REPORT FROM THE COMMISSION

ON APPLICATION OF 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. INTRODUCTION ............................................................................................................. 3

2. ACTION TAKEN TO IMPLEMENT THE DIRECTIVE ........................................... 4
   2.1. Main provisions of the Directive ........................................................................ 4
   2.2. Legislation adopted by the Commission ......................................................... 4
   2.3. Standardisation mandates .............................................................................. 6

3. APPLICATION OF THE DIRECTIVE .................................................................................. 7
   3.1. Introduction ...................................................................................................... 7
   3.2. Transposition problems .................................................................................... 7
   3.3. The translation problem .................................................................................. 8
   3.4. Conclusions ...................................................................................................... 8

4. EVALUATION OF OPERATION OF THE DIRECTIVE ...................................... 9
   4.1. Introduction ...................................................................................................... 9
   4.2. Eurocontrol's activities .................................................................................... 10
       4.2.1. Regulation, standardisation and validation ........................................... 10
       4.2.2. Weaknesses in this process .................................................................... 11
       4.2.3. The changing institutional context ......................................................... 11
   4.3. Operation of the Directive .............................................................................. 12
       4.3.1. Number of standards produced .............................................................. 12
       4.3.2. Incorporation of Eurocontrol standards into Community law ............... 12
       4.3.3. Cooperation with the European standardisation bodies ....................... 14

5. CONCLUSIONS ............................................................................................................. 16
1. INTRODUCTION

Council Directive 93/65/EEC of 19 July 1993 (hereinafter referred to as "the Directive") covers the definition and use of compatible technical specifications for the procurement of ATM\(^1\) equipment and systems. In particular, it allows certain Eurocontrol standards to be made mandatory at Community level.

The Directive was adopted in 1993 in a context marked by the air traffic crises of the late '80s. It is the fruit of the Council resolution of 18 July 1989\(^2\) which favoured multilateral cooperation within the ECAC (European Civil Aviation Conference) as the best means of solving the air traffic management problems. The same resolution called on the Commission to use the Community's legal instruments to ensure effective implementation of the decisions or recommendations adopted by the competent international organisations, especially Eurocontrol.

In this context, the Directive has two objectives:

- to facilitate, with the aid of common standards, the process of harmonisation and integration of the national air traffic management systems;

- to support completion of the internal market in air traffic management equipment and systems.

To attain these twin objectives, the Directive empowers the Commission to adopt, as common standards, the standards drawn up by Eurocontrol. It also places an obligation on authorities awarding contracts for purchases of air traffic management systems and equipment to refer to these common standards in the general specifications for the contracts.

Article 8 of the Directive requires the Commission regularly to submit reports to the European Parliament and the Council on operation of the arrangements provided for in the Directive. This is the first report of this kind.

---

\(^{1}\) Air Traffic Management.

2. ACTION TAKEN TO IMPLEMENT THE DIRECTIVE

2.1. Main provisions of the Directive

This section describes the most important provisions in the Directive to make the report easier to understand. The full text of the Directive is set out in Annex 1 to this report.

The essential requirement imposed by the Directive can be found in Article 5. This places an obligation on the awarding entities listed in Annex II to the Directive to refer to the standards adopted in accordance with the Directive in the general documents or specifications relating to each contract.

Article 3 makes it clear that this means the Eurocontrol standards (and amendments thereto) identified and adopted by the Commission relating to the areas listed in Annex I to the Directive.

Article 6 states that, for the purposes of exercising the powers delegated to it, the Commission will be assisted by a regulatory committee (type 3b committee, as defined in the Council Decision of 13 July 1987 laying down the procedures for the exercise of implementing powers conferred upon the Commission\(^3\)).

Article 4 of the Directive adds that in order to complement the Eurocontrol standards, where necessary, the Commission may give standardisation mandates to the European standardisation bodies (CEN, CENELEC and ETSI) in consultation with Eurocontrol.

Two Annexes are appended to the Directive.

Annex I contains an indicative list of the areas and subjects on which standards could be adopted under Article 3. The task of updating this Annex has been delegated to the Commission.

Annex II contains the list of awarding entities responsible for procurement of air-navigation equipment in the Member States. The Member States are under an obligation to send notification of any changes to this list. The task of updating this Annex has been delegated to the Commission.

2.2. Legislation adopted by the Commission

The Directive is a framework directive and, as such, requires further legislation to implement it effectively.

For this reason, after consulting the committee provided for in Article 6, the Commission duly adopted Directive 97/15/EC of 25 March 1997 adopting Eurocontrol standards and amending Directive 93/65/EEC.

