur costs which were [...] higher<sup>(5)</sup>. This would not be economically reasonable in particular since airlines operate on very low profit margins and this would lead to substantial losses.

Furthermore the ability to make twice as many flights would depend on twice as many slots being available for the airline. This is not realistic given the general scarcity of slots, in particular in the EC, especially in the main airports. Even if double the slots were to be made available, it is doubtful whether the additional slots would be at suitable times. This is particularly important for routes with business traffic.

## (2) Geographical reference market

20. The commuter markets from an economic point of view are considered to be world markets. There are no tangible barriers to the importation of these aircraft into the EC and there are negligible costs of transportation.

There is a significant mutual penetration in particular between the markets of North America and Europe. European commuter manufacturers compete successfully in North America, and the one North American competitor, de Havilland, has a strong market position within the EC. ATR, for example, has sold 39% of its ATR42 aircraft in North

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<sup>(4)</sup> The direct operating costs of an average flight include depreciation, insurance, fuel, cockpit crew, cabin crew, maintenance, and landing fees.

<sup>(5)</sup> If the costs of one ATR 72 flight are taken as 100, the costs of two Saab 340 flights would be [...].

America, and de Havilland has sold 58% of its Dash 8-300 aircraft in Europe. The most significant region in the rest of the world is the Asia-Pacific region. Most of the commuter manufacturers are present in this region, and in particular Casa, Fokker, ATR and de Havilland.

In their analyses, the parties exclude China and the Eastern European countries from the overall world market. This would appear correct since there is no interpenetration between the markets of China and the Eastern European countries and the overall world markets, and it is not expected that there will be such interpenetration in the foreseeable future. Generally speaking, some of these countries, in particular the USSR and China, have their own aircraft industries which fulfil the domestic demand. The aircraft produced do not meet the certification standards required by airlines in the rest of the world. Similarly the aircraft produced by the western manufacturers are too highly specified and usually too expensive for the airlines in China and Eastern Europe. Although in the long term it cannot be excluded that significant demand may emerge from Eastern Europe for such products, this depends however on the general economic development of these countries.

It is considered therefore that the geographical market to be taken into account is the world market excluding China and Eastern Europe.

### (3) Market structure

21. In the notification it is proposed that market shares should be calculated on the basis of firm orders to date (which includes all deliveries to date and orders placed but not yet delivered) for each commuter type which is currently manufactured or developed. This is the broad method of market share calculation used in the aircraft industry since it is considered to reflect the competitive position of the manufacturers of the aircraft on the market in terms of their industrial strength. This cumulation of sales smooths out

distortions in annual figures which may result from an uneven pattern of orders and deliveries in a low-volume market<sup>(6)</sup>.

22. These market share figures do not take into account the existing stock of all turboprop aircraft still flying (ATR + de Havilland account for around 25%). This existing stock includes aircraft that are no longer produced and sold, as well as aircraft sold by competitors no longer on the market such as Shorts. These aircraft were based on completely different technology. There is a distinct break between the current generation of commuter aircraft (the new technology commuters) and the old aircraft which are no longer produced. The old aircraft such as the Fokker F27 and the British Aerospace HS 748 were developed in the late 1950s or the early 1960s. From an economic and technical point of view they were already obsolete by the early 1980s. Aircraft developed from the early 1980s were based on a new generation of engines and airframes adapted to these engines to meet the requirements of airlines at this time. This new generation of commuter aircraft was designed in particular to be much more fuel efficient following the rise in oil prices in the 1970s, and to achieve higher standards of performance and passenger comfort. All of the commuter types now in production or development belong to this new technology generation of aircraft.

Although there may be some residual marketing advantage for manufacturers now on the market with new technology aircraft arising from their links to airlines still flying their old aircraft (further discussed at points 36 and 39), this is not relevant for the calculation of market shares. It is meaningless to analyse market shares for the former generation of products in assessing the market power of the manufacturers now and in the future. The market share analysis must therefore be based only on orders and deliveries of new technology aircraft currently on the market. This is not disputed by the parties.

23. On the relevant product markets, the world and EC market shares calculated on the basis of firm orders by units are accordingly as follows<sup>(7) (8)</sup>:

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<sup>(6)</sup> Total orders as at 31.08.91 have been analysed in the enquiry. The Commission obtained from all the manufacturers full details of numbers of orders, deliveries and options. These figures have been used in the market share calculations. They vary slightly from the estimates supplied by the parties.

<sup>(7)</sup> DHC = de Havilland, BAe = British Aerospace.

20-39 seats

World: Saab 34%, Embraer 31%, DHC 25%, Dornier 8%, BAe 2%

EC: Embraer 41%, Saab 31%, DHC 21%, BAe 6%, Dornier 1%

40-59 seats

World: ATR 45% + DHC 19% = 64%, Fokker 22%, Saab 7%, Casa 7%

EC: ATR 51% + DHC 21% = 72%, Fokker 22%, Casa 6%, Saab 0%

60 seats and over

World: ATR 76%, BAe 24%

EC: ATR 74%, BAe 26%.

24. Following the Commission's decision to open proceedings, the parties submit that options should also be taken into account in calculating the market shares. It is considered however that options are not a sufficiently reliable indicator of the market strength of a manufacturer since they can be and are easily cancelled. According to the experience of ATR for its programme, on average [...] of options taken out for an aircraft which is already on the market and has proved its reliability are converted into firm orders. Only some [...] of options taken out for an aircraft not yet in service are however likely to be converted. Options for aircraft not yet in service may be placed by airlines only as an insurance to preserve the possibility of actually ordering the aircraft at a later stage should it prove successful. Although the conversion rate of options into orders can be measured historically, it is difficult to predict the future conversion rate for aircraft not yet in service at the present time, since this will depend on factors such as technical performance. This is in particular true for the options currently taken out for the Saab 2000. This aircraft which is still in the stage of development is designed to meet a possible need of customers for turboprop aircraft to fly longer distances than the normal commuter routes. According to the parties and the competitors, it is not at all clear whether this is a significant customer requirement and it is thus contested within the industry whether the Saab 2000 will in fact

