

DEPARTMENT FOR TRANSPORT

SINGLE EUROPEAN SKY

DRAFT COMMISSION REGULATION

LAYING DOWN A COMMON CHARGING SCHEME
FOR
AIR NAVIGATION SERVICES

IMPACT ASSESSMENT

NOVEMBER 2005

INTRODUCTION

1. The Department for Transport has conducted an impact assessment on the European Commission's proposal for a Common Charging Scheme for Air Navigation Services¹ for the purposes of assessing the impact of such a scheme on UK aviation stakeholders and to assist Ministers in determining the UK vote in the Single Sky Committee.
2. The Department is grateful for the assistance it has received from the Civil Aviation Authority, airports, airlines, air navigation service providers, the general aviation community and the Ministry of Defence in compiling the data for this study.

SINGLE EUROPEAN SKY

3. The single sky initiative was launched by the European Commission in 1999, and has been the subject of widespread consultations with the ATM/ATC community. Formal legislative proposals were tabled in late 2001, and the European Parliament and Member States reached agreement on them in December 2003.
4. A package of four regulations² entered into force on 20 April 2004, each making a specific contribution to the initiative.
5. Regulation EC/550/2004 (The Service Provision Regulation) sets out the framework for the development of a new common charging scheme which is intended to promote the development of appropriate incentives on both airspace users and airspace providers to improve the effectiveness of the European ATM System. This new common charging scheme will be developed on the basis of recovering the full costs for providing air navigation services for all phases of operation (en-route, approach and aerodrome) provided by air navigation service providers, for the benefit of airspace users.
6. Airspace users pay charges for the various air navigation services they receive, both on the ground and in the air. Although common principles have been developed for the en route segments, the charges for specific services vary significantly from one service provider to another. Given that most air navigation services are provided on a monopoly basis, lack of transparency means that users may not be confident that they are paying a fair price.
7. Therefore the Commission is looking to increase the level of transparency and efficiency of the air traffic management network in Europe and believes that a new charging scheme will lead to fairer charges and improved accountability. Service

¹ Draft Commission Regulation laying down a common charging scheme for Air Navigation Services.

² EC 549/2004 The Framework Regulation, EC 550/2004 The Service Provision Regulation, EC 551/2004 The Airspace Regulation, EC 552/2004 The Interoperability Regulation,

providers will be encouraged to co-operate with one another, perhaps combining some operations, thus achieving savings and service improvements.

8. The Single European Sky Regulations make it clear that one of the underlying principles for a new charging scheme is that air navigation service costs should be recovered according to the 'user pays' principle. The European Commission is of the firm belief that airspace users should pay for the costs they generate at or as close to as possible to, the point of use.

EC OBJECTIVES FOR A COMMON CHARGING SCHEME

- To harmonise the principles governing the establishment of charges for all phases of flight, while providing for the required level of flexibility.
- To create the necessary enforcement mechanisms relating both to the application of principles by States and air navigation service providers and the imposition of charges to airspace users.
- To achieve greater transparency, proper consultation and adequate information disclosure on cost bases for all phases of flight.
- To identify and justify cross-subsidies, where they exist.
- To provide for an adequate and periodic review of charges.
- To provide the necessary framework for incentives to National Service Providers for regional co-operation, including, but not limited to, the creation of Functional Airspace Blocks, financing common projects, providing increased capacity, improving the use of existing capacity.
- To provide the necessary framework for incentives to Airspace users for improving the use of existing capacity and supporting improvements of collective Air Navigation infrastructures.

BENEFITS OF A COMMON CHARGING SCHEME

9. The European Commission believe that air navigation services should be unbundled, opening up the market to allow different suppliers to offer particular services separately, with charges related to costs. It is proposed that service providers' performance – on delays, for example – will be published, helping to make them accountable to their customers and putting them under pressure to improve efficiency. The Commission argue that the new rules should make it possible for a clear comparison of air traffic service costs across Europe. The combination of performance incentives and mechanisms for accountability will stimulate much-needed investment in key air traffic control centres. In addition, service providers will be encouraged to cooperate with one another – perhaps combining some operations, where savings and improvements can be achieved.