Commission Directive 97/15/EC adopted two Eurocontrol standards - the Eurocontrol standard for on-line data interchange (OLDI), edition 1, and the Eurocontrol standard for air traffic services data exchange presentation (ADEXP), edition 1. Both aim at ensuring interoperability between the national systems and fit in well with the framework provided by Directive 93/65/EEC.

The OLDI standard smoothes the coordination process required for transferring flights from one air traffic control centre to the next. In particular, it defines the minimum rules and common message formats for (semi-)automatic management of handovers of flights from one ATC centre to another, with the resultant gains in capacity.

The ADEXP standard concerns automatic exchanges of flight plans between the Eurocontrol Central Flow Management Unit (which is responsible for planning all flights in Europe), aircraft operators and providers of ATM services. In essence, ADEXP is a message format allowing automatic exchanges of flight plans between these individual players and, hence, more efficient flight planning at European level.

Directive 97/15/EC also made amendments to Annexes I and II to the Directive.

Annex I listed certain Eurocontrol standards which were being prepared at the time of adoption of the Directive. Eurocontrol's work programme has changed considerably since then and is constantly being adapted. With the agreement of the regulatory committee, the Commission therefore decided to take a new approach and to include in this Annex all the domains envisaged for Eurocontrol standards, instead of just the standards in preparation. The domains listed in Annex I therefore cover a broader spectrum of activities than at first, giving greater flexibility for identifying and adopting the necessary Eurocontrol standards.

As explained in section 2.1, the Member States send notification of any changes made to the list of awarding authorities in Annex II. Nevertheless, in addition to these routine changes and to the amendments which had to be made to the list to take account of the new Member States, the Commission saw this as an appropriate opportunity to clarify the scope of the Directive.

In particular, in order to attain its objectives the Directive must apply not only to public authorities awarding contracts but also to private suppliers of ATM services. Consequently, airports procuring their own equipment should also be on the list, which was not the case in the original Annex. Nevertheless, in line with the principle of proportionality with the objective (interoperability), the Commission decided, with the agreement of the committee, that these provisions would apply to airports with their own terminal manoeuvring area and offering ATM services on

---

their own account. The new Annex II therefore includes airports which, according to the notifications received from the Member States, meet these criteria.

Since the adoption of Directive 97/15/EC, Eurocontrol has adopted a number of standards. The Commission departments have examined them all and concluded that three of them could be adopted under the Directive:

- the ADEXP standard, edition 2, which replaces the previous edition adopted by Directive 97/15/EC;

- the OLDI standard, edition 2.2, which likewise replaces the previous edition adopted by Directive 97/15/EC;

- the Eurocontrol standard for the flight data exchange interface control document (FDE-ICD), edition 1.0.

The first two make improvements to the standards previously adopted: they simplify the content, make improvements and add new functions.

The third, or, to be more precise, part of it, was previously part of edition 1.0 of the OLDI standard. It has now become a Eurocontrol standard in its own right with the objective of defining a data communications interface for exchanges of messages containing flight data. It draws heavily on the general international standards for communication networks.

The procedure for adoption of these three standards by the Commission is in progress and should be completed by the end of 1999.

2.3. Standardisation mandates

The Commission has twice applied Article 4 of the Directive, which allows it to give standardisation mandates to the European standardisation bodies (CEN/CENELEC and ETSI) in order to complement, where necessary, the process of implementing Eurocontrol standards.

In October 1993 the Commission gave these organisations a mandate (M/O28) to draft a standardisation programme to complement the Eurocontrol programme. In June 1995 they submitted a comprehensive overview of the sectors in which European standardisation could make a contribution to the ATM community.

The Commission departments found this programme too wide-ranging. Moreover, the difficulties which the work on this first mandate in the field of air traffic management revealed with cooperation between aviation circles and the world of the European standardisation organisations prompted the Commission to move more cautiously.
For this reason, the first full standardisation mandate was considered a trial run and covered the drafting of only a relatively limited number of standards, mainly industrial, focusing on telecommunications in particular.

This mandate (M/239) was sent to the European standardisation organisations in September 1996. So far, only one point in the mandate - a feasibility study on a specific communications standard - has been completed. The first standards are scheduled in the year 2000.

3. APPLICATION OF THE DIRECTIVE

3.1. Introduction

The main problems encountered with application of the Directive have concerned transposition by the Member States and translation of the Eurocontrol standards.

On this point, it must be stressed that to date the Commission has received no complaints about contracts for procurement of systems and equipment affected by the standards adopted under the Directive.

3.2. Transposition problems

Article 9 of the Directive stipulated that the Member States had to bring into force the (national implementing) measures necessary for them to comply with the Directive within one year of adoption of the Directive, although Spain and Italy were allowed one year longer. These time limits expired in July 1994 and July 1995 respectively.

