



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 10.10.2001  
COM (2001) 564 final

2001/0235 (COD)  
2001/0236 (COD)  
2001/0237 (COD)

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE  
EUROPEAN PARLIAMENT**

**on the implementation of the Single European Sky**

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the provision of Air Navigation Services in the Single European Sky**

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the organisation and use of the airspace in the Single European Sky**

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the interoperability of the European Air Traffic Management network**

(Presented by the Commission)

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE  
EUROPEAN PARLIAMENT**

**on the implementation of the Single European Sky**

## **1. Introduction**

Document COM (2001)123 setting out an Action Programme on the creation of the Single European Sky defines the objectives and the working methods for the reform of air traffic management in Europe. This document puts forward the proposals on the specific areas of the action programme.

These proposals translate, as appropriate, into Community law the conclusions of the High-Level Group on the creation of the Single Sky, thereby allowing a more integrated and efficient approach towards the implementation of the Single Sky in the line with the approach followed for the completion of the single market and for the Euro.

Their aim is to provide a clear role for air traffic management within the social and economic development of the European Community, thereby departing from its existing fragmented and non-transparent functioning. Various actors involved in air traffic management need account to airspace users and air passengers for their actions. The clarifications of their roles and responsibilities will improve safety and efficiency.

The recent tragic events in the United States of America risks to seriously impact on the smooth development of air transport. A slow down or even a decrease in air traffic might initially alleviate the situation of chronic congestion and delay in Europe. But these facts do not diminish but rather reinforce the need for a Single European Sky. The prospects of a crisis in the aviation industry results in additional pressure on other related sectors, such as traffic management, to reduce their cost and improve efficiency.

The creation of the Single Sky also facilitates security management in particular during the operation of flights. The harmonisation and integration process leads to a tighter co-ordination between air navigation service providers and other operators, including military. Changes to orderly and regular traffic flows resulting from unexpected events or security measures can be anticipated and managed in a more effective way.

In the light of previous considerations, the following proposals provide credible means to achieve safety, capacity, efficiency and even security gains that are consistent with the growth expectations of the European Community.

## **2. Proposal for a regulation of the European Parliament and of the Council on the provision of Air Navigation Services in the Single European Sky**

2.1. The Community must set up a regulatory framework meeting users' needs as fully as possible. The Community framework must ensure the same obligations and offer the same opportunities to all air navigation service providers. It must address relations between service providers and the regulator (transparency and supervision), between the various service providers (co-operation), between these service providers and airspace users (consultation) and between service providers and other operators, including the military (co-ordination). It consists of the application of three concepts: a system of authorisation for the provision of air navigation services, which enables the application of the rules laid down under Community law; a compliance review mechanism for supervising and enforcing such rules by the Member States authorities; arrangements and procedures for payment of air navigation services.

2.2. Whilst the development of the regulatory activities will be at Community level, there should be an effective compliance review mechanism, in particular to supervise the

activities of service providers. The legislative proposal leaves compliance review primarily to national authorities. To this end, Member States will have to designate supervisory authorities. However, the measures proposed also ensure that the Community has enforcement ability to deal with cases of European significance and to supervise the conduct of compliance review and enforcement at national level. Member States, regulators, ministries of transport or civil aviation authorities should, on their own initiative or upon application by interested parties, review compliance of air navigation service providers with Community rules and take appropriate enforcement action, if necessary. The Community legislation will establish a link between domestic compliance review and enforcement and review processes at European level.

- 2.3. The exercise of powers by Member States requires that the supervisory function is separated from the operational function, in order to ensure that there are no conflicts of interest. No organisation providing a service must be responsible for such a supervisory function, either of itself or of any other body providing services. This regulation proposes as a minimum requirement the functional separation of supervision and operations, i.e. the bodies responsible for supervision and operations should be at least separated and distinct from each other at functional level. However, when reporting on the impact of the Single Sky initiative five years after its entry into force, the Commission will assess whether this approach to separation is still appropriate.
- 2.4. Review of compliance requires adequate inspection regimes to ensure that safety will not be compromised, rights and obligations of service providers are satisfactorily met and requirements for service provision are complied with. Primary responsibility for carrying out such inspections lies with Member States and their competent administrations, that is the supervisory authorities. When Member States have no sufficient resources and skills to discharge this role, they may rely upon specialised private and public organisations with extensive experience in the safety, financial and quality sectors. For this purpose, the legislation proposes to create a network of recognised organisations able to inspect and monitor service providers. Appropriate standards will have to be decided upon to qualify these organisations who carry out the inspections and surveys in question on behalf of Member States. It will also be important that the same standards are maintained throughout the Community and that there are no variations between performances of recognised organisations so that supervisory authorities can refer to any of such organisations located in the Community. Service providers will then be assessed on an equal footing therefore ensuring their services are of equally high levels of quality, which is a prerequisite for their acceptance from all Member States.
- 2.5. All legislative proposals have a strong link to safety issues. Safety is one imperative which must be maintained and reinforced in the regulatory approach put into place. All the measures proposed hereinafter take account of this absolute constraint to sustaining and fortifying safety standards. The safety issue is addressed at three distinct levels: the definition of safety requirements; the assessment of the proper implementation of such requirements and the exercise of the necessary preventive and corrective function on the basis of the safety performance of service providers, including the implementation of safety nets.
- 2.6. With regard to the definition of safety requirements, ultimately the Commission will have to consider how to involve the European Aviation Safety Agency (EASA) in

the safety aspects of air traffic management. For the time being the Commission proposes to implement safety measures based on the EUROCONTROL Safety Regulatory Requirements (ESARRs) drawn up by the SRC<sup>1</sup>, where they are suitable to support binding regulations.

- 2.7. In air traffic management, there is no such system of inspection, certification and surveillance of operations, as in aviation. The continued process of corporatisation of service providers and their increasing autonomy calls for a revised approach for Member States to discharge their responsibility for the safe and efficient conduct of air navigation services. The Commission proposes to establish a system for both initial authorisation and the continued surveillance of the service providers to ensure that the required standards of operation are maintained. Like in the case of issuance of Aircraft Operator Certificates (AOC), the granting of authorisations gives the Community and Member States the capability of ensuring the protection of public interest. It will also allow for the exercising of indirect influence and control upon the provision of services without encroaching upon the direct responsibility of service providers for their safety. This approach will support implementation of the safety regulations by the Community and Member States and establish a framework guaranteeing that the scenarios for releasing extra capacity meet the safety requirements.
- 2.8. To allow preventive and corrective actions, it is necessary to dispose of suitable information on safety. The Commission will propose to establish a mandatory, harmonised occurrence-reporting system for service providers<sup>2</sup>. It will be based on a non-punitive system for reporting by air traffic controllers. This system will be part of the system of authorisation described in the following paragraph 2.12. It will be subject to the relevant Community provisions on confidentiality and the protection of personal data.
- 2.9. Finally, the Commission proposes that the strengthening of the standardisation framework concerning equipment and systems used in air traffic management gives priority to the harmonisation and, where appropriate, mandatory introduction of airborne and ground safety tools<sup>3</sup>. These alerting devices permit to detect occurrences or potential occurrences thereby contributing to avoid collision, controlled flight into terrain (CFIT) and other unsafe situations.
- 2.10. Air traffic controllers have irreplaceable expertise on how the systems and techniques work. At the moment this expertise is not fully harnessed. Air traffic

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<sup>1</sup> At the moment these regulatory requirements can, in theory, be incorporated into Community law under Council Directive 93/65/EEC of 19 July 1993 on the definition and use of compatible technical specifications for the procurement of air-traffic-management equipment and systems; however, since the objective of this Directive is to lay down the conditions for calls for tender for equipment procurement, the actual possibility of incorporating ESARRs into Community law is limited to safety requirements regarding equipment and systems.

<sup>2</sup> Requirements for such a system will be based on the provisions of Council Directive 94/56/EC of 21 November 1994 establishing the fundamental principles governing the investigation of civil aviation accidents and incidents and the EUROCONTROL Safety Regulatory Requirements on reporting and assessment of safety occurrences in air traffic management (ESARR 2).

<sup>3</sup> These tools include Minimum Safe Altitude Warning, Short Term Conflict Alert, Medium Term Conflict Detection, Area Proximity Warning, Surface Movement Guidance and Control Systems, Airborne Collision Avoidance Systems)

controllers and air navigation staff in general should be more closely involved at two levels:

- in the evaluation of new systems and techniques, for example in the diagnosis mechanism;
- in the discussions on the general framework governing air navigation, by extending to the air navigation sector the Europe-wide social dialogue already existing in other sectors of air transport.

2.11. The shortage of air traffic controllers is expected to become more acute in the years ahead, due to the age pyramid in this profession. The solution to this problem is a matter for the service providers and depends on the performance requirements established by Community regulation. However, the Community can contribute, liaising with EUROCONTROL, towards identifying the reasons which militate against recruitment of new controllers. Besides the number of controllers, the High Level Group's report highlights another worrying phenomenon: the disparities in procedures and training as well as in licensing which, in practice, rule out any real mobility of staff within Europe and prevent any flexibility. The Commission will propose solutions to overcome this lack of harmonisation at Community level.

2.12. In this context, the Commission proposes the establishment of an authorisation system for air navigation service providers, setting the minimum conditions for exercising this function at European level. However it will be left to the Member States to implement the system. This should make it possible to enforce the overriding Community principles and to harmonise the essential conditions which must be imposed on service providers. Member States' right to decide the statutes and structure for providers best suited to their specific national conditions will also be simultaneously respected. This should also facilitate co-operation between service providers. In order to enable transnational service provision, the system of authorisation is based on the delivery of a harmonised authorisation and on the mutual acceptance of authorisations granted by Member States. Further provisions are included to allow a reasonable period of time for existing service providers to comply with the terms of the system of authorisation. The transparency of the provision of services is finally strengthened by the development of adequate accounting systems to report costs for each separate service and enable comprehensive audits.

2.13. With regard to air traffic services<sup>4</sup>, Member States retain their power to designate the service providers which have to operate under monopoly conditions within a specific airspace over their territory. However, the system of authorisation enables Member States to designate providers established in other Member States. Further co-operation and integration between service providers, especially in the upper airspace, is promoted by the creation of control areas across national boundaries<sup>5</sup> and the subsequent designation by Member States of service providers entitled to operate in such areas. In this light, existing regional service providers, such as the EUROCONTROL Maastricht Area Control Centre would have to be adequately

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<sup>4</sup> Provision of air traffic control during all phases of flight.

<sup>5</sup> Functional blocks of airspace in the proposal for a regulation on the organisation and use of the airspace (see Annex 2).

addressed<sup>6</sup>. Because of the close link of this activity with military interests, and the lack of third country markets, an ownership provision will prevent non-EU interests from controlling these services except where reciprocity is guaranteed. A Community framework applicable to ancillary services<sup>7</sup> is also defined, based on the principles laid down in the EC Treaty.

- 2.14. In parallel, the Commission proposes amendments, within the context of the common route charges system of EUROCONTROL, to the structure of charges for use of airspace. This will add efficiency incentives for service providers and incentives to optimise the capacity of the system as a whole for providers and users.
- 2.15. Developments in air traffic have enabled a number of air navigation service providers to become more autonomous in the managerial and financial domains. The majority of the Member States have transferred the responsibility for provision of services to agencies under exclusive rights. Such bodies, which are largely autonomous, and in principle self-financing, remain under the overall jurisdiction of national administrations in terms of their level of performance and charges. In these cases regulation is usually requested because of monopolistic conditions to align behaviours of service providers with public objectives to maximise general economic welfare through the setting of the appropriate price level in respect of the quality and quantity of services to be delivered.
- 2.16. To a significant extent, legislation providing for regulation of economic aspects of service providers does not yet exist in the Member States. However they have adopted the ICAO principles in relation to the establishment of charges for the provision of air traffic services<sup>8</sup>. Those principles are in turn embodied within the EUROCONTROL principles<sup>9</sup> and with which EUROCONTROL Member States consider themselves bound. But neither ICAO nor EUROCONTROL have compliance mechanisms or an enforcement power. They have not been subject to regulation through the introduction of rewarding/or penalising incentives to encourage an efficient and effective provision of air navigation services. In addition, ICAO and EUROCONTROL regulations cannot directly affect service providers, when autonomous, or airspace users.
- 2.17. Therefore it is of the utmost importance to introduce incentives on investment and management. The incentives are defined in respect of helping supply meet demand through financial rewards and penalties. They shall be devised so as to be equitable between airspace users and service providers, in order to reach better co-operation amongst them. That is why a charging regime is needed to ensure an efficient, transparent and cost-related air traffic management system. Furthermore, incentives will also have to ensure that air traffic management policy is consistent with environmental and general transport policies.

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<sup>6</sup> Pursuant to Article 1(2) of the “Agreement relating to the provision and operation of air traffic services and facilities by EUROCONTROL at the Maastricht Area Control Centre”, Contracting States to this agreement retain their competence and obligations in respect of regulations, rule-making and airspace organisation.

<sup>7</sup> Provision of communication, navigation and surveillance infrastructure, and meteorological services for airspace users, search and rescue services and aeronautical information services.

<sup>8</sup> Article 15 of the 1944 Chicago Convention on International Civil Aviation and Document 9092/6.

<sup>9</sup> “Principles for Establishing the Cost-base for Route Facility Charges and the Calculation of the Unit Rates” – Doc. N° 99.60.01/1).

2.18. The increase in the capacity of Europe's air traffic control system will require funding exceeding the resources currently available from Community programmes. Solidarity between users should make it possible to raise the funding needed by allocating some of the en route charges paid by airlines under the EUROCONTROL common route charges system to these projects, inter alia with the aid of measures to reshape this route charges system to include criteria reflecting attainment of common policy objectives. This allocation would not exceed the costs saved as a result of the improvements in the efficiency of the system. The Commission will examine the feasibility of allocating some of the en route charge (therefore with no impact on the Community budget) for measures to increase the capacity of Europe's air traffic control system, with a view to carrying out projects of common interest between 2002 and 2005.