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(8) The market shares for all aircraft of over 40 seats which is considered to be one market rather than two by a minority of respondents to the Commission's enquiry are as follows:

40 seats and over

World: ATR 51% + DHC 15% = 66%, Fokker 17%, Saab 6%, Casa 6%, BAe 5%

EC: ATR 57% + DHC 15% = 72%, Fokker 16%, BAe 7%, Casa 5%, Saab 0%.

achieve significant orders on its completion. If options were nonetheless to be taken into account in calculating the market shares, based on the conversion rates experienced in the past for the successful ATR programme, the market shares would be as follows based on orders plus options:

#### 20-39 seats

World: Embraer 36%, Saab 31%, DHC 20%, Dornier 9%, BAe 4%  
EC: Embraer 44%, Saab 29%, DHC 21%, BAe 5%, Dornier 1%.

#### 40-59 seats

World: ATR 42% + DHC 17% = 59%, Fokker 19%, Saab 16%, Casa 6%  
EC: ATR 50% + DHC 21% = 71%, Fokker 22%, Casa 6%, Saab 1%

#### 60 seats and over

World: ATR 82%, BAe 18%  
EC: ATR 79%, BAe 21%.

25. In order to obtain an overall view of the impact on the entire commuter industry the three relevant product markets as defined have been aggregated. It is considered necessary for this purpose to take into account the different sizes of the various types. The number of firm orders has therefore been multiplied by the standard number of seats for each type. This is so as to obtain an overall view of the total commuter market for 20-70 seats since the same weight cannot be given to a 30 seat type as to a 60 seat type. The market shares are accordingly as follows<sup>(9)</sup>:

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<sup>(9)</sup> The market share figures do not vary significantly if options are taken into account converted for all aircraft on the basis of the high rates achieved for the successful ATR programme in the past. The figures on this basis are:

World: ATR + DHC = 47% (nearest competitor, Saab 21%)  
EC: ATR + DHC = 66% (nearest competitor, Fokker 12%).

If the figures are calculated alternatively on the basis of list prices of each aircraft as opposed to a weighting by seats, the figures on the basis of firm orders are:

World: ATR + DHC = 47% (nearest competitor, Saab 20%)  
EC: ATR + DHC = 63% (nearest competitor, Fokker 14%).

The figures calculated on the basis of list prices and also taking into account options are:

World: ATR + DHC = 44% (nearest competitor, Saab 23%)  
EC: ATR + DHC = 64% (nearest competitor, Fokker 13%).

20-70 seats

World: ATR 29% + DHC 21% = 50%, Saab 18%, Embraer 13%, Fokker 9%, BAe 4%, Casa 3%, Dornier 3%

EC: ATR 49% + DHC 16% = 65%, Fokker 12%, BAe 8%, Embraer 6%, Saab 5%, Casa 3%, Dornier 1%.

26. It follows from these figures that:

- in the relevant product market of 40-59 seats the new entity would obtain about 64% of the world market and about 72% in the EC,
- in the relevant product market of 60 seats and above, the new entity would have about 76% of the world market and about 74% in the EC,
- ATR and DHC after a merger would obtain worldwide a share of about 50% of the overall commuter market and about 65% in the EC.

(4) Impact of the concentration

A. Effect on ATR's position

27. The proposed concentration would significantly strengthen ATR's position on the commuter markets for the following reasons in particular:

- high combined market share on the 40-59 seat market, and of the overall commuter market;
- elimination of de Havilland as a competitor;
- coverage of the whole range of commuter aircraft;
- considerable extension of the customer base.

a) Increase in market shares

28. The proposed concentration would lead to an increase in market shares for ATR in the world market for commuters between 40-59 seats from 46% to 64%. The nearest competitor (Fokker) would have 22%. This market together with the larger market of 60 seats and above where ATR has a world market share of 76% is of particular importance in the commuter industry since there is a general trend towards larger aircraft. This trend is particularly marked in Europe since airport fees favour the use of larger aircraft because of the crowded skies and limited airport capacities.

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[...]



Already at the end of 1990 84% of total commuter seat capacity ordered in the EC was accounted for by aircraft of 40 seats and above, compared to 57% worldwide. The trend towards larger aircraft in Europe can be seen in the geographic breakdown of the sales of the various types. Whilst for the 48-seat ATR42, 44% of the aircraft have been sold in Europe and 39% in North America, for the 66-seat ATR72, 67% have been sold in Europe and 19% in North America. For de Havilland, 14% of the 36-seat Dash 8-100 aircraft have been sold in Europe and 78% in North America, whilst 58% of the 50-seat Dash 8-300 aircraft have been sold in Europe and 35% in North America. The counterpart of larger aircraft becoming more important in Europe is that aircraft in the 30 seater market are relatively more important in North America than Europe. Embraer for example has sold 71% of its 33-seat aircraft in North America compared with only 18% in Europe.

29. ATR would increase its share of the overall worldwide commuter market of 20-70 seats from around 30% to around 50%. The nearest competitor (Saab) would only have around 19%. On the basis of this the new entity would have half the overall world market and more than 2 1/2 times the share of its nearest competitor.

30. The combined market share may further increase after the concentration.

The higher market share could give ATR more flexibility to compete on price (including financing) than its smaller competitors. ATR would be able to react with more flexibility to initiatives of competitors in the market place.

