

COMMISSION OF THE EUROPEAN COMMUNITIES

COM(81) 398 final

Brussels, 23rd July 1981

REPORT

SCHEDULED PASSENGER AIR FARES IN THE EEC

COM(81) 398 final

LIST OF CONTENTS

PARAGRAPHS

1) <u>INTRODUCTION</u>	1 - 7
2) <u>BACKGROUND</u>	
2.1. <u>The process of fixing passenger air fares</u>	8 - 13
2.2. <u>Government criteria</u>	14 - 17
2.3. <u>Other evaluation aspects</u>	18 - 33
2.4. <u>Description of the ensuing examination</u>	34 - 37
3) <u>THE AIR FARES EXAMINATION</u>	
3.1. <u>The profitability of the Community network</u>	
i. A comparison of overall revenue and total costs	38 - 44
ii. Comparison of revenue and costs on a per route basis	45 - 50
3.2. <u>The structure of fares</u>	51
i. Choice of fare types	52 - 64
ii. Transparency	65 - 66
iii. Elements of yield dilution	67 - 83
3.3. <u>The relation of fares to the costs of operation</u>	
i. Comparison of fare types and costs per route	84 - 91
ii. The distance relation of costs and fares	92 - 98
3.4. <u>The level of costs</u>	
i. The cascade studies	99 - 110
ii. Breakdown and evolution of costs per cost category	111 - 114
4) <u>CONCLUSIONS</u>	115 - 133

Annexes

- 1) Procedures and criteria used by governments for evaluating air fares.
- 2) AEA presentation to the EEC.
- 3) Presentation of the Consumers Consultatif Committee.
- 4) ACE (Independent Air carriers of the European Community): EC Commission Air Fares Examination
- 5) Technical procedures of the prorating system.
- 6) UK: 'Reverse Cascade'
- 7) Glossary of Terms.
- 8) Example: Brussels-Athens return fares

1. INTRODUCTION

1) Following the approval by the Council of Ministers in 1978 of a priority programme for civil aviation the Commission published in 1979 its memorandum on "Contributions of the European Communities to the Development of Air Transport Services". In this memorandum the Commission concluded with respect to scheduled air fares that although the situation is complex there is "scope for improvement and that it is time for a rethinking of the tariff structure".

This idea has been strongly supported by the European Parliament and by many other parties.

2) The United Kingdom presented in 1980 to the Council of Ministers a working paper on passenger air fares in the EEC which set in motion certain events. This resulted in June 1980 in the Council taking the following decision :

" Having taken note of the views on passenger air fares expressed in the Commission's Memorandum on the contribution of the European Communities to the development of air transport services,

- recognizes that the subject of scheduled passenger air fares in the Community is worthy of comprehensive study, and
- invites the Commission, in collaboration with national experts, to examine the various scheduled passenger air fares charged in the Community, in the light of the work being carried on, amongst others, by the European Civil Aviation Conference, taking particular account of :
 - the economic constraints on airlines,
 - the present conditions of their access to the market, and
 - the effect of non-scheduled passenger air fares,with a view to informing the Council of the results of its examination as soon as possible."

4) This is the background for the present report on the examination of scheduled passenger air fares in the Community. This examination does not include any examination of the conditions of market access although these form an essential background to the circumstances in which air fares are fixed*. Nor does this report examine the compatibility of the present methods of fixing air fares with the EEC Treaty, which will form the subject of further **considerations**. The report can therefore be said to consist of an examination of the actual levels of air fares paid in accordance with the present arrangements.

5) Any examination of air fares must take into account the responsibilities and objectives of governments and interests and objectives of airlines and users and must also have regard to the interests of air transport employees and travel agents. Each of these groups has its own opinion as to the characteristics air fares ought to have. Government responsibilities and objectives are expressed by law in many Member States but have otherwise been communicated to the Commission by the Member States. The other groups have been consulted through their organisations cooperating with the Commission. As a result of these consultations it became clear which aspects of air fares should be included in the examination. This is further explained in chapter 2.

6) For the examination as such the Commission has taken into account studies and analyses which have already been carried out, e.g. by ECAC. Existing information, however, seldom relates to the Community directly and it has therefore been necessary to collect further information and to reassess existing studies (see for details par. 37).

7) **The Commission's approach** has been to describe the present regulatory system with respect to air fares, to look at the air fares and economic consequences which result from this system and to examine the air fares with a view to the various aspects which interest the different groups. The examination, which has been made with the help of national experts, aims to be factual and objective in order to create a foundation for Commission proposals and Council decisions in this area. It should be noted in this context that the provisions of **the Rome Treaty** may have an important bearing on such proposals and/or decisions.

* see second indent of the Council's invitation.

2. BACKGROUND

2.1. The process of fixing scheduled passenger air fares

8) Fares charged by the airlines for scheduled passenger air services are a result of airline and government activities. The first stages involve mostly airlines individually and/or collectively while governments play a decisive role in the final stages.

9) The legal framework for tariff setting is constituted by national civil aviation laws and regulations, bilateral agreements and in particular the international agreement of 1967 on the procedure for the establishment of tariffs for scheduled air services, which was established by ECAC and published by ICAO. Although not all Community Member States have ratified this agreement it is in practice being followed by all.

10) The national civil aviation rules specify that airlines, both domestic and international, must present their tariffs and obtain government approval before they become valid. The government approval may be given in writing but provisions also exist, whereby approval is considered given after the expiry of a certain period.

11) These rules are supplemented by bilateral agreements and in most cases the 1967 international agreement. In fact since with respect to air fares the 1967 agreement in general replaces the bilateral agreements, only the 1967 agreement will be discussed here. The pertinent rules are found in article 2, paragraphs 3 to 6 :

"(3) The tariffs referred to in paragraph 2 of this Article shall, if possible, be agreed by the airlines concerned of both Parties, after consultation with the other airlines operating over the whole or part of the route, and such agreement shall, wherever possible, be reached by the use of the procedures of the International Air Transport Association for the working out of tariffs.

(4) The tariffs so agreed shall be submitted for the approval of the aeronautical authorities of both Parties at least ninety days before the proposed date of their introduction. In special cases, this period may be reduced, subject to the agreement of the said authorities.

(5) This approval may be given expressly. If neither of the aeronautical authorities has expressed disapproval within thirty days from the date of submission, in accordance with paragraph 4 of this Article, these tariffs shall be considered as approved. In the event of the period for submission being reduced, as provided for in paragraph 4, the aeronautical authorities may agree that the period within which any disapproval must be notified shall be less than thirty days."

*(6) If a tariff cannot be agreed in accordance with paragraph 3 of this Article, or if, during the period applicable in accordance with paragraph 5 of this Article, one aeronautical authority gives the other aeronautical authority notice of its disapproval of any tariff agreed in accordance with the provisions of paragraph 3, the aeronautical authorities of the two Parties shall, after consultation with the aeronautical authorities of any other State whose advice they consider useful, endeavour to determine the tariff by mutual agreement."

12) In addition to this, there are procedural provisions in case of conflict between States.

As a result of bilaterals and the multilateral agreement, confidential arrangements and agreed practices airlines are in practice expected to propose tariffs themselves and then discuss them with other airlines operating on the same route with a view to agreeing on common proposals to the governments involved. In some instances airlines do talk to their own government before they start consultations with other airlines. These consultations should if possible take place at IATA, but do not necessarily do so. Consultation between the airlines operating on the same routes is possible. However, in practice it has often happened that some governments are unfavourably disposed to tariff proposals if they have not gone through the IATA consultation.

13) When airline consultation has been finished, airlines then propose tariffs to the governments involved. It has been indicated to the Commission that the governments of all Member States in fact feel responsible for the tariffs charged, but that they as far as possible keep apart from the actual tariff negotiation. Some Member States do, however, specify general objectives for tariffs.

In practice, most governments refuse to approve fares which its own airlines do not agree with. From evidence supplied to the Commission this seems to have led to a situation where airlines are often not able to implement quickly their own commercial judgement, e.g. in cases where airlines see possibilities to open up new markets or in cases of fast rising costs.

2.2. Government criteria

14) Guidelines for tariff approval by the national administrations are to be found in national law, regulations and practice and in the 1967 International Agreement

The national criteria have been indicated to the Commission by the Member States and are found in Annex 1.

15) The 1967 agreement includes criteria for fares approval in article 2 paragraph 2 :

"(2) The tariffs to be charged by the airlines of one Party for carriage to or from the territory of the other Party shall be established at reasonable levels, due regard being paid to all relevant factors, including cost of operation, reasonable profit, and the tariffs of other airlines."

16) The three criteria in the 1967 agreement are also to be found in most national criteria, but may be expressed in a different way. In addition a number of other criteria are mentioned either by one or more Member States. The following criteria are mentioned either in the 1967 agreement or in national legislation or other national measures of Member States as indicated:

1. Reasonable relationship to costs (*) (1967, B, DK, F, NL, UK, D, GR, IRL.)
2. Reasonable profit (1967, B, DK, F, NL, UK, D, GR, IRL.)
3. Tariffs of other airlines (1967, B, DK, F, NL, D, GR, IRL).
4. No predatory effect (IRL, F, D).
5. In the interest of the consumers (GR, DK, F, NL, UK, D, I.)
6. In the interest of the carriers (DK, F, NL, UK, D, I).
7. Comparable fares over the same distances (F).
8. National interest (UK, D).

(*) In some countries it is stipulated that it should be the costs of efficient operators.

The following section will describe to what extent these national criteria were reinforced by the consultations with relevant organizations.

2.3. Other evaluation aspects

17) As well as governments, the users of airline services, the airlines themselves airline employees and travel agents are interested in air fares, but the criteria whereby they evaluate them may differ from the criteria used by governments or at least they may emphasize different aspects.

18) During a number of hearings the Commission was presented with the views of :

- Air Transport Users Committee (AUC), (UK)
- Consumers Consultative Committee (CCC), (EEC)
- Conference of Chambers of Commerce and Industry (CCCI), (EEC)
- Association of European Airlines (AEA), (Europe)
- Independant Air Carriers of the European Community (ACE), (EEC)
- Transport Workers Unions (TWU), (EEC)
- Groupe of National Travel Agents Association (NTAA), (EEC).

Apart from oral presentations by these organizations the Commission also received 3 written statements. These statements are attached as annex 2, 3 and 4.

19) It would be impossible to include a full account of the hearings so the following should be seen only as a summary. For ease of presentation the pertinent comments have been indicated with respect to each criteria as listed on page 5. It will also be seen that additional criteria have been added.

1. Reasonable relationship to costs

20) This criterion was supported by everybody. An important discussion, however, took place on what cost basis should be used.

AEA pointed to the very complex nature of the issue and stated:

"There must be indeed such a reasonable relation between costs and fares as a general objective. On the other hand, cost allocations are an extremely complex subject and many arbitrary elements are inevitably involved in a cost allocation to routes. Problems at that stage sufficiently underline the extreme difficulties which would arise in a cost allocation according to traffic category and fare type. There also remains to define what a representative cost would be on a specific route since the cost level on any given route varies between the individual operators. This is for instance, a factor which has been fully acknowledged in the ECAC study of European air fares, which notes that to a very great degree operating costs are a reflection of the respective national situations. Given the great differences encountered by the airlines themselves in cost allocations, a strict adherence to a theoretical cost formula, the purpose of which should enable authorities to assess mathematically the degree of relationship between fares and costs, can in fact be defined as a very ambitious target of spurious accuracy."

and further:

"Apart from technical arguments, we have to stress the fact that operators have to look, not only at the operating costs in isolation, but at the cost of servicing all segments of the air market."

21) ACE stated:

"A reasonable relationship to the cost of operations is the primary criterion for evaluating fares, and should always be observed bearing in mind the costs of an efficient carrier. Since mail and cargo in most cases can be carried in addition to a normal load of passengers, the cost criteria should be based on normal-load passenger flights only, and the revenues from mail and cargo considered an additional contribution. This will make fare comparisons possible between carriers that carry differing loads of mail and cargo or no mail/cargo at all."

and further :

"In the absence of free market conditions in Europe, the predominant on-demand fare type (in Europe normally the economy-class fare) should be linked closely to the costs of an efficient air carrier in point-to-point terms."

22) The argument about using an efficient air carrier's cost level as a basis was supported strongly by AUC. This organization in fact was trying to construct the cost level of a simulated efficient UK air carrier. This cost level would be used by AUC as a basis for their air fare evaluations. AUC acknowledged that the problem was more complicated in the Community where the cost levels may differ between airlines of different nationality serving the same route.

However, some users, and especially the CCCI emphasized the importance of full fare facilities and the existence of secondary and tertiary routes ; they felt that fares should be related more to the economic conditions on a whole network and not necessarily only on the routes concerned.

2. Reasonable profit

23) This criterion was also recognized as a prerequisite for a satisfactory system of air transport in the Community.

As a target percentage AEA claimed that 8 % profit over total costs excluding financial charges is needed for the industry. The financial charges would demand another 4 % profit. AEA mentioned that this was in fact not the case at present. This will be demonstrated in Chapter 3.

24) The transport workers strongly underlined the criterion of reasonable profit. They were of the opinion that a sound financial situation for the airlines would produce stable and otherwise satisfactory conditions for the workers.

Further more ACE stated :

"We can only re-iterate our view that European air transportation should be managed as a normal "for profit" business concern, with investments obtained through the normal free-market financial means. Any aspects of the business considered a "public service obligation" should be accounted for separately and subsidised separately if absolutely necessary."

3. Tariffs of other airlines

25) This criterion which would call for alignment of air fares, was not really commented on except by the NTAA who said that if there was not some sort of coordination the result would be an unmanageably large number of fares. This would be non-transparent and very difficult for the users.

4. No predatory effect

26) A general definition of this concept does not exist. If fares are cost related then this evaluation would not be necessary. The Commission regards it as being synonymous with whether tariffs have a character of dumping or not.

5. In the interests of the users

27) This criterion was supported by everybody and is implicitly covered by the criteria 1, 7, 9 and 10*.

6. In the interests of the carriers

28) This criterion was also acknowledged by everybody. In this context the CCC and CCCI mentioned that this should not lead to a subsidized air transport system. The air carriers making reasonable profits should be able to operate as commercial undertakings, being able to make decisions on market conduct on a commercial basis. Implicitly this criterion is covered by the criteria 1, 2, 3 and 4.

7. Comparable fares over the same distances

29) This is one of the classical aspects of air fares which many parties use as a yardstick.

However, as ACE said:

"If fares are related to point-to-point costs of an efficient carrier, as this Association is recommending, they will automatically become closely related to distance".

This point of view is to some extent not shared by AEA which points to large variations in costs. Nevertheless, they stated:

* see page 11

"There is in fact a reasonable overall relation between fares and distance. The overall correlation between fares and stage distance is, as we pointed out in our own examination referred to above, (1) higher than that between costs and distance. This is certainly a demonstration of the success of multilateral tariff-coordination in smoothing out not only inequalities between fares for adjacent routes, but also some of the large variations in costs."

8. National interest: This criterion did not give rise to separate analysis.

In addition to the abovementioned criteria a few others were mentioned.

9. A broad range of products⁽²⁾ (Choice)

30) For the users, the airfares should reflect the needs of the different groups of users. In order to cover these needs the users advocate a broad range of products so that they can have a choice.

There were users who advocated a low basic fare plus extra payments for additional services they might want. The CCCI on the other hand underlined the interest in the present economy type fare.

This seems to lead towards a requirement for a broad range of fares. This was acknowledged by the airlines and travel agents.

31) In this context ACE stated:

"We should perhaps encourage the Commission, on this question of relating fares to services rendered by the airline, to devote time to considering ways in which airlines could practically separate the aspect of an air ticket from the aspect of a seat reservation; with a view to treating the latter as a non-refundable option. Such a fundamental change to the basis of European on-demand air transport could have profound effects upon the evolution of European air transport."

32) while AEA claimed

"Regarding the overbooking problem, it is certainly an oversimplification to believe that the problem can be solved by charging directly for the cost of reservation. Let us repeat once more that the overbooking question is directly related to the 'no-show' problem, and that both the travelling public and the intermediaries are the major culprits in this respect. Overbooking, which is strictly controlled by the airlines, is a way of overcoming the 'no-show' problem."

(1) AEA : "Air fares in Europe"

(2) "Product" is used in this report in the sense of a service offered on particular conditions.

10. Transparency and simplification

33) It was claimed from many sides that passengers should not pay for costs they do not incur and for services they do not want. At any rate they want to know what exactly they are paying for. For that reason products need to be simple and understandable.

NTAA stated that travel agents see their commercial interest in serving the public and consequently their evaluation of the air fares is practically similar to the evaluation of the users. They too advocate simple, transparent and understandable products; they realize, however, that such a demand calls for a limitation of the number of products that can be available per route.

2.4. Description of the ensuing examination

34) To what extent the present scheduled passenger air fares in the Community reflect the criteria mentioned in paragraphs 14 - 33 is examined in chapter 3 of this report. Given the procedures for fare approval by governments and the opinions of the organisations consulted it seems logical to concentrate the examination on the following areas:

	Related criteria as numbered in <u>Par. 23 - 33</u>
a) What is the profit level of airlines operations in the Community and on individual routes?	1, 2, 6
b) Is there sufficient choice and transparency?	9, 10
c) Are fares related to the services offered?	5, 10
d) What is the cost relationship of fares?	4, 5
e) Are air fares related to distance?	7
f) Is air transport in the Community cost effective?	1, 2

35) The first step will therefore be to show revenue arrived at by the airlines selling all their services - defined as all revenue derived from intra-Community traffic traveling at the whole range of existing fares - and to what extent this is related to the costs of production (par. 38 - 44).

Thereafter attention will be paid to the profitability of individual routes (par. 45 - 50).

Before looking at the relation of the individual fare types and their costs it is **necessary to look at first at these fares and their related conditions.** Therefore chapter 3 will as a next step **treat** the structure of fares in the intra-community network and analyse the existing choice for the consumers and the transparency of that choice, **or** in other words whether the users can actually

understand the existing choice of fares with all their related conditions
(par. 51 - 66)

36) Thereafter it will be examined to what extent individual fare types are related to the costs of operation and how far such a relationship is compatible with a relationship between fares and distance. A related problem is the fact that the airlines yield per fare type is often less than the actual fare quoted (par. 67 - 98).

Finally chapter 3 will look into the matter of cost efficiency since a situation without any excess profit may well be combined with airline costs which are higher than they would be under a more competitive regime, as it was claimed by some of the organisations consulted. (Par. 99 - 114) .

37) As stated in the introduction of this paper, the major part of these items have already been the subject of study by other bodies, the results of the following studies have been evaluated by the Commission and are reflected in this report:

Complementarity of Competition between scheduled and non-scheduled air transport (ITA, 1976)

European Air Fares (AUC 1976 and supplement 1980)

European Air Fares (CAA 1977)

Air Fares in Europe (AEA 1977)

European Air Fares (House of Lords 1980)

Dutch Cascade study (NL 1979)

Report on intra-European air fares (ECAC 1981)

The economic cost structure of air transport in Europe (TAI 1980)

AEA: Sales costs, a comparative examination between AEA and US Airlines

3. THE EXAMINATION OF AIR FARES

3.1. Profitability of the Community network

i. Comparison of overall revenue and total costs

38) Several studies have been conducted in the past that devoted attention to the profitability of the local European scheduled operations. Although these operations cover more countries than the European Community alone, the conclusions reached for Europe as a whole will probably in principle not differ from the conclusions that would be achieved on the basis of data from the Community alone.

39) There are three bodies collecting evidence regularly concerning the profitability of European services. These are :

- 1) The International Civil Aviation Organisation (ICAO),
- 2) The Association of European Airlines (AEA) and
- 3) The IATA Cost Committee.

The following text includes only the main elements of these statistics. A more exhaustive description has been made by ECAC in its study on intra-European air fares, which includes an inventory of the various sources of evidence.

40) ICAO issues a yearly publication "Regional differences in fares, rates and costs for international air transport" in which the revenue/cost ratio for local Europe* can be found. These ratios were for the years 1975-1978 : 100, 125, 110 and 115**. According to their figures Europe has the highest revenue/cost ratio of the 12 regions investigated in the world. (Average for all regions 1978 = 101).

However the figures published by ICAO are criticized by European Airlines as well as by governments because the ICAO method of allocating indirect costs to the European services seems to underestimate the total cost level and also the method to derive the figures seems to lack consistency from one year to the other. On the other hand ICAO figures do not contain an allowance for incidental revenues which would add some percentage points to the ratios. The total effect seems to be an overestimation of operating results for local Europe.

* See definition of "Local Europe" in annex 7, Glossary of Terms.

