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**Communication from the Commission to the Council, the European Parliament, the  
European Economic and Social Committee and the Committee of the Regions**

**An action plan for airport capacity, efficiency and safety in Europe**

**Summary impact assessment**

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## Executive summary

### Introduction

Boosted by liberalisation, economic growth and market integration, air traffic in Europe is a rapidly growing sector: the number of passengers on internal Community flights increased at an average annual rate of 4.9% over the period 1995-2003, with passenger traffic growing by 5.8% in 2005. Overall, the number of Instrument Flight Rules (IFR) flights is expected to double by 2025.

Despite a 60% potential capacity increase of the airport network, more than 60 airports will become congested in the next 20 years. Should no further action be taken, the top 20 airports will be saturated at least 8-10 hours per day due to capacity imbalance. To accommodate this demand, distribution patterns could be adapted by using latent capacity at secondary airports or, alternatively, creating reliever airports (up to 10 new major airports and 15 medium sized airports) in the vicinity of their congested counterparts would be required.

While the Single European Sky initiative is providing structural answers to the issue of the "saturation of the skies", airport capacity (runway, airside and terminal capacity) is now widely recognised as being the future bottle neck of the air transport system. Take-off and landing capacity is at congested hub airports a pressing problem that has negative consequences for the global competitiveness of European airlines.

### Objectives

The **general objectives** of the Commission Communication are supported by other initiatives such as the creation of the single European sky. The general objectives are:

- (a) Develop capacity to cope with growing demand:
  - Promote a more efficient use of the existing network capacity of European airports;
  - Increase the network capacity of European airports;
  - Improve access to airports;
- (b) Maintaining or increasing safety at airports;
- (c) Promote environmental sustainability;
- (d) Obtain a cost effective and efficient air transport system.

The **specific objectives** are those laid down in the Commission communication, which constitute the targets that should be reached through the action plan so that the general objectives can be achieved. These specific objectives can be summarized as:

- (a) Encourage the better use of the airport network;
- (b) Unlocking the latent capacity at individual airports;

- (c) Increasing individual airport capacity (with existing runways) during normal and adverse operating conditions;
- (d) Enhance aircraft departure punctuality;
- (e) Promote railway connections to network relevant airports;
- (f) Improve safety during normal and adverse operating conditions;
- (g) Minimise impacts on the environment (noise and emissions).

The **operational objectives** are related to the measures to be assessed in the proposed action plan. These include:

- (a) Improving measurement of airport capacity and information circulation;
- (b) Improving co-ordination between airports so as to improve capacity planning (on a network basis);
- (c) Encouraging the use of other transport modes i.e. facilitating substitution of air to rail where relevant;
- (d) Facilitating decision-making and creating incentives for the better use of existing airport infrastructure by improving the regulatory framework;
- (e) Promoting the use of state-of-the art surveillance and control systems;
- (f) Encouraging the uptake of new procedures and technologies;
- (g) Promoting new approaches on environmental protection around airports;
- (h) Examining the criteria for possible financial support for airports (EU, EIB etc.).

### **Consultation and expertise**

The Commission undertook a stakeholder consultation process during the last quarter of 2005 in order to gather comments and suggestions from interested parties. This exercise was in accordance with the minimum standards for consultation as defined in the Communication from the Commission of 11 December 2002 [COM(2002) 704].

The policy choices stemming from this consultation are evaluated in this impact analysis. Beyond the 'do not intervene' option, ten measures were analysed under three broad policy options.

### **Policy options**

The first policy option intends to promote voluntary actions by industry to facilitate the better use of existing infrastructures. Air/rail ticketing could have a positive impact on airport operations.

The efficiency of air-rail ticketing could be increased by taking low cost accompanying measures such as obtaining IATA codes, which improve the level of services. Measures requiring high investment, although plausible, should be evaluated for implementation on a case-by-case basis. Efficiency of local capacity implementation plans (LCIP) to unlock latent capacity could be increased if all network relevant aerodrome operators participated on a voluntary basis to this medium term planning process. The content of the Status Reports of the Performance Review Commission could be enriched by more traffic and capacity planning related information.

The second option aims at improving use of existing infrastructure through a co-ordinating role at Community level. This option provides for six measures. Firstly, airports should establish coherent capacity assessment methodologies. This would lead to the establishment of a Community wide capacity inventory and benchmarks for airport operators. Secondly, early dissemination of relevant research results on procedures and technical progress could speed up the pace of technological innovation. Thirdly, the necessity for monitoring airport performance should be examined, also by promoting implementation of best practices for airport capacity management. Fourthly, all stakeholders involved in the operational management of airports should formalise their links in a collaborative decision-making framework to improve punctuality of traffic flows. Punctuality leads to a more efficient use of the whole air transport system. Fifthly, Advanced-Surface Movement Guidance and Control Systems (A-SMGCS) greatly contribute to situational awareness of pilots, especially during adverse weather conditions. Finally, sufficient priority of financing of inter-modal projects under TEN-T funding would improve efficient use of airport access infrastructure.

The third policy option promotes the provision of new infrastructure under which two measures were analysed. Benchmarking and dissemination of information (guidelines) on environmental protection policies could reduce the environmental nuisance of air transport. The European Investment Bank could start playing a more active role in financing airport projects through the JASPERS initiative.

### **Analysis of impacts**

Most measures presented positive impacts in terms of capacity and reduction of delays. Safety is positively impacted by air-rail ticketing, rail access to airport, Local Convergence Implementation Plan (LCIP), implementation of validated research results, the introduction of Collaborative Decision-Making (CDM) and Advanced-Surface Movement Guidance and Control Systems (A-SMGCS). Other measures were safety neutral. The impact which varies the most (from the positive to the negative) relates to the social and environmental impact. On the basis of limited quantitative data, it is reasonable to assume that there is a good balance between the expected costs and benefits. Most of the measures are expected to yield early effects (especially their positive impacts/benefits).

### **Comparing the options**

The analysis confirmed the need to strike a right balance between the measures which could all be implemented in the short term. Three of these measures could become mandatory: while common capacity assessment methodologies are proposed to become mandatory in the short term period, Advanced-Surface Movement Guidance and Control Systems could become mandatory from the medium term and collaborative decision-making in the long-term. Overall, all of the proposed measures provided positive impacts. The measures will be used to provide an effective action plan for tackling airport capacity within a given time frame.

## **Monitoring and evaluation**

The analysis performed within the current assessment confirmed that one single solution could not solve the problem of the lack of airport capacity in Europe. Rather, the solution is to be found in adopting a combination of measures some of which are intrinsically linked to one another. The Commission will ensure that the action plan is implemented within the given time frame and will continue to monitor the evolution of the situation of airport capacity in Europe.