### **3. Proposal for a regulation of the European Parliament and of the Council on the organisation and management of airspace**

3.1. The Single European Sky must also be conceived as a single airspace without frontiers. The first thing which this harmonisation implies is the adoption of a basis for organising the upper airspace for all Member States and ensuring consistency between the national organisations responsible for the lower airspace. This requires that a unique flight information region<sup>10</sup> is created by merging the 15 regions into a single portion of airspace. Therein air traffic services will be provided according to the same rules and procedures. As a first step the Commission proposes to take this important move with regard to the upper airspace where the majority of international flights are operated. To achieve this, a common airspace design and strategic management at European level with the support of EUROCONTROL is needed.

3.2. The creation of a single flight information region in the upper airspace allows the reconfiguration of such airspace into control areas. Where appropriate, these will be designed across national boundaries. The design of these areas gives an opportunity to establish functional blocks of airspace where control responsibility is assigned optimally and in line with operational requirements to one, or a group, of service providers. This provides for a more efficient use of airspace, systems and manpower. Thus reducing the costs for airspace users. At the same time, uniform and coherent upper airspace planning has to be harmonised with the developments in the lower airspace. The Commission expects proposals, technically co-ordinated to ensure operational cohesion, on the appropriate size and location of functional blocks of airspace by service providers in conjunction with Member States. These proposals will be taken into account by the Commission, involving EUROCONTROL, with a view to a final decision on the suitable configuration of airspace, that is the minimum number of airspace blocks consistent with overall system efficiency.

3.3. In conjunction with the proposal to create a single upper flight information region; the Commission proposes:

- the harmonisation of airspace categories, inter alia for developing the architecture of this airspace and route and sector design and for ensuring a

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<sup>10</sup> A Flight Information Region (FIR) refers to a portion of the airspace where air traffic services are provided. Traditionally lateral limits coincide with the borders of states; each FIR is subject to specific rules by the state responsible.

supply of reliable and complete information for regulators and airspace users alike;

- organisation and management of airspace with a view to allowing allocation of sectors to service providers and organisation of transfers of airspace between providers; the delimitation of the sectors of airspace allocated to service providers will have to be consistent with the definition of the airspace adopted at European level;
- rules for organising flow management, including better planning, rules on priority-setting in the event of congestion, relief routes and a crisis mechanism; EUROCONTROL's existing Central Flow Management Unit is a useful tool which will have to be developed by supporting its tasks and mandate with the adoption of such rules in Community legislation;
- mechanisms for more disciplined use of airspace, to integrate airports into airspace management and improve co-ordination between airport and airspace slots.

3.4. Use of airspace must be organised in a manner recognising the specificity of military uses. Without impinging on defence imperatives, efficient use of airspace warrants closer co-ordination between the two categories of user: civil and military. A first step to achieve this is the full and coherent implementation of the Flexible Use of Airspace<sup>11</sup> concept by all Member States in the upper airspace and, at a second stage, in the lower airspace. In order to facilitate a uniform and optimal application of such a concept, the Commission proposes to establish the criteria for its application based on principles of uniformity, completeness, confidence, priority, sharing, simplicity and transparency. The Commission also promotes a tighter co-operation between civil and military. This will contribute to reinforce the security in the use and management of airspace against any potential intruder.

3.5. Efficient use of airspace can only be realised if seamless and efficient air traffic management is provided within national airspace and beyond. Airspace management is one of the main functions of air traffic management. Civil and military service providers are complementary partners in the air traffic management system. The Flexible Use of Airspace and European airspace management, therefore, will not be as efficient as required without operational and technical interoperability between civil and military service providers. Across the Community, civil-military air traffic service provision is not organised uniformly. To improve such interoperability, the Commission encourages Member States and EUROCONTROL to take appropriate measures.

#### **4. Proposal for a regulation of the European Parliament and of the Council on the interoperability of the European Air Traffic Management network**

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<sup>11</sup> The Flexible Use of Airspace concept developed by EUROCONTROL is an airspace management concept currently applied in the European Civil Aviation Conference area and based on the fundamental principle that airspace should no longer be designated as either pure civil or military airspace, but rather be considered as one continuum in which all airspace users have to be accommodated to the extent possible

- 4.1. The Community has decision-making mechanisms allowing for harmonisation and standardisation at European level. To achieve this, the Commission proposes a text enshrining the principle of standardisation in the field of air traffic management, on its own initiative (subject to compliance with the international commitments already given). The objective is to put in place an instrument which will be effective and comprehensive. But it must also be rapid and flexible to allow harmonised Europe-wide definition and implementation of the technical regulations necessary. The “Single Sky Committee”, which should replace, inter alia, the existing committee set up by Directive 93/65<sup>12</sup>, will be indispensable for the success of this action<sup>13</sup>.
- 4.2. The proposed regulatory approach foresees three different levels:
- The adoption of essential requirements as a mandatory reference for all stakeholders engaged in the development, production and operation of systems. In particular it should ensure interoperability and the seamless provision of air navigation services; these requirements give enough information to allow stakeholders and national authorities to interpret them in the same way;
  - The establishment of implementation rules to enforce the above requirements, where appropriate, in the form of specific requirements by which stakeholders are to be bound. The objective of this level is to secure compliance with operational and technical developments when this is required by their cross-border nature and therefore the need for integrated operations. To ensure commonality of action, the implementation rules may also prescribe a uniform target date of entry into force of new concepts of operation or technical advances to be imposed on all operators concerned. ICAO and EUROCONTROL Standards can be associated with this level.
  - The drafting of European standards and/or EUROCONTTROL technical specifications representing the lower level of the regulatory process and implying the consensual agreement of stakeholders on standards of voluntary application.
- 4.3. Procedures to elaborate the above requirements and standards must reflect their mandatory or voluntary nature. Therefore, the Commission proposes that implementation rules are established on the basis of the work carried out by EUROCONTROL, notably relying on the future regulatory process of EUROCONTROL Notice of Proposed Rule-Making (ENPRM). With regard to European standards, in consistency with the Community approach<sup>14</sup> to standardisation, they are established by consensus, subject to public inquiry and approved by recognised European Standardisation Organisation, in collaboration with Eurocae<sup>15</sup>. This also carries with it the obligation to be implemented unchanged at national level with the status of a national standard and withdrawal of any

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<sup>12</sup> Council Directive 93/65/EEC of 19 July 1993 on the definition and use of compatible technical specifications for the procurement of air traffic management equipment and systems.

<sup>13</sup> See also Report of the Commission on application of Council Directive 93/65/EEC (COM(1999)454 final of 1.10.1999)

<sup>14</sup> Council Resolution of 7 May 1985 on a new approach to technical harmonisation and standards.

<sup>15</sup> The European Organisation for Civil Aviation Equipment (EUROCAE) is a non-profit making European Association, established in 1963, with members from national aviation authorities, equipment manufacturers and airlines.

conflicting national standards<sup>16</sup>. In certain specialised fields, EUROCONTROL may develop technical specifications, particularly on operational matters where co-ordination between service providers is needed.

- 4.4. At product level, manufacturers are required to make a declaration of conformity with essential requirements. The conformity with European standards creates a presumption of conformity to essential requirements. The conformity assessment relies on a modular approach, as specified in Council Decision 93/465/EEC<sup>17</sup>. Different modules for conformity assessment are available for utilisation according to the risks associated with the products concerned. These vary from a module which leaves the responsibility for conformity assessment to the supplier (self-certification) up to modules which require strict quality controls in order to assure compliance. The proposed approach will allow, once a product has achieved its declaration of conformity in its own Member State, the free circulation of such a product in the internal market. Thus creating the conditions for a competitive environment among manufacturers.
- 4.5. With regard to the acceptance of systems before operation, air navigation service providers must state their conformity with essential requirements by submitting a declaration to national supervisory authorities. To this end, air navigation service providers may avail themselves of the services of notified bodies and recognised organisations when so required by implementation rules. The proposed approach will enable monitoring of the development of equipment and systems to verify its compliance with essential requirements and associated implementation rules. The approach considers transitional aspects linked to the lack of implementation rules and European standards for many systems.
- 4.6. The creation of a common, integrated airspace means being able to develop, at European level, the solutions which are best both technically and commercially and which are best suited to the needs of airspace users and passengers in general. The Community can provide decisive support in this field, by optimising its own financial aid procedures through the trans-European network (TEN) programme and the EU's fifth Framework Programme (FP) on research and development (1998-2002). In its proposal for the next FP on research (2003-2006), the Commission has included aeronautical research as a priority particularly with a view to increasing capacity and safety in the air transport system to support the implementation of the Single European Sky. This confirms the recommendations made recently by a Group of Personalities on Aeronautics, who identified air traffic management as one of the main factors preventing growth in aeronautics<sup>18</sup>, as well as the targets of the *eEurope* 2002 Action Plan, agreed by Heads of State and Government in Feira. In this way the Commission plans to provide a framework for projects of European interest, for

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<sup>16</sup> This proposal represents a significant move from the present situation where EUROCONTROL still draw up functional and technical specifications of a voluntary nature. However, these specifications are rarely used consistently in Member States as they are published and the effectiveness of this process is undermined by the lack of transparency and balance between stakeholders in the definition of technical texts. Furthermore, they often mix elements of mandatory and voluntary application.

<sup>17</sup> 93/465/EEC: Council Decision of 22 July 1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonisation directives.

<sup>18</sup> See on the Report of the Group of Personalities: "European Aeronautics: a vision for 2020 Meeting society's needs and winning global leadership", January 2001

example on satellite navigation (Galileo), data processing and communication and the supply of aviation data and planning tools.

## **5. Conclusion**

- 5.1. The Community framework offers instruments for implementing the lines of approach advocated by the High Level Group on the Single European Sky. The creation of the Single Sky calls for measures of the same type incorporated in the creation of the single market. However, development of these measures requires technical expertise not available within the Commission departments but which will be provided, within the framework of arrangements with EUROCONTROL. It also requires consideration by the European Council for the possible setting up of a framework on military co-operation.
- 5.2. The Commission therefore proposes to the European Parliament and the Council to adopt the enclosed proposals for regulations. The Commission will also take all appropriate initiatives for setting up the institutional framework necessary to organise military co-operation.

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the provision of Air Navigation Services in the Single European Sky**

**(Text with EEA relevance)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 80(2) thereof,

Having regard to the proposal from the Commission<sup>19</sup>,

Having regard to the opinion of the Economic and Social Committee<sup>20</sup>,

Having regard to the opinion of the Committee of the Regions<sup>21</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty<sup>22</sup>,

Whereas:

- (1) Member States have restructured, to varying degrees, their national air navigation providers by increasing their level of autonomy and freedom to provide services. It is increasingly necessary to ensure that minimum public interest requirements are satisfied under this new environment;
- (2) The report of the High Level Group on the Single European Sky has confirmed the need for rules at Community level to distinguish between regulation and service provision and to introduce a system of authorisation and a charging mechanism to stimulate cost-effectiveness;
- (3) Regulation (EEC) XXX/XX of the European Parliament and of the Council lays down the framework for the creation of the Single European Sky<sup>23</sup>;
- (4) In order to create the Single Sky, measures should be adopted to ensure the safe and efficient provision of air navigation services consistent with the organisation and use of airspace as provided for in Regulation (EEC) XXX/XX [*airspace regulation*]; the establishment of a harmonised organisation of the provision of such services is important to adequately respond to the demand of airspace users and safely and efficiently operate air traffic;

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<sup>19</sup> OJ C [...], [...], p. [...].

<sup>20</sup> OJ C [...], [...], p. [...].

<sup>21</sup> OJ C [...], [...], p. [...].

<sup>22</sup> OJ C [...], [...], p. [...].

<sup>23</sup> OJ C [...], [...], p. [...].

- (5) The control of compliance of air navigation service providers and other operators concerned with Community requirements, as established on the basis of this Regulation, is predominantly a task for the Member States; it requires adequate independence of the authorities exerting such a control from air navigation service providers;
- (6) Member States may entrust to recognised organisations the verification and certification of the compliance of air navigation service providers and other operators concerned with Community requirements, as established on the basis of this Regulation;
- (7) Smooth operation of the air transport system also requires uniform, high safety standards of air navigation service providers;
- (8) Solutions shall be proposed to overcome the lack of controllers through the improvement of the procedures for training and licensing;
- (9) Whilst guaranteeing the continuity of service provision, a common system should be established for authorising air navigation services which constitutes a means for detailing the rights and obligations of air navigation service providers;
- (10) The authorisation system should provide for the means to control access to the activity. It should take into account the need to facilitate the introduction of new services as well as new modalities of service provision; therefore authorisations should provide for the most adequate control compatible with the fulfilment of applicable requirements; it is also important to define non-discriminatory requirements in relation to the location and control of a service provider, in particular of air traffic services, applying for an authorisation;
- (11) Conditions attached to authorisations are necessary in order to attain public interest objectives for the benefits of airspace users and the air transport passengers; they should be objectively justified in relation to the service concerned and should be non-discriminatory, proportionate and transparent;
- (12) The harmonisation of conditions attached to authorisations and of the procedures associated with the granting of authorisations should significantly facilitate the provision of air navigation services in the Community;
- (13) Existing air navigation service providers should be allowed, for a reasonable period of time, to adjust to the requirements of the new system of authorisation;
- (14) The authorisations should be mutually recognised by all Member States in order to allow air navigation service providers to provide services in a Member State other than where they obtained their authorisations, within the limits of what safety permits;
- (15) Desiring to facilitate the safe conduct of air traffic across the boundaries of the Member States in the interests of the airspace users and their passengers, the system of authorisation should provide for a framework to enable the designation by Member States of service providers for providing air traffic services, regardless of where they have been authorised;