** Revenue cost ratio = $\frac{\text{Total revenue}}{\text{Total costs}} \times 100$

41) The average operating ratios calculated by AEA for AEA airlines for the years 1975-1979 are 106.1, 108.7, 108.0, 105.3 and 105.7. These ratios do not include financial charges which amount to 4 percentage points. These results lead AEA to the conclusion that profits for local Europe are too low for any of the five financial years. To illustrate this further AEA derived an "economic cost ratio"; a ratio of 100 indicates a situation where the airlines can meet financial expenses, pay dividends and taxes and replace aircraft at current prices. For the financial year 1978/79 this ratio was 95.9.

42) In October 1980 the firm of consultants "Transportation Analysis International" (TAI) presented its final report on the study "The economic cost structure of air transport in Europe" which was carried out for the Commission.

The 1978 results for 15 AEA airlines were as follows:

Table 1 : Operating results in local Europe for 15 AEA scheduled airlines

Number of Airlines	% operating (*) result	
2	> 15 %	↑ + profit
1	11 - 15 %	
5	6 - 10 %	
2	1 - 5 %	
4	1 - 10 %	↓ - loss
1	> 10 %	

(*) Profit or loss as a % of total operating costs before interest expenses.

These 15 AEA airlines, of which 10 are Community based, account for 93.1% of the RTK's * of scheduled operations performed in local Europe by AEA airlines.

43) As stated in the table the operating results were calculated excluding interest expenses as they were not supplied by the AEA. The TAI report concluded that the AEA airlines as a group did not achieve an acceptable profit margin for local Europe scheduled passenger operations. The consultant took as a basis for that conclusion that the airlines must achieve a "clear and significant profit" over and above total operating costs and interest expenses in order to be

* RTK = Revue Ionne Kilometres

able to re-equip with new generation aircraft. This conclusion of course depends to a certain extent on the financial year which is chosen for the analysis.

However, the findings of the TAI report are similar to the ECAC conclusions where the ECAC study concluded that "if European scheduled fares are found to be generally too high, it is not because airlines are earning high profits from the region taken as a whole and taken one year with another". It should however be observed that these conclusions are based on information provided by AEA airlines and follows therefore from the usual AEA cost allocation method and as shown by the differences between ICAO and AEA operating ratios the calculations are very sensitive to cost allocation between Europe and other regions in the world. No information is available to illustrate this problem satisfactorily.

44) To the Commission it seems that in general it can agree with the conclusion of ECAC provided the cost allocation of AEA airlines is not biased against local Europe. At any rate even the ICAO ratios do not constitute excessive profits. It seems also likely that a few airlines are able to obtain satisfactory operating ratios in Europe.

ii. Comparison of revenue and costs on a per route basis

45) After the analysis in the preceding paragraphs the logical next step is to look at profitability on individual routes. Two sources of evidence may be quoted in this respect :
First there is the AEA, "Air fares in Europe study" where passenger operating ratios (1) are calculated for a sample of 84 routes, of which 57 relate to EEC airlines. The average passenger operating ratio was 101.5 with a minimum ratio of 59.7 and a maximum of 163.6. A table from the study is reproduced in table 2 and it may be seen that there is a very wide variation. The actual load factors vary from 30.8 to 78.1 and the breakeven load factors vary from 39.1 to 84.2.

(1) The passenger operating ratio is the relationship between passenger revenues and the passenger related operating expenses (including financial charges). An operating ratio of 100 indicates that the airline has achieved the break-even point which does not include any profit margin.

TABLE 2 - LOAD FACTORS AND OPERATING RATIO BY RANGE BAND (1975)

Source : AEA "Air fares in Europe"

Range Band (kms)	Actual Pax Load Factor (%)			Breakeven Pax Load Factor (%)			Pax Operating Ratio		
	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.
200 - 399	30.8	60.7	72.5	40.6	66.7	82.9	59.7	91.0	137.6
400 - 599	42.0	59.2	78.1	53.8	65.6	84.2	69.7	90.3	130.7
600 - 799	42.4	53.6	65.1	40.7	53.6	62.5	74.4	100.0	131.9
800 - 999	33.0	55.4	73.5	39.1	50.4	59.5	73.9	109.9	134.8
1000 - 1199	48.9	60.7	68.2	41.1	55.5	74.3	77.9	109.3	137.8
1200 - 1399	51.1	62.9	68.8	40.1	51.0	61.7	94.4	123.3	107.4
1400 - 1599	49.5	59.1	65.8	40.2	47.3	55.4	111.0	124.9	163.6
1600 - 1799	-	-	-	-	-	-	-	-	-
+ 1800	45.4	64.2	72.2	39.6	62.1	82.0	88.1	103.4	150.6
Total sample (84 routes)	30.8	60.1	78.1	39.1	59.2	84.2	59.7	101.5	163.6

Source: AEA routes from sample.

Notes:- the average refers to the weighted average for the corresponding range band;

- minimum or maximum rates of an actual and breakeven load factors and operating ratio do not necessarily refer to the same route;
- breakeven load factors and operating ratios include an allowance of 3.78% of total cost for financial charges.

46) The AEA study also produced figures - concerning the same 84 routes - with respect to individual airlines and those figures are reproduced in table 3.

47) As may be seen from table 3 important differences in route profitability can exist even within one airline. Furthermore it is interesting to see that high costs (carrier D) do not necessarily mean low profits as those costs may be compensated by even higher yields and reasonable load factors. Also low yields (carrier C) may be compensated by even lower costs and high load factors. Another example is set by air-line (M) with higher than average yields, lower than average costs but yet through a much lower than average load factor it still makes a loss on its four routes included in the study.

48) This evidence shows - for all airlines and all routes - that there are important differences in profitability per route and also that within an airline some routes do cross-subsidize other routes. In the Commission's opinion some cross-subsidization is only natural and reflects normal commercial practice.

However, on some routes the high level of profits may in fact be so high as to violate criteria 1 and 2 (reasonable relationship to costs and reasonable profits) and maybe also art. 86 of the Treaty. This is even more so since 1975 was a rather poor year for aviation. On the other hand some of the deficits are so high that the fares may be predatory (criterion 4), unless there is e.g. a public service obligation (criterion 8).

TABLE 3. - INDICES OF ECONOMIC PERFORMANCE BY CARRIERS (1975)
Source : AEA "Air Fares in Europe"

Carrier	Av. route distance (kms)	Carrier's Cost Index*	Carrier's Yield Index*	Av. Pax Load Factor	Av. Pax Operating Ratio	Passenger Operating Ratio			Total number of routes
						< 99.9	100-107.9	> 108	
A	1690	72	101	62.2	156.4	-	No. of routes	2	2
B	1147	83	94	65.3	143.6	1	-	4	5
C	419	74	70	75.2	121.3	1	1	2	4
D	665	105	104	58.6	114.4	-	2	2	4
E	640	82	98	43.7	109.5	1	-	1	2
F	594	105	106	50.4	102.9	7	1	4	12
G	1675	97	90	61.5	101.8	3	-	1	4
H	1018	118	87	66.5	100.9	5	2	2	9
I	505	96	85	56.9	94.6	10	2	1	13
J	592	116	94	56.1	93.8	9	2	5	16
K	970	108	84	60.4	92.5	3	1	-	4
L	471	121	101	60.2	91.2	4	1	-	5
M	330	80	109	41.4	85.8	4	-	-	4
Average/Total	686	-	-	60.1	101.7	48	12	24	84

Source: AEA routes from sample.

*Cost and yield indices compare the average cost and yield achieved by each carrier with the corresponding cost and yield for equivalent distances derived from the regression analysis of the sample data.

The index for the costs and yields derived from regression analysis is equal to 100.

49) It is argued by many airlines that one should look at the total network of the airline. Thinner routes are bound to be less viable than routes with dense traffic flows. Even if a thin route does not cover the full costs - including overheads - allocated to that route, the route may still contribute to the airline's profitability by generating revenue in excess of the direct costs.

50) Such position leads the Commission to the conclusion that the revenue on each route should at least cover variable route costs and give some contribution to the airline's fixed costs, otherwise criterion 4 would really be violated. Moreover the number of routes of the same airline not covering the total costs (fixed and variable) should be strictly limited, for only if the proportion of routes not covering their total costs is relatively small one could argue that marginal costing is acceptable for those routes.

*) See also page 48

3.2. The Structure of fares

51) For air travel a large number of different scheduled fare types and associated conditions exist. A difference can be made between fares which are directly available to the public and fares which are only available for tour operators as a basis for the construction of inclusive-tour packages ; the latter fare types are called Inclusive Tour (IT) basing fares.

For fares directly available to the public, within the Community, about 150 different rules* exist and one of these rules always applies to some or another of those fares.

In principle these conditions as expressed in the rule contain certain limitations with respect to the use of those fares by the travelling public. Such limitations contain in general rules with respect to :

- the validity period of the ticket
- the length of stay at the destination point (or points)
- the flexibility of booking
- the flexibility of routing
- the possibilities of making stop-overs
- the group size
- discounts for spouse, children, students, etc. and discounts for tourguides
- the capacity which the airlines make available for a fare type or a route.

The aim of lower fare types is to increase the total traffic volume and the airlines average load factor which improves the economics of the route, in principle at the benefit of all passenger categories flying on that route. The major aim of the limitations in this respect is to prevent too many passengers from shifting from the high yielding fares to the lower fares, thus maintaining for the airlines an acceptable average yield level.

i. Choice of tariffs

52) For the examination of choice the Commission looked at the tariffs available on 550** direct intra-Community routes. The decision of whether a tariff was available was taken merely on the bases of a tariff being published and sold. For some tariffs on some routes the capacity the airlines make available for that tariff is extremely limited, but these capacity limitations have not been taken into account.

In addition to the number of tariffs available there is also a system of discounts for specific groups of travellers, i.e. spouse, youth, workers, etc. These discounts apply to some but by no means to all tariffs publicly available. As example (Brussels-Athens) is shown in annex 8. In the following analysis these discounts have not been included.

* Source: Airline Passenger Tariff nr.85; January 1, 1981 - rules such as / numbered in the APT
** Example: London-Paris, Paris-London was counted as two routes.

As a first step table 4 gives information on the number of tariffs available on January 1, 1981, on the different routes. The first class tariffs have been excluded and also a tariff with different levels according to the season has for the sake of this analysis been counted as only one tariff. Furthermore, the analysis did not included the club class tariff which was only introduced recently and availability at the first months of 1981 was limited.

Table 4: Number of tariffs per route

% of Routes	Number (*) of tariffs available
7	1
19	2
32	3
30	4
8	5
4	6 or more
100%	

(*) Not included first class and seasonal differences nor discounts

Number of routes: 550.

53) From this table it may be seen that on 26% of the routes (143 routes) the passenger only finds one tariff (i.e. nearly always the expensive normal economy tariff) - or two tariffs; the second tariff is in most cases an "Excursion fare" which is the second highest revenue fare after the normal economy fare. At the other end of the scale there are 66 routes (12%) which offer the passenger a choice of 5 or more tariffs.

54) The passenger's prime interest is that he should be able to buy a product that suits his demand at the lowest possible price.

The products as they exist at present represent in most instances a combination of features which the passenger can either buy in total or not at all; these products are generally indicated as "bundled" fares in contrast to "unbundled" fares which give the passenger the option to buy only those elements he needs.

These elements besides the transportation itself are, interlining, prorating for multisector routes, mileage deviation, extra mileage rules, seat reservation, no show, ability to change reservations, possibility of rerouting, refunding of payments and catering.

- 55) In principle there are three groups of conditions:
- a) conditions that eliminate some or more of the above mentioned elements, thus giving a cost saving to the airlines;
 - b) conditions that allow the airlines to control their passenger flow and thereby increase the passenger load factor thus reducing costs per passenger seat sold;
 - c) conditions that are meant to prevent a shift of passengers from higher fares to lower fares.

The price differential is quite often much larger than the cost saving resulting from the relevant condition. Group c conditions do not incur any cost effects.

56) In the Commission's opinion group c conditions and limitations that are only meant to segment the market and to give the airlines a possibility to make use of differences in price elasticity of different user groups do not constitute essentially different products.

Only group a and b conditions which are meant to help the airline to increase its seat factor through a better management of its passenger flow, or which are based on cost differences, do constitute essentially different products. The availability of a certain number of different fare types on a route therefore does not yet mean that the passenger has a choice that meets his demand under different circumstances. The availability of a number of lower fare types only indicates that there are possibilities for the passengers to travel at less than the full normal economy fare if the passenger is prepared to accept the related conditions.

57) The second step in the examination was to discover how cheap a passenger can really travel if he is prepared to comply entirely to any limitations that the airline would impose on him. The relative figures are produced in table 5.

Table 5 : The lowest general* available fare as a % of Normal Economy (NY)

% of Routes	The lowest available fare as % of NY	
6.3** 1.7 3.5 19.0 16.5	100 % 100 - 80 % 80 - 70 % 70 - 60 % 60 - 55 %	On 47 % of the routes there is no tariff of about half the normal economy tariff.
26.4 14.5 7.0 5.1	55 - 50 % 50 - 45 % 45 - 40 % less than 40 %	On 53 % of the routes there are tariffs of about half or less than half the normal economy tariff
100 %		

* Excluding spouse, students, etc.

** Less than the 7 % in table 1 as there are some routes without the Normal Economy fare
Number of routes 550

58) As may be seen from table 5 there still is an important number of routes where tariffs do not exist which are based on a high utilisation and low seat access. This in spite of the fact that charter airlines generally are excluded from operating on routes with scheduled traffic.

Classification of fare types

59) For the further analyses of this chapter the different intra-Community air fares have been grouped into five different fare types based on the existing associated rules and restrictions.

1) The Normal Economy fare

This fare type*, the highest fare after first class, offers the passengers the full flexibility of rerouting, stop-overs, reservations, interlining, etc. The fare also offers maximum seat accessibility.

* Recently the slightly higher club class fare has been introduced./.
This fare type is, however, not included in this analysis.

2) Excursion fare

This fare still contains elements of flexibility ; it is generally bookable at short notice. The major feature is that the passenger is obliged not to return before the week-end after his departure or that he is obliged to stay at his destination during a certain number of days. For all fare types lower than normal economy there are generally no one way tickets available so a passenger is obliged to buy a return ticket.

3) Special Excursion fares

Usually more limitations are imposed on this fare type than on the Excursion fare. The most important features, on top of the limitations on the Excursion fare, are often that the outbound and inbound journey must be booked and the ticket must be paid at the moment of ticket purchase. Changes in reservations are generally not possible and often limitations exist with respect to routing and stop-over facilities.

4) Apex (advance purchase excursion) fares

In addition to the Special Excursion fares conditions these tickets must be purchased and paid a certain time before the journey commences and possibilities for refunds in cases of cancellation are strictly limited. The capacity offered on a route for Special Excursion fares as well as Apex fares is sometimes limited to certain flights or to a small number of seats per flight. Also these latter two fares are sometimes only available for a minimum group size travelling together.

The logic in this structure is that, going from fare type 1 to 4 seat access reduces, thus making it possible for the air line to increase its seat factor by attracting new passengers at the lower price bracket of the market and by a better control of the booking position on the route.

5) I.T. basing fare

A fifth fare type which exists is the earlier mentioned IT basing fare. This fare is not a fare which the consumer will find advertised or can buy for "travel only". The fare is a price the airlines ask from a tour operator who uses the fare for the travel part of an inclusive tour package which he sells to the general public. Very often, however, the IT basing fares have additional limitation similar to the excursion and apex fares.

Availability of fare types

60) Table 6 shows in how far each different fare type is available on the 550 intra-Community routes.

Table 6 : Availability of fare types

	% of all 550 routes
Normal Economy	99 %*
Excursion fare	73 %
IT fare	67 %
Special excursion fare	27 %
Apex fare	12 %

* There are indeed a very few routes with only excursion fares and no normal economy.

The most generally available are the normal economy fare and the excursion fare but also on many routes the IT fare exists. It appeared that the IT fare does exist on many routes where there are no other lower fare types available. The differences in availability of fare types per route are mainly caused by differences in market conditions on those routes.

The level of fares by comparison with normal economy fares

61) Table 7 gives the percentage of the normal economy fare that the passenger must pay for each different fare type on the different routes.

Table 7 : % of Normal economy fare, per fare type and per route

% of routes				Price as % of Normal economy fare
Excursion fare	Special "pex" fare	Apex fare	IT fare	
0	0	0	0	100 %
15.9	0	0	0.5	100 - 80 %
38.0	0	0	7.7	80 - 70 %
24.9	31.3	30.2	22.2	70 - 60 %
7.0	25.9	14.3	17.8	60 - 55 %
12.9	29.9	11.1	22.2	55 - 50 %
1.3	11.5	25.4	16.2	50 - 45 %
	1.4	6.3	8.5	45 - 40 %
	0	12.7	4.9	Less than 40 %
100 %	100 %	100 %	100 %	
398	148	64	366	Nrs. of routes

62) It should be noted in this context that many fares have different levels according to the season but then again many others are the same for the whole year. For this reason the fare has been chosen that was available during the high season, this being the fare at which most traffic will be carried.

63) It appears that on more than half the routes the excursion fare is still more than 70 % of the normal economy fare. On nearly 70 % of the routes with Special Excursion fares these fares are 45 - 60 % of normal economy and on 55 % of routes with apex fares these fares are even as low as between 30 and 55 % of normal economy. The spread of the price level for IT fares is much wider ; on about 13 % of the routes they are lower than 45 % of "normal economy" and on 8 % of the routes they are still higher than 80 % of "normal economy".

As often with statistics these figures do not reveal the whole truth. A different picture would emerge if one were to look at the absolute figures, as an example the line from table 7 is taken where fares are between 55 and 50 % of "normal economy". There are :

- 51 routes with Excursion fares at this level
- 44 routes with Special "Excursion" fares, only
- 7 routes with Apex and
- 81 routes with IT fares at 55 - 50 % of the normal economy fare.

64) The latter observations bring us to the consistency of the fare structure. As already stated only the normal economy, excursion and IT fares are available on a wide scale. This however does not mean that the consumer is necessarily better off on routes with the whole scale of fare types. Two examples may illustrate this point: Example 1:

On many routes with only two tariffs the excursion fare is as low as 50% of "normal economy" and the choice of the consumer is to pay the full fare with all its facilities or about half the fare with a limited number of restrictions.

Example 2:

On routes with more fare types the range may be :

Normal economy	100 %) of the price of a normal economy ticket
Excursion	80 %	
Special excursion	65 %	
Apex/IT	50 %	

In this case the passenger must accept many more restrictions to use a fare at half the "Normal economy" level.

Needless to say the first example with "less choice" is a better bargain for the consumer.

ii. Transparency

65) The observations on the structure of fares in this chapter have so far from the point of view of the airlines not pointed to any illogical elements. Also the range of fare levels in the former paragraph 100% - 80% - 65% - 50% is a logical one, as the fare level reduces when more limitations are imposed on the passenger.

Yet there are many routes where some more restrictive fare types are more expensive than the less restrictive ones; for instance one may sometimes find that IT basing fares are much higher than excursion fares with far less restrictions on the same route. This is a confusing situation for passengers who may not be familiar with all the fares available on a route. This is even more so where attached conditions are extremely complicated, unharmonized and difficult to compare even for professionals, let alone the general public.