Following a concentration between ATR and de Havilland, the competitors would be faced with the combined strength of two large companies. This would mean that where an airline was considering to place a new order, the competitors would be in competition with the combined product range of ATR and de Havilland. The sales strategy of the formerly separate companies would now be concerted. The combination could enable the new entity ATR/de Havilland to be more flexible in setting its price than its competitors where a sale is contestable, because of their absolute size advantage in terms of sales base. Furthermore, unlike the competitors, the combined entity would have all the advantages of a family of commuters to offer. This may give rise to the ability, inter alia, of offering favourable conditions for a specific type of aircraft in mixed deals. It may be conceivable that, for example, where an airline wants to acquire a small commuter of around 30 seats and a commuter of around 60 seats, then ATR/de Havilland could offer special conditions for the ATR72 when it is ordered with a Dash 8-100 where more competition is likely. The parties state that in practice there is no chance of mixed deals taking advantage of market power in one segment to sell in another. However, in comments introduced by economic consultants on the parties' behalf, reference is made to the ability of the combined entity to package together regional aircraft.

The parties themselves expect that the aggregation of ATR and de Havilland marketing and manufacturing forces "will certainly lead to an improvement of their position in North America and Europe among the regional aircraft producers", so that the position of the combined entity would be stronger than that of ATR and de Havilland currently.

b) Elimination of de Havilland as a competitor

31. In terms of aircraft sold, de Havilland is the most successful competitor of ATR. In the relevant product market of 40-59 seats, Fokker has a higher market share than de Havilland, but Fokker at the end of 1990 had a backlog of only 27 orders for the Fokker 50 whilst de Havilland had a backlog of 72 orders for the Dash 8-300 (second only to ATR with 103 orders for the ATR 42).

Furthermore, de Havilland has plans to develop a new aircraft - the Dash 8-400 - to compete in the top segment (60 seats and over)<sup>(10)</sup>. If the concentration goes ahead therefore, de Havilland would be eliminated as a potential competitor from this segment where ATR has a market share of 76%.

The parties argue that if the proposed concentration does not proceed, although de Havilland would not be immediately liquidated, its production might be phased out by Boeing so that de Havilland might in any case be eliminated as a competitor in the medium to long term. Without prejudice as to whether such a consideration is relevant under Article 2 of the Merger Regulation, the Commission considers that such elimination is not probable.

According to a pre-acquisition review of de Havilland carried out for Aerospatiale-Alenia at the end of 1990, the following factors, inter alia, were identified as critical in assessing the investment decision from a business/financial point of view: de Havilland produces high quality, well known and highly respected products, the net selling prices of which have been increasing; progress has already been made in reducing excess employees, and relations with trade unions have improved; there is still however scope for further improvement in production management since de Havilland's productivity is relatively poor. [...]<sup>(\*)</sup>

On the evidence made available to the Commission, there is therefore no likelihood that de Havilland, in the absence of the proposed concentration, would in any case be phased out. Boeing has however expressed its preference to sell de Havilland rather than continue to operate it. This would seem possible given that the parties are not the only potential buyers. British Aerospace, for example, has expressed an interest to buy de Havilland.

c) Coverage of the whole range of commuter aircraft

32. The new entity ATR/de Havilland would be the only commuter manufacturer present in all the various commuter markets as defined above.

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<sup>(10)</sup> Boeing has currently suspended this programme in order to give the buyer of de Havilland an opportunity to conduct its own programme analysis to determine what action would be taken after the sale.

<sup>(\*)</sup> Analysis of financial position of de Havilland.

Embraer sells only a commuter type in the 20-39 seat market. Fokker and Casa are only represented in the 40-59 seat market and British Aerospace is not represented in the 40-59 seat market. Saab is predominantly active in the 20-39 seat market. The new 50-seater Saab 2000, which will be delivered from 1992/3 onwards, is a fast turboprop commuter which meets a special need for customers operating regional routes of relatively long distances.

It appears that in the sector concerned having a complete range of products would give ATR/de Havilland a significant advantage in itself. From the demand side, airlines derive cost advantages from buying different types from the same seller. It was stated in the oral hearing by British Aerospace, for example, that in forecasting future sales of the 64-seat ATP it is assumed that existing customers for the 48-seat ATR42 acquire the 66-seat ATR72 when they identify a need for a larger plane. There is currently competition between ATR and British Aerospace for the uncommitted business, including that of existing de Havilland customers. If the proposed concentration were to proceed, the Dash 8 customers would be seen by British Aerospace as committed to the new combined entity also for their requirements for larger planes.

According to a study submitted by the parties, it is argued that the inability of a manufacturer to offer a full range of seating capacities under the same umbrella may harm the demand for other existing aircraft of that manufacturer. Thus, a significant regional carrier whose aircraft needs may call for a full complement of aircraft capacities to meet the route needs of that carrier might be dissuaded from purchasing smaller aircraft from a single manufacturer if the needs of the carrier for a larger aircraft could not also be met from the same aircraft manufacturer. This logic flows from the fixed costs borne by the carrier for each aircraft manufacturer dealt with by that carrier. These costs include the fixed costs of pilot and mechanic training as well as the costs of maintaining different in-house inventories of parts and the fixed costs of dealing with several manufacturers when ordering parts stocked only by the individual manufacturers themselves.

One of the stated main strategic objectives of the parties in acquiring de Havilland is to obtain coverage of the whole range of commuter aircraft. The competitive advantages which would arise from this would emerge over time.

The parties' economic consultants state that having products available across the broad spectrum of market potential reduces considerably the risk associated with future demand.

In the short term, ATR and de Havilland would establish common marketing and product support which may result in some cost savings for the combined entity. It may be possible later to further rationalise product support by increasing the 30% commonality of spare parts between ATR and de Havilland which already exists. This rationalisation would have cost saving implications also for customers where they acquire aircraft types of both ATR and de Havilland.

In practice the advantages of having complete coverage of the market are only present where airlines have or intend to have a fleet consisting of aircraft in different product markets. According to figures supplied by Fokker, over half of the aircraft sold in the markets of 40 seats and above for example are operated in fleets where there are also aircraft of around 30 seats. It appears therefore that at least having a more complete coverage of the market is significant.

d) Broadening of customer base

33. ATR would significantly broaden its customer base after the concentration. On the basis of deliveries to date, the parties state that ATR has currently delivered commuters to 44 customers worldwide and de Havilland has delivered commuters to 36 other customers giving a combination of 80 customers in all. This compares with, for example, Saab which has 27 operating airline customers and Fokker which has around 20 airline customers operating the Fokker 50. This figure of 80 customers does not take into account however the substantial backlog of orders not yet delivered of both companies placed by yet other customers. It is likely therefore that the customer base would be higher in the foreseeable future. This is already reflected in the market share figures.

