P5_TA(2002)0394

Interoperability of European network ***I

European Parliament legislative resolution on the proposal for a European Parliament and Council regulation on the interoperability of the European Air Traffic Management network (COM(2001) 564 – C5-0484/2001 – 2001/0237(COD))

(Codecision procedure: first reading)

The European Parliament,

– having regard to the Commission proposal to the European Parliament and the Council (COM(2001) 564[1]),

– having regard to Article 251(2) and Article 80(2) of the EC Treaty, pursuant to which the Commission submitted the proposal to Parliament (C5-0484/2001),

– having regard to Rule 67 of its Rules of Procedure,

– having regard to the report of the Committee on Regional Policy, Transport and Tourism and the opinion of the Committee on Legal Affairs and the Internal Market (A5-0266/2002),

1. Approves the Commission proposal as amended;

2. Asks to be consulted again should the Commission intend to amend the proposal substantially or replace it with another text;

3. Instructs its President to forward its position to the Council and Commission.

[1] OJ C 103 E, 30.4.2002, p. 41.

P5_TC1-COD(2001-0237

Position of the European Parliament adopted at first reading on 3 September 2002 with a view to the adoption of European Parliament and Council Regulation *(EC) No …./EC* on the interoperability of the European Air Traffic Management network

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[1],

Having regard to the opinion of the Economic and Social Committee[2],

Having regard to the opinion of the Committee of the Regions[3],

Acting in accordance with the procedure laid down in Article 251 of the Treaty[4],

Whereas:

(1) In order to create the Single European 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 (EC) No .../... of the European Parliament and of the Council *of … [on* the provision of air navigation services in the Single European Sky*]*[5] and the organisation and use of airspace as provided for in Regulation (EC) No .../... of the European Parliament and of the Council *of …[on* the organisation and use of the airspace in the Single European Sky]*[6]*.

(2) The report of the High Level Group on the Single European Sky (hereinafter referred to as: "the High Level Group") has confirmed the need to establish technical regulation on the basis of the "new approach" in accordance with the Council resolution of 7 May 1985 on a new approach to technical harmonisation and standards[7] where essential requirements, rules and standards are complementary and consistent.

(3) Regulation (EC) No .../... of the European Parliament and of the Council[8] lays down the framework for the creation of the Single European Sky.

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1 OJ C *103 E, 30.4.2002, p. 41.*
2 OJ C
3 OJ C
4 *Position of the European Parliament of 3 September 2002.*
5 OJ *L* ...
6 OJ *L* ...
7 OJ C 136, 4.6.1985, p. 1.
8 OJ *L* ...

(4) The air traffic management network is a complex, highly interactive structure involving large numbers of systems and components on the ground, in the air and in 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 has confirmed that even though 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 in the 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 coordination.

(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 industrial* cooperation 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 introduction of new operational concepts that are required to increase capacity.

(8) It is therefore in the interest of all those involved *in 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 partnership should aim at defining, in cooperation with the manufacturing industry, a coherent set of Community specifications that can fulfil the widest possible range of ***needs***.

(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.

(10) The development and adoption of Community specifications concerning the air traffic management network, its systems and constituents is an appropriate means of defining the technical and operational conditions necessary to achieve the essential requirements; compliance with these Community specifications should create 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 should be adopted; implementation rules should also be adopted to facilitate the coordination and introduction of new concepts in air traffic management; compliance with the implementation rules should be permanently maintained; these implementation rules should rely on rules and standards developed by international organisations such as *the European Organisation for the Safety of Air Navigation (*"Eurocontrol"*)* or *the International Civil Aviation Organisation (*"ICAO"*).*

(12) In accordance with the conclusions of the High Level Group, Eurocontrol is the body that has the appropriate expertise to support the Community in its role as regulator. Accordingly, Eurocontrol should be permitted to develop draft measures, under appropriate arrangements subject to the observance by Eurocontrol of the conditions to be included in a framework of cooperation between the Commission and Eurocontrol.