In most Member States, however, the national implementing legislation was delayed well beyond the date set for full compliance. For this reason, during the report period (1995 to 1999) the Commission initiated seven infringement procedures for non-notification and one infringement procedure for non-compliance by the implementing measures. Following these procedures and repeated exchanges between the relevant authorities and the Commission departments, the transposition problems have been overcome and, today, every Member State has adopted its national implementing measures.

There are many reasons for these delays in transposition, but only the two most important will be mentioned here. To begin with, this Directive is the first Community measure in the field of air traffic management. Apart from a degree of reticence, the sector was manifestly unaccustomed to transposing Community measures. It was therefore necessary to make the national authorities understand that even though civil aviation services are part of the public sector in some countries, transposition in the form of a simple administrative circular was not enough, but that binding, published acts were necessary so that third parties could know their rights and invoke them. The same problem also occurred in countries

5 The mandate was to draft standards on air-ground data links, ground-ground voice communications and ATM communications in airports and to define safety rules for ATM facilities.
where ATM services are supplied by bodies independent of the public sector, on the basis of exclusive rights, which can be explained by the special links between the administration and these bodies.

Article 4 of Commission Directive 97/15/EC stipulated that the Member States must bring into force the provisions necessary for them to comply with the Directive before 1 December 1997. Like any Directive, this Commission Directive also had to be transposed into national legislation, unless Directive 93/65/EEC had been transposed so flexibly that it covered all acts adopted by the Commission to implement it. The experience acquired with transposition of the basic Directive enabled most Member States to comply rapidly with this one. Although ten or so infringement procedures for non-notification were initiated at the start of 1998, it was possible to file most of them before very long. By the end of 1999 all the procedures should be closed. One procedure concerning a translation problem has been suspended. This case is discussed in further detail in the next section.

3.3. The translation problem

In the course of these infringement procedures, one Member State notified the Commission that it was unable to proceed with transposition since no translations of the Eurocontrol standards in its official language were available and it could not give texts written in another language binding force in its national legislation.

Although the Commission considers that transposition in the form of reference to an act adopted and published by an international organisation in its official languages is enough to render it applicable in the Community, the procedures against this State were suspended and translation of the OLDI and the ADEXP standards was started. Nevertheless, it must be noted that English is the universal language used in the aviation community and that translation of the highly technical, specialised Eurocontrol standards poses considerable problems for several Community languages.

3.4. Conclusions

The foregoing demonstrates the problems created by choosing a directive as the form for applying the basic Directive. For this reason, in its future legislation the Commission plans to opt for the form of a regulation rather than a directive to avoid tiresome transposition. To avoid the other implementing problems, it also intends to proceed with systematic translation of the Eurocontrol standards adopted by the Commission.

Nevertheless, it must be stressed that this practice will certainly not facilitate application of the Directive but risks creating a situation where the Community legislation in this field will constantly lag behind the Eurocontrol standards because of the time taken for translation into all the Community’s official languages.

---

* Eurocontrol publishes its standards in two languages: English and French.
4. EVALUATION OF OPERATION OF THE DIRECTIVE

4.1. Introduction

The results achieved from implementation of the Directive must be evaluated in the light of the objectives of the Directive and the means of attaining them, taking account of the circumstances which led to adoption of this text. In the early 1990s, following the air traffic crises, multilateral cooperation was considered the only means of bringing about an improvement in the situation. Harmonisation and integration of the national ATM systems was the objective. In this context, the Community brought added value to this process, as this Directive provides a means of giving the Eurocontrol standards legal force. In keeping with the spirit of the time, the Directive therefore deals with ATM equipment and systems only.

By contrast, it cannot cover the whole of the air traffic management problem in Europe on its own. In the meantime it has become clearer and clearer that other action is needed to complement the measures envisaged in the Directive in order to resolve this problem, including regulation of the performance standards offered by the air traffic management services in Europe. Questions such as this were completely unthinkable at the time and remain delicate to this day.

Returning to evaluation of operation of the Directive, it must be borne in mind that the two basic objectives of the Directive were interoperability and operation of the internal market. The first point to emphasise, however, is that the provisions in the Directive are such that its effectiveness depends completely on the quantity and quality of the work done within Eurocontrol, since all it does is to allow standards and amendments thereto adopted by that organisation to be incorporated into the Community legislation.

Satisfactory progress has been made with practical application of the standards adopted under the Directive in the Community Member States, as can be seen from the Eurocontrol reports on implementation of the standards. However, this observation is not enough to conclude that the Directive has attained its objectives.

In practice, if the Directive is to attain its objectives, two conditions must be met:

• for one thing, a sufficient number of Eurocontrol standards are needed, consistently covering all key aspects of interoperability between national ATM systems in Europe;

• for another, these standards must be drafted in a manner allowing incorporation into the Community legislation.