The customer base is an important element of market power for aircraft manufacturers since there is at least to some extent a lock-in effect for customers once their initial choice of aircraft is made.

Once a customer has made a commitment to a particular manufacturer, then there is usually a cost consideration in placing orders with another manufacturer. Customers indicate that there are relatively high costs arising from different technology used leading to training costs for maintenance and for pilots, and to different spare part requirements. The analysis of the fleets of the airlines shows that all airlines have only one type of new generation aircraft within a particular relevant product market. Furthermore, where airlines have aircraft from different relevant product markets, the fleet analysis shows that they always operate aircraft of the same manufacturer across different markets

where the manufacturer produces types of the size required, eg Brymon Air operates a fleet of Dash 8-100 and Dash 8-300 aircraft, NFD operates a fleet of ATR42 and ATR72 aircraft.

This applies equally to airlines which have very large fleets such as American Airlines. The only examples of mixed manufacturer fleets are where the airlines operate 50-seater ATR or Fokker aircraft together with aircraft in the small 30-seater market. This is inevitable since neither ATR nor Fokker produce aircraft of this category.

The analysis is the same if the outstanding orders of airlines are examined. The only airline which has ordered a different aircraft to the type it is already operating in a particular category has chosen to replace its current small Fokker 50 fleet by the new Saab 2000. It already operates a large number of Saab 340 aircraft.

The established airlines who have already acquired ATR or de Havilland commuters are therefore likely to stay with them in placing future orders.

The likelihood is thus that ATR/de Havilland would retain at least the current level of customers.

#### B. Assessment of the strength of the remaining competition

34. In order to be able to assess whether the new combined entity

would be able to act independently of its competitors, in view of its strengthened position, it is necessary to assess the current and expected future strength of the remaining competitors.

35. As to the competitors a distinction can be drawn between those which are medium-sized specialists and those which belong to large groups in which commuters form a relatively small part of their overall aerospace activity.

#### The medium-sized competitors

36. Fokker has been a successful competitor in the 40-59 seat market in the past. It now produces however only one commuter (the Fokker 50) and does not have a family of products to offer. Because of its relatively limited resources, it has only one other significant product, the Fokker 100 jet. Its military business is very limited.

The Fokker 50 has a relatively low share of 9% of the overall worldwide market of 20-70 seats and 22% of the market of 40-59 seats where ATR/de Havilland combined would have 64%. It has only 5% of the worldwide backlog of commuter orders (overall market), representing less than one year of Fokker's production capacity at the end of 1990.

Fokker may benefit to a certain extent from some customer loyalty from its sales of the Fokker 27 aircraft in the 1960s and 1970s. The low market share achieved by the Fokker 50 however shows that this has not been a significant factor. There has not been, in any event for customers, a lock-in effect from these old aircraft since the Fokker 50 is a new technology aircraft. It is considered that Fokker's relative success with the Fokker 100 jet would have no effect on sales of the Fokker 50. Although there are some production synergies between the Fokker 50 and Fokker 100, the market success of the two aircraft is not linked. Fokker's experience shows that customers who acquire the Fokker 100 jet are not influenced by this in their decisions as to which 50-seat turboprop to acquire. As outlined in the notification, Boeing's experience with de Havilland confirms that there are no significant marketing synergies between jet and turboprop aircraft.

Fokker could be particularly affected by the combined strength of ATR/de Havilland. It has not yet built up a large customer base for the Fokker 50 and has smaller resources than ATR. After a concentration between ATR and de Havilland, it would be more difficult for Fokker to broaden its product range of commuters by producing a stretch version of the Fokker 50 given the outlined competitive advantages of

the new entity. The concentration may have in this light a crucial impact on the situation of Fokker as a competitor in the aircraft market.

37. Casa is only present on the market of 40-59 seats so far in a marginal way with an aircraft derived from a military version. Casa has however intentions to increase its participation in the civil aircraft markets, and to develop a new commuter so as to diminish its existing dependence on the military markets.

It would not be easy for Casa to maintain its plans to develop this new commuter following completion of the proposed concentration, since Casa will find it difficult to compete against the market power of the combined entity ATR/de Havilland. The proposed concentration will impede Casa becoming a significant competitor in the civil aircraft market generally.

38. Embraer has stated that it will remain in the small segment (20-39 seats) with its current commuter type. Embraer is a Brazilian company which has concentrated its resources in the development of a new regional jet. It was announced in July 1991 however that this project - the EMB 145 - has been cancelled. Although the EMB 145 was said to be a good product, Embraer considered that it would be putting it on the market too late. It is questionable whether Embraer will now be able to develop a commuter type in the larger segments since the existing competitors in those segments have already been present for some time. Furthermore, after completion of the proposed concentration, it is less likely that Embraer could compete effectively in these segments against ATR/de Havilland.

#### The large aerospace groups

39. British Aerospace has the resources to broaden its current product range in the commuter markets. Its current market share is however small (4% of the overall world commuter market) and it has only 2% of the worldwide backlog of commuter orders, representing less than one year of its production capacity at the end of 1990. Future investment in the commuter markets by British Aerospace would depend on whether there exist more profitable opportunities elsewhere in the group and whether a stronger commitment to the commuter markets would be rational. Other than its broad aerospace activities, British Aerospace has significant interests in non-aerospace industries including cars, telecommunications and property.