- (16) The provision of ancillary services, meteorological services and aeronautical information services can be organised under market conditions whilst taking into account of the special features of such services;
- (17) Co-operation between service providers, airspace users and other operators should be enhanced on a contractual basis;
- (18) Air navigation service providers should establish and maintain close co-operation with military authorities responsible for activities that may affect air traffic, through appropriate arrangements;
- (19) The accounts of all air navigation service providers should provide for maximum transparency; to this end, the accounts must be separated for each service and control centre;
- (20) The introduction of harmonised principles and conditions for access to operational data should facilitate the provision of air navigation services and the operations of airspace users and airports under the new environment created by this Regulation;
- (21) A Community framework is needed to ensure that fair, equitable and transparent charging conditions apply to airspace users;
- (22) User charges should provide compensation for the facilities and services provided by air navigation services; such services and facilities can, by their nature, only be provided by air navigation service providers themselves; in view of this monopoly situation, the level of user charges must be in relation to the costs borne for the provision of such facilities and services, taking into consideration the objective of economic efficiency;
- (23) There shall be no discrimination between airspace users for the provision of equivalent air navigation services;
- (24) Air navigation services offer a certain number of facilities and services directly related to the operation of aircraft, the costs of which they must be able to recover according to the “user pays” principle, that is the airspace user should pay for the costs they impose at, or as close as possible to, the point of use;
- (25) It is important to ensure the transparency of the costs to which such services or facilities give rise; therefore, any changes made to the system or level of charges must be explained to airspace users; such changes or investment proposed by air navigation service providers must be explained in the framework of an exchange of information between their management bodies and airspace users;
- (26) There should be scope for modulating charges that contribute to maximise system-wide capacity; financial incentives are a useful way to accelerate the introduction of ground-based or airborne equipment that increases capacity, to reward high performance or to offset the inconvenience of choosing less desirable routings;
- (27) The Commission will examine the feasibility of organising a temporary financial aid to measures to increase the capacity of Europe's air traffic control system as a whole;

- (28) The establishment and imposition of charges to airspace users should be constantly and efficiently reviewed by the Commission, involving EUROCONTROL, in co-operation with national supervisory authorities and airspace users;
- (29) The performance of the air navigation services system as a whole at European level must be constantly examined to check the effectiveness of the measures adopted and to propose further measures;
- (30) Due to the particular sensitivity of information concerning service providers, national supervisory authorities should not disclose information covered by the obligation of professional secrecy without prejudice to the organisation of a system to monitor and publish the performance of service providers;
- (31) In line with the subsidiarity and proportionality principles laid down in Article 5 of the Treaty, the objectives of this Regulation, i.e. to promote the safe and efficient provision of air navigation services, cannot be sufficiently achieved by the Member States individually and can therefore, by reason of the transnational scale of this action, be better achieved by the Community, while ensuring that the implementing procedures take account of the specific local conditions;
- (32) Since the measures necessary for the implementation of this Regulation are measures of general scope within the meaning of Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>24</sup>, they should be adopted by use of the regulatory procedure provided for in Article 5 of that Decision;
- (33) In accordance with Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>24</sup>, measures for the implementation of this Regulation should be adopted by use of the advisory procedure provided for in Article 3 of that Decision,

HAVE ADOPTED THIS REGULATION:

## **Part I**

### **GENERAL ASPECTS**

#### *Article 1 (Scope)*

This Regulation shall apply to the provision of air navigation services for civil aviation, including air traffic services, meteorological services, search and rescue services and ancillary services providing communication, navigation and surveillance infrastructure and aeronautical information services as specified in Annex I to this Regulation, in accordance with and within the scope of Regulation (EEC) XXX/XX [*framework regulation*] laying down the framework for the creation of the Single Sky.

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<sup>24</sup> OJ L 184, 17.7.1999, p. 23.

## *Article 2 (Definitions)*

For the purposes of this Regulation and in addition to the definitions set out in Article 2 of Regulation (EEC) XXX/XX [*framework regulation*]:

- (a) “national supervisory authority” means the body or bodies, distinct and functionally independent of the air navigation service providers, appointed by a Member State with the supervision of air navigation service providers;
- (b) “recognised organisation” means a private or public body, recognised in conformity with Article 4 of this Regulation, carrying out assessment work for a national supervisory authority;
- (c) “authorisation” means a permission which is granted by a Member State and which certifies that an air navigation service provider is suitable to provide a specific service;
- (d) “bundle of services” means two or more air navigation services as specified in Annex I of this Regulation;
- (e) “air traffic services” means all flight information services, alerting services, air traffic advisory services and air traffic control services, including area control services, approach control services and aerodrome control services as identified in Annex I to this Regulation;
- (f) “designation” means an appointment by a Member State or Member States in accordance with this Regulation and which gives a service provider the responsibility for providing air traffic services on an exclusive basis;
- (g) “ancillary services” means communication, navigation and surveillance services as identified in Annex I to this Regulation;
- (h) “airspace block” means an airspace of defined dimensions, above land or waters, within which air navigation services are provided;
- (i) “functional airspace block” means an airspace of optimal defined dimensions, above land or waters, within which air navigation services are provided;
- (j) “operational data” means information and/or data used by air navigation service providers and airspace users during the execution of their operational activities;
- (k) “charges” means the price related to the operating and investment costs of air navigation services and related facilities.

## *Article 3 (National supervisory authorities)*

1. National supervisory authorities shall be established by each Member State in order to assume the relevant responsibilities and obligations under the requirements of this Regulation. The national supervisory authorities shall be independent of the bodies responsible for the management and operation of air navigation services. This independence shall be achieved through adequate separation, of at least functional level, between the national supervisory authorities and such bodies.

2. The national supervisory authority shall ensure the appropriate oversight and enforcement of the provisions of this Regulation, in particular with regard to the safe and efficient operations of air navigation service providers. To this end, the national supervisory authority shall perform adequate inspections and surveys to verify compliance with the requirements of this Regulation.
3. Member States shall inform the Commission of the names and addresses of the national supervisory authorities and of the measures undertaken to ensure compliance with the provisions of paragraph 1. Member States concerned may conclude an agreement on the supervisory role provided for in this Article in respect of regional service providers.
4. Member States shall notify any changes in respect of the information supplied under paragraph 3, within one month of their entry into force.

#### *Article 4 (Recognised organisations)*

1. In assuming their obligations under Article 3 of this Regulation, National supervisory authorities may decide with respect to air navigation service providers that operate under their responsibility to rely upon recognised organisations to undertake fully or in part the inspections and surveys.
2. Member States may only recognise those organisations which fulfil the requirements set out in accordance with the procedure referred to in paragraph 4 of this Article and which have submitted to the national supervisory authorities a request for recognition.
3. A recognition granted by a national supervisory authority is valid within the Community. National supervisory authorities may entrust any of the recognised organisations located in the Community to undertake the inspections and surveys under paragraph 2 of Article 3 of this Regulation.
4. Recognised organisations shall comply with the minimum requirements set out in Annex II of this Regulation together with any further measures defined in accordance with the procedure laid down in Article 19(2) of this Regulation, including the procedures for the granting of recognition, their monitoring and the working relationship and the liability between recognised organisations and the national supervisory authorities.

#### *Article 5 (Safety requirements)*

1. The EUROCONTROL Safety Regulatory Requirements (ESARRs) and subsequent EUROCONTROL amendments to those requirements shall be identified and adopted in accordance with the procedure laid down in Article 19(2) of this Regulation. The Commission shall publish the references of all ESARRs thus made mandatory in the Official Journal of the European Communities.
2. The provisions of this Article are without prejudice to Article 1(2) of Regulation (EEC) XXX/XX on establishing common rules in the field of civil aviation and creating a European Aviation Safety Agency.

*Article 6 (Licensing and training of controllers)*

The mobility of air traffic controllers together with enhanced training conditions shall be developed on the basis of a Commission proposal to be agreed by the European Parliament and the Council, so that the needs for controllers can be met more efficiently at Community rather than national level.

## **Part II**

### **MODALITIES FOR THE PROVISION OF SERVICES**

*Article 7 (System of authorisation)*

1. In order to facilitate the establishment of a harmonised environment for the safe and efficient management and operation of air navigation services across the Community the provision of air navigation services is subject to a system of authorisation certifying the suitability of service providers to provide such services.
2. Member States shall issue and monitor authorisations for air navigation services. Authorisations can be granted for each separate air navigation service as specified in Annex I of this Regulation or for a bundle of such services.
3. Member States shall accept any authorisation granted in the Community according to the requirements of this Article. No air navigation service provider established in the Community shall be permitted to operate within the Community unless it has been granted the appropriate authorisation. Without prejudice to international agreements and conventions to which the Community is a contracting party, providers of air traffic services shall be owned and continue to be owned directly, or through majority ownership, by Member States and/or nationals of Member States. They shall at all times be effectively controlled by such Member States or such nationals.
4. Air navigation service providers meeting the requirements of the system of authorisation shall be entitled to be granted an authorisation for the purpose of providing air navigation services. To that end, air navigation service providers shall apply to the national supervisory authority of the Member State where they have their principal place of operation and, if any, their registered office.
5. Authorisations shall specify the conditions in terms of rights and obligations of air navigation service providers that are objectively justified in order to meet the objectives of this Regulation. The conditions attached to authorisations and the procedures for their granting shall:
  - (a) comply with the general lines of approach set out in Annex III of this Regulation;
  - (b) be non-discriminatory, proportionate and transparent,
  - (c) avoid any conflict of interest in the management or operation of air navigation service providers and ensure equitable access by all airspace users,

(d) reflect the public interest nature of air navigation services and be harmonised.

The authorisation system, including harmonised conditions in respect of the various air navigation services and the relevant conditions and procedures for the granting of authorisations, shall be established in accordance with the procedure laid down in Article 19(2) of this Regulation.

6. Providers of air navigation services at the time of entry into force of this Regulation are authorised to continue to do so, provided that they comply with the provisions of this Article within a period of 6 months of the adoption of implementing rules for authorisations in accordance with paragraph 5 of this Article.

#### *Article 8 (Designation of service providers)*

1. The provision of air traffic services is subject to a system of designation allowing the service provider to operate on an exclusive basis within specific airspace blocks and defining the obligations and requirements of the operation. Member States shall designate authorised service providers to provide air traffic services in respect of the airspace over their territory. For this purpose, Member States may designate any service providers holding a valid authorisation within the Community.
2. Air traffic services that are, at the time of entry into force of this Regulation, operated by an air navigation service provider in respect of specific airspace blocks shall entitle that service provider to be designated for the same services in the same airspace blocks for a maximum period of 3 years without prejudice to the application of the provisions of Article 5 of Regulation (EEC) XXX/XX [*airspace regulation*].
3. With regard to ancillary services, meteorological services and aeronautical information services, the granting of authorisations confers to service providers the right of providing such services within the Community, subject to their notification to the relevant national supervisory authorities of the Member States and to the Commission of the airspace blocks in respect of which such services will be provided.
4. Air navigation service providers shall provide their services in an open, non-discriminatory and transparent manner. Such services shall be delivered in accordance with the terms of the relevant authorisations and, where appropriate, of the relevant designations.
5. In respect of functional airspace blocks as laid down in accordance with Article 5 of Regulation (EEC) XXX/XX [*airspace regulation*] and when the configuration of such functional airspace blocks differ from that of airspace blocks assigned on the basis of paragraphs 1 and 2, Member States shall designate service providers to deliver air traffic services in functional airspace blocks. When a functional airspace block extends over the territory of more than one Member State, the Member States concerned shall, within one month of the establishment of the functional airspace block, jointly designate the service providers. Such service providers shall be immediately notified to the Commission.

### *Article 9 (Relations between service providers)*

Air navigation service providers may avail themselves of the services of other service providers, in particular for ancillary services, meteorological services and aeronautical information services. In such cases, air navigation service providers shall formalise their working relationships by means of written agreements or equivalent legal arrangements setting out the specific duties and functions assumed by the providers. These arrangements shall comply with the relevant provisions of this Regulation.

### *Article 10 (Relations with military authorities)*

1. Air navigation service providers shall take the necessary steps with a view to entering into written agreements or equivalent legal arrangements with military authorities for the blocks of airspace where they are designated. These arrangements shall set out the specific obligations of each party, including the scope and procedures for exchanging data and for the transfer of control following the adoption of the measures referred to in Article 12 of Regulation (ECC) XXX/XX [*framework regulation*]. These arrangements shall comply with the relevant provisions of this Regulation.
2. As long as Member States have separate entities to provide air traffic services to civil and military air traffic, they shall inform the Commission of the way in which the co-operation between such entities is organised.

### *Article 11 (Unbundling of accounts)*

1. Air navigation service providers, whatever their system of ownership or legal form, shall draw up, submit to audit and publish their annual accounts in accordance with International Accounting Standards<sup>25</sup> adopted by the Community.
2. When providing a bundle of services, air navigation service providers shall, in their internal accounting, keep separate accounts for each service as listed in Annex I of this Regulation, and, where appropriate, consolidated accounts for other, non air navigation services, as they would be required to do if the services in question were carried out by separate undertakings. When providers of air traffic services operate within functional airspace blocks, they shall, in their internal accounting, keep separate accounts for each control centre responsible for that block.
3. Service providers shall inform the Commission of the rules for the allocation of assets, liabilities, expenditure and income which service providers follow in drawing up the separate accounts referred to in paragraph 2.
4. Member States or any competent authority they designate, as well as the Commission, shall have a right of access to the accounts of service providers.

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<sup>25</sup> International Accounting Standards elaborated by the International Accounting Standards Board based in London.

*Article 12 (Access to and protection of data)*

1. Operational data shall be exchanged in real-time between service providers and between such service providers and airspace users to facilitate the operational needs of both.
2. Access to operational data shall be granted to all authorised air navigation service providers, airspace users and other operators concerned on a non-discriminatory basis.
3. Each service provider shall establish standard conditions of access to its operational data from other service providers and airspace users. National supervisory authorities shall approve such standard conditions. Detailed rules relating to such conditions shall be established, where appropriate, in accordance with the procedure laid down in Article 19(2) of this Regulation.

## **Part III**

### **CHARGING REGIMES**

*Article 13 (Charging regime)*

A charging regime for air navigation services shall be established, in accordance with the requirements of Articles 14 and 15 of this Regulation, that contributes to the achievement of greater transparency with respect to the determination, imposition and enforcement of charges to airspace users. This charging regime shall also be consistent with the provisions of Article 15 of the 1944 Chicago Convention on International Civil Aviation.