At the moment there are problems on both these fronts. This section will focus primarily on analysing them and, where appropriate, spotlighting the points where improvements are needed. First, though, it will describe the context in which Eurocontrol has been working up until now and the changes expected in the future.
4.2. Eurocontrol's activities

4.2.1. Regulation, standardisation and validation

The ECAC7 strategy for the 1990s gave birth to EATCHIP (European Air Traffic Control Harmonisation and Integration Programme), for which Eurocontrol was made responsible.

Most of the activities under this programme are concerned with drafting technical specifications and with research, development and validation work on new concepts.

The technical specifications can cover both common ATM procedures and products, systems or concepts. In some cases, where coordinated implementation is of particular interest, these technical specifications become Eurocontrol standards.

The rest of the specifications serve only for guidance with application thereof by Eurocontrol Member States voluntary. Nevertheless, many States, particularly those without their own technology base, follow these Eurocontrol specifications in their procurement procedures, as if they were mandatory.

Up until now the regulatory activities - and, to a lesser extent, the technical specifications - have been reactive rather than pro-active. This is the logical result of the realisation by the aviation community, towards the end of the 1980s, that the incompatibility of the national systems was one of the main causes of the shortcomings in the system for Europe as a whole. It therefore tried to respond by drafting standards allowing harmonisation and integration of the existing systems.

In parallel, it has attempted to develop new concepts and systems to meet the challenges facing air traffic management in the next millennium. In this context, Eurocontrol has been running development and validation activities for a number of years. These projects have the advantage of speeding up the development of new tools and of reducing the cost to society at large. The need for these projects is undeniable, all the more so given that their complexity and the risks entailed would make it impossible for the industry to take any such initiative.

For each common project, a call for tenders is published and one or two industrial operators is/are selected. All the costs are borne by Eurocontrol which, therefore, becomes holder of the associated intellectual property rights. At the end of the development phase, Eurocontrol places the intellectual property rights at the disposal of the authorities of its Member States, free of charge.

7. European Civil Aviation Conference.
4.2.2. Weaknesses in this process

In its 1996 White Paper on air traffic management, the Commission pinpointed certain shortcomings in the regulatory and standardisation process for air traffic management.

The most striking weakness is the small number of Eurocontrol standards produced. This is because of a drafting process reflecting insufficient planning of the regulatory work and a (unanimous) decision-making procedure easily blocked by a single Member State. It must also be admitted that adoption of the Directive has made it no easier to produce Eurocontrol standards in that, out of concern about the obligations accompanying the adoption of a Eurocontrol standard as Community legislation, some Member States seem to have blocked adoption of standards or work in areas which could have affected their interests.

The Commission also stressed the confusion of functions typical of this sector, where the drafters of the specifications act as legislator, standardiser, customer and engineer, all at the same time. This is certainly one of the reasons for the slow pace of the standardisation process since most of the technical specifications are drafted by teams consisting mainly of suppliers of ATS services who strive to join forces to draw up the detailed technical specifications in the terms of reference for the calls for tenders which, in due course, they will each be able to publish separately.

The White Paper also regretted the lack of mechanisms to ensure effective participation by industry and stressed the impact which this gap had on the position of the European industry on the world market.

The White Paper therefore suggested closer cooperation between the individual players, based on their respective expertise and roles, and supported greater inclusion of aviation in the work of the European standardisation bodies. Finally, it stated that Eurocontrol should limit its specifications to the overriding requirements without prejudging the possible technical solutions.

4.2.3. The changing institutional context

To this day, the findings made in the ATM White Paper still hold true.

In the meantime, however, the Eurocontrol Convention has been revised. The organisation can now adopt binding decisions by majority vote. It has also conducted an in-depth review of its working methods, particularly of the procedures for producing standards and technical specifications.

In the light of the new powers exercised by this organisation, some of which fall within areas for which the Community is responsible, the Council decided that the Community should become a member of Eurocontrol and, on 20 July 1998, adopted a decision giving the Commission a mandate to negotiate membership. These negotiations are under way and could be concluded soon.
4.3.Operation of the Directive

4.3.1. Number of standards produced

So far the number of standards produced by Eurocontrol has been extremely limited - just seven since the start of the harmonisation and integration programme in 1992.

The new Convention removes the institutional obstacles which, in turn, will allow better planning of the regulatory work and identification of the best processes for achieving this. This procedure has been set in motion within Eurocontrol, with the assistance of the Commission departments concerned.

4.3.2. Incorporation of Eurocontrol standards into Community law

This section will examine practical examples of the difficulties encountered in incorporating some of the Eurocontrol standards available today into Community legislation.