In adjacent markets, British Aerospace manufactures the 19-seat turboprop aircraft J31 and the 95-seat BAe 146 jet. There are production synergies between the J31 and 27-seat



J41 and also between the 64-seat ATP and the BAe 146 jet arising from production in the same factory and sharing of common costs. There may be limited competitive advantage for the British Aerospace J41 arising from the existence of the small J31, but this will not be significant in the future in particular in the EC. The market for small aircraft of below 20 seats has been in overall decline since the early 1980s and in fact has always been relatively small within the EC. As for Fokker with the Fokker 100 jet and Fokker 50 turboprop, no competitive advantage is gained for the ATP turboprop from selling the BAe 146 jet. As for Fokker from the old F27 aircraft, there may be some customer loyalty to British Aerospace resulting from the sales in the 1960s and 1970s of the 46-seat HS748, although this aircraft was not in the same product market as the current 64-seat ATP. The low number of orders achieved by the ATP however shows that this has not been a significant factor.

Following the completion of a concentration between ATR and de Havilland, since British Aerospace has only a very small customer base in the commuter markets, it is doubtful that it would focus on these markets. It already has an identifiable gap between its two existing models in the key product market of 40-59 seats. Furthermore, the already difficult competitive situation for the 64-seat ATP vis-à-vis the 66-seat ATR72 would be worsened after completion of the proposed concentration given the strength of the new entity.

The proposed concentration will therefore lead to British Aerospace becoming further marginalised as a competitor in the commuter markets.

40. Saab can be expected to stay in the 20-39 seat market where it has a relatively healthy position. It is developing a 50-seat fast turboprop commuter which is expected to come on the market in two years time. This may to a certain extent only be a limited competitor to ATR and de Havilland since it meets a special need for customers operating regional routes of relatively long distances. The turboprop markets generally are short-haul markets with flights of an average of around one hour. Because take-off and landing times are a relatively high proportion of the overall flight time for short routes, speed is not so relevant since only some five minutes can be shaved off a particular flight by even the 25% increase in speed envisaged for the Saab 2000. It may be therefore that most customers would not be willing to pay a premium for this plane. This implies that this plane, given its technical and cost characteristics, will occupy a niche market which will not compete directly in the market for 40-59 seat commuters.

41. Dornier, which is part of the Daimler-Benz group via Deutsche

Aerospace (DASA), will enter the small commuter market with a 30-seat type in 1993. In assessing DASA's future competition with ATR however, it must be noted that a Memorandum of Understanding has been entered into between DASA and Aerospatiale and Alenia as to future development of a regional jet. If the decision is taken to develop this regional jet, it is intended that these companies would then form the joint venture "International Commuter" for the marketing of the whole range of regional aircraft, including commuters, manufactured by the three companies. If International Commuter is formed in this way, Dornier would not remain a real competitor of ATR/de Havilland. The formation of International Commuter is not however yet definitely decided and would be subject to review under the EC competition rules. If DASA does not enter into a final agreement with Aerospatiale and Alenia, then it may become a significant competitor in the 20-39 seat market.

#### Overall evaluation of the remaining competition

42. It follows from the above that effective competition for the combined entity would only be maintained in the market of 20-39 seat commuters, although even here the ability of the competitors to compete with the combined entity would lessen to a certain extent given the overall advantages to ATR/de Havilland arising from a broad sales base and coverage of all the markets. In the markets for commuters of 40 seats and over, apart from the limited competition from the Saab 2000, it is questionable whether the other existing competitors could provide effective competition in the medium to long term.

#### C. Assessment of the customers

43. In order to be able to assess whether the new combined entity

would be able to act independently of customers, in view of its strong position and the relative weakness of the competitors, the position of customers in the commuter markets must be examined.

44. Regional transport has evolved over recent years. The market has benefited from deregulation and liberalisation policies, first in North America and now in Europe. According to the notification, it is expected that there will be a need for additional commuters which would go beyond mere replacement of existing aircraft.

The impact of the proposed merger in this context is not the same for the established airlines as for airlines yet to emerge.

45. The established airlines which have already acquired ATR or de Havilland comuters are for the reasons outlined in point 33 likely to stay with them in placing future orders. In view of the lock-in effect, these customers consider themselves tied to the manufacturer who supplied the aircraft. This limits their bargaining power in placing future orders even if they are subsidiaries of major airlines.
46. New airlines or established airlines replacing an entire fleet will have initially a free choice because there is no lock-in effect at that moment.

New airlines which are small-scale operators, typically trying out new routes would have a relatively weak bargaining position since they will acquire only a limited number of aircraft. They will in fact frequently enter the market through leasing rather than buying aircraft. New airlines (or established airlines replacing an entire fleet) which are subsidiaries of major airlines may have more bargaining ability in those cases where the parent companies place large orders. Some American companies may have such ability. There are no similarly large scale European regional carriers for the time being. To the extent that any bargaining ability exists amongst these airlines, it would be reduced by the elimination of an important competitor from the markets.

47. Leasing companies offer bridging facilities for new market entrants wishing to avoid the exposure of long term ownership, at least at the outset. It is likely therefore that leasing will be a significant means of market entry given the high capital cost of aircraft and the risk of failure.

Leasing companies at the end of 1990 had placed 170 orders for commuter aircraft, [...] (\*) of which are accounted for by ATR and de Havilland ([...] ATR and [...] de Havilland). This amounts to some 10% of the overall worldwide market. Leasing companies act as intermediaries between manufacturers and airlines facilitating the acquisition by airlines of new equipment on a flexible basis.

Since leasing companies place their orders for aircraft without knowing where they will be leased, they must predict which products their potential customers will require. The leasing companies therefore usually only buy the products which are best established on the market to avoid the risk of being left with stocks. The buying policy of leasing

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(\*) almost all

companies therefore reflects existing majority customer preferences. Leasing companies could be seen therefore as market followers rather than market makers, accentuating demand, their success depending on the popularity of the products acquired. This is a significant constraint on the ability of leasing companies to exercise bargaining power where there is insufficient competition on the markets, since they cannot take the risk of being left with stocks of unpopular products.