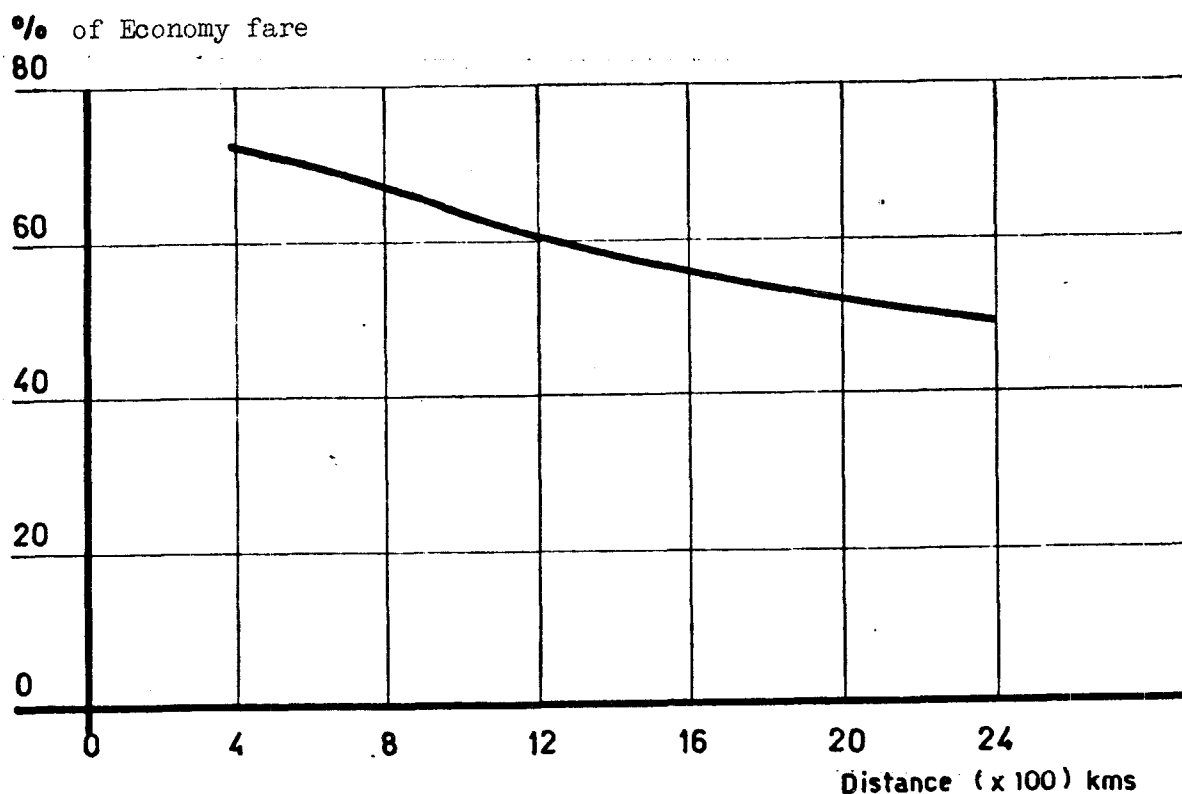
66) For passengers who make multi sector journeys it may be very difficult to find out what may be for them the cheapest way to fly even if they only use one airline and one fare type. Differences in the total price to be paid for such journeys may arise through a less than optimal use of the advantages such as commonrating, stop-overs, currency differences, extra mileages etc. Here again the problem is that passengers are often obliged to buy a "bundled" fare where it is difficult to understand what service elements are included and in what way the maximum benefit can be achieved from those elements. This makes it difficult to make the most sensible choice in a specific situation.

iii. Elements of yield dilution

67) The fare most often quoted on a route is the normal economy fare. However, to an airline this fare is not synonymous with average revenue per passenger. Some passengers pay more (e.g. first class) others pay less (e.g. excursion, apex etc.)

AEA has illustrated the difference between economy fare and average revenue in the following graph.

Fig. 1 : Average revenue per passenger (1975)



Source: AEA "Air fares in Europe" 1977

The difference is however composed of several elements and although airlines normally define yield dilution as the difference illustrated in fig.1 it has been found useful to use a more limited definition of yield dilution in this examination.

68) The Commission considers that different fare types should represent different products and the lower revenue from cheaper products should not be considered as yield dilution.

The justification for each fare type should be found in the characteristics of the products they represent.

For this examination, therefore, for each fare type yield dilution is defined as the difference between a fare and the actual revenue earned per passenger travelling at that fare type. The percentage yield dilution on a route therefore becomes the difference between the weighted average fare* per

* weighted average fare is the average of the local fares weighted by the numbers of passengers using each fare.

passenger and the actual revenue earned per passenger.

69) In this definition of yield dilution only three dilutionary elements remain; they are prorate dilution, discounts and dilution caused by currency effect. Of these elements the currency effects are more or less outside the control of the airlines, while prorate dilution and discounts can be influenced directly by the airlines.

a) Prorate dilution

70) Prorate dilution is a reduction in revenue caused by a passenger who travels with a through fare on a multi-sector journey, e.g. a passenger who travels from New York to Frankfurt via Paris. The through fare is in most instances lower than the sum of the local fares for each individual sector, in this case the sectors New York - Paris and Paris - Frankfurt. The prorate system is a system of revenue sharing between the different airlines that carry the passenger on one or more sectors of a trip.

The techniques of revenue sharing are explained in appendix 5.

If only one airline carries the passenger on all sectors of the route the prorate system can also be used as a revenue allocation method.

71) Table 8 shows the percentage of prorate yield dilution for some fare types on a number of intra-Community routes.

For the purpose of this exercise the same classification of five types has been used as in chapter 3.2.i "choice"; i.e. normal economy fares, excursion fares, special excursion fares, apex fares and inclusive tour fares. The fare construction unit (FCU) has been used in this section as a basis in order to exclude distortions caused by currency effects.

Table 8 does not give any quantification of the total dilution effect but shows differences in revenue an airline may receive from a through passenger on a sector of a multi-sector trip in comparison with a local passenger who travels on a similar fare type.

72) The first figure in each column is the yield dilution in percentages on the first sector of the trip and the second figure the dilution on the second sector. For instance on the first route London-Amsterdam-Copenhagen the airline receives 8% less revenue on the London-Amsterdam sector from a normal economy passenger with a ticket London-Copenhagen via Amsterdam, when compared with a point-to-point passenger just travelling London-Amsterdam.

For the excursion fare it can be seen that an airline carrying the passenger on the London-Amsterdam sector gets 2% less than it would receive from a local passenger using the excursion fare while on the Amsterdam-Copenhagen sector the airline gets 10% less.

Table 8 YIELD DILUTION PER FARE TYPE ON SAMPLE OF INTRA-COMMUNITY ROUTES
(Percentage reduction compared to normal applicable fare type)

ROUTES	Normal Econ.		Excursion		Spec. Exc.		Apex		I's	
	First sector	Second sector	First Sector	Second Sector	First sector	Second sector	First sector	Second sector	First sector	Second sector
LHR-AMS-CPH	8	8	2	10	—	—	—	—	58	—
LHR-BRU-NCE	10	10	—	7	25	24	—	—	—	24
ATH-FCO-CPH	21	21	27	33	—	—	—	—	—	23
ATH-FRA-LHR	16	16	8	+ 10	—	—	—	—	—	13
ATH-FRA-DUB	12	12	1	33	—	—	—	—	—	—
LUX-AMS-CPH	14	14	—	—	—	—	—	—	—	0
LUX-FCO-ATH	20	20	31	26	—	—	—	—	—	—
DUB-LHR-CPH	23	23	25	3	—	—	39	5	—	—
DUB-MAN-FRA	33	33	18	+ 20	—	—	—	—	—	13
AMS-BRU-MIL	15	15	2	39	—	—	—	—	—	33
AMS-BRU-FCO	14	14	+ 1	32	—	14	—	—	—	25
CPH-AMS-LYS	12	12	4	3	—	—	7	—	17	38
FCO-AMS-CPH	10	10	+ 8	5	—	—	—	—	18	0
FRA-BRU-LHR	25	25	24	38	—	—	—	—	58	—

73) Table 8 also shows that the percentage of yield dilution varies between the different routes. For fare types lower than the normal economy fare it is also seen that the through passenger in some instances gives the airline a higher yield when compared to a local passenger who travels on a similar fare type. This is caused by the fact that the revenue from a through fare is always shared on the basis of the normal economy fares of the respective sectors and not on the basis of comparable discounted fares.

74) The major question is whether there is any justification for these different prices the airlines charge for what is in principle the same product. One argument being used is that fares per mile over longer distances are lower than over shorter distances thus reflecting the lower per mile costs. A lower per mile cost over longer distances, however, would follow mainly from airlines avoiding a number of costs items which are incurred with each landing and take-off. A passenger making a multisector trip should therefore not necessarily be entitled to travel at a price which is in principle based on a cost level that does not include costs associated with intermediate stops.

75) A counter argument for nevertheless allowing a passenger to use the lower through fare is that the prorate system increases traffic on a number of routes leading thus to lower average costs per passenger on those routes to the advantage of both the local passengers and the passengers travelling on a prorated fare. It is further argued that in the absence of the present prorate system traffic might be concentrated on a limited number of routes thus reducing the number of direct services.

76) In the Commission's opinion there is merit in these arguments. There is no doubt that interlining is a necessary element in a satisfactory airtransport system. Interlining is facilitated by a prorate system and it seems evident that interlining and prorating assures a wider availability of direct services.

All this being true the matter remains a question of proportion. On some routes yields are more severely diluted by prorates than on others.

Prorating to the Commission is an acceptable principle.

However, this does not preclude a fair distribution of costs.

77) In table 9 a similar exercise is reflected for prorated traffic within the EEC but stemming from intercontinental routes.

Table 9

% Yield dilution per fare type from inter-continental routes

	DILUTION ON EEC INTERNATIONAL SECTOR			
	NY	EXC	APEX	IT
ATH-BRU-NAS	12	8	-	-
TYO-AMS-PAR	7	-	-	+ 8
MEX-PAR-FCO	12	9	-	24
JFK-LHR-CPH	14	-	27	-
JFK-CDG-ATH	18	20	+ 21 (*)	-
FRA-LHR-MEX	9	+ 28	-	+ 38
BRU-LHR-BGI	6	+ 4	-	11 (**)
LAX-AMS-CPH-AAR	13	-	+ 42	+ 52

(*) Since "apex" does not exist on CDG-ATH the prorated apex amount has been compared with local IT.

(**) For the same reason on LHR-BGI the prorated IT amount has been compared with local superpex.

From table 9 it may be seen that the yield dilution from the lower fare types is not greater than the dilution from the normal economy fare. It appears again that in some instances the airlines are getting a higher revenue from the prorated lower fares when compared with comparable local fares.

b) Discounts

78) The second factor causing a reduction in the airlines' yields are discounts on the published fares, such as mentioned in paragraph 52. On the one hand there are sometimes commercial discounts for customers who generate a considerable volume of traffic such as large international firms.

On the other hand discounts are offered to certain groups of the general public which, at the normal fare levels, would probably not use aviation as a transport mode to the extent that they use it now.

Examples are spouse fares and special fares for students, third age and children. These fare types could be criticized because they are not based on cost differences nor on conditions to which all members of the public can comply. Annex 8 gives an example of a total fare structure on a route (i.e. Brussels-Athens).

c) Currency effects

79) Since the inception of IATA, members have negotiated at traffic conferences against the background of the fares/rates levels in local currency which they required on their specific routes. For the facilitation of traffic conference negotiation the fare construction unit* (FCU) was introduced.

* The FCU (Fare Construction Unit) is a concept established primarily to assist tariff publishers and is used in all aspects of ticketing. The FCU itself equals the IATA basic currency of the US Dollar (pre 1972 value). All basic tariffs in UK Pounds are converted to FCUs at the existing Resolution O21b rate of 2.6057.

The result is a system of local selling fares and rates that are directional in nature, and complicated rules are needed covering payment for transportation when a currency other than the local currency is accepted or payment is made outside of the country where the carriage commences. In arriving at selling fares the procedure is to take the basic dollar or sterling fares (FCUs), apply the 021b currency conversion rate as established at the Currency Conference in January 1972, and then add the appropriate "surcharge" - i.e. positive or negative adjustment factors. The relationship between the basic US dollars and basic UK pounds sterling was maintained at the currency conversion rate of US dollars 2.6057= 1 pound.

80) The adjustment factors are applied either positively or negatively, pending on the relative strength of the currencies involved to achieve the local selling tariff required. Thus basic fares/rates are calculated according to the following formula :

Local Selling Fare (Rate)



Basic Fare (Rate) X Frozen Exchange Rate X Surcharge/discount adjustment factor

81) In simple terms therefore the present system of calculating inter-related national currency selling fares is based on the process :

- a) establishment of the fare level, route by route, in terms of FCUs;
- b) these FCU units are then converted into national currency equivalents by use of fixed IATA exchange rates;
- c) the resulting national currency figure is then subjected to plus or minus currency adjustment factors to produce the prices which the airline offers to its public after governmental approval.

82) What in fact happens is that states in this way are able to fix prices for trips originating in their own territory and yet through the conversion to FCUs it is possible to construct multi-sector prices. The effects on passenger and airlines because of currency conversion and prorating are however obscure.

83) It is not surprising that the present system has proved complex and difficult to apply, and that there has been lack of understanding of it on the part of airline employees, agents and the general public. The system also leads to situations which in the Commission's opinion are unacceptable, where services are bought in one state for use in another state and where the price to the consumer because of artificial exchange rates is different from that charged in the other state. The currency effects with respect to airline revenue will show yield dilution for some and yield increase for others. It is not known what the overall effect is, i.e. it is dilutionary or the opposite.

3.3. The relation of fares to the costs of operation

i. Comparison of fare types and costs per route

84) In paragraphs 45 - 50 the existence of cross-subsidization between routes was demonstrated. This observation implies that it is possible to allocate the airlines' total costs to the different routes which are operated.

The ECAC report on intra-European air fares focused on the problem of cost allocation. The report arrived at the conclusion that a reasonably accurate allocation of costs to routes is possible. It carried out an exercise where costs were allocated to routes according to alternative allocation methods which are actually used by different airlines. The differences in costs per route were limited to 10% depending on the allocation system chosen. This was, however, only a limited exercise and the difference would probably have been greater if a common accounting system had been used. The ECAC exercise also did not analyse the allocation of fixed costs between areas of operation e.g. local Europe versus the rest of the world.

85) For an analysis directly of the relation between fares and costs it is necessary to carry the allocation of costs to routes one step further and to allocate the route costs to the different fare types that are offered on a route. An analysis of this kind was carried out in the 1977 CAA-European air fares study. The UK analysis showed that on the routes examined a significant cross-subsidization existed or in other words that the individual fares were not cost related.

The ECAC task force on intra-European airfares contemplated to carry out a similar analysis for countries other than the UK but concluded that the allocation of costs to different fare types on a route imposes problems which are very difficult to overcome. First there is the problem of data availability; many airlines do not collect the necessary data for this type of analysis. There is also the more theoretical problem of allocating the "joint" and "common" cost elements to the individual products represented by the fare types.

86) The ECAC task force tried to overcome part of the problem by looking at the costs related to the normal economy fares in isolation on a selection of 22 intra-European routes involving 5 different countries and airlines. Four of the airlines and countries, but only 12 routes, belong to the Community. The rationale behind this approach was that one could argue that regardless^{of} the allocation method one would choose, any category of traffic, which is being asked to pay more than it would have to for a similar service provided separately, is being over-charged.

In order to estimate the costs of serving the normal economy market in isolation ECAC derived for each route the numbers of passengers travelling at the full normal economy fare.

A subjective judgement was made on the acceptable level of service in terms of frequency and aircraft type. On the basis of the seat factors implied by the choice of aircraft type and frequency and after allowance for profit, a "required" selling fare was derived. This "required fare" level was then expressed in index form and the current selling fares at each end of the route were compared to it. Table 10 illustrates the approach and table 11 shows the current fares as percentages of the required fares on the 22 routes studied.

Table 10

Route	Present weekly frequency o/w	Size of a/c presently in use	No. of local on-demand pax	Implied frequency requirement @ 55% sf.	Aircraft size and frequency considered appropriate	Implied sf (%)	"Required" selling fare *	Actual selling fares	
								(i) home area	(ii) other end
X	48	120	150,000	44 pw	120 seats 44 pw	55	100	120	118
Y	56	100	100,000	36 pw	100 seats 42 pw	46	100	95	98
Z	14	80	18,000	8 pw	65 seats 10 pw	53	100	94	107

* including an allowance for profit

Footnote: In selecting the aircraft size and frequency considered appropriate (column 6), it is obviously necessary to have regard to the characteristics of the route(s) concerned. In the three-route example shown in Table 7, Route X typifies a relatively high density but long route, Route Y a somewhat less dense but shorter route and Route Z a low density short route.

Table 11

Route identity	Actual selling fares (Index base 100 = "Required" fare)*	
	(i) Home area	(ii) Other end
Short-haul routes (Less than 600 kms)		
a)	78	85
b)	103	93
c)	92	82
d)	118	106
e)	79	82
f)	100	87
Medium-haul routes (700 to under 1500 kms)		
g)	140	111
h)	113	108
i)	139	151
j)	92	82
k)	129	95
l)	32	34
m)	91	99
n)	113	125
o)	177	143
p)	107	79
q)	149	148
r)	228	181
Long-haul routes (Over 1500 kms)		
s)	183	166
t)	74	93
u)	109	93
v)	207	164

* includes an allowance for profit

Source: ECAC - European air fares study, final report 1981

87) The ECAC report draws from this exercise the following conclusions.

"On short distance routes of up to 600 kms normal economy fares are generally no higher than the estimated cost of serving the business market in isolation if allowance is made for directional imbalances.

On the longer routes there is a general, but by no means universal, tendency for normal economy fares to exceed the cost of separate production. On a number of the routes studied the fare is substantially above this cost, although there are reasons to believe that the margin would be much less for the other airlines on these routes.

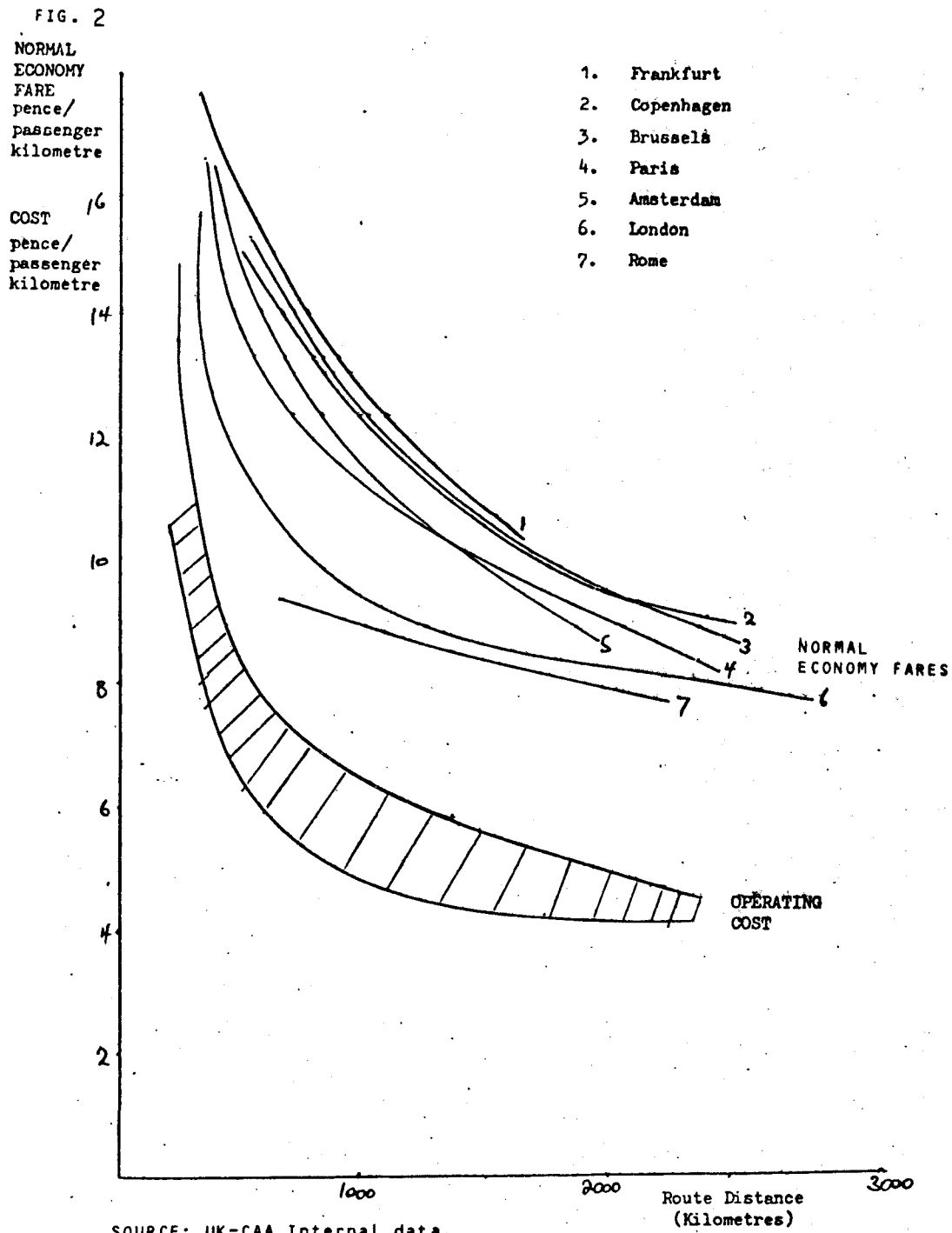
Normal economy passengers are obtaining non-price benefits from joint production and, in particular, a more frequent service than would otherwise be possible. However, with the exception of some of the shorter routes, and possibly also of the less dense routes on which the proportion of business traffic is low, they are not obtaining price benefits. Thus the price benefits of joint production are falling mainly to non-business passengers and the service benefits to business passengers. It is generally the longer routes which would be reduced to very low frequency if only business traffic were carried."