Out of the seven standards adopted by Eurocontrol, four cannot be incorporated:

- The Eurocontrol standard on radar data exchange, also known by the acronym ASTERIX (for "all-purpose structured Eurocontrol radar information exchange"). With the aid of definition of a message structure for radar data exchange, this standard allows transfrontier sharing of radar data and, hence, optimum use of radar infrastructure in Europe. Consequently, this standard is extremely beneficial for the interoperability of ATM systems in Europe, which falls well within the scope of the Directive.

- The Eurocontrol standard on radar surveillance in en-route airspace and major terminal areas contains different levels of requirements for radar services and equipment in Europe. It covers the operational requirements imposed on the radar service offered by suppliers of air-navigation services (for example, double radar cover), the performance requirements for different links in the radar chain (detectors and systems for processing radar data) and the requirements on verification of the conformity of these components.

- The Eurocontrol standard on area navigation equipment operational requirements and functional requirements deals with implementation of area navigation (or RNAV) in Europe. RNAV is a concept allowing navigation of aircraft on any route desired, without direct links with the radionavigation infrastructure on the ground. Introduction of RNAV capacity will provide a far more efficient network of routes in Europe, considerably improving the capacity of the ATM system in Europe in the process. The standard lays down, in particular, the requirements imposed on air operators in order to ensure safe introduction of area navigation in Europe. It consists partly of operational requirements in order to receive approval to carry out RNAV operations (such as navigation precision,
approval procedures and aspects linked to the human factors) and partly of functional requirements to be met by on-board RNAV equipment.

- The Eurocontrol standard on surveying of navigation facilities concerns the implementation of a single geodetic system for definition of the coordinates used by aviation - the World Geodetic System 1984 (WGS-84), for which the International Civil Aviation Organisation (ICAO) has issued a mandate for worldwide use. The Eurocontrol standard defines, in particular, the technical requirements for surveying the geographical coordinates of navigation facilities in order to attain the precision sought. It also specifies the methods to be followed by the teams performing this operation.

One problem which all these standards have in common, with the exception of ASTERIX, is that their links to the procurement process are weak. After all, the Directive imposes an obligation on the ATM authorities awarding contracts to refer to the standards in the procurement procedures for equipment and systems. However, these standards impose regulatory requirements which have little or no connection with the procurement process. This holds true for parts of the radar standard and for the whole of the RNAV standard. In the case of the WGS-84 standard it depends on the decision taken at national level on whether or not to subcontract this activity. Consequently, the Directive is not an appropriate instrument for incorporating the standards into the Community legislation and other specific Community instruments must be envisaged.

Another problem is the content of the standards, which does not really lend itself to Community integration.

The first example of problems of this type is the level of requirements in some standards (such as the radar standard). In practice, incorporation of these requirements in the Community legislation would be tantamount to making a harmonised level of radar service mandatory in Europe, hence forcing suppliers of air-navigation services to purchase or convert radar systems to bring their services into line with the standard. Although the Community could certainly consider creating such obligations, there are doubts about the Member States' will to accept them and the feasibility of enforcing them. The question is, therefore, whether regulation by means of performance targets for the ATM service might be a better way of attaining the same result, without prejudging the means to be employed.

A second example of problems with the content is the WGS-84 standard. This defines the best practices to be followed by suppliers of air-navigation services for surveying navigation facilities and is more like a quality assurance standard (ISO 900x series) to demonstrate compliance with a corresponding ICAO standard. Consequently, it can be considered an acceptable means of demonstrating compliance with an essential requirement (in this case the ICAO standard) but should not depend on a regulatory act to apply it. This is a typical problem concerning the level of regulation, where the degree of detail goes beyond the absolutely essential.
One final type of problem in this category is the balance between the obligations of the various players, as illustrated by the case of the RNAV standard. If this were incorporated into Community legislation, the obligations would apply only to airspace users. However, the obligations of suppliers of air-navigation services must also be specified so that both sides can be sure that they will take the action necessary to provide the service for which users are being asked to invest in equipment.

A third kind of problem concerns the means of verification of compliance with the standards, as illustrated by the radar standard. More specifically, this standard recognises the expedience of means of verification of compliance but, at the same time, demonstrates the embryonic state of this process in the air traffic management field. All the standard states is that "certified" tools will be used for verification of compliance by the various links in the radar chain. But the bodies which could "certify" these tools have yet to be defined and the existing standard gives no indication of the tests required to ensure uniform verification standards.

The fourth type of problem is the impact of the standards on competition on the market for ATM equipment and systems, as exemplified by the radar standard. The non-regulatory (explanatory) sections of the standard make repeated references to tools developed by Eurocontrol. These can be understood as indications of the best means of complying with the requirements of the standard. However, some of these tools compete with others offered by the industry and, to this extent, this degree of publicity influences free competition. For this reason, even though these texts are not strictly part of the Community arsenal (only the regulatory sections of the Eurocontrol standards are), they nevertheless pose problems on matters of principle.