*Article 14 (General principles)*

1. An equitable charging regime shall proceed:
  - (a) by the account of costs for air navigation services incurred by service providers on behalf of airspace users;
  - (b) to an allocation of the costs of air navigation services among categories of users and the development of a charging policy;
2. The following principles shall be applied when establishing the cost-base for charges:
  - (a) The cost to be shared among airspace users shall be the full cost of providing air navigation services, including appropriate amounts for interest on capital investment and depreciation of assets, as well as the costs of maintenance, operation, management and administration.
  - (b) The cost to be taken into account shall be those assessed in relation to the facilities and services, provided for and implemented under the 24<sup>th</sup> edition of

1998 of the ICAO Regional Air Navigation Plan, European Region Doc no. 7754, as amended on 16 December 1999.

- (c) The cost of different air navigation services shall be identified separately as provided for in Article 11 of this Regulation.
  - (d) Cross-subsidy between different air navigation services shall be clearly identified.
  - (e) Costs that are external to the operation of facilities and of services to airspace users, such as environmental costs, shall become a component of user charges in the most appropriate way.
  - (f) Air navigation services may produce sufficient revenues to exceed all direct and indirect operating costs and to provide for a reasonable return on assets to contribute towards necessary capital improvements.
3. Charges have to be established in accordance with the principles of non-discrimination, cost-relatedness, transparency and efficiency:
- (a) Charges shall be set for the availability of air navigation services under non-discriminatory conditions. No distinction shall be made between charges imposed on different airspace users for the use of the same service in relation to the nationality or category of the airspace user.
  - (b) Charges shall reflect the cost of air navigation services and facilities used by airspace users who generate them.
  - (c) Transparency of the cost-base for charges shall be guaranteed. Standards shall be set out for the provision of information, including existing and future data, by the service providers in order to conduct reviews of the provider's forecasts, actual costs and income. Information shall be regularly exchanged between the national supervisory authorities, service providers, airspace users, the Commission and EUROCONTROL.
  - (d) Charges shall encourage the safe, efficient and effective provision of air navigation services at the lowest possible cost and stimulate integrated service provision. They can provide incentives consisting of financial advantages and disadvantages which apply to air navigation service providers and/or airspace users. They can also provide revenues to benefit projects designed to assist specific categories of users and/or air navigation service providers in order to improve collective air navigation infrastructures, the provision of air navigation services and the use of airspace
4. The necessary implementing rules in the fields covered by this Article shall be established in accordance with the procedure laid down in Article 19(2) of this Regulation.

#### *Article 15 (Review of charges)*

- 1. The Commission shall provide for the continued review of compliance of the charges with the principles and rules referred to in Article 13 and 14 of this Regulation

involving, in particular, national supervisory authorities. The Commission may also establish the necessary mechanisms for making use of EUROCONTROL expertise.

2. At the request of (a) Member State(s), which considers that the principles and rules have not been properly applied, or on its own initiative the Commission shall carry out an investigation on any issue of non-compliance or non-application of the principles by service providers. Within two months of receipt of a request and after consulting the “Single Sky Committee” in accordance with the procedure laid down in Article 19(4) of this Regulation, the Commission shall take a decision on the application of Article 13 and 14 of this Regulation and decide whether the service provider may continue to apply the principle or rule concerned.
3. The Commission shall communicate its decision to the Member States and to the service provider concerned. Any Member State may refer the Commission’s decision to the Council within a time limit of one month. The Council, acting by a qualified majority, may take a different decision within a period of one month.

## **Part IV**

### **FINAL PROVISIONS**

#### *Article 16 (Performance regime)*

Detailed rules for the submission of information required pursuant to Article 10 of Regulation (EEC) XXX/XX [*framework regulation*] shall be established in accordance with the procedure laid down in Article 19(2) of this Regulation, with a view to allowing the comparison and improvement of air navigation service provision within the Single Sky. The submission of this information shall:

- promote the wide performance of a network of air navigation service providers within the Community;
- offer a prospect of the ability of air navigation service providers to deliver the required services;
- improve the consultation process between airspace users and air navigation service providers;
- allow the identification and the promotion of best practice.

#### *Article 17 (Adjustment to technical progress)*

1. In order to make adaptations to technical developments adjustments may be made to:
  - the Annexes to this Regulation, in so far as such amendments do not broaden the scope of this Regulation,
  - the reference to the ICAO Regional Air Navigation Plan as provided for in Article 14(2) of this Regulation,

in accordance with the procedure laid down in Article 19(2) of this Regulation.

2. The Commission shall publish implementing rules adopted on the basis of this Regulation in the Official Journal of the European Communities.

#### *Article 18 (Confidentiality)*

1. National supervisory authorities shall not disclose information covered by the obligation of professional secrecy, in particular information about service providers, their business relations or their cost components.
2. Paragraph 1 shall be without prejudice to the right of national supervisory authorities to mandate disclosure where it is essential for the purposes of fulfilling their duties, in which case such disclosure shall be proportionate and shall have regard to the legitimate interests of service providers in the protection of their business secrets.
3. Paragraph 1 shall not preclude publication of information on the conditions and performance of service provision, which does not include information of a confidential nature as required by Article 16 of this Regulation.

#### *Article 19 (Procedures for the Single Sky Committee)*

1. The Commission shall be assisted by the “Single Sky Committee” as provided for in Article 7 of Regulation (EEC) XXX/XX [*framework regulation*].
2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with Article 7(3) and Article 8 thereof.
3. The period provided for in Article 5(6) of Decision 1999/468/EC shall be one month.
4. Where reference is made to this paragraph, the advisory procedure laid down in Article 3 of Decision 1999/468/EC shall apply, in compliance with Article 7(3) and Article 8 thereof.

## **Part V**

### **ENTRY INTO FORCE**

#### *Article 20*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, [...]

*For the European Parliament*  
*The President*  
[...]

*For the Council*  
*The President*  
[...]

## ANNEX I

### SCOPE AND DEFINITION OF AIR NAVIGATION SERVICES

#### Air traffic services

- (1) **Area control services**, means air traffic control for controlled flights in control areas. Air traffic control is a service provided for the purpose of preventing collisions between aircraft, and on the manoeuvring area between aircraft and obstructions, and expediting and maintaining an orderly flow of air traffic.
- (2) **Approach control services**, means air traffic control service for arriving or departing controlled flights.
- (3) **Aerodrome control services**, means air traffic control service for aerodrome traffic.

#### Other services

- (4) **Search and rescue services**, means a service to provide assistance to aircraft in distress and to survivors of aircraft accidents.
- (5) **Meteorological services**, means a service to supply operators, flight crew members, air traffic services units, search and rescue services units, airports and other concerned with the conduct or development of air navigation with the meteorological information necessary for the performance of their respective functions.
- (6) **Aeronautical information services**, means a service provided for the purpose of ensuring the flow of information necessary for the safety, regularity, and efficiency of international air navigation.

#### Ancillary services

- (7) **Communication services**, means a communication service provided for any aeronautical purpose.
- (8) **Navigation services**, means a navigation service provided for any aeronautical purpose.
- (9) **Surveillance services**, means a surveillance service provided for any aeronautical purpose.

## **ANNEX II**

### **MINIMUM REQUIREMENTS FOR RECOGNISED ORGANISATIONS**

The recognised organisation must:

- be able to document extensive experience in assessing public and private entities in the air transport sectors, in particular air navigation service providers, and in other similar sectors in one or more of the fields covered by this Regulation;
- have comprehensive rules and regulations for the periodic survey of the above mentioned entities, published and continually upgraded and improved through research and development programmes;
- not be controlled by air navigation service providers, or by others engaged commercially in the provision of air navigation services or in air transport services;
- be established with a significant technical, managerial, support and research staff commensurate to the tasks to be carried out;
- be managed and administered in such a way as to ensure the confidentiality of information required by the administration;
- be prepared to provide relevant information to the national supervisory authority and to the Commission;
- have defined and documented its policy and objectives for, and commitment to, quality and has ensured that this policy is understood, implemented and maintained at all levels in the organisation;
- have developed, implemented and maintains an effective internal quality system based on appropriate parts of internationally recognised quality standards and in compliance with EN 45004 (inspection bodies) and with EN 29001, as interpreted by the IACS Quality System Certification Scheme Requirements;
- be subject to certification of its quality system by an independent body of auditors recognised by the administration of the Member State in which it is located.

### **ANNEX III**

#### **CONDITIONS WHICH MAY BE ATTACHED TO AUTHORISATIONS**

1. General information relating to
  - the recipient of the authorisation;
  - a general description of the purpose of the authorisation;
  - confirmation of the authority of the issuing body to issue the authority;
  - comprehensive references to the governing legislation under which the authorisation is issued and under which it will operate;
  - a clear specification of the period for which the authorisation is to run;
  - the notice period required for the authorised service provider to surrender the authorisation or for the national supervisory authority to revoke it;
  - a definition of terms referred to in the authorisation.
  
2. Conditions relating to:
  - the organisational structure and ownership of the service provider, including the prevention of conflict of interest;
  - the financial strength of the service provider and insurance in respect of liability risks;
  - the suitability of the holder of the authorisations, particularly in terms of past experience and credibility, safety and quality management systems and processes, human resource policies;
  - the provision of information reasonably required for the verification of compliance with applicable conditions, including the regular publication by the service providers of business plans, financial and operational data and the reporting of safety occurrences;
  - the management of assets relevant to the provision of the authorised service, including capital and human resources;
  - the non-discriminatory access to services from airspace users and the required level of performance of such service, including safety and interoperability levels;
  - ring-fencing or restriction of operation of business other than those related to the provision of air navigation services,
  - any other legal conditions which are not specific to air navigation services,
  - measures taken by Member States in accordance with public interest requirements recognised by the Treaty specifically in relation to public morality, public security, including the investigation of criminal activities, and public policy.

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the organisation and use of the airspace in the Single European Sky**

**(Text with EEA relevance)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 80(2) thereof,

Having regard to the proposal from the Commission<sup>26</sup>,

Having regard to the opinion of the Economic and Social Committee<sup>27</sup>,

Having regard to the opinion of the Committee of the Regions<sup>28</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty<sup>29</sup>,

Whereas:

- (1) The creation of the Single European Sky requires a harmonised approach for regulation of the organisation and the use of airspace,
- (2) The report of the High Level Group on the Single European Sky has confirmed the need for rules at Community level to design, regulate and strategically manage airspace on a European basis and enhance air traffic flow management;
- (3) The Communication of the Commission on the creation of the Single European Sky<sup>30</sup>, calls for structural reform to permit the creation of the Single Sky by way of integrated management of airspace and the development of new concepts and procedures of air traffic management;
- (4) Regulation (EEC) XXX/XX of the European Parliament and of the Council lays down the framework for the creation of the Single European Sky<sup>31</sup>,
- (5) Airspace is a common resource and needs to be used flexibly ensuring fairness and transparency for all users, whilst taking into account security and defence needs of Member States and their commitments in international organisations;

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<sup>26</sup> OJ C [...], [...], p. [...].

<sup>27</sup> OJ C [...], [...], p. [...].

<sup>28</sup> OJ C [...], [...], p. [...].

<sup>29</sup> OJ C [...], [...], p. [...].

<sup>30</sup> OJ C [...], [...], p. [...].

<sup>31</sup> OJ C [...], [...], p. [...].

- (6) Efficient airspace management is fundamental to increasing the capacity of the air traffic services system, to providing the optimum response to various user requirements and to achieving the most Flexible Use of Airspace;
- (7) EUROCONTROL's activities confirm that the route network and airspace structure cannot realistically be developed in isolation, as each individual Member State is an integral element of the European air traffic management network;
- (8) A single airspace should be established for en-route air traffic in the upper airspace; the interface between such airspace and regional and local airspace should be identified accordingly;
- (9) The delineation of airspace wherein air traffic services are to be provided, should be related to the need for efficient services, rather than to national boundaries;
- (10) Airspace users face disparate conditions of access to, and freedom of movement within, the Community airspace; this depends on the lack of harmonisation of classification of airspace;
- (11) Constraints in the definition of the route network cause concentration of air traffic flows at fixed crossing points or junctions of airways whilst the principle of direct routings is the preferred, economical and ecological way to use Community airspace;
- (12) It is essential to achieve a common, harmonised airspace structure, to base the present and future allocation of airspace on common principles and to design and manage airspace in accordance with harmonised rules;
- (13) Adequate interfaces should be established between the upper and lower airspace and the extension of an harmonised approach to the latter is desirable;
- (14) Variations in the organisation of civil military co-operation in the Community prevent uniform and timely airspace management and the implementation of changes; the success of the Single Sky is dependent upon an effective co-operation between civil and military authorities;
- (15) There should be an effective functioning of the Flexible Use of Airspace concept and collaborative management to smoothly adapt military training with civil air traffic; it is necessary to optimise the location, size and time periods of usage of sectors of airspace allocated to military needs, especially during peak periods for civil air traffic and in high-density airspace;
- (16) Military operations should be safeguarded whenever the application of common principles and criteria, as provided for in this Regulation, is detrimental to their safe and efficient performance;
- (17) Adequate measures should be introduced to improve the effectiveness of air traffic flow management;
- (18) In accordance with the conclusions of the High Level Group on the Single European Sky, EUROCONTROL is the body that has the appropriate expertise to support the Community in its role as regulator; therefore development of draft measures may be done by EUROCONTROL under appropriate arrangements subject to the observance

by EUROCONTROL of the conditions to be included in a framework of co-operation between the Commission and EUROCONTROL;

- (19) In line with the subsidiarity and proportionality principles laid down in Article 5 of the Treaty, the objectives of this Regulation, i.e. to establish a European airspace as a single operating airspace, cannot be sufficiently achieved by the Member States individually and can therefore, by reason of the transnational scale of this action, be better achieved by the Community, while ensuring that the implementing procedures take account of the specific local conditions;
- (20) Since the measures necessary for the implementation of this Regulation are measures of general scope within the meaning of Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>32</sup>, they should be adopted by use of the regulatory procedure provided for in Article 5 of that Decision,

HAVE ADOPTED THIS REGULATION:

## **Part I**

### **GENERAL ASPECTS**

#### *Article 1 (Scope)*

1. This Regulation concerns the organisation and the use of airspace in accordance with and within the scope of Regulation (EEC) XXX/XX [*framework regulation*] laying down the framework for the creation of the Single Sky.
2. This Regulation shall apply to the airspace where Member States designate air navigation service providers as provided for in Article 8 of Regulation (EEC) XXX/XX [*service provision*].