88) A second, although much more general paper in this field was produced by the United Kingdom for the Council in the beginning of 1980. One of the charts in that paper, reproduced in fig. 2, provides a comparison between intra-European normal economy fares and costs. This chart was prepared as follows. First the UK obtained the local normal economy selling fare from each of the seven cities, within the EEC, named in the chart to fourteen other cities in Western Europe, (i.e. Amsterdam, Athens, Bonn, Brussels, Copenhagen, Dublin, Frankfurt, London, Luxembourg, Madrid, Oslo, Paris, Rome, Stockholm and Zürich). The fares extracted were local selling fares in effect as on February 1980 and were obtained from the airline publication "Air Tariff", September 1979 edition (except that fares from London were obtained from Bulletin No.2 of the same edition). Local selling fares for cities other than London were converted from the relevant national currency into Sterling terms (as a common unit for comparison) using the bankers rate of exchange in effect on 11 February 1980 as published in the Financial Times. Direct route distances for each of the city pairs were extracted from the IATA/IAL Air distances manual. Fare levels were then expressed in unit terms (pence per kilometre) and plotted on a graph. Curves were drawn to represent the various fares from each main city. These curves were not derived statistically because of the small number of observations in each case.

89) Second, the costs of operating scheduled services over these routes was estimated. Total operating costs were calculated, for a selection of different aircraft types, over the range of route distances shown in the graph. Total costs included direct flying costs, fixed costs, all overhead costs and capital charges including depreciation. Financing charges were excluded. Costs were as applicable at the end of 1979 levels. The estimation of the direct operating costs used a computer model, based on the "Group of 6" cost allocation methods. Actual cost inputs to this model are derived from UK Civil Aviation Authority internal sources and incorporate a wide range of airline operating cost information. This range was used to derive estimates of indirect operating cost levels. A range of total costs was thus derived representing different aircraft types. This was expressed as costs per seat kilometre using the appropriate seat configurations for each aircraft type. These costs were then converted into passenger costs (pence per pax* kilometre) using a passenger load factor of 55% as representative of scheduled service operations. The range of costs per passenger kilometre derived in this way was then cross-checked against current costs calculated by a UK airline operating intra-European scheduled services and found to be reasonably consistent. This data was plotted as shown.

* Pax = Passenger

COMPARISON BETWEEN INTRA-EUROPEAN FARES AND COSTS



90) It should be stressed that this is not a rigorous statistical exercise. The costs of operations experiences on intra-European operations may not fall entirely within the derived range, for example because of different methods of cost allocation or because of higher or lower costs in certain countries. Similarly not all intra-European fares coincide with the representative curves drawn on the graph. Nevertheless this graph shows that in

general normal economy fares in Europe, in early 1980, were between 50% and 100% higher than the general level of operating costs. It is difficult to account for such a large disparity by differences in the method of cost allocation or by variation in fares from the general levels shown.

Also the graph shows quite clearly that the percentage of profit of the normal economy fare increases with the increase in distance.

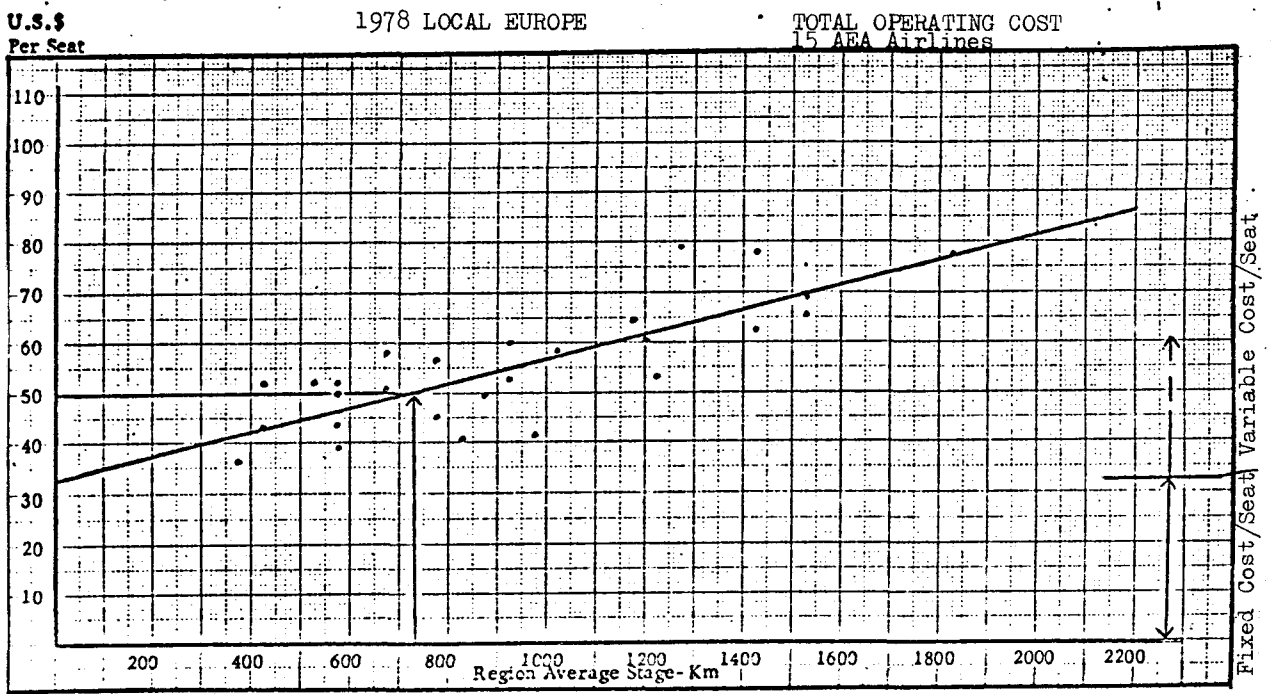
91) On the basis of these two studies it seems clear to the Commission that the economy tariff in particular on point-to-point traffic is yielding high revenues compared to costs, specially on routes with longer distances. It would have been useful to carry out an analysis of fares in force in Europe and compare them to the costs of operation on routes. Such information does only exist in a few countries and the Commission does not feel that only a partial presentation would serve a useful purpose. It is, however, known to the Commission that a very large variation would appear if fares were compared with costs. If the break-even seat factor of a fare type is calculated on the basis of costs of operating the route some economy fares would show factors below 30% while some low fares (e.g. Apex) would show more than 100%. The airline would therefore begin to show a profit on that route if it flew with a seat factor of more than 30% of point-to-point economy passengers while it would be impossible to fly at a profit with passengers only at the Apex tariff. In the Commission's opinion it is debatable whether these two situations in fact fulfil the criteria of a fare having a reasonable relation to costs and allowing for a reasonable profit. The low fare might even represent a situation where it would have to be deemed predatory. The Commission therefore feels that Member States ought to examine these problems closer. As stated earlier only a very few states have been doing this.

ii. The distance relation of costs and fares

92) It is believed by many that air fares ought to be distance related, i.e. the price for a longer route should in absolute terms be higher than the price for a shorter although price per kilometre should be lower for the long route. Is this borne out by reality and is it in fact a reasonable supposition?

From the TAI report on the economic cost structure of air-transport in Europe the following graph can be derived:

Fig. 3



Source: AEA airlines data and TAI analysis.

The graph is however based on average data provided by AEA airlines and may thus disguise large variations. A more direct examination of fares and distances has therefore been carried out.

a) Analysis of the normal economy fare

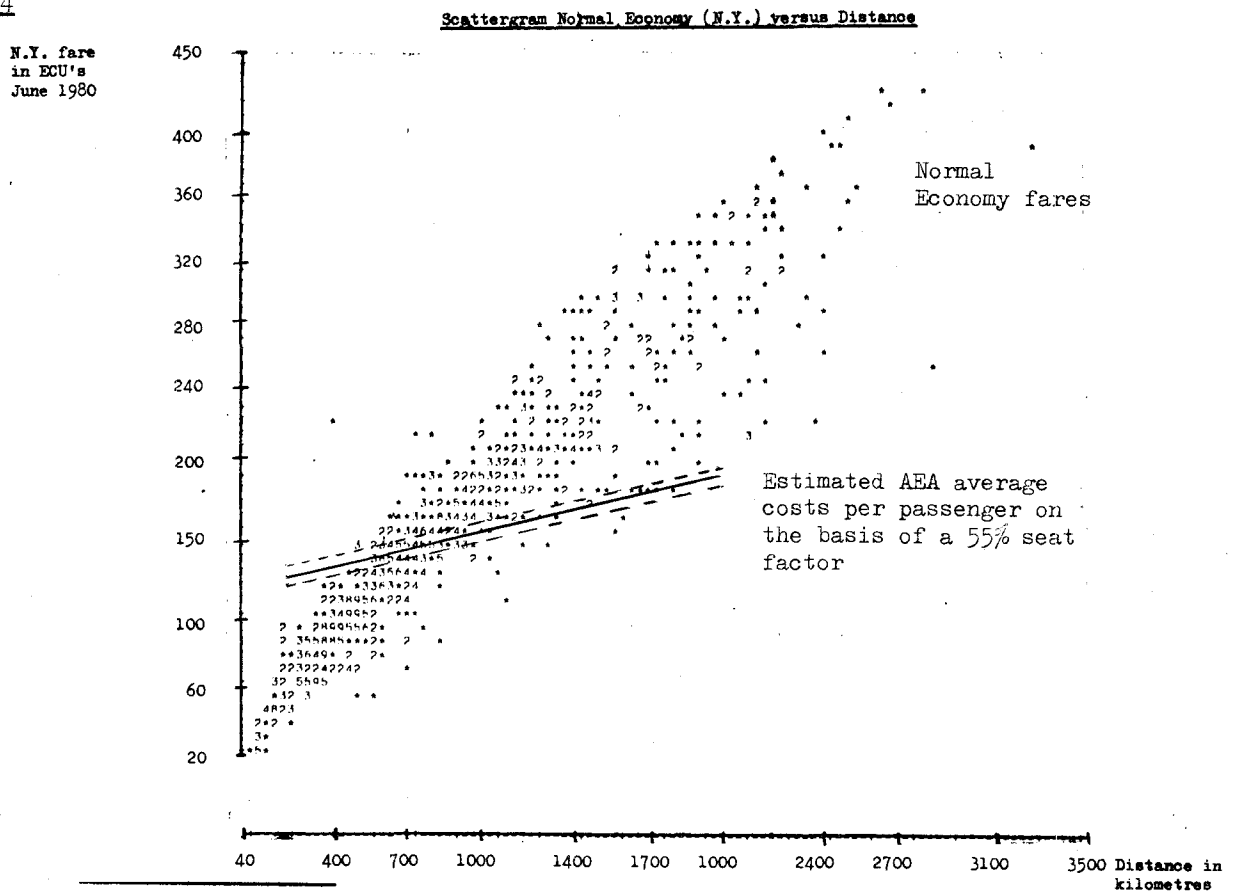
93) The relationship of fares to distance has been analysed by the Commission on 422 non-stop routes* within the Community. No domestic routes were included since the cost structure of these routes is different from that of international routes.

The first part of the analysis considered the normal economy fare as this is the only fare type guaranteed to be common to all routes. With respect to the level of fares the selling fares of 1st July 1980 in the local currency at each end of the route were used, converted in ECU's against the bank exchange rates of 24 June 1980.

For distances the sector distances in kilometres were extracted from the IATA Distance Manual; this implies that geographical distances are used rather than the actual distances flown. The latter may be longer due to divergencies from the most direct route.

94) The following fig. 4 shows the scattergram of the normal economy fares by distance.

Fig. 4



* London-Paris and Paris-London counted as two routes.

The vertical axis presents a scale of tariffs expressed in European units of account and the horizontal axis presents a scale of distances expressed in kilometres. The figure shows clearly that there is an underlying correlation between fares and distances.

95) This was confirmed by a statistical analysis which found a very high correlation coefficient in general. Analysis was carried out for routes between the 10 EEC countries as a whole and separately for all the routes originating in each country. These two approaches seemed to indicate a significantly stronger correlation between fares and distances on routes to and from each country separately. This may be explained by the fact that in the country by country analyses there is no distortion from artificial IATA exchange rates. From the analyses also the following information can be derived:

For 23% of the routes the actual fares found lie within $\pm 2,5\%$ of the level estimated by the regression line,

43% of the routes have fare levels $\pm 5\%$ of the estimated fare level,

77% of the routes have fare levels $\pm 10\%$ of the estimates and

96% of the routes have fare levels $\pm 16\%$ (twice the standard deviation) of the fare level as predicted by the distance formula,

4% of the routes have actual fare levels that are outside the range band of twice the standard deviation.

96) This information reveals that distance is indeed an important factor and the level of fares does reflect it, although the scatter clearly shows that there are other factors also influencing the fare level on any particular route.

It was concluded in earlier studies* that the correlation between fares and distances is quite high. Given the fact that fares on different routes with similar distances are bound to differ due to factors such as differences in cost levels between airlines, differences in currencies, traffic volumes on the route, the traffic mix etc. The correlation found is probably as high as could be expected. The correlation is even higher than expected if fares are really supposed to be cost related and it may be said that the high correlation reflects the efficiency of inter-airline consultation. One should realize, however, that a difference in fare of 20% or more on routes with equal distances - as may be the case on 23% of the routes - is yet a considerable difference.

* ECAC: European Air fares study.

97) Every cost study which has been undertaken does indicate a basic underlying cost/distance relationship as claimed at the beginning of this section. The relationship is also confirmed with respect to fares. Local conditions and differences in operation introduce, however, variables into the final outcome which means that a distance relationship for fares can at best be only indicative. An interesting feature arises when the cost/distance relation is superimposed on the fare/distance relation - see also fig. 4 - it becomes clear that the shape of the cost curve is not as steep as the shape of the fares curve, confirming the findings in the former paragraphs 84 - 91, that the margin between the normal economy fare and the costs increases by the increase in distance.

b) Analysis of the excursion fare

98) A similar exercise to that for the normal economy fares has been carried out for the excursion fares. In general the correlation between the excursion fare - also expressed in local currencies converted into ECU's - and the distance is somewhat lower than was the case in the normal economy analysis. Still the correlation was surprisingly high given the variation in fare level as a percentage of the normal economy fare. Also the correlation for each country separately is in general higher than the Community as a whole, thus showing similar results as the normal economy analyses.

3.4. The level of costs

i. The Cascade studies

99) The preceding paragraphs were focused in different ways on the question whether and to what extent the fares were related to the costs of operating the air services. The level of costs as such has so far not been discussed. There are two reasons to look at the level itself. First there is the possibility that the costs of an airline are higher than they would be under a more competitive regime; such a situation may arise from the fact that the airlines do not need to be extremely cost conscious as they can set their fares to match their costs without the threat of entry into the market of new, more efficient competitors. The second reason is that the cost levels in Europe may be high, due to circumstances outside the control of the airlines but due to the regulatory regimes in the Member States and the aviation infrastructure.

100) With respect to cost efficiency of airlines three relevant studies exist. On the basis of scheduled airline costs there were two "Cascade studies" which examined the relative costs of British Airways and a UK charter airline and the relative costs of a major Dutch scheduled carrier and a major Dutch charter operator only. The third study was a "reverse cascade" study taking the costs of a charter airline as a basis and comparing these with the costs that would incur if the charter airline were to produce a scheduled service. The rationale behind this type of comparison is that charter airlines in contrast to scheduled airlines operate in a competitive environment and that market pressure necessarily will make them efficient. If the scheduled airlines appear to produce at costs which are higher, the difference may be attributable to the differences in competitive environment.

101) One of the problems in comparing charter and scheduled airlines' costs is that one should as much as possible ensure that like is compared with like. The "cascade method" eliminates step by step those cost differences which are attributable to differences in scheduled and charter operations and not to differences in efficiency. As a result a figure is derived, i.e. the so-called "derived charter costs". These are the costs of a simulated charter operation based on the scheduled airline's level of cost efficiency*. A comparison between the "derived charter costs" and the actual costs of a charter airline shows the costs difference that remains if both airlines were to offer a similar product.

102) The steps included in the analyses to arrive at comparable figures between scheduled and charter efficiency were the following:

- 1) Sales Commission - These costs are not relevant to the charter service and are thus deducted.
- 2) Tourist class - Eliminates the effects of first class services which does not exist for non-scheduled.
- 3) Seating density - Makes allowance for the different seating pitch in scheduled and non-scheduled operations.
- 4) Load factor - Takes into account the effect of increasing the passenger loadfactor from 55% for scheduled services to 85% which is typical for charter operations.
- 5) Peak/trough ratio - Charter airlines have a larger seasonal variation and thus higher costs.

* Cost efficiency expresses the amount of money the airline has to pay for a certain production unit; this in contrast to e.g. labour efficiency which expresses the amount of labour that is needed for a certain output. An airline with more employees per ton/kilometre production but lower salaries may be more cost efficient than an airline with less employees but higher salaries.

- 6) Utilisation - Charter services are assumed to be able to achieve 25% higher utilisation of both crew and aircraft than scheduled.
- 7) Standards - Takes account of the costs attributable to the higher standard of service of the scheduled mode.
- 8) Not applicable - In this step those costs and revenues were adjusted that occur for scheduled services but not for charter services. This adjustment relates to two main areas: sales, reservations and advertising costs; cargo revenue and bar profit.

103) The 1975/76 figures for the British Airways/UK charter airline comparison are reproduced in table 12. All figures are in index form, taking the scheduled costs per passenger as a basis (100). The tenth line of the table represents the costs that would occur if British Airways were to produce a similar product as the charter airline whose costs are reflected in the eleventh line.

Table 12: British Airways cascade analysis

	<u>Route A</u>	<u>Route B</u>	<u>Route C</u>
1. Total scheduled cost per pax	100	100	100
2. Deduct commission	92	92	91
3. Tourist class	86	84	87
4. Seating density	77	80	83
5. Load factor	56	59	60
6. Peak/trough ratio	60	62	63
7. Utilisation	57	60	61
8. Standards	51	51	53
9. Not applicable	36	37	39
10. Derived charter	36	37	39
11. Charter actual	34 - 37	32	35

104) The costs that have been used for the Dutch cascade analysis did not include commission nor does the Dutch airline operate with a first class service in Europe. For this reason the first two steps included in the UK exercise could be eliminated from the Dutch analysis. The Dutch analysis also was only carried out for one route which is comparable mostly with the UK route "C".

The results of the Dutch analysis are reproduced in the following table 13, where also a comparison is made with the results of the UK exercise. For the purpose of comparison the UK figures were recalculated to take account of the two cascade steps that were not included in the Dutch analysis.

Table 13: Comparison of UK and Dutch cascade analyses

"Cascade"	Dutch analysis	UK (route C) analysis
1. Scheduled cost per passenger	100	100
2. Seating density	92	95
3. Load factor	68	69
4. Peak/trough ratio	69	72
5. Utilisation	68	70
6. Standards	68	61
7. Not applicable	54	45
8. Derived charter	54	45
9. Actual charter	51	40

105) It would appear that only a relatively small proportion of the difference between scheduled and charter costs cannot be attributed to inherent differences between the two modes of operation. The Dutch "cascade" reveals an estimated 5 - 6% difference between "derived charter" and "actual charter" costs; the UK "cascade" an estimated 12½% difference. Both "cascades" attach particular significance to the "load factor" and "not applicable" adjustments. With respect to the "not applicable" adjustment it should be noted that the costs that fall under this heading represent more than 20% of the total scheduled airlines' costs and the exclusion of these costs from the analyses consequently means that no conclusion can be drawn on the efficiency of specific scheduled activities such as sales and reservations.

106) The difference between the Dutch "scheduled cost" per passenger and "actual charter" cost per passenger does appear to be somewhat less marked than that implied by the UK data. This may be indicative of differences in the relative efficiencies of the two scheduled operators. Alternatively, it may reflect a more competitive UK charter market.

Part of this variation in relative costs may also be attributable to the two sets of data not being entirely consistent.

"Reverse Cascade"

107) A third cascade analysis was recently carried out in the United Kingdom; the methodology used was basically the same as the one used for the previous two exercises be it that this time the costs of the charter airline were taken as a basis and those costs were "cascaded up" to the level at which the charter airline could operate a scheduled service comparable with the type of service offered by a scheduled airline. The "Reverse Cascade" indices are shown in Table 14 below. Those in column I relate to the 25 percent utilisation adjustment and the notional peak/trough* allowance. Those in column II show the effect of omitting both the utilisation and the peak/trough ratio adjustments altogether.