(13) In order to ensure separation between the rule-making and standardisation functions, Community specifications should predominantly be developed by the European standardisation bodies in conjunction with the European Organisation for Civil Aviation Equipment ("Eurocae") and should 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) Eurocontrol should also be permitted to develop, where necessary, Community specifications, subject to compliance with the principles of the Council Resolution of 7 May 1985 and in accordance with general Community standardisation procedures; such procedures should 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 cooperation with Eurocontrol.

(16) The procedures governing the assessment of conformity or suitability of use of constituents should be based on the use of the modules covered by 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[1]; as far as necessary these modules should be expanded to cover specific requirements of the industries concerned.

(17) The market concerned is of small size and consists of systems and *constituents almost exclusively used for* 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 should 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, should be subject to verification of compliance with the essential requirements; this compliance is based on implementation rules; use of Community specifications should create a presumption of conformity to the essential requirements; depending on the system, the intervention of a notified body should be deemed necessary in particular for safety reasons.

(19) In accordance with the conclusions of the report of the High Level Group, the Commission should consult industry with a view to facilitating the establishment of a coherent strategic management programme for the introduction of new concepts in air traffic management.

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1 OJ L 220, 30.8.1993, p. 23.

(20) The full application of the provisions of this Regulation should be done according to a transition strategy which should 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 on a Community-wide scale***. The Member States ***cannot implement individually the measures needed to ensure this interoperability. Consequently,*** in accordance with the principle of subsidiarity, ***it is necessary to take these measures at Community level, and the European Aviation Safety Agency should in future have a leading role in coordinating interoperability measures***.

(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 *should* be ensured.

(23) 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[1], is limited to obligations of awarding entities; *this* 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 Directive 93/65/EEC should be repealed.

(24) Since Commission Directive 97/15/EC of 25 March 1997 adopting Eurocontrol standards and amending Council Directive 93/65/EEC on the definition and use of compatible technical specifications for the procurement of air-traffic management equipment and systems[2] has become obsolete, it should be repealed.

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1 OJ L 187, 29.7.1993, p. 52.

2 OJ L 95, 10.4.1997, p. 16.

(25) The measures for the application of Directive 93/65/EEC as set out in Annexes I, II and III to Commission Regulation (EC) No 2082/2000 of 6 September 2000 adopting Eurocontrol standards and amending Directive 97/15/EC, adopting Eurocontrol standards and amending Council Directive 93/65/EEC[1] are compatible with the provisions of this Regulation.

(26) Since most of 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[2], they should be adopted by use of the regulatory procedure provided for in Article 5 of that Decision. However, in accordance with Article 2(c) of that Decision, some measures should be adopted by use of the advisory procedure provided for in Article 3 of that Decision,

HAS ADOPTED THIS REGULATION:

Chapter 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 (EC) No .../... [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 (EC) No .../... [on the provision of air navigation services in the Single European Sky] shall be excluded from the scope of this Regulation.

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1 OJ L 254, 9.10.2000, p. 1.
2 OJ L 184, 17.7.1999, p. 23.

Article 2

Objectives

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 ***safe and*** seamless operation and development and upgrading to new technology***, notwithstanding the ultimate aim of achieving global interoperability***.

In the pursuit of the objective referred to in the first paragraph, this Regulation shall 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 the definitions set out in Article 2 of Regulation (EC) No .../... [laying down the framework for the creation of the Single European Sky] shall apply.

The following definitions shall also apply:

(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;

(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 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 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*[1] or a Eurocontrol technical specification whose references have been published in the Official Journal of the European Communities;

(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, appointed by a Member State for the supervision of air navigation service providers;

(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;

(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.

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[1] OJ L 204, 21.7.1998, p. 37.

Chapter II

ESSENTIAL REQUIREMENTS, COMMUNITY SPECIFICATIONS AND IMPLEMENTATION RULES

Article 4

Essential requirements

The European Air Traffic Management network, its systems and their constituents shall meet the essential requirements described in Annex II.

Article 5

Community specifications

1. Compliance with the essential requirements referred to in Annex II 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 which the said Community specification is intended to cover, the procedure referred to in Article 16(3) shall apply.

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.

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 referred to in Article 16(3).