#### *Article 2 (Objective)*

The objective of this Regulation is to establish a Community airspace as a single operating airspace where common procedures for design, planning and management ensure the efficient and safe performance of air traffic management. The use of Community airspace shall support the operation of the air navigation services as a coherent and consistent whole in accordance with the provisions of Regulation (EEC) XXX/XX [*service provision*].

#### *Article 3 (Definitions)*

For the purposes of this Regulation and in addition to the definitions set out in Article 2 of Regulation (EEC) XXX/XX [*framework regulation*]:

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<sup>32</sup> OJ L 184, 17.7.1999, p. 23.

- (a) “single operating airspace” means uniform airspace management procedures and safety standards in the provision of Air Traffic Control;
- (b) “airspace design” means an appropriate, efficient and effective process for structuring, division and categorisation of airspace together with the planning of routes and airspace;
- (c) “flight information region” means an airspace of defined dimensions within which flight information services and alerting services are provided
- (d) “division level” means the boundary between upper and lower airspace;
- (e) “upper airspace” means the airspace above a certain flight level;
- (f) “lower airspace” means the airspace below a certain flight level;
- (g) “flight level” means a surface of constant atmospheric pressure which is related to specific pressure datum 1013.2 hectopascals and is separated from other such surfaces by specific pressure intervals;
- (h) “functional airspace block” means an airspace of optimal defined dimensions, above land or waters, within which air navigation services are provided;
- (i) "area control centre" means an operational unit established to provide air traffic control services to air traffic in a block of airspace under its jurisdiction;
- (j) “airspace classification” means the ICAO classification of airspaces alphabetically designated as classes A to G, as specified in Appendix 4 to the twelfth edition of July 1998 of Annex 11 to the 1944 Chicago Convention on International Civil Aviation, also defined as airspaces of defined dimensions, alphabetically designated, within which specific types of flight may operate and for which air traffic services and rules of operation are specified;
- (k) “direct routing” means an aircraft operation allowing an aircraft in flight to proceed directly between two points outside the scheme of routes;
- (l) “route network” means a network of specified routes for channelling the flow of air traffic as necessary for the provision of air traffic services.
- (m) “sector” means a subdivision of the totality of control tasks into manageable airspace portions at which throughput and capacity can be measured;
- (n) “Flexible Use of Airspace” means an airspace management concept applied in the European Civil Aviation Conference area, as specified in the first edition of 5 February 1996 of the “Airspace Management Handbook for the application of the Concept of the Flexible Use of Airspace” issued by EUROCONTROL;
- (o) “airspace management” means a planning function with the primary objective of maximum utilisation of available airspace by dynamic time-sharing and, at times, the segregation of airspace among various categories of airspace users based on short-term needs;

- (p) “air traffic flow management” means a service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that air traffic control capacity is utilised to the maximum extent possible, and that traffic volume is compatible with the capacities declared by the appropriate air traffic services providers;
- (q) “Collaborative Decision Making” means a process for exchanging information between air traffic service providers, airport operators, air traffic flow management providers and airspace users to instil more flexibility in slot/route allocation and flight co-ordination processes in order to optimise utilisation of scarce capacity.

## **Part II**

### **AIRSPACE ARCHITECTURE**

#### *Article 4 (Creation of a European Upper Flight Information Region)*

1. Taking due account of ICAO requirements, as specified in the twelfth edition of July 1998 of Annex 11 to the 1944 Chicago Convention on International Civil Aviation, a single European Flight Information Region, hereinafter referred to as European Upper Flight Information Region (EUIR), shall be established in the upper airspace.
2. The division level between upper and lower airspace shall be set at flight level 285.
3. Within three years after the establishment of the EUIR, the European Parliament and the Council shall extend, on the basis of a proposal from the Commission, the concept referred to in paragraph 1 of this Article to include the creation of a European Flight Information Region in the lower airspace.
4. The Commission shall take the necessary measures in order to have the EUIR recognised by ICAO as required by the tenth edition of July 1997 of Annex 15 to the 1944 Chicago Convention on International Civil Aviation. The Commission, involving EUROCONTROL, shall also organise the publication of a single aeronautical information relating to the EUIR through the consolidation of existing national aeronautical information. This publication shall incorporate all changes to requirements and procedures introduced by the implementation of the Single Sky.

#### *Article 5 (Reconfiguration of the upper airspace)*

1. The EUIR shall be reconfigured into functional airspace blocks of minimum size on the basis of safety and efficiency. The borders of such functional airspace blocks do not need to coincide with national boundaries. Functional airspace blocks shall be created to support the provision of air traffic services within area control centres responsible for an optimal size of airspace in the EUIR.
2. Functional airspace blocks shall be defined in accordance with the procedure laid down in Article 16(2) of this Regulation. The definition of such functional airspace blocks shall:

- (i) Support efficiently the existing and future pattern of air traffic;
- (ii) Ensure that each airspace block is designed to maximise the efficiency of European airspace as a whole;
- (iii) Take into account the human and capital resources of various air navigation service providers;
- (iv) Minimise the transaction costs between various area control centres;
- (v) Ensure coherence between the existing and future configurations of upper and lower airspace.

*Article 6 (Airspace classification)*

1. The EUIR shall be designated in accordance with a harmonised airspace classification to ensure the seamless provision of air navigation services throughout the Community and to establish a single category of environment within which all air traffic is known to providers of air traffic services, both with position and with flight intentions.
2. The classification referred to in paragraph 1, shall be established on a common and simplified application of the classification of airspace currently prescribed in chapter 2 of twelfth edition of July 1998 of Annex 11 to the 1944 Chicago Convention on International Civil Aviation.
3. The necessary implementing rules in the fields covered by this Article shall be prescribed in accordance with the procedure laid down in Article 16(2) of this Regulation.

*Article 7 (Direct routing in the upper airspace)*

Subject to safety analysis, air navigation service providers shall organise the phased implementation of direct routings in the EUIR as the optimum economic and environmental usage of Community airspace. Service providers shall regularly report to the Commission on this implementation.

*Article 8 (Uniform airspace design)*

The structuring, division and categorising of airspace together with the planning of routes shall rely on a uniform, efficient and effective design process within the agreed concept of operation. To this end, airspace rules, common principles and criteria for sector design, especially the design of cross-border sectors, and route design shall be established on the basis of the “Concept and Criteria for Medium Term EUR Route Network and Associated Airspace Sectorisation”, EATMP ARN Version 4 issued by EUROCONTROL on 1 April 2001.

The necessary implementing rules in the fields covered by this Article shall be prescribed in accordance with the procedure laid down in Article 16(2) of this Regulation.

*Article 9 (Consistency with the design for lower airspace)*

Based on the criteria specified in Article 5(2) of this Regulation, the planning and design of lower airspace shall be harmonised to be consistent with upper airspace and take account of the environment at and around airports in accordance with the procedure laid down in Article 16(2) of this Regulation. Pursuant to Article 4(3), the concept of the functional airspace blocks, specified in Article 5 of this Regulation, shall be extended to establish similar blocks in the lower airspace, particularly to address cross border problems for short to medium flights.

Air navigation service providers shall harmonise operations and practices concerning approaches and departures of aircraft to/from airports and their movement on the airport surface. A common procedure to the definition of such practices shall be defined in accordance with the procedure laid down in Article 16(2) of this Regulation, including risk assessment methods to verify the local feasibility of these procedures.

### **Part III**

#### **CIVIL MILITARY CO-ORDINATION**

*Article 10 (Civil Military Co-ordination)*

1. Member States shall ensure an efficient allocation and use of airspace by civil and military airspace users through the uniform and full application of the concept of the Flexible Use of Airspace.
2. Member States shall facilitate the organisation of civil-military co-operation particularly in all aspects of airspace management and flow management. Civil and military providers of air navigation services shall exchange data under the agreements provided for in Article 10 of Regulation (EEC) XXX/XX [*service provision*]
3. Taking into account the general conditions for air traffic flow management, as defined under Article 13 of this Regulation, criteria shall be established:
  - for the use of segregated airspace, including factors for the determination of horizontal and vertical extensions, the location of such airspace, and its subdivision into functional elements to be activated according to demand;
  - for the application of the Flexible Use of Airspace concept,in accordance with the procedure laid down in Article 16(2) of this Regulation.

These criteria shall implement the principles provided for in Article 4 of Regulation (EEC) XXX/XX [*framework regulation*].
4. Member States shall encourage the full integration of air defence in airspace management ensuring full exploitation of airspace under certain agreed conditions and arrangements, taking into account national security requirements.

5. Without prejudice to international agreements and conventions to which the Community is a contracting party and in order to ensure the safety of civil aviation, Member States can request the submission of a flight plan for any military flight entering the airspace where they have designated air traffic services providers in accordance with Article 8 and 9 of Regulation (EEC) XXX/XX [*service provision*], regardless of the origin and/or the destination of the flight.

*Article 11 (Temporary exemption for adjustments)*

In the case of serious disturbance of military operations, Member States may request the Commission to prepare adjustments to the criteria defined in accordance with Article 10(3) in its territory. Pending the elaboration of such adjustments the Commission shall exempt on a temporary basis the Member State(s) from the application of the provisions.

*Article 12 (Information disclosure)*

Pursuant to Article 10 of Regulation (EEC) XXX/XX [*framework regulation*], Member States shall submit the necessary information on the demand and actual use of airspace prohibited, closed, or restricted for military reasons to the Commission for further analysis and publication.

## **Part IV**

### **FLOW MANAGEMENT**

*Article 13 (Air Traffic Flow Management)*

Rules for air traffic flow management shall be established in order to optimise available capacities in the use of airspace and to enhance flow management processes. These rules shall be based on transparency and efficiency ensuring that capacity is provided flexibly and in a timely manner. They shall support a framework for operational decisions by air navigation service providers, airport owners and airspace users, i.e. Collaborative Decision Making. These measures will cover:

- a consistent route and traffic orientation policy defined in a single publication;
- consistency between airport slots and slots assigned by the Central Flow Management Unit;
- inconsistencies in flight planning;
- options for diversion of air traffic from congested areas into routes in less congested areas;
- priority rules in access to airspace, particularly during periods of congestion and crisis.

The necessary implementing rules shall be prescribed in accordance with the procedure laid down in Article 16(2) of this Regulation.

## **Part V**

### **FINAL PROVISIONS**

#### *Article 14 (Procedures)*

When preparing for implementing rules covered by this Regulation, the Commission may request, where appropriate, EUROCONTROL to draw up draft measures on the basis of a work programme laid down by the Commission.

#### *Article 15 (Review of measures)*

1. In order to make adaptations to technical developments adjustments may be made to:
  - the flight level referred to in Article 4(2) of this Regulation,
  - references to ICAO and EUROCONTROL documents as referred to in Articles 3, 4 6 and 8 of this Regulation,in accordance with the procedure laid down in Article 16(2) of this Regulation.
2. The Commission shall publish implementing rules adopted on the basis of this Regulation in the Official Journal of the European Communities.

#### *Article 16 (Procedures for the Single Sky Committee)*

1. The Commission shall be assisted by the “Single Sky Committee” as provided for in Article 7 of Regulation (EEC) XXX/XX [*framework regulation*].
2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with Article 7(3) and Article 8 thereof.
3. The period provided for in Article 5(6) of Decision 1999/468/EC shall be one month.

## **Part VI**

### **ENTRY INTO FORCE**

#### *Article 17*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, [...]

*For the European Parliament*  
*The President*  
[...]

*For the Council*  
*The President*  
[...]

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the interoperability of the European Air traffic management network**

**(Text with EEA relevance)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 80 (2) thereof,

Having regard to the proposal from the Commission<sup>33</sup>,

Having regard to the opinion of the Economic and Social Committee<sup>34</sup>,

Having regard to the opinion of the Committee of the Regions<sup>35</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty<sup>36</sup>,

Whereas:

- (1) In order to create the Single Sky, measures should be adopted in relation to equipment, systems and associated procedures with the objective of ensuring seamless operations of the air traffic management network consistent with the provision of air navigation services as provided for in Regulation (EEC) XXX/XX [*provision regulation*] and the organisation and use of airspace as provided for in Regulation (EEC) XXX/XX [*airspace regulation*];
- (2) The report of the High Level Group on the Single European Sky has confirmed the need to establish technical regulation on the basis of the "new approach" in accordance with Council resolution 85/C136/01 of 7 May 1985<sup>37</sup> where essential requirements, rules and standards are complementary and consistent;
- (3) Regulation (EEC) XXX/XX of the European Parliament and of the Council lays down the framework for the creation of the Single European Sky<sup>38</sup>;
- (4) The air traffic management network is a complex, highly interactive structure involving large number of systems and components on the ground, in the air -and in

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<sup>33</sup> OJ C [...], [...], p. [...].

<sup>34</sup> OJ C [...], [...], p. [...].

<sup>35</sup> OJ C [...], [...], p. [...].

<sup>36</sup> OJ C [...], [...], p. [...].