Table 14: "Reverse Cascade"

	Column I	Column II
Charter cost per pax	100	100
1. Not applicable	118	118
2. Standards	133	133
3. Utilisation	141	133
4. Seat Factor	191	178
5. Seating Density	211	197
6. Peak/trough ratio	203	197
7. Commission	219	214
Derived scheduled cost per pax	219	214

108) The difference between the charter and derived scheduled cost indices implies that, even assuming no efficiency differences between the two modes, one might expect to find scheduled costs (and therefore fares) some 110 to 120 percent higher than charter costs even on the same route. "Reverse Cascade" also demonstrates that by far the most important single adjustment is that relating to modal differences in seat factor. This adjustment alone probably accounts for some 40 percent of the total scheduled/charter cost difference.

* See for further details annex 6 "Reverse Cascade" and annex 7 "Glossary of terms".

As the "Reverse Cascade" study had not been published at any earlier occasion the full details on that study are added to this report as Appendix 6.

109) The studies referred to above seem to indicate that for the airlines investigated the differences in cost levels between the charter and scheduled mode are much smaller than one is inclined to assume at first sight when looking at the differences in fares. In spite of the thoroughness of the analysis it is inevitable that there are still some inaccuracies in the calculations and the results are heavily dependant on assumptions with respect to load factor differences, seating density and sales costs. For these reasons one should not attach a 100% accuracy to the absolute size of the cost differentials found between the scheduled- and the charter airlines.

110) One should note that the "Cascade" method does not allow conclusions on the efficiency of the "sales function" of the scheduled airlines as the commercial costs and commissions were excluded in one of the Cascade steps. Sales costs in Europe do account for more than 20% of the total scheduled airlines' costs and are as was described in the AEA "sales cost" study*, noted as being very high for most European scheduled operators. It should be noted, however, that the studies do seem to provide good evidence that a normal economy tariff should be more than double a normal charter tariff.

ii. Breakdown and evolution of costs per cost category

111) In order to illustrate the importance of the major cost categories the following table 15 represents the breakdown of the AEA carrier group costs.

* AEA: 1979 "Sales Costs". A comparative Examination Between AEA and US Airlines.

Table 15: Breakdown of cost categories

1979	<u>% of local operating costs</u>
General & Administrative and Other ticket/Sales/promotions	17.6 %
Fuel + Oil	15.6 %
Station and Ground	14.7 %
Landing and Route charges	11.2 %
Cabin Attendants & Passenger services	10.2 %
Maintenance & Overhaul	9.8 %
Flight Deck Crew	7.3 %
Commissions	6.7 %
Depreciation, Rental, Amortisation	6.5 %
Flight, Equipment Insurance	0.4 %

112) The average operating costs per available seat kilometre expressed in US \$ have increased from 1973 to 1979 by 134.5 %. This figure is however influenced by the change in parity between the US \$ and the European currencies.

A correction for these changes would bring the cost increase down to 120.5 % which could be compared with an increase of the OECD consumers price index for Europe of 91% over the same period. Whereas air transport used to become relatively cheaper over the years by means of a lower than average cost inflation, this situation came to an end after 1973.

113) Table 16 gives the break down of the total costs* in ten cost-headings.

Table 16: Evolution of costs 1973 - 1979

	1979 US\$/ASU	Rank	1973 US\$/ASU	Rank	Growth 73-1979
G.& A, other ticket/Sales/Promotion	1.483	1	0.739	1	100.7 %
Fuel & Oil	1.315	2	0.332	6	296.1 %
Station & Ground	1.235	3	0.339	2	129.1 %
Landing & Route charges	0.945	4	0.301	8	214.0 %
Cabin Attendants & Passenger services	0.855	5	0.353	4	142.2 %
Maintenance & Overhaul	0.824	6	0.394	3	109.1 %
Flight Deck Crew	0.611	7	0.309	7	97.7 %
Commissions	0.559	8	0.221	9	152.9 %
Depreciation, Rental, Amortisation	0.543	9	0.351	5	54.7 %
Flight Equipment Insurance	0.029	10	0.043	10	- 32.6 %
TOTAL	8.400		3.582		134.5 %

* excluding financial charges

114) Without the soaring increase of the costs for fuel & oil and the landing & route charges the total cost increase might have been the same level as the general inflation. These latter two elements only ranked 6th and 8th in importance in 1973 but they are now the second and fourth largest single cost item. With the percentage cost increases as they are at present they could become soon the two largest cost items. Specially with respect to the landing & route charges governments should realize that these costs are no longer a minor item in the total operating costs and further increases are bound to influence the level of fares.

4. CONCLUSIONS

115) This report is mainly based on existing information which in some cases may not be fully up-to-date but which nevertheless permits the Commission to draw meaningful conclusions on scheduled passenger air fares in the Community. The character of the following conclusions of which the major ones are indicated and numbered in the margin is such that more up to date information would not change most of them. The report should therefore, together with the forthcoming considerations on the **compatibility** of the present methods of fixing air fares with the EEC Treaty, constitute an adequate basis for policy formulation in this area.

4.1. The process of tariff setting

1. 116) With respect to the process of fixing scheduled passenger air fares the Commission notes that the procedures are rather time consuming and that airlines are seldom in a position to quickly implement their own commercial judgement. Some ECAC Member States have already realized that the present system needs to be reviewed and ECAC made an attempt, so far without success, to modify the 1967 multilateral agreement so that it would become less cumbersome to establish air fares. The modifications would have given more direct possibilities to third and fourth freedom carriers to decide on new fares on the routes concerned, whereas now in principle the interest of all other carriers - also fifth and sixth freedom carriers and carriers on adjacent routes - must be fully taken into account. Such modifications would bring the 1967 multilateral agreement more in line with the present IATA practice. It would also have become easier to introduce tariffs on which airlines had not reached an agreement.

2. In general the Commission thinks that many ideas put forward during the ECAC effort merit credit and one of the fields for future action for the European Community should be to achieve a less rigid tariff setting procedure for intra-Community air travel. The Commission will pursue its reflections on the question, particularly in relation to the compatibility of the present system with the competition rules and will make a further communication on the subject.

4.2. Aspects of air fares

117) Air fares, as they result from the present regulatory system, have been evaluated in this report to illustrate a number of criteria. These criteria follow from aviation law and rules and from the hearings which the Commission undertook with interested parties.

ii. Reasonable profits

3. | 117) Criticism is often expressed on the level of air fares in the Community. Information from scheduled airlines demonstrate that the overall profit of their operations in local Europe leaves much to be desired. The allocation of fixed costs between different geographical areas of operation may however influence the profitability of the operations in Europe. The Commission can not say whether the unsatisfactory operating ratio in Europe is explained in this way.

4. | The difference between the ICAO published operating ratios and the AEA published operating ratios have indicated at least that the profitability per world region is rather sensitive to the way costs are allocated to the

5. | regions, but neither the AEA nor the ICAO ratios give evidence of excessive earnings in local Europe overall.

6. | Chapter 3 also showed a wide variation of profitability between routes implying that some routes are cross-subsidized by others. In the Commission's opinion this is generally acceptable but only to the extent that each route should at least cover the incremental costs of operating that route and the number of routes that do not fully cover the total costs of operation should be strictly limited.

7. | However, on some routes the level of profits may be so high that the question of their compatibility with article 86 arises.

ii. The level of costs

118) Having observed that profitability is not excessive one might ask whether the efficiency is too low or in other words if the costs are too high.

8. | The "cascade" studies show first of all that the difference in efficiency between scheduled and non-scheduled airlines is not enormous. Secondly, however, the studies do show that a difference exists. This difference may be estimated differently according to the assumptions underlying the comparison. It has been estimated as low as about 5% and as high as 25%. This difference is very much dependant on the product which an airline offers. If costs are represented per passenger carried it seems reasonable that a typical charter passenger cost level is only about 50% of a typical cost level for a normal economy fare passenger, the latter demanding

9. | considerably more flexibility and access possibilities than the charter passenger.

119) In the Commission's opinion there are a few areas where cost reductions or at least cost control seems possible.

10. First there are the government charges for the use of infrastructure which have increased over the last six years nearly as fast as the price for fuel. Under an unchanged policy these charges will continue to increase at percentages well above the general inflation rate due to the inclusion of new cost elements such as environmental charges and airport safety charges and probably also due to the deminishing growth of air traffic leading to the situation where governments' costs must be covered by less traffic.

120) A second area is an area where airlines have the most discretion themselves, namely their sales activities.

11. Sales costs in Europe seem to be extremely high. AEA proved this themselves in their study on the comparison of commercial costs in Europe versus the USA. One can put the question whether:

- a) all the sales activities are really necessary, and
- b) to the extent that they are needed, are they indeed needed for local European traffic?

12. 121) Although cost control may lead to lower prices in relative terms a larger effect to the passenger may be produced through changes in the products which airlines are offering, maybe in fact by eliminating some of the services which are included in many of the present fares but which the passengers do not need under all circumstances.

iii. Reasonable relationship to costs

13. 122) The evidence produced with respect to the normal economy fare shows that the relation between this fare and the costs on shorter routes seems to be quite reasonable but that the margin of profit increases considerably on larger distances. To what extent cross-subsidization between the different fare types takes place and if an unacceptable situation exists requires a detailed analysis of the relation of all fares and costs on individual routes.

14. It seems evident to the Commission that few governments dispose of the necessary information to control whether individual air fares are reasonably related to costs.

123) The difference in profitability between short and long haul routes may also be the result of trunk carriers being "obliged" to operate some short routes although they are in fact not profitable because of competition from other modes of transport or because the airlines in question have not suitable equipment. It seems indicated to the Commission that **there is a risk that a very complicated and inefficient fleet structure would result if an airline tries to keep a range of different aircraft types suited for all sorts of routes from short haul thin routes and short haul high density routes to long haul thin routes and long haul high density routes.**

15. | 124) In general it also seems unreasonable to the Commission that the economy fare type in some instances is profitable at a breakeven load factor of only 30% or less. A break-even load factor of about 50 - 60 % seems more reasonable. Such a fact may be an indication of a situation where an airline does not have an aircraft well suited to the route, or an indication that fares have been set at an unreasonable level which should be examined in the light of art. 86 of the Rome Treaty.

iv. The tariffs of other airlines and the predatory effects

16. | 125) The importance that the tariffs of other airlines bear on the approval of new tariffs should in the Commission's opinion be limited to the tariffs of third and fourth freedom carriers on each route and in particular that such proposals should not have a character of dumping. This is in the Commission's mind at any rate not the case when the proposed tariffs have a reasonable relation to their costs.

v. Comparable fares over the same distance

17. | 126) It has been demonstrated that there is indeed a fair relationship between the normal economy fare and the distance flown and a somewhat less marked but nevertheless statistically important, relation between the excursion ^{and distance.} fare/ This criterion is in conflict with other criteria such as reasonable profits on a route and a reasonable relation of fares to the costs of operation. In the Commission's opinion the latter two criteria are more important. The Commission finds similar fares over similar distances to some extent desirable but it finds that important differences in the costs of operation between airlines and/or routes should be reflected in the respective tariffs.

vi. The interest of the users

127) Apart from the interest which the users have in the earlier mentioned criteria, such as the fares relation to costs and comparable fares over comparable distances, the users take a more specific interest in the choice of tariffs that are available and in the transparency of the existing fare structure and in the conditions related to the fares.

a) Choice of tariffs.

128) The Commission considers that the present fare structure is too much a result of the interest of the airlines where the airlines can make maximum use of differences in price elasticity between passenger categories.

18. The Commission finds, as this is reflected in chapter 3, that there are many routes where the consumers choice is too limited and where no low tariffs types (e.g. based on a break-even seat factor of 85%) are available.

129) When the normal economy fares are cost based they are often based on an assumed seat factor of around 50%. This is undoubtedly correct for this type of product and it reflects many qualities and in particular the full flexibility which is required by a large number of passengers.

19. 130) However, the Commission thinks that also on routes to regions where there is no charter competition or where there is no strong market for leisure traffic the passenger should be given the opportunity to travel at a fare level which is based on a much higher seat factor than the economy tariff. This is not generally the case at present and the Commission thinks that, as long as the airlines are protected both with respect to market access and prices, airlines should also offer at least one unbundled low fare on each route they operate, in addition to an economy type fare, which is based on point-to-point transportation costs with an option of buying a reservation.

b) Transparency.

20. 131) With respect to the limitations and conditions quoted, specially to the lower than normal economy fares, the Commission thinks that this situation is intolerably complicated. It should be possible to introduce more simplification. This would improve the understanding of the travelling public for what it is paying for.

132) To this understanding would also contribute the above mentioned minimum fare structure as the passenger could actually see by comparison the price he needs to pay for a certain amount of flexibility he may want to maintain while he is travelling by air. It is only fair to say that on some routes there is indeed a development in this direction.

vii. Access to the market and competition

133) The present report does not deal with the question of market access and competition.

The situation which the Commission found with respect to tariff setting, fare structure and cross-subsidization between routes and most probably also between fare types (although this latter point remains to be explored), strengthens however the Commission's opinion as expressed in its memorandum of 1979 on "contributions of the European Communities to the development of Air Transport Services" that more opportunities should be given to airline initiatives in intra-Community traffic, both with respect to products offered on a route and market entry.

21.

PROCEDURES AND CRITERIA USED BY GOVERNMENTS FOR EVALUATING AIR FARES

BELGIQUE

Les procédures d'approbation des tarifs des services aériens réguliers sont définies par les clauses qui les concernent dans les accords aériens bilatéraux signés par la Belgique, ainsi que par l'Accord international de 1967 sur la procédure applicable à l'établissement des tarifs des services aériens réguliers, ratifié par la Belgique. Ces dispositions prévoient généralement que les tarifs sont d'abord convenus soit conformément aux résolutions régissant les tarifs qui auraient pu être adoptées par l'IATA, soit par entente directe entre compagnies aériennes désignées. Ils doivent ensuite être soumis à l'approbation des autorités aéronautiques. L'Administration de l'Aéronautique belge estime que les entreprises de transport aérien doivent, autant que possible recourir à la procédure de l'IATA pour l'élaboration des tarifs.

Pour la procédure d'approbation, l'Administration de l'Aéronautique applique le principe que les tarifs doivent être établis à des taux raisonnables, compte dûment tenu de tous les éléments d'appréciation, notamment du coût d'exploitation, d'un bénéfice raisonnable, ainsi que des tarifs appliqués par les autres entreprises de transport aérien.

BUNDESREPUBLIK DEUTSCHLAND

Alle Fluglinientarife, die im Verkehr mit der Bundesrepublik Deutschland oder innerhalb des Bundesgebietes zur Anwendung kommen sollen, bedürfen der vorherigen Genehmigung durch den Bundesminister für Verkehr.

Rechtsgrundlage für die Genehmigung ist § 21 Luftverkehrsgesetz (LuftVG) i.V.m. den Vorschriften der jeweils zwischen der Bundesrepublik Deutschland und ausländischen Partnerstaaten abgeschlossenen bilateralen Luftverkehrsabkommen.

Die Tarife, die auf den vereinbarten Linien für Fluggäste und Fracht anzuwenden sind, werden unter Berücksichtigung aller Faktoren, wie der Kosten des Betriebes, eines angemessenen Gewinns, der besonderen Gegebenheiten der verschiedenen Linien und der von anderen Unternehmen, welche die gleiche Linie ganz oder teilweise betreiben, verwendeten Tarife festgesetzt.

Die Tarife werden, wenn möglich, für jede Linie durch Vereinbarung der beteiligten benannten Unternehmen festgesetzt. Hierbei sollen sich die benannten Unternehmen nach den Beschlüssen richten, die aufgrund des Tariffestsetzungsverfahrens des Internationalen Luftverkehrsverbandes (IATA) angewendet werden können oder die benannten Unternehmen sollen sich nach einer Beratung mit dem Luftverkehrsunternehmen dritter Staaten, welche die gleiche Linie ganz oder teilweise betreiben, wenn möglich unmittelbar untereinander verständigen.

Die auf diese Weise festgesetzten Tarife sollen den Luftfahrtbehörden eines jeden Vertragsstaates wenigstens 30 Tage vor dem in Aussicht genommenen Inkrafttreten zur Genehmigung vorgelegt werden.

Das auf deutscher Seite für die Genehmigung der Tarife zuständige Bundesverkehrsministerium prüft vor einer Entscheidung, inwieweit die beantragten Tarife hinsichtlich ihrer Höhe und Struktur marktgerecht und unter Berücksichtigung der tatsächlichen Kosten des Flugbetriebs der einzelnen Linien angemessen kalkuliert sind.

In den Fällen, in denen vorgenannte Wirtschaftlichkeitskriterien nicht erfüllt sind und insoweit befürchtet werden muß, daß die Durchführung eines sicheren und leistungsfähigen Flugbetriebs gefährdet sein kann, ist die Genehmigung zur Anwendung der beantragten Tarife zu versagen. Versagungsmöglichkeiten bestehen ferner aus folgenden Gesichtspunkten:

1. Schutz des Verbrauchers vor überhöhten Flugpreisen,
2. Schutz des deutschen Fluglinienunternehmens vor ruinösem Wettbewerb,
3. Berücksichtigung sonstiger öffentlicher Interessen.

Führt ein Unternehmen ohne die nach § 21 erforderliche Genehmigung Fluglinienverkehr durch oder wendet es nicht genehmigte Tarife an, so handelt es gem. § 58 LuftVG ordnungswidrig. Ordnungswidrigkeiten können nach § 58 LuftVG mit einer Geldbuße bis zu 20.000,-- DM (Zwanzigtausend Deutsche Mark) geahndet werden.

DENMARK

1. Both domestic and international aviation is regulated by the Civil Aviation Act, the authorised regulatory body being the Ministry of Public Works. Scheduled fares and rates have to be submitted for approval to the Ministry, which can approve or disapprove totally, or approve in part or with certain conditions.
2. Denmark is a signatory to the 1967 international Agreement on the procedure for the establishment of tariffs for scheduled air services, which replaces tariff clauses in bilateral agreements among signatories of the Agreement or supplements agreements which have no tariff clause.
3. Denmark supports in principle IATA's fare and rates setting machinery. When this Ministry receives a IATA-package for approval, the Ministry examines the proposed fare/rate-level and structure as compared with the already existing. The Ministry may then seek supplementary information on certain points of the filing. It happens - especially as regards the so-called Fuel-increases - that the Ministry has not found sufficient justification for some of the fares, contained in a IATA-package. Consequently those fares have not been approved. So far the reaction has not been a formal rejection of the IATA-package as such, but adjustments of the currency factors.
4. In case of an open-rate situation within IATA, the Ministry is responsible for assessing fares. In the first place, the Ministry endeavours to persuade the airlines to come together

ANNEX 1.5.

and try to reach an agreement on fares. Any such agreement is subject to government approval. Failing agreement between carriers, consultations with the competent authorities of the other party are initiated in accordance with the provisions of the bilateral agreement, if any.

5. A similar procedure is followed when airlines which are not members of IATA apply to the Ministry for fares approval.

6. No written directives exist concerning criteria to be used for evaluating air fares. In assessing whether fares are reasonable, the ministry seeks to strike a balance between the interests of consumers and the need for airlines to cover their reasonable costs.

PROCEDURES ET CRITERES UTILISES POUR L'EVALUATION DES TARIFS AERIENS
EN FRANCE

En France, le Code de l'aviation civile exige que les propositions de tarifs soient déposées pour approbation auprès de l'autorité appropriée. Tous les transporteurs exploitant des services de passagers sur le territoire national ou en provenance ou à destination du territoire national sont tenus de soumettre leurs propositions tarifaires au Ministère des Transports. Seuls les transporteurs exploitant des aéronefs d'un poids maximum au décollage inférieur à 5,7 tonnes et transportant moins de six passagers sont exemptés de cette exigence. En ce qui concerne les vols réguliers, les propositions de tarif doivent spécifier la route et la catégorie tarifaire. Les propositions de tarif doivent également indiquer les conditions générales du transport et les réductions que les transporteurs ont l'intention d'appliquer pendant des périodes déterminées ou d'offrir à des catégories de trafic déterminées. Les conditions générales de transport comprennent, notamment les conditions de service et l'aménagement de la cabine, les conditions d'accès, le cas échéant, à ce type de tarif: durées de séjour, délai d'achat à l'avance, facilités de transfert et d'arrêts volontaires en cours de route, conditions de paiement et de remboursement etc...ainsi que la saisonnalité, la capacité disponible pour le type de tarif considéré, la franchise des bagages, les commissions versées aux agences. Si le Ministère ne répond pas dans un délai d'un mois à partir de la date du dépôt, les tarifs sont censés être applicables.