- It will deliver savings and efficiency improvements by encouraging cross-border co-operation between service providers.
- Targeted EU funding and more transparent charging will allow resources to be applied to solving particular congestion problems, with Europe-wide benefits.
- The single European sky will help to control charges for air navigation services, currently over 5 % of airlines' total costs, with estimated annual savings of up to €1 billion.

ASSUMPTIONS

10. The European Commission produced its initial draft text for a Regulation laying down a Common Charging Scheme for Air Navigation Services on 14 April 2004. This has been used as the basis for the impact assessment and will provide the Department with a yard stick to measure its success in achieving the UK's aims.

11. The following assumptions have been made on this first draft text:-

- The Regulation applies to air navigation services provided to general air traffic;
- Member States shall establish charging zones which are consistent with air traffic operations, and which may extend beyond national borders.
- ANSPs are required to separate out the costs of air navigation services provided to general air traffic;
- The current en-route charging formula remains unchanged. $(\text{distance}/100) \times (\text{sq.root}(\text{MTOW}/50)) \times \text{Unit Rate}$.
- The Regulation applies to air navigation services provided at all airports with more than 10,000 annual chargeable commercial air transport movements;
- Airports will apply a common charging formula $(\text{MTOW}/50 \text{ to the power of } 0.7) \times \text{Unit Rate}$.
- Airports will be allowed to offset the costs of providing air navigation services with other commercial revenue (Single Till).
- The Regulation will not impose any significant increase in the overall costs to air navigation service providers at airports.
- Service providers will be required to disclose the costs of providing air navigation services.
- Economic regulation allowed

- General air traffic under two tonnes and military aircraft are exempt from paying air navigation charges.
- Member States will be responsible for financing the costs of exemptions.

METHODOLOGY

12. Ten airports were asked to contribute to the impact assessment on the basis that the information they provided would remain confidential and that the Department would only reveal the high-level data and no details on their individual costs. Eight of these aerodromes provided the requested information. Each of the aerodromes that participated in the study has estimated the current ANS charge for each of the selected aircraft types, and has calculated the charge that would result from the common charging formula contained in the regulation. The Aerodromes have assumed the costs to be recovered through aerodrome ANS charges will not change significantly as a result of the SES Regulation. Airports that currently adopt the Single Till approach were asked to assume that this practice would continue post SES. Therefore the impact assessment focuses on the impact of the common charging formula contained in the regulation which will lead to a redistribution of charges as it differs from the £/tonne basis used at most UK aerodromes at present.
13. It should also be noted that several of the regional airports do not levy a traditional landing fee or ANS charge on all users. Instead they have negotiated commercial contracts with their main airline users, and levy a per passenger charge that funds all airport provided services including runway and parking charges, security, ANS etc. These aerodromes have estimated the average current ANS charge for a range of aircraft types.
14. Several of the aerodromes that took part in the IA have peak/off-peak charging structures. In such cases the standard charge has been used as the basis for comparison. A list of the participating aerodromes and the aircraft types is shown below.

Aerodromes	Aircraft Types	Weight
London Heathrow	Cessna 310	2.5 tonnes
Manchester	Cessna 404	3.8 tonnes
London City	Beech 200	5.7 tonnes
Edinburgh	Learjet 45	9.3 tonnes
Cardiff	ATR42	17 tonnes
Belfast International	BAE146	43 tonnes
Newcastle	Airbus A319	64 tonnes
Leeds Bradford	Boeing 737-800	78 tonnes
	Boeing 757-200	108 tonnes
	Airbus A330-200	230 tonnes
	Boeing 747-400	390 tonnes