<sup>37</sup> Council Resolution of 07.05.1985 on a new approach to technical harmonisation and standards, OJ C 136, 4.6.1985

<sup>38</sup> OJ C [...], [...], p. [...].

space - including facilities, equipment, and computer hardware and software as well as the people that operate them;

- (5) The report of the High Level Group on the Single European Sky has confirmed that even if progress has been realised during the last few years towards a seamless operation of the air traffic management network in Europe, the situation still remains unsatisfactory with a low level of integration between national air traffic management systems and a slow pace of introduction of new concepts of operation and technology necessary to deliver the additional required capacity;
- (6) This low level of integration at Community level results in a number of severe inefficiencies and additional costs for procurement and maintenance and in difficulties in operational co-ordination;
- (7) The predominance of national technical specifications used in procurement often developed between the air navigation service provider and the national manufacturing industry has led to fragmentation of market equipment and does not facilitate the industrial co-operation at Community level; as a result industry is particularly affected since it needs to considerably adapt its products for each national market; these practices render development and implementation of new technology unnecessarily difficult and slow down the pace of introduction of new operational concepts that are required to increase capacity;
- (8) It is therefore in the interest of all those involved in the air traffic management to develop a new partnership approach allowing the balanced involvement of all, stimulating creativity and the sharing of knowledge, experience and risks; such co-operation shall aim at defining, in co-operation with the manufacturing industry, a coherent set of Community specifications that can fulfil the widest possible range of needs from which an air navigation service provider can choose the elements that best fit in its environment and limit the local adaptations as much as possible;
- (9) It is therefore appropriate to define essential requirements which will apply to the systems and constituents of the air traffic management network; in view of the complexity of the air traffic management network it has proven necessary to break it down to a number of systems defined in Annex I;
- (10) The development and adoption of Community specifications concerning the air traffic management network, its systems and constituents is an appropriate means to define the technical and operational conditions necessary to achieve the essential requirements; compliance with these Community specifications creates a presumption of conformity with the essential requirements;
- (11) For some systems that are important to the fulfilment of the essential requirements of this Regulation, implementation rules must be adopted; implementation rules may also be adopted to facilitate the co-ordination and introduction of new concepts in air traffic management; compliance with the implementation rules shall be permanently maintained; these implementation rules may rely on rules and standards developed by international organisations such as EUROCONTROL or ICAO;
- (12) In accordance with the conclusions of the High Level Group on the Single European Sky, EUROCONTROL is the body that has the appropriate expertise to support the Community in its role as regulator; therefore development of implementation rules

may be done by EUROCONTROL under appropriate arrangements subject to the observance by EUROCONTROL of the conditions to be included in a framework of co-operation between the Commission and EUROCONTROL;

- (13) In order to ensure separation between the rule-making and standardisation functions, Community specifications will predominantly be developed by the European standardisation bodies in conjunction with the European Organisation for Civil Aviation Equipment (Eurocae) and will take the form of European standards;
- (14) Eurocae is a non-profit making organisation in charge of preparing drafts of technical specifications for civil aviation equipment; its membership is open to all aviation stakeholders including, in particular, air navigation service providers, airspace users and manufacturing industry; Eurocae must establish formal relationships with the European standardisation bodies so that its specifications can be recognised as European standards according to the procedures set out by the European standardisation organisations;
- (15) Whereas EUROCONTROL can also develop, where necessary, Community specifications, subject to compliance with the principles of Council Resolution 85/C136/01 of 7 May 1985 and in accordance with general Community standardisation procedures; such procedures include as a minimum the observance of the principles of openness, transparency, impartiality, consensus, maintenance, public access to specifications, efficiency, accountability and coherence; detailed provisions to that effect will be included in a document forming the framework of co-operation with EUROCONTROL;
- (16) The procedures governing the assessment of conformity or suitability of use of constituents must be based on the use of the modules covered by Council Decision 93/465/EEC<sup>39</sup>; as far as necessary these modules can be expanded to cover specific requirements of the industries concerned;
- (17) The market concerned is of small size and consists of systems and constituents of an almost exclusive use to air traffic management purposes and not destined to the general public; it would be therefore excessive to affix the CE mark to constituents as, on the basis of the assessment of conformity and/or suitability for use, the manufacturer's declaration of conformity is sufficient; that does not affect the obligation on manufacturers to affix the CE mark to certain constituents in order to certify their compliance with other Community provisions relating to them;
- (18) The putting into service, renewal or upgrading of air traffic management systems, is subject to verification of compliance with the essential requirements; this compliance is based on implementation rules; use of Community specifications creates a presumption of conformity to the essential requirements; depending on the system, the intervention of a notified body might be deemed necessary in particular for safety reasons;
- (19) In accordance with the conclusions of the report of the High Level Group on the Single European Sky, the Commission will consult industry with a view to facilitating

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<sup>39</sup> Council Decision 93/465/EEC of 22 July 1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonisation directives (OJ L 220, 30.08.93, p.23)

the establishment of a coherent strategic management programme for the introduction of new concepts in air traffic management;

- (20) The full application of the provisions of this Regulation must be done according to a transition strategy which must endeavour to maintain the objective of the seamless operation of the air traffic management network while not creating unjustified cost-benefit barriers to the preservation of the existing infrastructure;
- (21) Interoperability within the Community air traffic management network is Community wide in scale; the Member States are unable, on an individual basis, to take the action needed in order to achieve that interoperability; it is therefore necessary, pursuant to the principle of subsidiarity, for this action to be taken at Community level;
- (22) Within the framework of the relevant Community legislation, due account shall be taken of the need to ensure harmonised conditions with regard to the availability and efficient use of radio spectrum necessary for the implementation of the Single European Sky, including electromagnetic compatibility aspects; an efficient and appropriate use of frequencies exclusively allocated to and managed by the aviation sector shall be ensured;
- (23) Council Directive 93/65/EEC<sup>40</sup> on the definition and use of compatible technical specifications for the procurement of air-traffic-management equipment and systems is limited to obligations of awarding entities; the present Regulation is more comprehensive in that it addresses obligations of all actors, including air navigation service providers, airspace users, manufacturing industry and airports, and allows both for stipulating rules applicable to all, as well as adoption of Community specifications which, while being of voluntary use, give presumption of conformity to the essential requirements; therefore Council Directive 93/65/EEC has to be repealed by the present Regulation;
- (24) Since the measures necessary for the implementation of this Regulation are measures of general scope within the meaning of Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>41</sup>, they should be adopted by use of the regulatory procedure provided for in Article 5 of that Decision;
- (25) In accordance with Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission<sup>23</sup>, measures for the implementation of this Regulation should be adopted by use of the advisory procedure provided for in Article 3 of that Decision,

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<sup>40</sup> OJ L 187, 29.07.1993, p. 52-56.

<sup>41</sup> OJ L 184, 17.7.1999, p. 23.

HAS ADOPTED THIS REGULATION:

## **Part I**

### **GENERAL PROVISIONS**

#### *Article 1 (Scope)*

1. This Regulation shall apply to equipment, systems and associated procedures for the establishment of the air traffic management network and its concept of operation in accordance with and within the scope of Regulation XX/XXX/ laying down the framework for the creation of the Single European Sky.
2. General conditions that are linked to the rights and obligations of air navigation service providers in the sense of Regulation XXX/XX [*service provision*] are excluded from the scope of this Regulation.

#### *Article 2 (Objectives)*

1. The main objective of this Regulation is to define the conditions to be met in order to achieve interoperability within Community territory between the different systems and constituents of the air traffic management network, including their seamless operation and development and upgrading to new technology.
2. In the pursuit of the objective referred to in paragraph 1, this Regulation must also contribute to the progressive creation of the internal market in equipment, systems and associated services.

#### *Article 3 (Definitions)*

For the purposes of this Regulation and in addition to the definitions set out in Article 2 of Regulation (EEC) XX/XXX [*framework regulation*]:

- (a) “air traffic management network” means a system comprising ground elements and airborne elements, enabling the provision of air navigation services, with the objective of allowing airspace users to meet their planned times of departure and arrival and adhere to their preferred flight profiles with minimum constraints, without compromising agreed levels of safety. The airborne part consists of the elements necessary to allow functional integration with the ground part. The ground part comprises air traffic services, air traffic flow management and airspace management;
- (b) "systems" means that the air traffic management network consists of systems as described in Annex I, for which essential requirements must be laid down; each system is made up of a number of constituents and has interfaces with other systems; the concept of a "constituent" covers both tangible objects and intangible objects such as software or procedures;

- (c) "concept of operation" means the specification of the criteria for the operational use of air navigation equipment and systems ; it provides information concerning the operational elements involved, the requirements of all those involved in their operational use, ground and airborne equipment functionality and the measures needed to ensure continued safe and efficient air traffic management;
- (d) "seamless operation" means the operation of the whole system in such a manner that from the user's perspective it functions as if it were a single system;
- (e) "essential requirements" means all the conditions set out in Annex II of this Regulation which must be met by the air traffic management network, its systems and their constituents;
- (f) "Community specification" means a European standard within the meaning of Article 1 of Directive 98/34/EC or a EUROCONTROL technical specification whose reference numbers have been published in the Official Journal of the European Communities, compliance with which is not compulsory;
- (g) "implementation rules" means the rules by which a system or part of a system is covered in order to meet the essential requirements and ensure the seamless operation of the air traffic management network, including its interoperability;
- (h) "national supervisory authority" means the body or bodies, distinct and functionally independent of the air navigation service providers, charged by a Member State with the supervision of air navigation service providers, in accordance with Article 3 of Regulation XX/XXX [*service provision*];
- (i) "upgrading" means any major modification work on a system or part of a system which requires the drawing up of a declaration of verification within the meaning of Article 10 of this Regulation;
- (j) "renewal" means any major substitution work on a system or part of a system which requires the drawing up of a declaration of verification within the meaning of Article 10 of this Regulation.

## **Part II**

### **ESSENTIAL REQUIREMENTS, COMMUNITY SPECIFICATIONS AND IMPLEMENTATION RULES**

#### *Article 4 (Essential requirements)*

The European ATM network, its systems and their constituents shall meet the essential requirements described in Annex II of this Regulation.

#### *Article 5 (Community specifications)*

1. Compliance with the essential requirements referred to in Annex II of this Regulation shall be presumed in relation to systems or constituents that meet the relevant

Community specifications or parts thereof whose reference numbers have been published in the Official Journal of the European Communities.

2. Where a Member State or the Commission considers that conformity with a Community specification does not ensure compliance with the essential requirements referred to in Annex II of this Regulation which the said Community specification is intended to cover, the Commission or the Member State concerned shall bring the matter before the Committee referred to in Article 16(4) of this Regulation.
3. In the case of shortcomings of European standards with respect to essential requirements, partial or total withdrawal of the standards concerned from the publications containing them, or their amendments, may be decided upon in accordance with the procedure laid down in Article 5 of Directive 98/34/EC<sup>42</sup> of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.
4. In the case of shortcomings of technical specifications drawn up by EUROCONTROL with respect to essential requirements, partial or total withdrawal of the specifications concerned from the publications containing them, or their amendments, may be decided upon in accordance with the procedure laid down in Article 16(4) of this Regulation.

#### *Article 6 (Implementation rules)*

1. Implementation rules will be drawn up:
  - for systems which are essential to achieve the objectives of this Regulation,
  - to support the co-ordinated and rapid introduction of new concepts of operations or technology in air traffic management.
2. Where necessary, especially for treating categories of systems or to solve certain problems as a matter of priority or to reflect the evolutionary introduction of new technology, a system may be covered by more than one implementation rule. In this case the provisions of this article also apply to the part of the system concerned. Inversely, achievement of particular operational performances in parts of the network might imply the drawing up of rules that impose requirements on more than one system.
3. Systems shall comply with the relevant implementation rules; this compliance shall be permanently maintained while each system is in use.
4. To the extent necessary to achieve the objectives defined in Article 2, each implementation rule, shall:
  - determine any specific requirements for seamless operations, including interoperability, safety or performance that are essential to achieve the objectives of this Regulation;

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<sup>42</sup> OJ L 204, 21.7.98, p. 37-48.

- state in each case under consideration which of the modules defined in Decision 93/465/EEC or where appropriate which specific procedures are to be used in order to assess either the conformity or the suitability for use of the constituents essential for seamless operations, safety or performances as well as the verification of systems.
5. Where a Member State or the Commission considers that conformity with an implementation rule does not ensure compliance with the essential requirements referred to in Annex II of this Regulation which the said implementation rule is intended to cover, the Commission or the Member State concerned shall bring the matter before the Committee referred to in Article 16(2) of this Regulation.
  6. In the case of shortcomings of implementation rules with respect to essential requirements, partial or total withdrawal of the rules concerned from the publications containing them, or their amendments, may be decided upon in accordance with the procedure laid down in Article 16(2) of this Regulation.

### **Part III**

#### **PROCEDURES**

##### *Article 7 (Procedures for Community specifications)*

1. Community specifications shall consist of either European standards or EUROCONTROL technical specifications:
  - European standards shall be drawn up by the European standardisation bodies in co-operation with Eurocae under a mandate from the Commission in accordance with the provisions of Article 6(4) of Directive 98/34/EC.
  - In certain specialised fields, in particular on matters of internal co-ordination between air navigation service providers, such as procedures, the Commission may request EUROCONTROL to draw up technical specifications within a list to be established in accordance with the procedure laid down in Article 16(4) of this Regulation.
2. The Commission shall publish the references to the European standards referred to in paragraph 1 of this Article in the Official Journal of European Communities.
3. The references to the EUROCONTROL technical specifications, referred to in paragraph 1 of this Article shall be published in the Official Journal of European Communities, after consulting the “Single Sky Committee” in accordance with the procedure laid down in Article 16(4) of this Regulation.

##### *Article 8 (Procedures for implementation rules)*

1. When preparing for implementation rules referred to in Article 6 of this Regulation, the Commission may request, where appropriate, EUROCONTROL to draw up draft measures on the basis of a work programme laid down by the Commission.

Implementation rules will be adopted and reviewed by the procedure set out in Article 16(2) of this Regulation. They shall be published in the Official Journal of the European Communities.