One final sort of problem with compatibility with Community legislation - in the ASTERIX standard but also in the radar standard - is extensive use of the exemption right. In these cases, the standard itself allows States to give notification of any differences in their national implementing measures, in the absence of any joint monitoring mechanism to verify that such exemptions in no way call into question the essential objectives of the standard itself. However, the Directive contains no mechanism for Community monitoring of application of the standards adopted by the Commission and, hence, for checking such variants.

4.3.3. Cooperation with the European standardisation bodies

The first part of this report showed how the work on the programming mandate given to the European standardisation bodies, under Article 4 of the Directive, ran into problems arising from relations between these bodies and the aviation community. As an international industry with enormous safety constraints, aviation developed regulatory and standardisation activities at a very early stage. To this end, it normally works within its own fora such as the ICAO at world level and Eurocontrol and the JAA in Europe. As a result, this mandate was perceived as an attempt to infiltrate a new entrant
(the European standardisation bodies) with no specialist knowledge of aviation.

These difficulties are also bound up with the weaknesses of the standardisation process outlined earlier in this report and, in particular, the highly detailed nature of the Eurocontrol standards. As suggested in the White Paper, closer cooperation between the individual players is needed, based on their respective expertise and roles. The European standardisation bodies can contribute knowledge, particularly on new technologies, and, hence, avoid duplication. For this reason, despite the obvious difficulties, the Commission departments concerned have persisted with giving a standardisation mandate to these bodies.

The success of this exercise will depend heavily on the quality of the products emerging from these standardisation bodies and whether they are available in time. The first standards are expected next year; although a lead time of four years to produce standards cannot be considered completely satisfactory, it is still relatively compatible with the average time taken to prepare standards in other fields.

However, it is too early for definitive evaluation of the results of the standardisation mandate. This will not be possible until the end of next year, on the strength of the standards available by then.
5. CONCLUSIONS

In the climate of general cooperation in the early 1990s, the Community decided to support European States' efforts to make their air traffic management system more efficient, by placing at their disposal the means in its hands to ensure effective and uniform implementation of the harmonisation decisions taken within Eurocontrol.

To this end, it adopted Directive 93/65/EEC on the definition and use of compatible technical specifications for the procurement of air-traffic-management equipment and systems, which allows the Commission to adopt Eurocontrol standards and makes it mandatory to use those standards for purchases of ATM equipment and systems by air-navigation bodies.

After a few problems with setting up this system, this tool is now operational and has started to produce standards, even though the need to translate them into every Community language will add a lengthy delay between adoption by Eurocontrol and incorporation into Community legislation.

Nevertheless, the effectiveness of this tool depends largely on Eurocontrol's capacity to produce transposable standards. But the pace of adoption of such standards is relatively slow and neither their nature nor content lend themselves to easy integration into the Community legislation under this Directive.

Eurocontrol's new Convention, the reform of its working methods now under way and the plan for the Community to accede to the organisation are likely to provide solutions to these difficulties.

However, the range of regulatory action which Eurocontrol must take to harmonise and integrate the national air traffic management systems goes far beyond the simple technical interoperability of the equipment and systems. Other means will therefore have to be envisaged to make the various Eurocontrol decisions enforceable in the Community, particularly when the time comes for the Community to join Eurocontrol.

These various aspects will undoubtedly be covered in the Communication that the Commission is preparing, at the Council's request, concerning air traffic delays and related solutions.
II

(Acts whose publication is not obligatory)

COUNCIL

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

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 84 (2) thereof,

Having regard to the proposal from the Commission (*) ,

Having regard to the opinion of the European Parliament (+),

Having regard to the opinion of the Economic and Social Committee (†),

Whereas air transport in Europe is at present under considerable strain owing to air traffic congestion;

Whereas, so far, management systems have been developed and brought on stream in accordance with International Civil Aviation Organization (ICAO) provisions, which allow national or local interpretation;

Whereas defining and introducing Community standards is an effective approach to the management of general air traffic since the present situation, based on national or local systems, has resulted in the technical and operational incompatibilities which now hinder the transfer of controlled flights between traffic-control bodies in different Member States;

Whereas the important work undertaken by the European Civil Aviation Conference (ECAC) and Eurocontrol in the field of air-traffic management and the relevant conclusions adopted by ECAC Ministers in April 1990 and March 1992 should be borne in mind;

Whereas functional integration should be effected to remedy traffic congestion and improve the flow of traffic in the short term;

Whereas the process of harmonization and integration would be facilitated if all Member States acceded to the International Convention relating to Cooperation for the Safety of Air Navigation;