EN-ROUTE CHARGES

15. There are some minor changes to the existing Eurocontrol en-route charging scheme, these include making it possible for the scheme to allow for incentive schemes, for Member States to create charging zones and FABS. The current method for calculating en-route air navigation charges using the current Eurocontrol formula $((\text{distance}/100) \times (\text{sq.root}(\text{MTOW}/50)) \times \text{Unit Rate})$ remains unchanged.
16. The draft Regulation gives Member States the possibility to create one or more charging zones which may extend across the airspace of more than one State. The costs for each charging zone would have to be calculated according to the services provided within the charging zone and a separate unit rate established.
17. All Eurocontrol Member States' en-route ANS costs are currently recovered through a single national unit rate. Should any State choose to establish more than one charging zone under SES, there would be a redistribution of costs, and charges, between individual airspace users. Having more than one charging zone would lead to greater cost reflectivity, since charges to airspace users would be based on the cost of services provided in specific areas of airspace. However, costs will vary from one charging zone to another, which will mean a redistribution of costs between users, inevitably creating winners and losers.
18. The SES Charging Regulation specifies that certain categories of airspace user shall be exempted from air navigation service charges (see table below). This is no different to what happens now. However, SES requires the Member State to finance the costs of providing services to these aircraft, which is calculated according to the Eurocontrol formula. There is therefore an impact for Government

COST OF EXEMPTED FLIGHTS (2004 DATA)								
UK Military	Non UK Military	Search and Rescue	State Aircraft	Training	Checking of Navaids	< 2T	Circular	Total (2) to (9)
2,768,971	7,129,849	2,196	237,598	52,718	12,290	225,569	106,273	10,535,468

19. SES requires that these costs are separately identified and paid for by the State. In other words the Government, in this case the DfT and MoD would have to pay the service provider for handling these flights.
20. Based on 2004 figures this would result in a cost to the **MoD of approx. £9.89 million per annum** and a cost to the **DfT of approx. £636,000 per annum.**

AIRPORT ANS CHARGES

21. The European Commission is proposing a comprehensive air navigation charging scheme which extends the existing Eurocontrol en-route charging scheme for air navigation services to cover all phases of flight, including aerodrome control, approach control and terminal control services.
22. Assessing the impact of the Charging Regulation on aerodrome air navigation services (ANS) charges is not a straightforward matter. The UK is virtually unique in Europe in having a contestable market for the provision of navigation services at aerodromes. This makes it difficult to compare current aerodrome ANS charges with those that would result from the common formula in the SES Charging Regulation. There is no common basis for the calculation of aerodrome ANS at present. Most Aerodromes in the UK do not separately identify the costs of providing air navigation services, but choose to recover ANS costs through a landing fee, which is usually weight-based. Some regional aerodromes have contracts with individual airlines under which a passenger charge is used to fund all aerodrome related costs, including ANS. The Single Till approach is followed by many aerodromes, through which other commercial revenues are used to offset some, or all, of the costs providing ANS.
23. Eight aerodromes agreed to participate in the impact assessment. It became quickly apparent that most UK aerodromes had no clear understanding of how the SES charging would impact on them, particularly with regard to the transparency of their ANS costs. Almost all of the airports had some problems completing the tables and not surprisingly the results are not easy to compare and therefore should be treated with some caution. Regional Airports found it very difficult to quantify their 'existing' ANS charges, particularly by aircraft types, as this is not how they recover the majority of their costs now. The costs shown in the table below are averaged across the participating airports. The results, whilst only a approximation, give a fair reflection of what can be expected if aerodrome ANS charges are based on the common formula contained in the Regulation..

Tonnes	Aircraft Type	Average current costs	Average cost post SES	IMPACT	UK Aircraft Operators.
2.5	Cessna* 310	£9.05	£19.53	115.8%	General Aviation
3.8	Cessna* 404	£13.07	£26.17	100.2%	Business and General Aviation
5.7	Beech* 200	£19.60	£34.76	77.35%	Business and General Aviation
5.7	Twin Otter	£19.60	£34.76	77.35%	Loganair, Isle of Scilly Skybus

9.3	Learjet 45*	£32.23	£48.97	51.94%	Business Aviation
12.4	BAe 125	£18.13	£28.60	57.8%	Business Aviation
16.7	ATR 42	£24.78	£35.94	45%	Air Wales, Highland Airways
20	Embraer 145	£30.80	£42.04	36.5%	Bmi Regional, British Airways Citiexpress, Eastern Airways
43	BAe 146-200	£63.93	£67.93	6.3%	British Airways Citiexpress, Flightline, Flybe, Titan Airways, Scot Airways.
64	Airbus A319	£99.25	£92.50	-7.3%	Bmi, British Airways, EasyJet,
78	Boeing 737	£118.95	£104.98	-13.3%	Excel Airways, British Airways, EasyJet, bmibaby
109	Boeing 757	£163.83	£146.81	-11.6%	Britannia, DHL, First Choice, Monarch, MyTravel, Thomas Cook
230	Airbus A330-200	£266.08	£223.78	-18.9%	bmi, Monarch, My Travel, Thomas Cook.
390	Boeing747-400**	£327.60	£276.18	-18.6%	British Airways, Virgin Atlantic

* Averaged across the 5 airports used by general and business aviation, excluding Heathrow, Manchester and London City.