This analysis is confirmed by the views of the Irish-based GPA group, which is the world's largest aircraft leasing company. GPA has acquired only ATR and de Havilland commuters, partly through a joint venture company in which ATR has a 25% interest. The decision to buy these aircraft was based on the assessment that these aircraft were among the most popular on the market. It was considered that they would provide an attractive leasing product to a wide range of customers due to their being part of a family of aircraft, technical strengths, record of innovation and marketing support.

It would therefore not be easy for the leasing companies to switch to other manufacturers because of the risk of being left with stock. The products of the other manufacturers are not as popular and would be more difficult to place. The proposed concentration thus significantly reduces the choice for leasing companies and can be expected to lead to a situation in which they may depend to a certain extent on ATR/de Havilland.

48. From the customers' replies to the Commission's enquiry, it seems that most established airlines found it difficult to assess the impact of the proposed concentration on the general conditions of competition based on the information available to them. Half of the respondents stated that there would be no direct impact on their company since they already have a commitment to a particular commuter manufacturer and have thus no plans, or even realistic possibility to switch to another manufacturer. Some of these airlines have already placed their orders to fulfil their medium-term demand and others anticipate no further orders. 25% of the airlines which replied expressed nonetheless concern about the reduction of choice and elimination of competition which they perceived to be a direct result of the concentration.

It appears therefore that for most established airlines a direct negative effect from the proposed concentration would only appear over time. The impact would be immediate for airlines which will come on to the market in the future, in particular following deregulation in the EC.

49. Even if in general terms customers would want to switch to a significant extent to the competitors of ATR/de Havilland, there is only a limited possibility given that the existing capacity of each competitor on average is estimated to be capable only of an increase of some 15-20% in one to two years. This amounts to under 10% of the overall current worldwide commuter production capacity.
50. The parties claim that in the future customers may have the possibility of acquiring second-hand aircraft and that these would compete with new aircraft to a certain extent.

It is not considered that second-hand aircraft will significantly compete with new aircraft even in the long term. As stated by the parties, there is for the time being no significant second-hand market. It has also been stated by the parties that the older aircraft which are replaced by new aircraft are relegated to secondary needs. These secondary needs include freight and postal transport which is a completely different type of demand to the demand for passenger transport. The second-hand market is therefore likely to be a different market from that for new aircraft.

D. Summary of effect of the proposed concentration on the commuter markets

51. The combined entity ATR/de Havilland will obtain a very strong position in the world and EC commuter markets of 40 seats and over, and in the overall world and EC commuter market, as a result of the proposed concentration. The competitors in these markets are relatively weak. The bargaining ability of the customers is limited. The combination of these factors leads to the conclusion that the new entity could act to a significant extent independently of its competitors and customers, and would thus have a dominant position on the commuter markets as defined.
52. The proposed concentration would create a dominant position even if the parties' definition of the relevant product market as that of the overall market of 20-70 seat aircraft were considered correct.

ATR would increase its market share in this market from 29% to 50% worldwide and from 49% to 65% within the EC. The effects of the strengthening of ATR's position in terms of higher sales base, the coverage of the whole range of commuter aircraft and the broadening of the customer base would be the same on this larger market as outlined for the markets of 40-59 seats and 60 seats and above.

Furthermore, the market power of ATR/de Havilland in an overall commuter market is even stronger than is reflected

in the market shares. In the overall commuter market, there is an identifiable general trend towards larger aircraft in particular in the EC as explained in point 28. The higher segments have therefore a strategic importance for the overall commuter market both now and in the future. The evaluation of market power must reflect this dynamic of the market and take into account the fact that a competitor is particularly strong in the strategic parts of the overall market. The extremely strong position which would be obtained by ATR/de Havilland in the higher segments together with the other structural factors as outlined above leads to the conclusion that a dominant position would also be created on an overall market of aircraft of 20-70 seats.

#### E. Potential entry into the market

53. In general terms, a concentration which leads to the creation

of a dominant position may however be compatible with the common market within the meaning of Article 2.2 of the Merger Regulation if there exists strong evidence that this position is only temporary and would be quickly eroded because of high probability of strong market entry. With such market entry the dominant position is not likely to significantly impede effective competition within the meaning of Article 2.3 of the Merger Regulation. In order to assess whether the dominant position of ATR/de Havilland is likely to significantly impede effective competition therefore, it is necessary to assess the likelihood of new entry into the market.

54. Any theoretical attractiveness of entry into the commuter market by a new player must be put into perspective taking into account the forecast demand and the time and cost considerations to enter the market.

Based on the parties' figures, the overall market potential for 20-70 seat commuter aircraft over the next 20 years is estimated at around [...] units, including the backlog of around 700 units. It is expected that the current level of demand will be maintained only until the mid-90s, and thereafter decline and stabilise. The average annual level of demand from the mid-90s onwards could then be estimated at around [...] (\*) units compared to the current rate of some [...] units.

It follows that in terms of increase in annual deliveries the market appears to have therefore already reached maturity.

55. Even for a company currently active in a related industry not

already present on the commuter market - in practice this would seem to be limited to large jet aircraft manufacturers - it would be very expensive to develop a new commuter from scratch. According to the study submitted by the parties, there are high sunk initial costs of entering the regional aircraft market and delays in designing, testing and gaining regulatory approval to sell the aircraft. These are important for several reasons. The critical point is that with substantial fixed and sunk costs of entering the industry, these markets will be viable only for a limited number of producers. Furthermore, once a manufacturer is committed to the design and production of an aircraft, it is extremely costly and lengthy to adjust that design and production to unanticipated changes in market demand for aircraft. Critical design features of the aircraft include its size, weight, engine specifications with attendant payload, fuel efficiency and distance capacity. The magnitude of the initial sunk development costs of the aircraft constitutes a significant risk associated with commitment to a particular aircraft. If the manufacturer errs in design, these initial costs are not recoverable.

In terms of time, the study states that it takes approximately two to three years of marketing research to determine which plane is required to meet the anticipated needs of the market. This involves forecasting changes in aircraft technology as well as forecasting the evolving nature of the market. From the point of initial research and development to the point of producing and delivering aircraft, an additional four years would likely elapse. The total time lag involved is of the order of six to seven years. This does not include any time required to construct or acquire plant facilities necessary for aircraft construction.