Whereas, following resolution 89/C 189/02 (‡), the process of all Member States’ accession as Contracting Parties to the International Convention relating to Cooperation for the Safety of Air Navigation would be facilitated if those Member States which are already Contracting Parties to that Convention would strive within Eurocontrol to adopt, where appropriate, measures aimed at facilitating such accession;

Whereas the technical specifications adopted by Eurocontrol comply with ICAO recommended standards and practices;

Whereas the Commission, assisted by a committee of representatives of the Member States, should be authorized, in accordance with the procedure laid down in Council Decision 87/373/EEC of 13 July 1987 laying down the procedures for the exercise of implementing powers conferred on the Commission (§), to make certain Eurocontrol standards mandatory at Community level;

(*) OJ No C 244, 23. 9. 1992, p. 16.
(‡) OJ No C 189, 26. 7. 1989, p. 3.
(§) OJ No C 197, 18. 7. 1987, p. 33.
Whereas European standardization is a key factor in establishing a consistent level of safety in air-traffic management; whereas Eurocontrol and the European standardization bodies should cooperate with each other;

Whereas it should be specified that in accordance with Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (1) the Commission may, after consulting Eurocontrol, give European standardization bodies mandates to draw up European standards to provide support for air-traffic-management systems;

Whereas in any case any item of equipment legally marketed in one Member State must be able to move freely within the territories of the other Member States;

Whereas the International Convention relating to Cooperation for the Safety of Air Navigation designates Eurocontrol as the appropriate instrument to take the necessary measures to solve the present problems in Europe;

Whereas safety is a key factor in air transport in the Community; whereas this Directive should take account of the existence of the Convention on International Civil Aviation, signed in Chicago on 7 December 1944, which provides for the implementation of whatever measures are required to ensure the safe and orderly development of international civil aviation;

Whereas Council Directives 77/62/EEC of 21 December 1976 coordinating procedures for the award of public supply contracts (2) and 90/531/EEC of 17 September 1990 on the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors (3) apply to the air-traffic-management sector and the awarding entities must be specified;

Whereas in certain Member States the procurement of air-navigation equipment is not covered by the aforementioned Directives; whereas however, the Eurocontrol standards incorporated in the Community legal system must be complied with in all Member States,

of air-traffic-management equipment and systems, in particular:

— communications systems,
— surveillance systems,
— systems providing automated assistance to air-traffic control, and
— navigation systems.

**Article 2**

For the purposes of this Directive:

(a) technical specification shall mean the technical requirements included, in particular, in the tender documents defining the characteristics of a piece of work, a material, a product or a supply, and making it possible to describe a piece of work, a material, a product or a supply objectively in a manner such that it fulfils the use for which it is intended by the contracting entity. Such technical prescriptions may include quality, performance, safety and dimensions, as well as requirements applicable to the material, product or supply as regards quality assurance, terminology, symbols, testing and test methods, packaging, marking and labelling;

(b) standard shall mean a technical specification approved by a recognized standardization body for repeated or continuous application, compliance with which is not in principle compulsory;

(c) Eurocontrol standard shall mean the mandatory elements of Eurocontrol specifications for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as essential for the implementation of an integrated air traffic services (ATS) system (the mandatory elements shall form part of a Eurocontrol standard document).

**Article 3**

1. The Commission shall, in accordance with the procedure laid down in Article 6, identify and adopt the Eurocontrol standards and subsequent Eurocontrol amendments to those Eurocontrol standards, in particular those relating to the areas listed in Annex I, that shall be made mandatory under Community law. The Commission shall publish the references of all technical specifications thus made mandatory in the *Official Journal of the European Communities*.

2. The ensure that Annex I, which lists Eurocontrol standards to be produced, is as complete as possible, the Commission, following the procedure laid down in Article 6 and in consultation with Eurocontrol, may, where appropriate, amend Annex I in accordance with amendments made by Eurocontrol.

---

3. The Italian Republic and the Kingdom of Spain may postpone the application of this Article for one year. If at the end of that period those Member States cannot apply the Eurocontrol standards the Council shall, in accordance with the Treaty, decide on the appropriate action to be taken.

Article 4

In order to complement, where necessary, the process of implementing Eurocontrol standards the Commission may give standardization mandates to European standardization bodies in accordance with Directive 83/189/EEC and in consultation with Eurocontrol.

Article 5

1. Without prejudice to Directives 77/62/EEC and 90/531/EEC the Member States shall take whatever steps are necessary to ensure that in the general documents or specifications relating to each contract the awarding civil entities defined in Annex II refer to the specifications adopted in accordance with this Directive when purchasing air-navigation equipment.