2. Les tarifs déposés auront normalement déjà été acceptés dans le cadre d'un organisme reconnu par le Ministère, tel que l'IATA. En Europe, l'administration française s'appuie sur l'Accord aérien de 1967. Elle approuve généralement les structures tarifaires qui ont "ainsi", fait l'objet d'un accord multilatéral inter-compagnies et qui sont compatibles avec les tarifs des services exploités dans des conditions analogues mais sur des distances différentes.

3. Les modifications de la structure ou des niveaux des tarifs sont examinées dans leur contexte propre plutôt qu'en fonction d'une norme universelle. La recette prévue par passager-kilomètre est comparée à celle de tarifs existants dans la même région et sur des distances analogues. Dans le cas de tarifs réduits nouveaux, il est important qu'ils n'aient pas d'effet nuisible sur le trafic transporté aux tarifs existants, ce qui menacerait la structure en vigueur. Cependant, c'est sur les routes à prédominance touristique que l'introduction de tarifs réduits fait l'objet d'une considération favorable.

4. Comme tout changement de la structure ou des niveaux des tarifs agit sur les recettes totales de la compagnie aérienne, le Ministère demande des renseignements qui lui permettent d'estimer ses avantages pour le public et ses effets sur la situation économique du transporteur, principalement en termes de recettes, de développement du trafic, de coefficient de remplissage et de recette unitaire moyenne. Si l'action gouvernementale vise à assurer la santé économique du transport aérien elle tend aussi à assurer la protection du public. C'est ainsi que des mesures gouvernementales interdisent ou limitent la repercussion dans les produits touristiques (essentiellement populaires par nature) des hausses des tarifs aériens entrant dans la composition de ces produits.

5. L'administration française tient également compte des principes énoncés par la CEAC en matière d'évaluation des tarifs internationaux passagers et marchandises, à savoir qu'il faudrait établir et maintenir un rapport plus étroit entre les tarifs et les coûts.

1. The Civil Aviation Authority is the regulatory body of Air Transport in Greece.
2. Greece is a signatory member of the International Agreement on the procedure for the establishment of Tariffs for scheduled Air Services which was signed in Paris in 1967. This Agreement has been ratified by Greek Parliament as an internal law.
3. As far as scheduled fares are concerned the procedures provided in the aforementioned Agreement are usually followed. Packages of fares so agreed are always filed with CAA for consideration and approval and they are valid only after they receive the official approval of CAA.
4. CAA when considering international fares takes account of:
 - a) The existing relationship between operating cost and proposed level of fares,
 - b) other coherent fares which are applied by other carriers in the area,
 - c) the interests of users of air transport services.
5. CAA taking into account the said criteria may approve or disapprove in part or in all or put reservations on certain of these fares.
6. Any Airline, intending to introduce scheduled fares deviating from those agreed in IATA and approved by CAA or in cases of open fare situation, always has to submit them to CAA for approval.
7. Sometimes CAA on its own initiative establishes fares whenever the needs of the public (or some specific categories thereof, students seamen, immigrants) seems to justify them.
8. It is noted that no written guidance exists for evaluating the levels and structure of air fares.

ITALIE

Les conventions conclues entre le Ministère des Transports et les compagnies aériennes nationales pour la concession de services aériens réguliers disposent que les tarifs pour le trafic aérien tant national qu'international sont arrêtés par le Ministère sur proposition de la société.

En ce qui concerne en particulier l'approbation des tarifs internationaux, en s'en remet en général à la procédure multilatérale IATA dont les résolutions, avant d'être avalisées, sont cependant soumises à l'approbation expresse précitée.

Des estimations ad hoc sont toutefois réalisées notamment lorsque les niveaux ou les structures tarifaires proposés s'avèrent avoir une incidence économique très importante qui pourrait engendrer des charges particulières pour les usagers ou avoir des effets négatifs.

Dans ces cas, l'Administration utilise des critères spécifiques d'appréciation qui font abstraction des accords IATA.

En ce qui concerne les propositions tarifaires relatives aux accords entre transporteurs non généralisés dans le cadre de la procédure multilatérale IATA, l'Administration est intervenue à plusieurs reprises afin de modifier soit les niveaux tarifaires soit les conditions de transport proposées par les transporteurs, en faisant abstraction de ce qui semblait être l'intérêt immédiat et contingent de la compagnie.

IRELAND

1. Statutory Position

The legal position on the process of tariff setting is that power is vested in the Minister for Transport under the Air Navigation and Transport Act, 1965 which provides that : -

"The Minister may in his absolute discretion approve or refuse to approve of the fares or rates proposed to be charged for the carriage of passengers, cargo or mail on an air service to, from or within the territory of the State."

Provision is made in Bilateral Agreements and in the 1967 International Agreement on the procedure for the establishment of tariffs for scheduled air services, of which Ireland is a member, for airlines to consult and if possible reach agreement on fares. There is also provision for Aeronautical Authorities to consult in the event that airlines fail to agree on tariffs and ultimately if the need arises for a disputes procedure. Ireland supports airline agreement on fares through the International Air Transport Association tariff setting machinery. Tariffs so agreed are subject to the approval of the regulatory authority.

2. Administrative Position

The Minister has traditionally accepted fares agreements within the International Air Transport Association Tariff Conferences, but in the open rate situation which at present applies on North Atlantic routes, examination of fares seeks to ensure the prevention of predatory pricing to the detriment of year round services. The examination also seeks to ensure that the proposed fares meet the direct and indirect costs in the context of provision of a year round service. These criteria also apply to fares filings from

non IATA airlines operating in Europe. Each application is examined on its merits.

LUXEMBOURG

Toute demande d'autorisation de tarifs aériens émanant de compagnies aériennes doit obligatoirement être adressée au Ministère des Transports, Service aéronautique, à Luxembourg. Après une première analyse faite par nos soins, la demande est transmise pour avis aux services compétents de notre compagnie nationale LUXAIR avant que la décision finale ne soit prise par le ministère.

THE NETHERLANDS

In principle, the establishing of fares is left to the airlines. However, by a royal decree all fares must be approved by the Minister of Transport, who can disapprove fares which are considered to be unreasonable or in conflict with the requirements of an economically justifiable operation.

In the approving of fares, account is taken of:

- 1) the interests of the travelling public;
- 2) the economic capacity of the airline; and
- 3) the importance of a coherent tariff structure in international air transport.

The Minister of Transport can himself establish fares in three specific cases:

- 1) if he has disapproved fares filed by the airline;
- 2) if airlines fail to file fares; and
- 3) in special circumstances, the Minister can fix a fare with specific conditions, which differs from normal levels.

UNITED KINGDOM

The Civil Aviation Authority (CAA) is the United Kingdom authority which has responsibility for the economic regulation of the U.K. civil aviation industry. Its duties in relation to air services and fares are set out in the Civil Aviation Act 1971 as amended by the Civil Aviation Act 1980. Sections 3 and 23A of the Act state:

"3 - (1) it shall be the duty of the Authority to perform the functions conferred on it otherwise than by this section in the manner which it considers is best calculated -

(a) to secure that British airlines provide air transport services which satisfy all substantial categories of public demand (so far as British airlines may reasonably be expected to provide such services) at the lowest charges consistent with a high standard of safety in operating the services and an economic return to efficient operators on the sums invested in providing the services and with securing the sound development of the civil air transport industry of the United Kingdom;

and

(b) to further the reasonable interests of users of air transport services; and in this subsection "British airline" means an undertaking having power to provide air transport services and appearing to the Authority to have its principal place of business in the United Kingdom, the Channel Islands or the Isle of Man and to be controlled by persons who either are United Kingdom nationals or are for the time being approved by the Secretary of State for the purposes of this subsection".¹⁾

1) But see also section 15 of the Civil Aviation Act 1980.

- "23A - (1) It shall be the duty of the Authority to perform its air transport licensing functions in the manner which it considers is best calculated to ensure that British airlines compete as effectively as possible with other airlines in providing air transport services on international routes; and in performing those functions the Authority shall also have regard -
- (a) to any advice received from the Secretary of State with respect to the likely outcome of negotiations with the government of any other country or territory for the purpose of securing any right required for the operation by a British airline of any air transport services outside the United Kingdom;
 - and
 - (b) to the need to secure the most effective use of airports within the United Kingdom.
- (2) In considering whether to grant any air transport licence it shall be the duty of the Authority to have regard to the effect on existing air transport services provided by British airlines of authorising any new services the applicant propose to provide under the licence, and in any case where those existing services are similar (in terms of route) to the proposed new services or where two or more applicants have applied for licences under which each proposes to provide similar services, the Authority shall have regard in particular to any benefits which may arise from enabling two or more airlines to provide the service in question.
- (3) Subject to section 3 of this Act and to subsections (1) and (2) of this section, it shall be the duty of the Authority in performing its air transport licensing functions to have regard to the need to minimise so far as reasonably practicable -
- (a) any adverse effects on the environment;
 - and
 - (b) any disturbance to the public;
- from noise, vibration, atmospheric pollution or any other cause attributable to the use of aircraft for the purpose of civil aviation.

- (4) In addition to the duties with respect to particular matters imposed on the Authority by the preceding provisions of this section, it shall be the duty of the Authority to perform its air transport licensing functions in the manner which it considers is best calculated to impose on the civil air transport industry of the United Kingdom and on the services it provides for users of air transport services the minimum restrictions consistent with the performance by the Authority of its duties under sections 3, 22 and 23 of this Act and the preceding provisions of this section."

Section 13(1) of the Act imposes on the CAA the duty of publishing from time to time a statement of the policies it intends to pursue in performing its economic regulatory functions. On 28th April 1981 in CAA Official Record Series 2, the CAA published a formal statement of the policies it intends to follow. Paragraphs 19 to 22 refer to pricing and state:

Wherever possible the Authority will allow market forces to set or influence the levels of fares and rates for air transport. To the extent that fares and rates need to be controlled, the Authority will seek to ensure that users are charged only for those product features they require. The Authority aims progressively to diminish discrimination and cross-subsidisation between routes and between fare types. Each fare should be related to long-run costs at a level which will yield sufficient revenue to cover the costs of efficient operations, including an adequate return on capital. The Authority, however, recognises that British airlines may on occasion need to offer fares which are below long-run costs in order to match competitors or respond to a cyclical shortfall of demand.

Scheduled services have traditionally offered a consistently available product with a high probability of obtaining a seat at short notice and a high degree of flexibility to the passenger, often together with intraline and interline facilities on multi-sectors journeys. The Authority sees a value in the maintenance and development of these product features to the extent that there is a substantial demand for them. This does not presuppose that they should be provided on the present scale or by specific airlines. The Authority's tariff policy must also ensure that the costs of providing them are met by those who require them.

The Authority will seek to ensure tariffs that are clear and understandable. It aims to help the travelling public obtain a clearer picture of the options

available. It believes that price competition between airlines should benefit users rather than intermediaries.

The policies in paragraphs 19 - 21 above should apply no less to domestic and cabotage fares than to international. The Authority will make proposals for changes in the regulatory system so as to allow airlines greater flexibility and quicker response consistently with more effective and less cumbersome arrangements for taking the interests of users into account.

Therefore when considering scheduled fares proposed to it, to the extent that these fares need to be controlled, the CAA takes as the main economic criterion the relationship of the fare to its long-term cost. The Authority is, of course, aware that many factors other than costs influence the setting of fares, and these are also considered.

The CAA has established a standard procedure for evaluating fares applications. Since it is not possible to analyse every fare on every route in detail, the Authority selects a sample of routes for study. The United Kingdom airline is asked to provide details of capacity, traffic and revenue, and costs for individual fare categories on the selected routes. From this, the Authority assesses the long-term profitability of each fare type.

The Authority's approach to the evaluation of European fares is discussed in the publication "European air fares - a discussion document" (CAP 409). Appendix 7 of this document describes fully the method of assessment and the information requested from United Kingdom airlines.

The Authority does not normally intervene in the setting of international charter fares, but it reviews developments in the charter sector of the industry, and would take action if this became necessary.

ASSOCIATION OF
EUROPEAN AIRLINES

G(E)3158
20.11.80

AEA PRESENTATION TO THE EEC

Meeting of the Commission with National Experts on Air
Fares in Europe to be Held on 24th November 1980

AEA is grateful for this opportunity to present its views on this very complex issue of European air fares, even though we were somewhat short of time to prepare ourselves adequately for this Hearing. AEA has on many occasions presented verbal and written evidence of our member airlines' views on European air fares. We can, for instance, refer to our study of air fares in Europe issued in 1977, and which is now in the process of being updated. We can also quote the extensive material submitted last year to the former RPRPTC Committee of the European Parliament. We repeat that it is a very complex issue on which many papers have been written and it would be rather difficult to cover now all aspects in detail. We will therefore confine ourselves to a general statement outlining our common position, or even sometimes different points of view on the main problems. We are of course ready to answer your questions to the best of our knowledge. In view of our direct concern with the subject, may we also add that we would most welcome the opportunity to be able to follow the development of your review of European air fares.

Our remarks will refer to general economic and commercial aspects of air fares and, to the extent that you may wish to examine in detail the tariff machinery itself, may we suggest that you invite the IATA Secretariat to deal with this subject. AEA is an association of nineteen scheduled European airlines, members of IATA, and even though we cover a wide spectrum of airline activities, our Association is not involved in the tariff making process which is covered worldwide by IATA member airlines within the Traffic Conferences. Needless to say, we are in full support of a multi-lateral tariff co-ordination system.

Before coming to specific air fares issues, it may be opportune to recall that Europe is by no means a homogeneous market like US domestic operations, nor is the EEC area covering the whole of European operations. Moreover, as indeed underlined in the Commission Memorandum of last year, European operations are only part of the

total system of the airlines. This proviso is meant to underline the fact that European air fare issues, being already difficult in themselves, in many cases they cannot be taken in isolation from the overall air transport context.

We would now like to comment on the basis for your assessment, which you have defined yourselves as possible fares evaluation criteria. We believe them to be a generally reasonable formulation in a first stage for the purpose of studying European air fares, and they indeed point to many unclear and sometimes conflicting objectives which ought to be met. Such objectives are the target of all airlines, but the relative weight of, and priority for, each of them obviously varies from one individual airline to another, depending on its own geographical, marketing and economic position. The relative importance of those criteria has also by nature changed over time.

As to the individual criteria which have been mentioned, our observations are the following :

1. REASONABLE RELATIONS TO COSTS OF OPERATION

There must be indeed such a reasonable relation between costs and fares as a general objective. On the other hand, cost allocations are an extremely complex subject and many arbitrary elements are inevitably involved in a cost allocation to routes. Problems at that stage sufficiently underline the extreme difficulties which would arise in a cost allocation according to traffic category and fare type. There also remains to define what a representative cost would be on a specific route since the cost level on any given route varies between the individual operators. This is for instance, a factor which has been fully acknowledged in the ECAC study of European air fares, which notes that to a very great degree operating costs are a reflection of the respective national situations. Given the great differences encountered by the airlines themselves in cost allocations, a strict adherence to a theoretical cost formula, the purpose of which should enable authorities to assess mathematically the degree of relationship between fares and costs, can in fact be defined as a very ambitious target of spurious accuracy, and would in practice result in transfer to the authorities themselves of unwanted responsibility for commercial decisions in the price-making process. Apart from any technical arguments, we have to stress the fact that operators have to look, not only at the operating costs in isolation, but at the cost of servicing all segments of the air market.

different allocation methods give a difference up to 10% on routes

As a final remark on this item, it remains to be seen how to define what is a high fare or a high cost. On the cost side, not to speak of studies carried out by AEA itself, examinations by ECAC and by TAI certainly did not support any claim that costs of European airlines are too high. Our poor profitability then points to the fact that fares are not excessive in relation to our cost level. We have also to mention that a large part of the operating expenses is beyond the airlines' control. In 1979 fuel represented 16% of the total operating cost for European passenger operations, and airport/navigation charges another 11%. Add to this the cost of personnel and over 60% of all operating expenses were outside the airlines' influence or offered very limited scope for manoeuvre. Final figures for 1980 are obviously not yet available, but as an indication, the fuel bill may be as high as 30% of the total cost.

2. REASONABLE PROFIT

We could not agree more with this statement, but unfortunately we are far from a profitable intra-European operation. There are obviously variations between individual carriers, but the overall picture for AEA airlines shows that in 1979 there was an operating profit (relation between operating revenues and operating expenses) of 5.6%. This is before any allowance for financial charges and return on capital, and there is a consensus in the industry that at least a 12% figure ought to be reached. May we refer in this context to an AEA examination of capital requirements produced last year, indicating that by the mid-80s the accumulated value of aircraft purchase systemwide will be over 40 billion dollars? A large part of those aircraft orders is required anyway to replace presently obsolescent aircraft in terms of fuel consumption or noise emission, apart from other potential cost savings connected with more modern aircraft. We calculated at that time that the airlines' own cash generation would be only of the order of 13 billion dollars, thus covering only a small proportion of the necessary investment, and we have to underline that this was assuming also a reasonable traffic growth of the order of 8%, which we certainly did not achieve in 1980, since up to October, traffic in Europe went down by 2% over the same ten month period of 1979. This should be a sufficient illustration that excessive profits - far from it - are not made in Europe.

3. DISTANCE RELATION

There is in fact a reasonable overall relation between fares and distance. The overall correlation between fares and stage distance is, as we pointed out in our own examination referred to above, higher than that between costs and distance. This is certainly a demonstration of the success of multilateral tariff co-ordination in smoothing out not only inequalities between fares for adjacent routes, but also some of the large variations in costs. There are obviously deviations from the overall curve of fares versus distance, and they are due to specific economic, marketing and geographical conditions within the overall European picture.

4. PASSENGER VOLUME RELATION

As indeed for any type of production, costs and prices depend to a large extent on the traffic size. This is again a general criterion within which there are bound to be many variations to the theme. For instance, the question has been raised as to whether the higher costs per passenger on thin routes should be reflected in the price. A first remark here refers to the dynamics of the operation, and when serving what is now a thin route, a carrier obviously expects to show over medium/long term a reasonable traffic growth, and obviously a strict price/cost relationship would undermine the prospects for traffic expansion on such routes. Such a so-called 'thin route' may also be required as a feeder route. We must underline again here the fact that we want to serve as much as feasible the overall market, both in terms of network requirement and market segments, and this may mean serving also a number of routes which cannot be defined as being, or likely to become, profitable in isolation. There is not evidence that a specialised carrier with the so-called appropriate combination of 'smallish aircraft and administrative structure' would have lower costs than a major carrier, and in any case we believe there is a strong case for his fare not to undercut the existing structure. We have already explained at length our position on this subject in our statement to the Hearing of the Transport Committee of the European Parliament on Regional Services.

5. Two other criteria have been mentioned separately and which we believe are closely inter-related. One is the issue of a broad range of fares and the other is the question of simplification and transparency. There is inevitably a conflict between those two objectives. On the one hand it is recognised that airlines cater for all market segments, but this should be further clarified since, because of the close inter-relation between routes in an airline network and within the overall intra-European network, a carrier caters not only for the market segments on any given route in isolation, but also for the requirements of multiple destinations and interline passengers.

This remark again underlines the case for multilateral tariff co-ordination and illustrates the need for a broad range of fares. On the other hand there is a prerequisite in any tariff structure serving a wide range of market segments that whilst satisfying customer needs, promotional fares have conditions to maximise load factors and avoid yield erosion below profitable levels, failing which the purpose of increasing traffic and revenues would be defeated. Moreover, tariff conditions within a multilateral framework have to cater for the requirements of all airlines concerned. We fully recognise that simplification, and thereby transparency, are our goals: we constantly pursue them, but they are certainly not easy to achieve. We can perhaps also mention in this context what last year's Memorandum quoted as 'strange currency effects'. Such effects are a reflection of the monetary parities. They exist for all products and if it is accepted that any given commodity bears different prices in different countries, why not recognise air transport problems in this respect. Such so-called oddities reflect differences in each country's purchasing power. Yet airlines try to smooth them out as extensively as market considerations and economics of operations permit and they are continuing their extensive efforts to reform the IATA currency system.

The last aspect we would like to comment briefly on is the question of service-related fares, which is also closely related to the above mentioned last two criteria. We have already dealt with the question of conditions and restrictions. May we repeat again that the existence of a broad range of fares also implies such sets of conditions.