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(\*) Substantially lower: around 2/3 of current rate

The study concludes that there is no doubt that the presence of substantial and fixed entry costs significantly reduces the entry response by others to any successful aircraft by one manufacturer.

56. It follows from the above that a new entrant into the market would face high risk. Furthermore, given the time necessary to develop a new aircraft and the foreseeable development of the market as described above, a new manufacturer may come too late into the market to catch the expected period of relatively high demand. Any new market entry at this stage could only come when the market would have declined from current levels and have stabilised. It is therefore doubtful whether a break-even level of sales could be achieved by a new entrant since even existing competitors are not yet at break-even point in their product cycles.

57. For these reasons it is considered that it would not be rational to now enter the commuter aircraft market. This is accepted by the parties. The parties argue however that some newly industrialised countries would decide nonetheless to support the development of a local commuter industry. Even if some time in the future such a local commuter industry were established in the way the parties suggest, it is considered unlikely that significant inroads into the international markets could occur in this way. Such an uncertain possibility would not in any case be sufficient to justify a conclusion that the dominant position of ATR/de Havilland is only temporary.

As to market entry in the foreseeable future, furthermore, there is no known development programme by a company not yet on the market other than as assessed below. All competitors contacted consider that it is not probable that there will be another entrant into the market because given the current structure of the market the level of development costs is out of all proportion to any possible return.

58. The parties cite Aero Czechoslovak Aeronautical Works (ACAW) as a manufacturer which could enter the relevant commuter market with its 40-seat turboprop aircraft, LET 610, within the next five years. This aircraft has been designed to meet the requirements of the markets of the USSR and the other former COMECON countries. This aircraft has been in development since 1977 and is now only at the stage of prototype testing. In 1989, a decision in principle was taken to develop a version which would meet the requirements of western certifications, and it is envisaged to equip this variant with engines from General Electric. It may be difficult, however, for ACAW to enter the relevant markets without a partner established in these markets since ACAW may not be able to set up alone the necessary maintenance



and product support facilities. Furthermore, the LET 610 is of unproven reliability since it has not yet flown and ACAW has no experience at all in the commuter markets affected by the proposed concentration as defined. It will be difficult for ACAW to obtain the necessary credibility for western airlines to seriously consider evaluating its aircraft.

This manufacturer is not therefore considered to be a realistic potential entrant, or alternatively if it were to enter, it would not play a significant role in the foreseeable future.

59. The parties also cite the Indonesian company, Industri Pesawat Terbang Nusantara (IPTN), as a manufacturer which could enter the western commuter market with the 50-seat turboprop aircraft N250. IPTN has collaborated with Casa in the development of the CN235, but to date has not itself developed a commuter aircraft. First plans for the N250 were made in 1987, and it is expected to only obtain its first certification in 1996 at the earliest. This aircraft seems likely to be successful in Indonesia which has an estimated potential demand for 400 aircraft over the next 20 years. It may be possible for IPTN also to sell outside Indonesia to a certain extent. Sales outside Indonesia would however be dependent on IPTN establishing the reliability of the new aircraft which would take several more years following certification.

In this light, sales outside Indonesia are a matter of speculation only, and would not occur within a time-scale where IPTN could be taken into account as a significant potential competitor under the Merger Regulation.

60. The parties also mention the Ilyushin 114 which has been developed for the USSR and the former COMECON countries. The first deliveries of this aircraft are expected in 1992 to Aeroflot. The parties state that this aircraft will not compete in Europe or North America. This analysis appears correct. The main importance of the Ilyushin 114 is considered to be as the future main aircraft (perhaps with the aircraft of ACAW) of the eastern geographic area.

61. Boeing, which is selling de Havilland, has stated in response

to a specific request that it has no intention of re-entering the market for turboprops, and will concentrate its activities on jet aircraft and helicopters. Its experience with de Havilland has demonstrated that no significant synergies exist between manufacturing jet aircraft and manufacturing turboprop aircraft. The parties state that at the basis of Boeing's decision to sell de Havilland lies the

consideration of the weaker than expected link between regional and large civil aircraft.

There is no indication either that McDonnell Douglas or Lockheed as the other main North American jet manufacturers, have any intention of entering the turboprop markets. Even in the period of high growth in the North American markets in the early 1980s, these manufacturers did not enter.

62. There are currently no Japanese manufacturers of commuters. Furthermore, the Japanese are largely not present in the aircraft industries generally in particular because of a post-war treaty prohibiting production and exportation of aircraft until 1995. It may be therefore that in the future Japanese manufacturers would be interested to play a certain role in the aerospace industry. It is, however, questionable whether the commuter market would be a focus given its apparent lack of strategic and technical interest within the

aerospace industry generally, and the risks of unprofitable trading as outlined above. It is considered therefore that there is no identifiable Japanese potential entrant.

#### Evaluation of the possibility of new entry

63. It follows that there is no realistic significant potential competition in the commuter markets in the foreseeable future.

The parties claim that the commuter markets are volatile on the basis that in the early 1980s Fokker and British Aerospace had high market shares and this did not prevent significant market entry, notably of ATR.

A change in market structure from the early 1980s to the early 1990s does not demonstrate that these markets are volatile. The situation in the early 1980s was very different from the current situation.

The markets in the early 1980s were characterised by the following factors:

- There were very few competitors on the markets. In the small commuter market of 20-39 seats, there was only Shorts, and in the market of 40-59 seats there were only Fokker, British Aerospace and to a limited extent de Havilland.
- The aircraft on the markets and in particular those of Fokker and British Aerospace were very old, even obsolete, products. The markets were ripe for the introduction of new and better performing aircraft.
- Forecasts showed that there would be high growth in the markets over the following decade arising from deregulation in North America. These forecasts proved justified.
- The markets were therefore attractive to new entrants and it was rational for entry to occur.