** Averaged across Heathrow and Manchester only

Airspace Users

24. In general terms the common formula will lead to an increase in charges for lighter aircraft, and a reduction for heavy aircraft. The equilibrium point varies from airport to airport, depending on the exact calculation of their existing charge, and of the mix of aircraft types using the aerodrome. Typically aircraft below 50 tonnes will attract higher charges while aircraft above this weight will benefit from lower charges.
25. Business and General Aviation will see their ANS charges increase between £10-£15 per movement for arriving and departing at airports. This could be argued a significant increase for very little benefit.
26. The biggest impact would be felt by the regional operators providing essential services from the rural communities to major airports and on thinner routes between

UK and European regional airports. Operators of smaller regional aircraft could face increases in their ANS charges of between £10-£20 per movement. This will represent a significant increase to those airlines operating with substantial fleets of smaller regional aircraft with a high volume of short-range domestic and regional services.

27. The impact of the Regulation on larger airlines with a range of aircraft types, including heavier aircraft, is likely to be negligible and in some cases would lead to a slight reduction in the overall ANS charges paid.

Exemptions

28. The draft Regulation requires the mandatory exemption of certain categories of aircraft from paying aerodrome ANS charges. This is not the case at the moment. As with en-route exemptions, the State is required to fund the cost of air navigation services provided to exempted aircraft at aerodromes covered by the Regulation. Airports were asked to provide details of the number of annual movements for each of the exempted categories. An average charge for each exempted movement was then calculated, based on the common formula in the Regulation. The table below shows the results based on 2004 actual traffic data provided by airports. These figures should be treated with some caution as not all airports were able to provide the required information in the same level of detail. For example, it is likely that some of the movements recorded under the Search and Rescue category include air ambulance and law enforcement movements, which are not exempt from charges.

Exemption Categories	2004 movements	Average ANS charge	Cost
Aircraft < 2 tonnes	298,810	£15	£4,482,150
State Aircraft	1,019	£100	£100,900
Search and Rescue	3,586	£48.97	£175,606
Total State Cost			£4,758,656

ANSPs

29. Article 12(3) of the Service Provision Regulation requires full transparency of ANSPs' costs and income for air navigation services provided. ANSPs in the UK operate in a contestable market, reinforced by the backdrop of a broadly competitive airports market, thus placing a significant discipline on aerodromes and their ANSPs to provide cost-effective services and to deliver required levels of service.

30. The market for air navigation service provision in the UK would be seriously damaged by the requirement for ANSPs to provide a breakdown of their costs according to type of service provided. This is because it will necessarily involve ANSPs revealing detailed cost information to their competitors. Full transparency of costs could also erode the disciplines and incentives that the competitive process would normally provide – i.e. if you can make an innovative cost reduction or quality enhancement you may be rewarded by winning more business from your competitors. If costs are forced to be revealed then it would be easier for competitors to replicate the cost advantage and the incentive to seek it out in the first place would therefore be lost.
31. This would also prevent the effective functioning of any future tendering process as it would require ANSPs to reveal their costs to potential competing bidders, potentially permitting another ANSP to undercut the preferred bid. In fact, it could act against cost reduction as bidders for new business may bid at a smaller discount to the existing price than they would in the absence of transparency about existing costs. The incentives for aerodromes to go out to competitive tender would also be reduced as the benefits from doing so would be likely to be small. All of which would seem to act to the detriment of users.