2. To ensure that Annex II is as complete as possible, the Member States shall notify the Commission of any changes made to their lists. The Commission shall amend Annex II in accordance with the procedure laid down in Article 6.

Article 6

1. The Commission shall be assisted by a committee consisting of representatives of the Member States and chaired by a representative of the Commission.

2. The Commission representative shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the Member States’ representatives within the committee shall be weighted in the manner laid down in that Article. The chairman shall not vote.

3. The Commission shall adopt the measures envisaged if they are in accordance with the committee’s opinion.

4. If the measures envisaged are not in accordance with the committee’s opinion or if the committee delivers no opinion the Commission shall without delay submit to the Council a proposal concerning the measures to be taken. The Council shall act by a qualified majority.

5. If the Council does not act within three months of the referral to it the Commission shall adopt the proposed measures unless the Council has decided against those measures by a simple majority.

Article 7

In exercising its powers the Commission shall regularly consult the relevant European representatives of air-navigation bodies, of air-space users and of professional bodies. It shall inform the committee provided for in Article 6 of the outcome of those consultations.

Article 8

1. The Commission shall regularly submit reports to the European Parliament and to the Council on the operation of the arrangements provided for in this Directive, accompanied if necessary by proposals for the implementation of Articles 3 and 4.

2. Each year the Member States shall notify the Commission of any measures they have introduced to achieve the objectives set in this Directive.

Article 9

1. The Member States shall bring into force the provisions necessary for them to comply with this Directive within one year of its adoption. They shall forthwith inform the Commission thereof.

When then Member States adopt those provisions they shall include references to this Directive or shall accompany them with such references on their official publication. The Member States shall lay down the manner in which such references shall be made.

2. The Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field governed by this Directive. The Commission shall inform the other Member States thereof.

Article 10

This Directive is addressed to the Member States.

Done at Brussels, 19 July 1993.

For the Council
The President
W. CLAES
ANNEX I

EUROCONTROL STANDARDS REFERRED TO IN ARTICLE 3

INDICATIVE LIST

Communications systems
- Flight-plan-related-data exchange (message format) (*)
- Radar-data exchange (Asterix message format) (*)
- Telephone systems for ATS (*)
- On-line data interchange (OLDI) (*)
- Automated SSR-code-assignment systems (*)

Navigation systems
- RNAV (*)
- Radar separation (**) 
- Short-term-conflict alert (STCA) (**) 

Surveillance systems
- Surveillance specifications (*)
- Shared use of radar facilities (**)
ANNEX II

AWARDING ENTITIES RESPONSIBLE FOR THE PURCHASING OF AIR-NAVIGATION EQUIPMENT

Eurocontrol
rue de la Loi, 72
B-1040 Bruxelles

Belgium
Régie des Voies Aériennes
CCN — Rue du Progrès 80
B-1210 Bruxelles

Denmark
Statens Luftfartsvesen
(Civil Aviation Administration)
Postbox 744
DK-Copenhagen SV

Germany
DPS Deutsche Flugsicherung GMBH
Kaiserleistr. 29-33
D-6030 Offenbach am Main

Greece
Ministry of Transport and Communications
Civil Aviation Department
Financial Administration and Procurement Directorate
Purchasing Section
Postal address
Vasilios Georgiou 1
PO Box 73751
16604 Elliniko
GR-Athens
Telephone (0030-1-) 89 47 71 21

Spain
ARNA (Aeropuertos Españoles y Navegación Aérea)
Calle Santa Engracia, 120
E-Madrid

France
Le Directeur général de l'aviation civile
93 boulevard du Montparnasse
F-75270 Paris Cedex 06
who delegates in particular to:
— Monsieur le directeur général des aéroports de Paris
291 boulevard Raspail
F-75675 Paris Cedex 14

Ireland
The Department of Tourism, Transport and Communications
Air Navigation Services Office
Corporate Services Division
Scotch House
Hawkins Street
IRL-Dublin 2

Italy
AAAYTAG
Azienda Autonoma Assistenza al Volo per il Traffico Aereo Generale
Via Salaria, 715
I-00138 Roma

Luxembourg
Ministère des Transports
Direction de l'Aviation civile
L-2938 Luxembourg

The Netherlands
Luchtverkeersbeveiliging
Postbus 7601
NL-1118 ZJ Luchthaven Schiphol

Portugal
Empresa Pública de Aeroportos e Navegação Aérea (ANAep)
Avenida Sidónio Pais, no 8-35
F-1000 Lisboa
Acquisitions for small airports and aerodromes may be made by local authorities or by regional governments.

United Kingdom
Civil Aviation Authority
CAA House
45-59 Kingsway
UK-London WC2B 6TE
Highlands & Islands Airports Ltd (HIAL)
Inverness Airport
UK-Inverness