Regarding the overbooking problem, it is certainly an oversimplification to believe that the problem can be solved by charging directly for the cost of reservation. Let us repeat once more that the overbooking question is directly related to the 'no-show' problem, and that both the travelling public and the intermediaries are the major culprits in this respect. Overbooking, which is strictly controlled by the airlines, is a way of overcoming the 'no-show' problem.

CONCLUSION

We hope that, with this brief presentation, we have been able to provide you with a satisfactory picture of the main aspects of the European air fares situation, and may we repeat again that we would be most happy to co-operate further in the development of your examination.

- - - - - o0o - - - - -

CONSUMERS' CONSULTATIVE COMMITTEE

Hearing on government experts of the Working Party on Air Fares

25 November 1980

Introductory remarks

1. Having heard Mr Ashton HILL of the United Kingdom Air Transport Users Committee a month ago, you have today before you the Air Transport Working Party of the Consumers Consultative Committee. The UK Committee has been specializing in air transport matters for six years. At the European level, however, we still have a good deal to learn. Our purpose today is to put to you certain common-sense observations from consumers who are also air-transport users.

2. In our view, our task today is not to compare actual figures for fares. We assume that it is now more or less generally recognized that the actual level of European air fares should be revised. The existence of your Working Party is proof of this, moreover. We shall limit ourselves to discussing the criteria for evaluating fares contained in the Commission's Working Paper. We also suggest two or three other criteria which should be added.

3. The current situation with regard to air transport in Europe

In our view, the air transport industry suffers from overcapacity, with the result that, where even a minimum of competition is possible, many air lines now tend to compete strenuously with each other. Unless such competition is harmonious and conducted in accordance with well-established and fair rules, the consumer does not necessarily benefit in the long term. An analysis of current fares, therefore, must take account of current costs. These seem to us to be too high at the moment in Europe. It is in everyone's interests therefore to deal not just with fares, but with the causes of the civil aviation industry's problems. Studies must be done on restructuring the whole industry, in order gradually to reach more rational fares which reflect more rational costs.

Criteria for evaluating fares

1. Fares should relate sensibly to operational costs

(1) Overall costs

We are aware that, generally speaking, current fares hardly allow the airlines to make a profit, since current costs are excessive.

(ii) The relationship between individual fares and operational costs

It is clear from the enormous difference which sometimes exists between the fares paid by different passengers for the use of identical aircraft over the same route that individual fares bear no relation to real costs. There is often a big difference between the full fare and last-minute "plane-filling" fares. As airlines

think primarily in terms of long-haul flights, they often consider European flights simply as bringing passengers to the long-haul point of departure. Sometimes passengers are carried below cost in Europe. To meet ends meet, airlines often make other customers not flying non-haul journeys compensate for these losses.

Our proposal for reforming this situation is given in point 5 below which deals with the wide range of rates.

(iii) Transport operations as public services

We are aware that, if market forces were allowed to govern the operation of all European routes, some of them would no longer be operated since they would not be profitable. The problem is the same as with the railways. We ourselves wonder whether establishing a close link between fares and costs on non-profitable routes which it is in the public interest to keep open can be justified. We realize that this raises the general problem of competition between private airlines which would like, as far as possible, to operate profitable routes and nationalized airlines. There is also the problem of whether the price of public services accurately reflects costs, a problem with which all industries are becoming increasingly familiar. In our view, the most important step is to draw up an inventory of routes in Europe which are ripe for competition and those which are non-profitable. The problem of regional and other subsidies can be tackled later. We do not agree, however, that losses on secondary routes should be borne by passengers flying on profitable ones and having to pay unduly high fares in order to offset losses.

(iv) Information on costs

In order to establish a relationship between fares and costs, the latter must first of all be known. We believe it is unrealistic to ask for such information to be made available to the general public. A discussion on fares could perhaps be arranged between the airlines and selected passenger representatives who would have confidential access to information on costs. However, it is the authorities rather than the users who are responsible for defending the public interest. We know that some of you already have access to the necessary financial information and, if we may in turn put a question to you, we would like to know in which Member States such information is already available to the authorities.

2. Reasonable profit

It seems that most airlines are at present unable to build up reserves for essential modernization. In our view a reasonable profit is essential if research and other costs are to be amortized. Defining what constitutes a reasonable profit is a quite different matter.

In our view this is a general question which concerns much more than just the air transport industry.

3. Relation to distance

(i) Relating variable costs to distance

It is our view that it is possible to establish a relationship between distance and variable costs, but not the fixed costs encountered in all operations. However, the authorities must monitor the calculation of the different factors very closely, if no abuses are to be created.

(ii) Rationalization through "fifth freedom" /rights/

In our opinion, the costs resulting from the lack of fifth freedom rights in Europe (half-empty aircraft and wasted energy) should be studied. In the current non-competitive situation, conceding fifth freedom rights to airlines which already have operating rights, but with no right to pick up at stops, could well introduce a little more competition and rationalization, without there being any risk of cut-throat competition.

4. Link with the number of passengers

(i) Competition on frequency rather than fares

Unable to compete on price, carriers have tried to compete on service and, more particularly, on frequency. However, competition on frequency has often led to empty seats, which increases the costs of providing the service. Operators have often tried to offer flights at about the same time, eliminating the benefits to passengers of more flights. Whether they are a consequence of excessive frequency or duplication, empty seats mean first and foremost wasted fuel.

(ii) Fifth freedom rights could also improve load factors

(iii) Load factor statistics

The Association of European Airlines has such statistics. We wonder whether they could not be used to improve forecasting at Community level.

5. The wide range of tariffs

(i) Introduction of basic tariffs

The following paragraph sets out one of our chief demands.

The current situation regarding the range of fares is as follows. The user must start with the full fare, which is usually high; from this he must try and deduct what he can to get the best fare possible, and by his own efforts, since no clear information on reductions is available. He must normally fulfil certain conditions, which by their very nature, or in accordance with commercial practice, often have no direct bearing on the flight contract, in order to benefit from a bargain fare. We take the view, on the other hand, that, henceforth, the basic fare should be set out and made known to the public; to this would then be added the "extra" services, charged at a percentage of the basic fare. The extra services, i.e. over and above the basic fare, would include, in particular, advantages such as interchangeability with other flights and ease of cancelling.

(ii) Simplification and clarity

Simplification and clarity are particularly important today, for what is emerging is increasingly a single air transport market; there is no longer a clear distinction between charter and scheduled flights, or between business and tourist passengers. Everything is mingled today, and every user tries to get the best bargain.

ANNEX 3.4.

Hence the great need for information in this jungle of rates and conditions etc. Some encouragement can be drawn from the airlines' growing awareness that it is in their interest to provide travel agencies with brochures that are as clear as possible if they are to attract customers. The airlines should be made to do more in this direction, and travel agents' help should perhaps be solicited.

We suggest that the following three criteria be added to those in the Commission's paper:

1. Air traffic control

- (i) The problem of military areas
In view of the energy problem, flights should be as direct as possible in our opinion, with the least delay of landing and take-off. We suggest, in particular, that the question of military areas where overflying is not allowed to be studied. We regret that the Council, replying to Written Question n° 499/80 by Mr MORELAND in the European Parliament, should have said it did not intend to include this matter among its priorities.
- (ii) The future of Eurocontrol
We are all aware that Eurocontrol is currently in a bad way. At a press conference in Luxembourg on 13 November, the public service unions pointed out that, if air-traffic control was to revert to national agencies once Eurocontrol ceased to be active, costs would go up and air fares would be affected. We would like air-traffic control to be studied as well.

2. Airport and other costs

We realize that landing and other costs in Europe are currently passed on in air fares. To clarify the situation, we would like to see a distinction between the flight charge and all airport and other costs. Once this distinction has been made and the various costs analysed, discussions could be held as to which of the infrastructure and other costs should be borne by the Community and which by the air transport users alone.

3. National prestige policies

In our view, Member States should rethink these policies and try and cost them. Let us quote just one example. It appears that in 1980 there will be a deficit of + é illion for Concorde flights between London and Singapore (source: Interavia "Courrier aérien", 18 November).

Building 28, P. O. Box 36
Brussels National Airport
B - 1930 Zaventem

Tel. : 02 / 751 80 75
Telex : 24833

Bank Brussel Lambert
Account 310 - 0106562 - 45

Association des ANNEX 4.1.
Compagnies Aériennes de la Communauté
Européenne a. i. b. s.

Independent Air Carriers of the
European Community



Brussels, 24 November 1980

EC Commission Air Fares Examination

With regard to the Commission's 13OCT80 working document:-

RE ITEM (3): We note with some surprise that the "UK Cascade Study" (BA/CAA 1976) will be included in this examination. Non-scheduled carriers did not participate in this study. Considering the preponderance of non-scheduled traffic in European air transportation, we recommend that the methodology and findings of the Cascade Study be treated with serious reservations by the Commission.

On the other hand, we would strongly recommend the independent study "Complementarity or Competition between Scheduled and Non-Scheduled Air Transport" made by ITA, the Institut de Transport Aérien in Paris. The study carries the ITA reference 4 397/JLL/MV/JUNE 1976.

RE ITEMS (5) & (8): For further advice concerning criteria by which to examine air fares, we recommend that the Commission seek also the advice of tour operators and their respective organisations, and not only that of travel agents. The latter will offer mainly the views of Europe's scheduled airlines, while tour operators have considerable experience as regards both charter fares and scheduled airline group/bulk fares. We would encourage the Commission to contact the I.F.T.O. (International Federation of Tour Operators) in this respect.

RE ITEM (8): Public service obligation is a much over-rated excuse on the part of Europe's state-owned carriers, and we question the sacrifice and inherent non-profitability it implies. We would advise the Commission to ascertain what routes and conditions are deemed unprofitable by the airlines under this reference, and whether their respective governments agree. In our opinion, both the public and the airlines would be better served if such routes received direct government subsidies. If the public service obligation assertion is valid, the amount of cross-subsidisation should be analysed carefully and compared with the value of the service obligation.

At the same time, other air carriers should be given the opportunity to provide the same service with a lower degree of subsidisation, or indeed with no subsidy at all.

The whole issue will be an important one, not only in relation to existing routes and fares, but also when the tariffs and conditions of the Commission's proposed inter-regional services come up for evaluation in the not-too-distant future.



EC Commission Air Fares Examination
Monday, 24 November 1980
Page Two

RE ITEM (10): The rôle of air transport in the Community vis-à-vis the other modes of transport. The questions raised here are indeed comprehensive and complicated, and we should like to offer for your consideration some further views.

The amount of direct and indirect state subsidies must be taken into consideration when comparing the various modes of transportation. For instance, trains are subsidised heavily, whereas private cars are mostly considered the object of taxation. On the other hand, the cost of infrastructure, e g roads, must be deducted in the same considerations.

The same applies to airlines. In general, airlines more than fully pay for their own infrastructure, e g airways and airports, and in some cases even provide a surplus through airport user-charges or direct taxation of air passengers. In most of the European Community, charter passengers going abroad are made to pay a charter tax, in places up to 1400 Belgian Francs, that is not levied on other modes of transportation.

It can also be argued that the state-owned carriers receive hidden subsidies by virtue of the monopoly they enjoy in the marketplace.

RE ITEMS (11)-(20): We do recognise the difficulties involved in deciding the criteria by which to evaluate air fares, but we would submit that the task is not so complicated as it may seem and some airlines wish to contend.

The Commission has at its disposal the best possible "yardstick" for measuring fares, namely the true cost related point-to-point fare offered in an open international market by the Community's independent air carriers. This fare allows a modest, reasonable return on investment to an efficient operator, and the fare can easily be checked from time to time by soliciting tenders from ACE member-carriers.

RE ITEM (12): A reasonable relationship to the cost of operations is the primary criterion for evaluating fares, and should always be observed bearing in mind the costs of an efficient carrier. Since mail and cargo in most cases can be carried in addition to a normal load of passengers, the cost criteria should be based on normal-load passenger flights only, and the revenues from mail and cargo considered an additional contribution. This will make fare comparisons possible between carriers that carry differing loads of mail and cargo or no mail/cargo at all.

Allocation of costs to each single fare type is indeed very cumbersome and in our opinion not necessary. Under free market conditions there would be no need to control fares, since competition would ensure that fares are not too high, and that excess revenues are not available for cross-subsidisation.



EC Commission Air Fares Examination
Monday, 24 November 1980
Page Three

In the absence of free market conditions in Europe, the predominant on-demand fare type (in Europe normally the economy-class fare) should be linked closely to the costs of an efficient air carrier in point-to-point terms.

RE ITEM (13): We can only re-iterate our view that European air transportation should be managed as a normal "for profit" business concern, with investments obtained through the normal free-market financial means. Any aspects of the business considered a "public service obligation" should be accounted for separately and subsidised separately if absolutely necessary.

RE ITEM (14): If fares are related to point-to-point costs of an efficient carrier, as this Association is recommending, they will automatically become closely related to distance.

RE ITEM (15): When air transport operations are properly adapted to the volume of traffic in a market, there is no reason to expect fares to be significantly higher than in dense-volume markets. Obviously, the type and size of the aircraft must be gauged to achieve a satisfactory service-frequency while preserving an economical load factor.

Under no circumstances should improper equipment, e g too large an aircraft, be permitted to justify higher fares.

RE ITEM (16): The aim of the existing broad range of fares is naturally to obtain the highest possible load factor and revenue at a given level of production by utilising all existing preferences of the public. Since this will also mean the best utilisation of production factors, differentiation of fares should at least in theory produce the lowest costs.

RE ITEM (17): Complaints by leisure and VFR travellers are quite understandable, since the scheduled air fares for this clientele are laden with restrictions to prevent usage by business travellers, on one hand, and beefed up to cover privileges the traveller may not necessarily desire, such as interchangeability and the privilege not to show up for a flight without any risk of penalty. Charter fares for this same clientele are similarly burdened with government-imposed restrictions.

The real victim, however, is the business traveller who is forced to pay whatever fare the airlines may demand, including subsidies to leisure travellers.

We should perhaps encourage the Commission, on this question of relating fares to services rendered by the airline, to devote time to considering ways in which airlines could practically separate the aspect of an air ticket from the aspect of a seat reservation; with a view to treating the latter as a non-refundable option. Such a fundamental change to the basis of European on-demand air transport could have profound effects upon the evolution of European air transport.

EC Commission Air Fares Examination
Monday, 24 November 1980
Page Four



RE ITEMS (19) & (20): Simplification and differentiation are just not compatible factors. Again, the only real solution is increased competition, as this alone will produce the right combination of differentiation (i e lower prices) and simplification (i e the public's ability to comprehend the various fares and associated restrictions).

In conclusion, ACE submits that the need for public approval and control of air fares comes basically as a result of the absence of competition, and also as a result of non-adherence to fundamental principles in the Treaty of Rome, i e the right of establishment and the rules of competition.

No amount of public control will be able to substitute for competition, and we therefore suggest that immediate steps be taken to increase the scope for competition in air transport serving the European Community.

Whilst the opening up of new inter-regional air services can become a step in the right direction towards more competition, it cannot in itself be sufficient to secure a reasonable fares structure on all the important trunk routes. We therefore point once again to the suggestions contained in our 30NOV79 Opinion of the Commission's COM(79)311 memorandum. These suggestions were, as follows:-

- A) "The introduction of 'part-scheduled' rights on charter flights, in order that a portion (e g 50%) of all seats may be sold to the public without artificial restrictions as to land arrangements, length of stay, return flight, etc. Such rights would only be a natural counterpart to the 'part-charter' privileges already enjoyed by scheduled carriers."
- B) "A general liberalisation of existing charter regulations to relax or remove current constraints and restrictions, such as the requirements for land packages, advance purchase, minimum stay and group sizes, and to allow for mixing of various charter types on the same flight."

We tender these suggestions--again--in view of the fact that over half of European air traffic is presently carried in the charter mode, and that progress towards low-cost European air transportation has always originated in this sector of the industry.

On behalf of the Association and all its member-carriers, I should like to thank the Commission for this opportunity to air ACE views on this matter. We look forward to working closely with the Commission on this, and every other issue affecting the future of European air transportation. Thank you.

Yours sincerely,

A Vernieuwe,
Secretary-General.

Technical procedures of the prorating system

Prorating is a system of sharing the revenue between airlines with an interline agreement of a passenger who travels on a multi sector journey with one ticket.

Two different methods exist for the calculation of the share that each airline gets from the total price of the ticket.

First there are rates based on the Multilateral Prorate Agreement (MPA). The method is called "Straight Rate Proratio" (SRP). The "SRP" is based on the flight coupons. For each sector of a journey the ticket contains a flight coupon.

The first step is to take the sum of the local one way (normal economy) fares for each sector (coupon).

Example

1) Route	A	—	B	—	C	—	D	—	E	
Local one way fares										Sum = 250
		70		40		80		60		

2) Suppose total ticket price (throughfare) = 150

3) The prorate factor = $\frac{150 : 250}{100\%} = 60\%$

4) The prorate value or the share for each airline is calculated as follows:

sector	A - B	= 60% of 70	= 42
	B - C	= 60% of 40	= 24
	C - D	= 60% of 80	= 48
	D - E	= 60% of 60	= 36
	Total		150

The prorate dilution for each airline is in the "SRP" method the same in this case 40%.

The second method is virtually the same be it that some airlines - mainly those with a domestic network - do not accept the full dilution, or any dilution from prorates. These airlines have supplemented demands called "proviso" or "requirements".

Example prorate calculation with proviso/requirement

Route remains A --- B --- C --- D --- E

Suppose the airline operating on the A --- B sector demands the full local fare (70).

1) Through fare was	150
subtract	<u>70</u>
for the other airlines	80
remain	

2) Sum of the remaining local fares
= 250 - 70 = 180

3) The prorate factor = $\frac{80 : 180}{100\%} = 44.45\%$

4) The prorate value for the remaining airlines is

B --- C = 44.45% of 40 = 18

C --- D = 44.45% of 80 = 35

D --- E = 44.45% of 60 = 27

Sum 80

The prorate dilution of the airline serving A - B " 0% at the expense of the other three airlines whose dilution goes up from 40% to 55.55%.

In general prorate dilution increases

- when the number of flight coupons increases
- when sectors with "requirements" are included in a multi sector journey
- when the "through fare" becomes lower in comparison with the sector fares
- when sectors are included with a relatively high level of local fares compared to the other sectors of the journey.

"Reverse" Cascade"

Introduction

The difference between scheduled and charter fares largely reflects the relatively higher costs of scheduled operators. However, higher costs do not necessarily imply that scheduled operators are less efficient, since like must truly be compared with like. It is necessary to allow for the cost implications of intrinsic differences between the scheduled and charter modes before drawing any conclusions about comparative efficiency.

The main objective of the study which is described in this paper was to determine just how large a differential between charter and scheduled costs might reasonably be expected in the absence of any efficiency differences. In common with earlier similar studies, the basic method of approach was to identify those product features which were exclusive to each mode and to assess their cost implications. There is an important difference however between this and previous studies. This study considered the costs which a charter airline would incur if it were to offer a scheduled-quality product. Previous studies considered the costs which a scheduled airline would incur if providing a charter-quality product. Consequently the results of this study are not only valuable in themselves but also for contrasting with those of earlier studies.

Data Base and Methodology

The UK charter airline to which this study relates provided a fairly detailed breakdown of the costs for a round-trip operation to popular Mediterranean destinations in March 1978.

The methodology adopted was broadly the same as that used in the earlier studies and exemplified by the joint British Airways/Civil Aviation Authority "Cascade" studies. However, unlike the earlier "Cascade" type studies this study defined charter rather than scheduled cost per passenger as its index base; and instead of cascading down to the charter product cascaded up to the scheduled product cost: hence "Reverse Cascade".

The charter route costing data was used to derive a charter cost per passenger reflecting an assumed seat factor of 85%. Systematic adjustments were then made to appropriate elements of this cost in order to allow for intrinsic differences between the charter and scheduled modes. Each of these adjustments was represented as a separate step in the "Reverse Cascade". These adjustments are described in the following section.

Certain technical aspects of the cascade approach are worthwhile mentioning at this point. Firstly, although this approach involves examining the implications of specific modal differences for each cost area separately and the cost areas are fairly narrowly defined, it is not always possible to be precise about the extent to which certain cost areas need to be adjusted to reflect a modal difference. Secondly, each step in the cascade represents the cumulative effect of all those modal differences up to and including that being considered. Consequently, it is preferable for those adjustments which involve making possibly arbitrary assumptions about certain costs to occur in the latter part of the cascade. Thirdly, it follows that a difference in the ordering of the adjustments may well produce a slight variation in the cascade indices. Another consideration is variations associated with rounding.