Article 6

Implementation rules

1. Implementation rules shall be drawn up:

(a) for systems which are essential to achieve the objectives of this Regulation;

(b) to support the coordinated 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, or part of a system, may be covered by more than one implementation rule. 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, or parts thereof, 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:

(a) determine any specific requirements for seamless operations, including interoperability, safety or performance that are essential to achieve the objectives of this Regulation;

(b) 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 operation, 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 which the said implementation rule is intended to cover, the procedure referred to in Article 16(2) shall apply.

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 referred to in Article 16(2).

Chapter III

PROCEDURES

Article 7

Community specifications

1. Community specifications shall consist of European standards drawn up by the European standardisation bodies in cooperation 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 coordination 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 referred to in Article 16(3).

2. The Commission shall publish the references to the European standards referred to in paragraph 1 in the Official Journal of European Communities.

3. The references to the Eurocontrol technical specifications, referred to in paragraph 1 shall be published in the Official Journal of European Communities, in accordance with the procedure referred to in Article 16(3).

Article 8

Implementation rules

1. When preparing for implementation rules referred to in Article 6, 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 shall be adopted and reviewed by the procedure set out in Article 16(2). 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***, with due regard to the maintenance of a high level of safety***. 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). Where simultaneous actions of the different stakeholders are required to achieve the objectives of this Regulation, the date of entry into force ***shall, where appropriate,*** be also a target date by which all stakeholders have to equip themselves with systems compliant to the relevant implementation rule.

Chapter 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.

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 referred to in Article 12, 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 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 *with* the essential requirements, accompanied by a technical file, the components of which are set out in Annex IV. This technical file *shall* include results of verification by a notified body referred to in Article 12, 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 measures 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:

(a) failure to meet the essential requirements referred to in Annex II;

(b) incorrect application of the implementation rules or Community specifications;

(c) shortcomings in the implementation rules or Community specifications.

2. The Commission shall enter into consultation with the parties concerned ***forthwith***. 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 shall apply. Where following ***this*** 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 and the verification procedure referred to in Article 10, 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 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.

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 (EC) *No*.../... [on the provision of air navigation services in the Single European Sky].

Chapter V

FINAL PROVISIONS

Article 13

Revision of annexes

In order to make adaptations to technical developments, in particular progress in the definition of the concept of operations referred to in Article 14, adjustments may be made to Annexes I and II in accordance with the procedure referred to in Article 16(2).

Article 14

Introduction of new technology ***and process for consulting interested parties***

1. The Commission shall work on the 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 shall consult stakeholders, including air navigation service providers, ***professional associations,*** airspace users***, users of air navigation systems*** 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 January 2003 the essential requirements of Annex II shall 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 January 2009.

Article 16

Committee Procedures

1. The Commission shall be assisted by the "Single Sky Committee" as provided for in Article 7 of Regulation (EC) No .../... [laying down the framework for the creation of the Single European Sky].

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 and Article 8 thereof.

The period provided for in Article 5(6) of Decision 1999/468/EC shall be one month.

3. 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 and Article 8 thereof.

4. In addition to the Committee, an 'Industry Consultation Body', to which associations of airspace users, flight-safety organisations and the manufacturing industry shall belong, shall be established to advise the Commission on technical aspects of the implementation of the Single European Sky.

Article 17

Repeal

Directives 93/65/EEC and 97/15/EC are hereby repealed.

References to the repealed Directives shall be construed as references to this Regulation.

Article 18

Entry into force

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 ,

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 coordinated 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 ***compliance with safety requirements and 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. ***To that end, system users (air traffic controllers, engineers, air safety electronic technicians, technicians, etc.) shall be systematically involved in all the stages of study, design, installation and development of such systems.***

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 coordination throughout the Community during all phases of flight.

In order to *ensure 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. ***They shall, inter alia, allow the systematic analysis of all detected incidents.***

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.

3.3.3 Safety

The design, building, maintenance and operation of surveillance data processing systems shall make it possible to achieve high levels of safety, in both indicated and degraded modes, in order to reduce the number of accidents or of potentially dangerous incidents attributable to surveillance, in respect of all phases of flight and in respect of the entire European air traffic management network.

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.

4.4 Safety

The design, building, maintenance and operation of communication 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. 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.

6.3 Safety

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

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 *abovementioned* 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.