2. The preparation, adoption and review of implementation rules shall take into account the estimated cost of technical solutions by which they may be met, with a view to defining the most viable solution. To this end, an assessment of the costs and benefits of those solutions for all stakeholders concerned as well as for the European air traffic management network shall be attached to each draft implementation rule.
3. When each implementation rule is adopted, the date of entry into force shall be laid down in accordance with the procedure referred to in Article 16(2) of this Regulation. Where simultaneous actions of the different stakeholders are required to achieve the objectives of this Regulation, the date of entry into force can be also a target date by which all stakeholders have to equip themselves with systems compliant to the relevant implementation rule.

## **Part IV**

### **VERIFICATION OF COMPLIANCE**

#### *Article 9 (EC declaration of conformity or suitability to use of constituents)*

1. Compliance with the essential requirements of this Regulation shall be presumed in relation to those constituents that bear the EC declaration of conformity or suitability for use the components of which are set out in Annex III of this Regulation.
2. In order to draw up the EC declaration of conformity or suitability of use, the manufacturer, or its authorised representative established in the Community, must apply the provisions laid down in the relevant implementation rules. Where so required by the implementation rule, the assessment of the constituent shall be appraised by the notified body with which the manufacturer or his authorised representative has lodged the application.
3. Where constituents are the subject of other Community provisions covering other aspects, the EC declaration of conformity or suitability for use shall, in such instances, state that the constituent also meets the requirements of those other provisions.

#### *Article 10 (EC declaration of verification of systems)*

1. The putting into service, renewal and upgrading of those systems constituting the Community air traffic management network shall be subject to verification with a view to ensuring that these systems are designed, developed, installed and operated in such a way as to meet the essential requirements concerning them when integrated into the European air traffic management network.
2. Prior to the putting into service, the air navigation service provider shall send to the national supervisory authority concerned, an EC declaration of verification

confirming compliance to the essential requirements, accompanied by a technical file, the components of which are set out in Annex IV of this Regulation. This technical file will include results of verification by a notified body when so required by the applicable implementation rule(s).

3. In the event of upgrading involving airborne components the airspace users shall declare conformity with the provisions of this Regulation at the same time they request a safety approval by the national supervisory authority.

#### *Article 11 (Safeguard clause)*

1. Where the national supervisory authority finds that a constituent bearing the EC declaration of conformity or suitability of use or a system accompanied by the EC declaration of verification is likely, when used as intended, not to meet the essential requirements it shall take all necessary steps to restrict its area of application, prohibit its use or withdraw it from the market. The national supervisory authority shall immediately inform the Commission of any such measures, indicating its reasons and in particular, whether non-compliance is due to:
  - failure to meet the essential requirements referred to in Annex II of this Regulation ;
  - incorrect application of the implementation rules or Community specifications,
  - shortcomings in the implementation rules or Community specifications.
2. The Commission shall enter into consultation with the parties concerned as soon as possible. Where following the consultation, the Commission establishes that the measure is justified, it shall forthwith so inform the Member State that has taken the initiative and the other Member States. Where the decision referred to in paragraph 1 is justified by shortcomings in the implementation rules or Community specifications, the procedure referred to in Articles 5 and 6 of this Regulation shall apply. Where following the consultation the Commission establishes that the measure is unjustified, it shall forthwith so inform the Member State that has taken the initiative and the manufacturer or its authorised representative established within the Community.
3. Where a constituent bearing the EC declaration of conformity or suitability for use or a system accompanied by the EC declaration of verification, fails to comply, the Member State shall take appropriate action against whomsoever has drawn the EC declaration of conformity or suitability for use or the EC declaration of verification.

#### *Article 12 (Notified bodies)*

1. Member States shall notify to the Commission and the other Member States the bodies responsible for carrying out the procedure for the assessment of conformity or suitability for use referred to in Article 9 of this Regulation and the verification procedure referred to in Article 10 of this Regulation, indicating each body's area of responsibility, and the identification numbers obtained in advance from the Commission. The Commission shall publish in the Official Journal of the European

Communities the list of bodies, their identification numbers and areas of responsibility, and shall keep the list updated.

2. Member States shall apply the criteria provided for in Annex V of this Regulation for the assessment of the bodies to be notified. Bodies meeting the assessment criteria provided for in the relevant European standards shall be deemed to meet the said criteria.
3. A Member State shall withdraw approval from a body which no longer meets the criteria referred to in Annex V of this Regulation. It shall forthwith inform the Commission and the other Member States thereof.
4. Without prejudice to the requirements referred to in paragraphs 1, 2 and 3, Member States may decide to notify as notified body(ies) the organisation(s) recognised in conformity with Article 4 of Regulation XX/XXX [*service provision*].

## **Part V**

### **FINAL PROVISIONS**

#### *Article 13 (Revision of annexes)*

In order to make adaptations to technical developments, in particular progress in the definition of the future concept of operations referred to in Article 14 of this Regulation, adjustments may be made to Annexes I and II of this Regulation in accordance with the procedure laid down in Article 10 (5) of Regulation XX/XXX/[framework regulation].

#### *Article 14 (Introduction of new technology and industry consultation process)*

1. The Commission will work on the definition of a future concept of operations to be implemented under this Regulation with a view to achieving safe and efficient airspace use for all phases of flight.
2. To support the timely introduction of the future concept referred to in paragraph 1, the Commission will consult stakeholders, including air navigation service providers, airspace users and manufacturing industry with the objective of establishing a widely supported strategic management programme for the introduction of new concepts and technologies in the Community air traffic management network.
3. In the accomplishment of its tasks, the Commission may take the advice of industry through the process referred to in paragraph 2 so as to ensure the feasibility, proportionality and cost-effectiveness of implementation rules and Community specifications proposed for adoption under this Regulation.

*Article 15 (Transitional arrangements)*

1. Starting from 1<sup>st</sup> January 2003 the essential requirements of Annex II of this Regulation will apply to the putting into service, renewal and upgrading of systems and constituents of the air traffic management network.
2. Compliance with the essential requirements of Annex II shall be required for all systems and constituents in operation by 1<sup>st</sup> January 2009.

*Article 16 (Procedures for the Single Sky Committee)*

1. The Commission shall be assisted by the “Single Sky Committee” as provided for in Article 7 of Regulation (EEC) XXX/XX [*framework regulation*].
2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with Article 7(3) and Article 8 thereof.
3. The period provided for in Article 5(6) of Decision 1999/468/EC shall be one month.
4. Where reference is made to this paragraph, the advisory procedure laid down in Article 3 of Decision 1999/468/EC shall apply, in compliance with Article 7(3) and Article 8 thereof.

## **Part VI**

### **ENTRY INTO FORCE**

*Article 17 (Repealing of Council Directive 93/65/EEC)*

1. Council Directive 93/65/EEC and Commission Directive 97/15/EC of 25 March 1997 adopting EUROCONTROL standards and amending Council directive 93/65/EEC<sup>43</sup> are hereby repealed.
2. The Annexes I, II and III of Commission Regulation (EC) No 2082/2000 of 6 September 2000 adopting EUROCONTROL standards and amending Directive 97/15<sup>44</sup>, are hereby adopted as implementation rules in the sense of Article 6 of this Regulation.

*Article 18*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

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<sup>43</sup> OJ L 95, 10.4.1997, p. 16.

<sup>44</sup> OJ L 254, 9.10.2000, p. 1.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, [...]

*For the European Parliament*  
*The President*  
[...]

*For the Council*  
*The President*  
[...]

## ANNEX I

### LIST OF AIR NAVIGATION SYSTEMS

For the purpose of this Regulation the air traffic management network is subdivided in seven systems.

When so required, the system is meant to include not only the ground part but also the airborne equipment and procedures related to air traffic management operations and the airport equipment and procedures related to air traffic management operations.

1. Equipment and procedures used for flow management.
2. Equipment and procedures used for airspace management.
3. Equipment and procedures for air traffic control, in particular for flight data processing systems, surveillance data processing systems and human-machine interface.
4. Communications equipment and procedures for ground-to-ground, air-to-ground and air-to-air communications.
5. Navigation equipment and procedures.
6. Surveillance equipment and procedures.
7. Equipment and procedures for aeronautical information and meteorological information.

## **ANNEX II**

### **ESSENTIAL REQUIREMENTS**

#### **Part A: General requirements**

1. Seamless operation

Air traffic management systems and their constituents shall be designed, built, maintained and operated in such a way so as to ensure the seamless operation of the air traffic management network throughout the Community at all times and for all phases of flight. Seamless operation can be expressed, in particular, in terms of information exchange, common understanding of information, comparable processing performances and the associated procedures enabling common operational performances agreed for the whole or parts of the air traffic management network.

2. Support to new concepts of operation

The air traffic management network, its systems and their constituents shall support, on a co-ordinated basis, new agreed concepts of operation that improve the quality of air navigation services, in particular in terms of safety and capacity, taking due account of technology development and of their safe introduction.

3. Safety

Evolution of systems and operations of the air traffic management network shall achieve agreed high levels of safety. Agreed safety management methodologies shall be established to achieve this. A harmonised set of safety requirements for the systems and their constituents shall be defined with a view to achieving the agreed safety levels.

4. Integrated civil/military operation

The air traffic management network, its systems and their constituents shall support integrated civil/military operations, to the extent necessary for the efficient use of airspace

5. Environmental constraints

The evolution of systems and operations of the air traffic management network shall minimise environmental impact in accordance with applicable Community legislation.

6. System construction principles

Systems shall be designed, built and maintained on the grounds of sound engineering principles, in particular those relating to high availability, redundancy and fault tolerance of critical constituents.

#### **Part B: Specific requirements**

1. Equipment and procedures used for airspace management

## 1.2. Seamless operation

Information relating to pre-tactical and tactical aspects of airspace availability shall be provided to whomever concerned in a correct and timely way so as to ensure an efficient allocation and use of airspace by all airspace users. This should take into account national security requirements.

## 1.3. Safety

The design, implementation, maintenance and operation of equipment and procedures for airspace management shall be compliant with the safety requirements in force for the relevant parts of the network (or the relevant volumes of airspace).

## 1.4. Integrated civil/military operation

Equipment and procedures used for airspace management shall support and facilitate the gradual implementation of integrated civil/military operations, in particular the Flexible Use of Airspace.

## 2. Equipment and procedures used for flow management

### 2.1 Seamless operation

Equipment and procedures shall support the bi-directional exchange of correct, coherent and relevant strategic and pre-tactical flight information and offer dialogue capabilities in view of an optimised use of airspace.

Provision of accurate and relevant tactical flight information covering all phases of flight shall be ensured to further optimise the use of airspace.

### 2.2. Safety

In order to ensure that the network load remains within the boundaries dictated by separation and safety standards, equipment and procedures shall match demand for airspace use with available airspace capacity while providing an optimised use of airspace.

### 2.3. Integrated civil/military operation

Equipment and procedures shall support and facilitate the gradual implementation of integrated civil/military operation, in particular the Flexible Use of Airspace.

## 3. Equipment and procedures for air traffic control

### 3.1. General requirements

#### 3.1.1. System construction principles

Systems shall be designed, built and maintained on the grounds of sound engineering principles, in particular those relating to modularity supporting inter-changeability of constituents.

#### 3.1.2. Safety

Systems shall be designed, built, maintained and operated in such a way as to maintain high levels of safety both under nominal and degraded modes of operation, in particular when implementing increased levels of automation.

Systems shall be designed, built, maintained and operated in such a way as to provide, in the event of failure, a gradual and graceful transition between nominal levels of automation and the degraded mode operation.

### 3.2. Flight data processing systems

#### 3.2.1. Seamless operation

Flight data processing systems shall be interoperable in terms of timely exchange of correct and consistent information, sharing a common operational understanding of that information, in order to ensure a coherent and consistent planning process and resource-efficient tactical co-ordination throughout the Community during all phases of flight.

In order to ensure a safe, smooth and expeditious processing throughout the Community, flight data processing performances shall be equivalent and appropriate for a given environment (surface, terminal manoeuvring area, en-route), with known traffic characteristics and exploited under a certain operational concept, in particular in terms of accuracy and error tolerance of processing results.

#### 3.2.2. Support to new concepts of operation

Flight data processing systems shall accommodate the gradual implementation of advanced concepts of operation for all phases of flight, in particular those relating to Collaborative Decision Making, increased automation and the delegation of separation responsibility to the airborne side.

The characteristics of automation-intensive tools must be such as to enable a coherent and efficient pre-tactical and tactical processing of flight information in parts of the network.

Airborne and ground systems and their constituents supporting Collaborative Decision Making and the delegation of separation responsibility to the airborne side shall be designed, built, maintained and operated in such a way as to be interoperable in terms of the timely exchange of correct and consistent information and share a common understanding of the current and future operational situation.

#### 3.2.3. Safety

Flight data processing systems' design, building, maintenance and operation shall achieve high levels of safety, both in nominal and degraded modes, with a view to decreasing the number of air traffic management induced accidents or risk bearing incidents, for all phases of flight and for the entire European air traffic management network.

Safety nets shall be subject to agreed common performance characteristics as derived from the agreed safety levels for the whole or parts of the network

#### 3.2.4. Integrated civil/military operation

Flight data processing systems' design, building, maintenance and operation shall support the timely exchange of correct and consistent information between civil and military counterparts, covering all phases of flight and for the entire European air traffic management network and, as much as possible, a similar working environment.

### 3.3. Surveillance data processing systems

#### 3.3.1. Seamless operation

Surveillance data processing systems shall be designed, built, maintained and operated in such a way so as to provide the required quality of service within a given environment (surface, terminal manoeuvring area, en-route) with known traffic characteristics, in particular in terms of accuracy and reliability of computed results, correctness, integrity, availability, continuity and timeliness of information at the controller position.

Surveillance data processing systems shall accommodate the timely exchange of relevant, accurate, consistent and coherent information between them to ensure optimised operations through different parts of the network.

#### 3.3.2. Support to new concepts of operation

Surveillance data processing systems shall accommodate the gradual availability of new sources of surveillance information in such a way as to ensure the overall quality of service.

### 3.4. Human-machine interface

#### 3.4.1. Seamless operation

Human-machine interfaces of ground air traffic management systems shall be designed, built, maintained and operated in such a way as to offer a similar working environment to all controllers.