The Modal Adjustments

As already stated, the index base for "Reverse Cascade" was defined as the charter cost per passenger relating to a popular UK-Mediterranean route and an assumed seat factor of 85%. The adjustments contained in the earlier British Airways'/ Civil Aviation Authority "Cascade" studies were recognised as being a comprehensive and logical classification of all possible scheduled/charter modal differences. Accordingly, the "Cascade" adjustments were considered and adopted where appropriate in "Reverse Cascade". It will be noted however that the ordering of the adjustments was altered slightly so that the more controversial adjustments were placed towards the latter part of the cascade. The "Reverse Cascade" adjustment steps are described below.

Step 1 Not Applicable

This adjustment relates to two main areas: sales, reservations and advertising costs; cargo revenue and bar profit.

An estimate of the additional costs which the charter airline might expect to incur if it retailed scheduled airline tickets was obtained on the basis of advice from other bodies within the industry with direct experience of performing similar functions. The sales, reservations and advertising element comprised by far the greatest part of the "Not applicable" adjustment.

The cargo revenue and bar profit element was included to reflect the net effect of the freight-carrying capability which is exclusive to the scheduled mode and the relatively higher level of on-board sales typical of charter services. The cost implications of these two opposing influences was calculated as a small increase in charter costs. That is, the lower (ie scheduled mode) level of bar profits was not expected to outweigh the cargo revenue which might be expected to accrue if revenue freight traffic was allowed on a charter service.

Step 2 Standards

This adjustment was intended to reflect the additional costs involved in upgrading charter handling and in-flight services to scheduled quality. The additional handling costs were obtained from quotations by companies already providing handling services for scheduled airlines at the airports at either end of the "Reverse Cascade" route.

The costs involved in improving meal standards and customer services in general (eg toys for children, in-flight reading material, training cabin crew in the use of ABC Airways guides etc) were estimated by the charter airline itself.

Step 3 Utilization

This was recognised as being one of the most controversial steps in the cascade. In the earlier "Cascade" studies it was assumed that the level of utilisation achieved by airlines operating charter services was likely to be some 25% higher than that achieved by airlines operating scheduled services and that the cost areas

most likely to be affected would be aircraft depreciation and fixed crew costs. The effect of a reduced level of utilisation was also calculated on the basis of a 25% modal difference for "Reverse Cascade". However, whereas in the "Cascade" studies aircraft depreciation and fixed crew costs were considered the only items affected by this adjustment, in "Reverse Cascade" it was also considered appropriate to adjust for the effect upon interest charges, and administration and operations support costs.

Utilisation and average stage length are undoubtedly interrelated. However, although longer stage lengths almost invariably permit higher utilisation, it is by no means clear that utilisation must inevitably be lower for the scheduled mode. It was decided therefore to explore this aspect in more detail.

The link between average stage length and aircraft utilisation has been formally expressed in various studies of airline cost. Cost models developed by Hawker Siddeley and the Group of Six each include a formula expressing annual aircraft utilisation as a function of block time. These formulae were used to derive "predicted" levels of aircraft utilisation for a sample of UK scheduled and charter airlines based on average block time data for 1977. Although the two formulae gave slightly different results for each of the airlines involved, both formulae showed a variation of some 12 percent between the annual utilisation "predicted" for British Airways' short-haul international scheduled operations and that "predicted" for the "Reverse Cascade" airline's charter operations. This finding obviously raised doubts about the validity of the 25 percent variation assumed in the "Cascade" studies. "Predicted" utilisation levels were then compared with those actually achieved by each of the sample airlines. The differences between actual and predicted values suggested that charter airlines obtain more utilisation than can be explained by their longer average stage lengths. These findings could only confirm the difficulty of reaching firm conclusions in this area. It was decided therefore to investigate just how sensitive the "Reverse Cascade" indices were to changes in the utilisation assumption. The two alternative utilisation assumptions adopted for this purpose were firstly, the 25 percent charter/scheduled differential previously referred to; and, secondly an assumption of no modal difference in utilisation.

Step 4 Seat Factor

The charter cost per passenger index base relates to an 85% seat factor. The purpose of this adjustment step was to allow for the relatively lower seat factors generally achieved on scheduled services. In common with the earlier studies, this study assumed a scheduled mode seat factor of 55 percent.

The cost areas considered likely to be affected by the seat factor adjustment were flight-related direct operating costs and fixed costs. Accordingly, all costs other than those which were identified as being purely passenger-related had to be spread over fewer passengers. This cost-increasing effect was only slightly offset by the estimated saving in fuel resulting from the implied payload reduction.

Step 5 Seating Density

The aircraft used by the "Reverse Cascade" airline were in 30" seat pitch configuration. A scheduled standard seat pitch of 34" was assumed in order to make the seating density adjustment. The cost areas affected were the same as those described in Step 4 above.

Step 6 Peak/Trough Ratio

This adjustment was included in the "Cascade" studies on the grounds that, because scheduled operators are less "peaky" than charter operators, charter operators are at a comparative disadvantage in having fewer units of output over which to spread certain fixed costs.

The peak/trough ratio adjustment was one of the most controversial. It was noted that this factor might have already been accounted for in the utilisation adjustment. It was also noted that the respective timings and peak days of the services operated by the two types of operator would determine the size of any peak/trough adjustment which was indeed considered necessary. In addition, it was recognised that charter operators were probably more able to hire temporary staff, schedule major engineering work and staff holidays away from the peak and lease out spare aircraft in the winter. The controversial nature of this adjustment indicated that it should be left until towards the end of the cascade. Furthermore, because the cost implications of any peak/trough differences are so difficult to quantify, it was decided to show the effect of two alternative peak/trough ratio assumptions. It was assumed firstly, that charter costs should be reduced by (a purely notional) £3 per passenger, and secondly, that no peak/trough ratio adjustment was necessary.

Step 7 Commission

Commission costs are specific to the scheduled mode. The normal commission rate in March 1978 was 8 percent. The "Reverse Cascade" commission cost adjustment was calculated by taking 8 percent of the total charter costs per passenger after adjusting for Steps 1 to 6 (inclusive).

The Results

The "Reverse Cascade" indices are shown in Table 1 below. Those in column I relate to the 25 percent utilisation adjustment discussed under Step 3 and the notional peak/trough allowance discussed under Step 6. Those in column II show the effect of omitting both the utilisation and the peak/trough ratio adjustments altogether.

Table 1 "Reverse Cascade"

	Column I	Column II
Charter cost per pax	100	100
1 Not applicable	118	118
2 Standards	133	133
3 Utilisation	141	133
4 Seat Factor	191	178

Table 1 "Reverse Cascade" contin.

	Column I	Column II
5 Seating Density	211	197
6 Peak/Trough Ratio	203	197
7 Commission	219	214
Derived Scheduled cost per pax	219	214

The difference between the charter and derived scheduled cost indices implies that, even assuming no efficiency differences between the two modes, one might expect to find scheduled costs (and therefore fares) some 110 to 120 percent higher than charter costs even on the same route. "Reverse Cascade" also demonstrates that by far the most important single adjustment is that relating to modal differences in seat factor. This adjustment alone probably accounts for some 40 percent of the total scheduled/charter cost difference.

Comparison with Other Studies

The only other study with which it is at all possible to compare "Reverse Cascade" is the Route C "Cascade" study contained in the Civil Aviation Authority's European Air Fares document (CAP 409). It must be emphasised however that the two studies are not strictly comparable. Indeed, it was first necessary to recalculate the Route C data to reflect the ordering of the "Reverse Cascade" adjustments and to omit the adjustment relating to First Class facilities on the scheduled mode (ie the Tourist Class adjustment in the "Cascade" studies). For this and technical reasons of the kind mentioned earlier, this implies that the revised indices may not be entirely compatible with those in the original "Cascade". Furthermore, the base data for these two studies reflect costs at different periods in time; the routes are very similar but not identical; and there are certain differences between the two cost breakdowns. Nevertheless, it is useful to show the revised "Cascade" and "Reverse Cascade" indices together when attempting to draw some broad inferences about the principal sources of scheduled/charter cost differences. The two sets of indices shown below both include the effect of a 25 percent utilisation difference and an allowance for a peak/trough ratio difference.

Table 2 "Cascade" and "Reverse Cascade"

	"Reverse Cascade"	"Revised)"Cascade" Route C
Charter cost per pax (actual)	45	36
(derived)		40
1 Not Applicable	45	40
2 Standards	53	55
3 Utilisation	60	64
4 Seat Factor	64	66
5 Seating Density	86	92
6 Peak/Trough Ratio	96	97
7 Commission	92	91
Scheduled cost per pax (actual)		100
(derived)	100	

Both "Cascade" and "Reverse Cascade" indicate that there is likely to be a very substantial variation between scheduled and charter costs, even ignoring any efficiency differences that might exist. The variation indicated by "Reverse Cascade" is, however, somewhat smaller than that indicated by "Cascade". The most significant single adjustment in both studies is that for seat factor differences between the two modes: 22 percentage points in "Reverse Cascade" and 26 percentage points in "Cascade".

The most striking difference between the two studies is the importance which is attached to those factors included in the "Not Applicable" adjustment step. An adjustment of 15 percentage points is shown in "Cascade" in contrast to the 8 percentage point difference shown in "Reverse Cascade". The underlying cost data were examined and it was found that this difference could be largely explained by two factors. Firstly, the "Reverse Cascade" charter airline's estimates of what it would cost to retail the scheduled product were considerably lower than those actually incurred by the "Cascade" and other scheduled airlines. Nevertheless the charter airline's estimates were accepted as being convincing. This raises the question of whether the fairly high sales costs incurred by most European scheduled operators really are attributable to methods of selling that are indeed intrinsic to the scheduled mode. The other factor which accounts for the larger 'Not Applicable' adjustment shown in "Cascade" was the inclusion of a notional allowance for the cost implications of any aircraft equipment differences which might exist between scheduled and charter operations.

GLOSSARY OF TERMS

Advance purchase excursion (APEX)	A discount fare on scheduled services for which purchase is required by a specified time in advance of departure. The fare may contain other special conditions.
AEA	Association of European Airlines
AEA Member Airlines	Aer Lingus, Air France, Alitalia, Austrian Airlines, British Airways, British Caledonian, Finnair, Iberia, Icelandair, Yugoslav Airlines, KLM, Lufthansa, Olympic Airways, Sabena, SAS, Swissair, TAP, Turkish Airlines, UTA.
Available seat-kilometres	A seat-kilometre is available when an aircraft seat is flown one kilometre. Available seat-kilometres may be calculated by multiplying the number of seats available for sale on a given flight by the stage distance.
Available tonne-kilometres	A metric tonne of available payload space flown one kilometre. It is calculated by multiplying the number of tonnes available for the carriage of revenue load (passenger, cargo and mail) on the flight by the stage distance.
Average revenue yield	See "Yield".
Common rating	Is the fact that the same fare applies from one origin point to several adjacent destination points.
Discount fares	Any fare other than normal fare.
Dilution (yield-)	The difference between a point-to-point - sector - fare and the actual revenue earned per passenger travelling at that fare type.
Direct route	Means the shortest all-year route operated in both directions between only two points.

ANNEX 7.2.

Extra mileages	The fare paid for a journey on a direct route usually includes an allowance for mileages in excess to the direct route distance (15%) which enables the passenger in many cases also to use an indirect route with a longer distance.
Fare	The price to be paid for the carriage of passengers and baggage and the conditions under which those prices apply.
Fare construction unit (FCU)	A unit of account used for fare construction and calculation purposes, based on the pre-1972 value of the US dollar.
Inclusive tour (IT)	A scheduled fare available for constructing package tours which include accommodation etc.
Interline passenger	A passenger using a through fare for a journey involving two or more separate flights and two or more carriers.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organisation.
Indirect route	Means any scheduled continuous air route other than the direct route.
Load factor	In this report it is synonymous to revenue passenger load factor, which is the percentage of seating capacity which is actually sold and utilised. It is computed by dividing revenue passenger-kilometres flown by available seat-kilometres flown on passenger service.
Local Europe Operations	Include all international routes originating and terminating within the region comprising geographical Europe (including Iceland and USSR to longitude 55°E), Algeria, Azores, Canary Islands, Madeira, Marocco, Tunisia and Turkey.
Multi sector journey	A journey including more than one sector not being a return trip on one route.

ANNEX 7.3.

Net passenger cost	Is the total operating costs for the scheduled passenger services less the revenue received for the carriage of freight and mail on those services.
Normal fare	The full fare established for a first or tourist/economy class service.
Operating ratio	Is the relationship between operating revenues and operating expenses, computed by dividing operating revenues by operating expenses (including financial charges).
Peak/trough ratio	A measure of the seasonal variation of services operated by air carriers.
Pro-rate	See annex 5.
Refund	Repayment to the purchaser of all or a portion of a fare, rate of charge for unused carriage.
Revenue passenger Load factor	The percentage of seating capacity which is actually sold and utilised. Computed by dividing revenue passenger-kilometres flown by available seat-kilometres flown on revenue passenger services.
Revenue passenger - PAX	All passengers counted on a point-to-point basis, as carried at 25% or more of the normal applicable fare for the journey.
Route	Scheduled service provided by an airline between two or more cities with the same flight.
Sales, Commission	Is paid by the airlines for the sale of air transportation documents to the agents (travel agents or other air carriers).
Seat factor	See "Load factor".
Seating density	A term indicating the standard of seating on an aircraft. It is normally measured by the distance between rows of seats, and the number and size of seats in a row.

ANNEX 7.4.

Sector	Taken to be synonymous with "stage flight", i.e. from take-off to the subsequent revenue landing.
Scheduled services	Scheduled flights performed according to a published timetable, or so regular or frequent as to constitute a recognisably systematic series which are open to use by the public on an individually ticketed basis; extra flights occasioned by overflow traffic from the scheduled flights and preparatory revenue flights on planned air services.
Stage	An aircraft journey between a take-off and the subsequent revenue landing.
Stage distance	Is the airport-to-airport great circle distance.
Station costs	The cost of maintaining staff and facilities at airports for handling passengers and aircraft.
Stopover	Equivalent to the term "break of journey". A deliberate interruption of a journey by the passenger, agreed to in advance by the carrier, at a point between the place of departure and the place of destination.
Tariff	In this report synonymous to fare.
Through fare (or route)	The total fare (or route) from point of departure to point of destination.
Ticketing	Issuing an air transportation document.
Yield (passenger)	The passenger yield is the total revenue received for the carriage of passengers divided either by the total number of revenue passengers carried or revenue passenger-kilometres flown.

BRUSSELS - ATHENS return fares

The following return fare structure with associated conditions applied 1.1.1981

Note the first class and economy fares are also available on single trip fares at half the quoted price..

	BFR	Rule/Conditions
		Period of application
		Max. val.
1) First class	36.660	---
2) Normal economy fare	27.140	---
3) Public excursion fare	17.650	5256 01 APR - 31 MAR 1 month Return transportation from the point of turnaround shall not be commenced prior to 0001 h on the Sunday following the day of outward travel. Advertising and sales shall also be permitted in the country of point of turnaround.
4) Apex fare (summer)	12.900	7987 01 APR - 30 SEP 2 months (a) Return transportation from the point of turnaround shall not be commenced prior to 0001 h on Sunday following the day of outward travel. (b) This fare is only available for round trip travel and stopovers are prohibited. (c) Reservations for the entire journey, ticket issue and full payment of fare must be made at the same time and not less than 21 days prior to commencement of travel. PTA transactions are not permitted. All reservation requests must be clearly identified as 'APEX'. (d) Voluntary changes not permitted and all coupons of the ticket must be clearly endorsed 'APEX' and reservations may not be changed. (e) Refunds not permitted except that 50% of the ticket value may be allowed for cancellations made up to 21 days before the date of commencement of travel. (f) Combination with any other fares/add-ons prohibited except full domestic fares. (g) Infants' and children's discounts permitted. All other discounts prohibited. (h) Notwithstanding any other Resolution, this fare shall not be used to establish the minimum tour price for an inclusive tour and furthermore this fare (and fares constructed therefrom) shall not be used as a 'control price' for fly/drive packages. (i) Flights to be designated for this fare will be determined in advance of each fare period. (j) The maximum number of passengers to be carried by each carrier shall not exceed 30 passengers per flight. (k) Advertising and sales only permitted in country of origin.
(winter)	10.870	7988 01 OCT - 31 MAR 2 months Same conditions as Note 7987.
5) Group inclusive tour	8.240	7340 01 APR - 15 MAY 14 days 01 OCT - 31 MAR From AMS period of application: 01 APR - 15 MAY 01 OCT - 31 OCT Only applicable to IT groups of not less than 10 adult passengers, except that from PAR the group size shall be 12 adult passengers. For travel AMS-ATH-AMS and BRU-ATH-BRU return travel is permitted in sub groups of not less than 5 adult passengers. Return transportation from the point of turnaround shall not be commenced prior to 0001 h on the Sunday following the day of outward travel. Stopovers prohibited except that one stopover permitted at the first point of arrival in Greece. The minimum tour price shall be the IT basing fare plus UKL 3 per day for the total duration of the journey but in no event the total price shall be less than the IT basing fare plus UKL 15. Advertising and sales, including issuance of MCO or PTA, are also permitted in the country of turnaround.

Unless otherwise specified in the respective special fare rules (i.e. rules nrs. 5256/7987/7988 and 7340), on these different fares the following discounts are available :

I. On the basis of all fares

a) Infants/children fares

Infants (0 - 2 years) 10% of applicable adult fare.

Children (2 - 12 years) 50% of applicable adult fare.

b) Tour conductor tickets

The following concessions are available for tour conductors worldwide on IATA Carriers:

For a group consisting of	the following number of additional tour conductor tickets may be issued
10-14 adult fare paying passengers	one half fare ticket (50% reduction)
15-24 adult fare paying passengers	one free ticket (100% reduction)
25-29 adult fare paying passengers	one free ticket and one half fare ticket
30-39 adult fare paying passengers	two free tickets
40-44 adult fare paying passengers	two free tickets and one half fare ticket
45-54 adult fare paying passengers	three free tickets
55-59 adult fare paying passengers	three free tickets and one half fare ticket
60-69 adult fare paying passengers	four free tickets
etc. (the tour conductor rebate is cumulative).	

The minimum number of passengers in relation to the granted concession must be reached over the entire trip of the tour conductor, i.e. not only over the portion travelled in common.

In no case shall a tour conductor's free or reduced rate ticket issued by an IATA Carrier to a tour conductor, be sold to the tour conductor, directly or indirectly, at more than its face value, nor shall such ticket be resold.

Applicable Fares and Combinations

The fare paid by the passengers may be any full applicable normal or special adult fare (including IT fare), but not a fare on which an agent's, emigrant's, student's or group travel reduction has been granted, except when specifically allowed in the group travel regulations. Two children for each of whom a half fare is paid count as one passenger for the purpose of computing the number of passengers in the group.

The tour conductor reduction of 50% may be applied on any applicable normal or special fare (including IT fare) if the appropriate conditions are fulfilled, except as may be otherwise provided in the appropriate special fare conditions. For cumulation with other reductions, see discounts concerned.

II. On the basis of normal economy and public excursion fares are also available

c) Youth fares

Age 12 - 22 for all youth,

Over 22 - 26 for full time students

A discount of

- 25% of the applicable normal Y-class one-way round or circle trip fare may be granted.
- 25% of the applicable individual public excursion fare may be granted; provided that
 - (i) such discounted fare shall in no event be less than the applicable normal Y-class one-way fare.
 - (ii) all conditions of the individual public excursion fare shall be complied with.
 - (iii) in the case of circle trips the youth fare shall not be less than the highest normal Y-class direct one-way fare applicable from point of origin to any en route point.

These discounts are based on the general IATA rules.

III. On the basis of only normal economy fares

d) Student fares

Age 12 - 30 for full time students. A fare applies of 45% of normal economy one way for a single trip and 90% of one way normal economy for a return trip. This fare is based on the carriers' special regulations and gives a better bargain than the under c) mentioned fares for students.

e) Reduced fares for Greek workers

45% of normal economy one way for one way,
90% of normal economy one way for return.

f) Seamen's reductions based on government order fares

Within Europe 40% of one way normal economy for a one way journey.

g) School party groups

Groups of ten children for a return trip 85% of one way normal economy and for a one way trip 42,5 % of one way normal economy.

IV. On the basis of normal economy and first class

h) Spouse fares

50% of the full round trip fare for the spouse accompanying wife or husband (maximum ticket validity shall be 5 days).

This annex only reflects the major topics of the different fares and discounts. A large number of more general rules on for instance interlining, construction with other fare types, advertising, etc. exist which are all published under general rules in the Air Passengers Traffic guide (APT).