State Costs

32. The draft Regulation places an onerous obligation on the State, in the UK, the DfT, to set the National Unit Rates for both en-route and aerodrome. Although the DfT is responsible for setting the UK's current en-route Unit Rate, in reality NATS costs are set through the Regulator and for convenience the table is consolidated by NATS, so current DfT involvement is minimal. UK airports operate in a contestable market and therefore the DfT has no involvement in how airports' charges are set, and there is no prescribed formula for how they should charge for these services. As argued above, the existence of a contestable air navigation service provision market, and the demand behaviour exhibited by users, acts to constrain prices. The UK does not regulate markets where competition exists and therefore would argue against introducing regulation into markets that can be shown to be contestable.
33. If this draft Regulation is agreed in its current form then the DfT would have to employ a full-time HEO to work with airports, NATS and the CAA in determining UK Unit Rates. This would cost approximately **£40,000 per annum**.

34. Total State costs would be:

MoD en-route exemptions	£9,890,000
DfT en-route exemptions	£ 636,000
DfT aerodrome exemptions	£4,758,656
DfT staff costs	£ 40,000
TOTAL	£15,324,656

CAA costs

35. The costs tabulated below are based on the following assumptions:-

- DfT will delegate the majority of State tasks to the NSA, consistent with the policy that the State does not set charges for private sector companies.
- The task of consulting airspace users and publishing reports of such consultations will be delegated to the ANSPs in their designation under the Common Requirements.
- The regulation will be implemented with as light a touch as possible, consistent with CAA regulatory policy and BRTF principles.
- In the spirit of light touch regulation, the CAA will “audit” around five ANSPs per year for compliance with the regulation.
- The CAA will not intervene in incentivising ANSPs or airlines in a contestable market.

36. If it is necessary for the CAA to become involved in “assessing actual and forecast costs and service units”, then CAA costs are likely to increase significantly as each ANSP covered by the Regulation would have to be subjected to a regulatory regime resembling that currently applied only to NERL.

Article	Activity	Comment	Additional Cost
5(2)	Establish own costs & allocate to different charging zones	Done already; liable to increase depending on new NSA responsibilities	£5,000
8 (Annex I and II)	Ensure data provided meet requirement/ Complete tables in annexes	½ day per unit per year	£10,000
8	Validate MET costs	Already done for en route; new activity for airports	£1,000
12	Implementing & administering incentive schemes	The price cap element of NERL licence oversight costs about £100K	£0

		over the five year period – assuming the Competition Commission does not become involved.	
13	Set unit rate for each charging zone <i>Assumes CAA will collect tables, agree and publish proposed unit rates</i>	CAA already publishes Eurocontrol en route unit rates Additional cost for publishing aerodrome unit rates	£3,000
13,18	Inspect ANSPs' records	5 units per year; 2 days per unit including travel	£5,000
15	Ensure charges promptly & fully paid	Legislative provisions exist already; airport operators have powers under 1982 Act to enforce recovery. No increase in CAA workload foreseen	£0
16	Consult airspace users on 'charging policy', organise a 'consultation hearing' and put all documentation at disposal of all.	Would delegate to ANSPs through designation Some oversight role	£2,000
17	Publish reports from consultations	Would delegate to ANSPs through designation	£1,000
17	Establish & operate appeal mechanism	No existing mechanism for ANS charges	£27,000 per hearing
			£54,000

CONCLUSIONS

- The calculation of en-route charges using the Eurocontrol formula remains unchanged. Therefore there are no additional costs for airspace users.
- The existing exemptions for en-route air navigation charges remain unchanged. However, the Member State will be required to meet these costs. This will result in costs to the MoD of approx. £9.89 million and the DfT of £0.7 million per annum.
- The extension of the scheme to aerodromes will increase bureaucracy and costs for airspace users. Regulatory costs will increase by approx £54k per annum on the assumption that there will be one appeal a year. However, if there is more than one appeal, then this figure will increase by £27k per extra hearing.
- Increased transparency will jeopardise the existing contestable market that exists for the provision of ANS at aerodromes.
- A common charging formula at aerodromes will lead to significantly increased costs for General Aviation, Business Aviation and Regional Airlines.
- The extension of the exemption policy to aerodromes will cost the DfT approx £4.75 million per annum. The bureaucracy of such a proposal, particularly in time and effort recovering charges from the States could lead to some airports denying access to these categories of aircraft.