The markets in the early 1990s, in contrast, are characterised by the following factors:

- There are eight competitors altogether already on the markets. The aircraft available are all based on modern technology which fulfils the stringent customer requirements in this respect for the foreseeable future.
- Current forecasts as outlined above show that the markets are approaching maturity and will decline and stabilise from the mid-1990s.

- The markets are not therefore attractive to new entrants, and it is not rational to now enter. The expectation is rather that some of the existing competitors will leave.

64. It is considered therefore that a change in market structure similar to that which took place in the 1980s is unlikely to recur in the 1990s. Furthermore, the possibility of market entry would be further reduced if the proposed concentration goes ahead.

F. Other general considerations

65. The parties argue that one of their objectives in acquiring de Havilland is to reduce costs. The potential cost savings arising from the concentration which have been identified amount to only some 5 million ECU per year. According to the estimates of the parties' economic consultants, these cost savings to the combined entity would arise from rationalising parts procurement, marketing and product support.

Without prejudice as to whether such considerations are relevant for the assessment under Article 2 of the Merger Regulation, such cost savings would have a negligible impact on the overall operation of ATR/de Havilland, amounting to around 0.5% of the combined turnover. The parties have identified (although have not quantified) cost savings which could be made by better management of certain aspects of de Havilland's internal operation. These cost savings would not arise as a consequence of the concentration per se, but are cost savings which could be achieved by de Havilland's existing owner or by any other potential acquirer.

66. The parties have not claimed that cost savings will arise from combining the research and development activities of ATR and de Havilland. This is in line with undertakings given to the Canadian authorities to maintain de Havilland as a full-function aircraft manufacturer.

67. ATR's current position in the industry is very healthy. Given the relatively high initial costs of development for new aircraft, it is normal for manufacturers in this industry to show losses in the early years of a programme. It takes some time before a sufficient level of sales has been achieved to amortise the development costs. [...]<sup>(\*)</sup>

Since ATR has also established an excellent position in the market, and efficient production management, it does not need to obtain by acquisition further capacity or market

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(\*) ATR financial projections.

shares in order to guarantee its long term success as a major player in the worldwide commuter industry.

68. The parties have stated that a competitive advantage (which has not been quantified) will be obtained from acquiring de Havilland by enabling manufacturing in a dollar area to reduce the currency fluctuation risk. For the ATR product range this will only arise, however, to the extent that production could be shifted between Europe and North America.

Although some advantage may be obtained from a dollar manufacturing base, it should be noted that no competitor other than de Havilland has such a base. It is doubtful in practice that production of ATR aircraft would be transferred to Canada in any significant way.

69. For the above reasons, the Commission does not consider that the proposed concentration would contribute to the development of technical and economic progress within the meaning of Article 2(1)b of the Merger Regulation. Even if there was such progress, this would not be to the consumers' advantage.

The consumers will be faced with a dominant position which combines the most popular aircraft families on the market. Choice will be significantly reduced. There is a high risk that in the foreseeable future, the dominant position of ATR/de Havilland would be translated into a monopoly.

Both British Aerospace and Fokker, the two principal competitors in the markets of 40 seats and above, have stated that the concentration would seriously jeopardise the survival of the ATP and Fokker 50 aircraft. These two competitors expect that the proposed concentration would lead to ATR/de Havilland pursuing a strategy of initially lowering prices so as to eliminate the competitors at least in the key markets of 40 seats and above.

Neither Fokker nor British Aerospace consider it possible for them to withstand such a price war. Consequently both would leave the markets.

In evaluating these statements, it is noted that such conduct could be rational since the proposed concentration would mean that ATR/de Havilland would exceed the threshold of market shares which would make such a pricing policy likely given that it would be the optimal profit maximising strategy.

Having established a monopoly, ATR/de Havilland would be able to increase prices without any competitive check.

70. With this perspective, the proposed concentration would become even more harmful to the customers over time as the dominant position translates to a monopoly. Higher prices for commuters have a proportionally large impact on regional airlines since the price of an aircraft accounts for some 30-40% of their total operating costs.

71. The proposed concentration would also lead to adverse effects

in the adjacent 100-seat jet market. The British Aerospace BAe 146 jet is produced in the same factory as the ATP commuter so that fixed costs are spread over the two aircraft. A similar interdependency exists between the Fokker F100 jet and the Fokker 50 commuter. Removal of the commuter product lines of both companies would therefore weaken their competitiveness in the 100-seat jet market where they are already facing strong competition from the Boeing 737.

#### V. CONCLUSION

72. For the reasons outlined above, it is considered that the proposed concentration would lead to a situation whereby the combined entity ATR/de Havilland could act to a significant extent independently of its competitors and customers on the world markets as defined for commuters of 40-59 seats and 60 seats and over. The proposed concentration therefore creates a dominant position on the world markets. Furthermore, according to the above analysis, this dominant position is not merely temporary and will therefore significantly impede effective competition. It is considered that such a dominant position is also created even if the relevant product market is the overall 20-70 seat market.

The conditions of competition in the EC commuter markets are not appreciably different from those prevailing in the overall world markets. The market shares of the new entity would be similar in both the world and EC markets for commuters of 60 seats and over and even higher in the EC market for commuters of 40-59 seats than in the world market. These markets are also relatively more important in the EC than in the rest of the world. As to the overall market 20-70 seats the market shares of the new entity would be higher in the EC than in the rest of the world. It is considered therefore that the proposed concentration creates a dominant position which significantly impedes effective competition in the common market within the meaning of Article 2.3 of the Merger Regulation.

HAS ADOPTED THIS DECISION

The proposed concentration between Aerospatiale and Alenia and de Havilland is declared incompatible with the common market.

Article 2

This decision is addressed to:

Aerospatiale SNI  
37 Boulevard de Montmorency  
F-75781 Paris Cedex 76

and

Alenia-Aeritalia & Selenia Spa  
P. le V. Tecchio 51/a  
I-80125 Napoli

Done at Brussels, 2 October 1991

For the Commission