#### 3.4.2. Safety

Human-machine interfaces shall be designed, built, maintained and operated in such a way so that the tasks given to the controller are consistent with human capabilities in both normal and degraded modes of operation in a way compatible with required safety levels.

### 4. Communications equipment and procedures for ground-to-ground, air-to-ground and air-to-air communications

#### 4.1. Seamless operation

Communication systems shall be designed, built, maintained and operated in such a way so as to achieve the required performances within a given volume of airspace or for a specific application, in particular in terms of communication processing time, integrity, availability and continuity of function.

The communications network throughout the Community shall be such as to meet the requirements of quality of service, coverage and redundancy.

#### 4.2. Support to new concepts of operation

Communication systems shall support the agreed implementation of advanced concepts of operation for all phases of flight, in particular those relating to Collaborative Decision Making and delegation of separation responsibility to the airborne side.

#### 4.3. Environmental constraints

The siting and the operation of ground-based communication systems shall take into account environmental constraints.

Ground-based communication systems shall be designed, built, installed, maintained and operated in such a way as to be electromagnetically immune and not interfere with the installations, equipment and public or private networks in their normal environment.

### 5. Navigation equipment and procedures

#### 5.1. Seamless operation

Navigation systems shall be designed, built, maintained and operated in such a way so as to achieve the required horizontal and vertical navigation accuracy for a given environment (surface, terminal manoeuvring area, en-route), with known traffic characteristics and exploited under a certain operational concept.

#### 5.2. Safety

The design, building, maintenance and operation of navigation systems shall be such as to guarantee safety at the level set for the network or parts thereof, including that for specific degraded modes.

#### 5.3. Environmental constraints

The siting and the operation of ground-based navigation systems shall take into account environmental constraints as well as compliance with requirements of electromagnetic compatibility.

Ground-based navigation systems shall be designed, built, installed, maintained and operated in such a way as to be electromagnetically immune and not interfere with the installations, equipment and public or private networks in their normal environment.

### 6. Surveillance equipment and procedures

#### 6.1. Seamless operation

Surveillance systems shall be designed, built, maintained and operated in such a way so as to achieve the required separation minima applicable in a given environment (surface, terminal manoeuvring area, en-route) with known traffic characteristics and

exploited under a certain operational concept, in particular in terms of accuracy at the control position, coverage, range and quality of service.

The surveillance network throughout the Community shall be such as to meet the requirements of accuracy, coverage and redundancy, including availability of information, to ensure optimised operations through different parts of the network.

## 6.2. Environmental constraints

The siting and the operation of ground-based surveillance systems shall take into account environmental constraints.

Ground-based surveillance systems shall be designed, built, installed, maintained and operated in such a way as to be electromagnetically immune and not interfere with the installations, equipment and public or private networks in their normal environment.

## 7. Equipment and procedures for aeronautical and meteorological information

### 7.1. Seamless operation

Accurate and consistent aeronautical information shall gradually be provided in an electronic form, based on a commonly agreed and standardised data model.

Accurate, complete and up-to-date meteorological information shall be made available in a timely manner, based on a commonly agreed data set.

### 7.2. Support to new concepts of operation

Increasingly accurate, complete and up-to-date aeronautical information shall be made available and used in a timely manner, in order to support the continuous improvement of the efficiency of airspace use.

Increasingly accurate, complete and up-to-date meteorological information shall be made available and used in a timely manner, in order to support the continuous improvement of the efficiency of airspace use.

### 7.3. Safety

Accurate and consistent aeronautical information, in particular between airborne and ground-based constituents or systems, shall be made available in a timely manner.

## **ANNEX III**

### CONSTITUENTS

#### **EC declaration**

- **of conformity**
- **of suitability for use**

#### *1. Constituents*

The EC declaration applies to the constituents that are essential to achieve the objectives of this Regulation. These constituents will be identified in the implementation rules in accordance with the provisions of Article 6 of this Regulation.

#### *2. Scope*

The EC declaration covers:

- either the assessment by a notified body or bodies of the intrinsic conformity of a constituent, considered in isolation to the Community specifications to be met, or
- the assessment/judgement by a notified body or bodies of the suitability for use of a constituent, considered within its air traffic management environment.

The assessment procedures implemented by the notified bodies at the design and production stages will draw upon the modules defined in Decision 93/465/EEC, in accordance with the conditions referred to in the implementation rules.

#### *3. Contents of the EC declaration*

The EC declaration of conformity or suitability for use and the accompanying documents must be dated and signed.

That declaration must be written in the same language as the instructions and must contain the following:

- the Regulation references and where appropriate the references of other Community provisions applied;
- the name and address of the manufacturer or his authorised representative established within the Community (give trade name and full address and in the case of the authorised representative also give the trade name of the manufacturer);
- description of the constituent;
- description of the procedure followed in order to declare conformity, suitability for use (Article 9 of this Regulation);
- all of the relevant descriptions met by the constituent and in particular its conditions of use;

- if applicable, name and address of notified body or bodies involved in the procedure followed in respect of conformity or suitability for use and date of examination certificate together, where appropriate, with the duration and conditions of validity of the certificate;
- where appropriate, reference to the Community specifications followed;
- identification of signatory empowered to enter into commitments on behalf of the manufacturer or of the manufacturer's authorised representative established within the Community.

## **ANNEX IV**

### **SYSTEMS**

#### **EC declaration of verification of systems**

##### **Verification procedure for systems**

###### *1. Contents of declaration of verification of systems*

The EC declaration of verification and the accompanying documents must be dated and signed.

That declaration must be written in the same language as the technical file and must contain the following:

- the Regulation references and where appropriate the references of other Community provisions applied;
- name and address of the contracting entity or its authorised representative established within the Community (trade name and full address, and in case of the authorised representative also the trade name of the contracting entity);
- a brief description of the system;
- description of the procedure followed in order to declare conformity of the system (Article 10 of this Regulation);
- name and address of the notified body which conducted the verification procedure, if applicable;
- the references of the documents contained in the technical file;
- where appropriate, reference to the Community specifications;
- all the relevant temporary or definitive provisions to be complied with by the systems and in particular, where appropriate, any operating restrictions or conditions;
- if temporary: duration of validity of the EC declaration;
- identification of the signatory.

###### *2. Verification procedure for systems*

Verification of systems is the procedure whereby an air navigation service provider, or a notified body where so required by the applicable implementation rule, checks and certifies that a system:

- complies with this Regulation,
- complies with other applicable Community provisions,

and may be put into operation.

The system is checked at each of the following stages:

- overall design,
- development and integration of the system, including in particular constituent assembly and overall adjustments,
- operational system integration.

Where a notified body is involved, it draws up a certificate of conformity intended for the contracting entity or its authorised representative established within the Community. The contracting entity then draws up the declaration of verification intended for the national supervisory authority.

### *3. Technical file*

The technical file accompanying the EC declaration of verification must contain all the necessary documents relating to the characteristics of the system, including conditions and limits of use, as well as the documents certifying conformity of constituents where appropriate.

The following documents shall be included as a minimum:

- indication of the relevant parts of the technical specifications used for procurement that ensure compliance with the applicable implementation rules, and, where appropriate, the Community specifications,
- list of constituents essential for seamless operations, safety or performance, as referred to in Article 6 of this Regulation;
- copies of the EC declaration of conformity or suitability for use with which the above mentioned constituents must be provided in accordance with Article 9 of this Regulation accompanied, where appropriate, by a copy of the records of the tests and examinations carried out by the notified bodies,
- where a notified body has been involved in the verification of the system(s), certificate countersigned by itself, stating that the system complies with this Regulation and mentioning any reservations recorded during performance of activities and not withdrawn;
- where there has not been involvement of a notified body, a record of the tests and installation configurations made in view of ensuring compliance with essential requirements and any particular requirements contained in the relevant implementation rules.

### *4. Submission*

The technical file must be attached to the declaration of verification which the contracting entity sends to the national supervisory authority.

A copy of the technical file must be kept by the contracting entity throughout the service life of the system. It must be sent to any other Member States which so request.

## ANNEX V

### NOTIFIED BODIES

1. The body, its Director and the staff responsible for carrying out the checks may not become involved, either directly or as authorised representatives, in the design, manufacture, marketing or maintenance of the constituents or systems or in their use. This does not exclude the possibility of an exchange of technical information between the manufacturer or constructor and that body.
2. The body and the staff responsible for the checks must carry out the checks with the greatest possible professional integrity and the greatest possible technical competence and must be free of any pressure and incentive, in particular of a financial type, which could affect their judgement or the results of their inspection, in particular from persons or groups of persons affected by the results of the checks.
3. The body must employ staff and possess the means required to perform adequately the technical and administrative tasks linked with the checks; it should also have access to the equipment needed for exceptional checks.
4. The staff responsible for inspection must have:
  - sound technical and vocational training,
  - satisfactory knowledge of the requirements of the inspections they carry out and adequate experience of such operations,
  - the ability required to draw up the declarations, records and reports to demonstrate that the inspections have been carried out.
5. The impartiality of the inspection staff must be guaranteed. Their remuneration must not depend on the number of inspections carried out, nor on the results of such inspections.
6. The body must take out liability insurance unless its liability is assumed by the State in accordance with national law, or the Member State itself is directly responsible for the inspections.
7. The staff of the body must observe professional secrecy with regard to all information gained in carrying out their tasks under this Regulation.

## **IMPACT ASSESSMENT FORM**

### **THE IMPACT OF THE PROPOSAL ON BUSINESS WITH SPECIAL REFERENCE TO SMALL AND MEDIUM-SIZED ENTERPRISES( SMEs)**

#### **TITLE OF PROPOSAL**

Proposal for the implementation of the Single European Sky

#### **DOCUMENT REFERENCE NUMBER**

Not applicable

#### **THE PROPOSAL**

1. Taking account of the principle of subsidiarity, why is Community legislation necessary in this area and what are its main aims?

The performance of the European Air Traffic Management (ATM) system has continued to worsen over several years and in 1999 air traffic delays reached catastrophic proportions where one flight in three was delayed with average delays of 20 minutes. Nearly half of these delays have been attributed to the ATM sector. The causes of delay arise from excessive fragmentation in systems, procedures and planning between Member States and their national service provider. Consequently, the provision of air traffic management services has not been organised to meet European requirements and there are recurring structural problems which inhibit the ability to provide new capacity in a timely and efficient manner.

The main aims of this Community legislation are to:

- Restructure the arrangements for the provision of air navigation services in order to achieve adequate separation between the regulatory and service provision functions.
- Enable the Community to assume regulatory responsibilities in the fields of safety, performance, economic, interoperability, and airspace domains.
- Secure optimum co-operation between all actors in this sector and particularly to enhance the civil-military relationships resulting in uniform processes for the planning, design, management and allocation of European airspace.
- Secure enhanced co-operation with other international organisations and non-Community Member States in a wider approach to ATM issues.

## THE IMPACT ON BUSINESS

### 2. Who will be affected by the proposal?

The whole aviation community: national aviation authorities, ATM service providers organisations, airline operators, airport operators and manufacturing industry covering both third party software and hardware component suppliers.

Which sectors of business?

Predominantly, the air navigation services sector.

Which sizes of business (what is the concentration of small and medium sized firms)?

Air navigation service suppliers and equipment manufacturers are typically large organisations with several thousand employees. Annual pan-European running costs amount to 4 billion euros. Typical investment costs for a single large service provider vary from 800 million euros to 1.5 billion euros over a 10 year period.

Are there particular geographic areas of the Community where these businesses are found?

No

### 3. What will business have to do to comply with the proposal?

Most businesses or enterprises will not be affected. However improved standardisation processes will increase the rate of return for manufacturing industry as ATM product lines become more harmonised.

However the status of air navigation providers will change in recognition of their increasing economic interests. The regulatory or public interest functions will be separated from providers and re-focussed in national supervisory authorities and the Community.

### 4. What economic effects is the proposal likely to have?

The restructuring of the ATM sector is designed to improve the efficiency and effectiveness of this sector, to reduce delays and raise productivity through increased automation. Some quantification of economic benefits is possible. The total economic costs of delays were estimated at 6 billion euros in 1999.

Thus a 10% reduction in ATM induced delays will reduce total economic costs by up to 600 million euros per year. Thus significant benefits are possible and will result in improved utilisation of fleets, less direct operating costs for airlines and time lost by passengers, business etc. There will also be less external costs particularly associated with environmental pollution at airports.

### 5. Does the proposal contain measures to take account of the specific situation of small and medium-sized firms (reduced or different requirements etc)?

Not directly, but air navigation services suppliers will become more “business-like” in their management and procurement strategies. This will increase the tendency to concentrate research and the development of new tools to increase ATM productivity. It is envisaged that new investment will be stimulated and that major manufacturers will develop new ‘high technology’ products with third party small/medium specialist software houses expected to benefit.

## **CONSULTATION**

6. List the organisations which have been consulted about the proposal and outline their main views.

Following the adoption of the Commission’s Communication on the creation of the Single European Sky, a High Level Group of the Member States was created to review the issues and to make recommendations for change. The HLG was chaired by the Vice President of the Commission, Mrs De Palacio, and met throughout 2000. In parallel, an Industry and Consultation Board was also created with full representation from all sections of the aviation industry including, the Association of European Airlines (AEA), International Air Carrier Association (IACA), European Regional Airlines Association (ERA), International Council of Aircraft Owner and Pilot Associations (IAOPA), European Business Aviation Association (EBAA), European Association of Aerospace Industries (AECMA), European Organisation for Civil Aviation Equipment (EUROCAE), International Air Transport Association (IATA), European Cockpit Association (ECA), Airport Council International (ACI), International Federation of Air Traffic Controllers’ Associations (IFATCA), International Federation of Airline Pilots Association (IFALPA), Federation of Air Transport User Representatives in Europe (FATURE), European Transport Workers’ Federation (ETF), Air Traffic Controllers European Union Co-ordination (ATCEUC) and International Federation of Air Traffic Safety Engineers Association (IFATSE).

The Report of High Level Group on the creation of the Single European Sky was finalised in Nov 2000.