

COMMISSION OF THE EUROPEAN COMMUNITIES

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Proposal for a
COUNCIL DIRECTIVE

on standardization in the field of information technology
and telecommunications

Proposal for a
COUNCIL DIRECTIVE

concerning the first phase of the establishment of the mutual
recognition of type approval for telecommunications
terminal equipment

(submitted to the Council by the Commission)

**PRESENTATION OF THE
TWO DRAFT PROPOSALS FOR DIRECTIVES CONCERNING
STANDARDIZATION FOR INFORMATION TECHNOLOGY
AND TELECOMMUNICATIONS
AND THE MUTUAL RECOGNITION OF CONFORMANCE TESTS
FOR TELECOMMUNICATIONS TERMINAL EQUIPMENT**

I. ESSENCE OF THE PROBLEM

Standardization policy has always played an important role in the organization of the European Economic Community and particularly in the creation of a true internal market.

During the past year, the necessity of promoting a real standardization policy in the new technologies, and in particular in information technology and telecommunications, has become increasingly imperative.

Yet the stakes placed on standardization in these areas go far beyond the technical problems of drawing up standards : the importance of the issue relates to the objectives to be met, notably as regards the establishment of the internal European market, keeping up competition and competitiveness while providing support for European industry, and making optimum use of concurrent research and development programmes.

The importance of this policy has been well understood by the Ministers of Industry who, at the Council meetings of 18 May 1984, 16 July 1984 and 17 December 1984, have approved the direction of such a policy.

This importance also justifies the pragmatic approach and the common discipline required which characterize the two draft Directives proposed by the Commission to the Council.

- Their pragmatic character is based on the use of existing instruments, the necessity to confront a new situation and on a staged approach.
- The necessary common discipline ensures that the proposed measures and procedures are applied in a coherent and efficient manner at all decision-making levels in the Member States.

For these reasons, a directive is required as the appropriate legal instrument.

The proposed approach takes into account the current situation in information technology and telecommunications, particularly as regards the character and responsibilities of the bodies working on the definition of technical specifications in these sectors, without calling into question the principle of reference to standards adopted by the Council on 7 May 1985. Furthermore, the need to ensure terminal interoperability will point the way to detailed common technical specifications for manufacturing.

EFFECT OF THE NEW DIMENSION

Standardizers can no longer rely on codifying decades of 'best practice' to produce their standards. It is not enough for advanced technologies to reflect the state-of-the-art; one has to reach forward to a definition of systems architectures and the timely elaboration of the complex and precise technical specifications which are indispensable to guide the engineers responsible for organising communication between systems. If, through a lack of determination, these technical specifications are not available in time and with the desired quality and precision, the official standard can no longer succeed and the de facto standard takes over imposing constraints which are much more heavily resented.

Whenever standardization work corresponds to clearly expressed needs, it must be undertaken with greater determination on the basis of procedures and structures which are better adapted to the new tasks with well defined and identified objectives.

USE OF EXISTING TOOLS

The approach selected uses existing mechanisms to the maximum.

The information procedure laid down in the Directive 83/89/EEC is used where it concerns standards. Only in its application to technical regulations has it been reinforced in order to ensure:

- a) information at an early stage. If the prevention of barriers is to be considered the basic objective, it is evident that the conditions necessary for a common agreement are better at the early stage of the work which is to be undertaken in common;

1 Technical harmonization and standards : a new approach
COM(85)19 final of 31.1.1985

- b) the application of the status quo to promote the preparation of common technical specifications and avoid duplication, at the national level, of the work undertaken in the European framework.

The Directive 77/62/EEC cannot provide an adequate basis to ensure the implementation of standards in public contracts because it excludes telecommunications from its field of application and the activity of Member States in this area cannot be limited to those tenders covered by this Directive.

THE NEED FOR SYNERGY IN THE APPROACH

The issue of standardization is a common, dominant factor in all aspects of information technology and telecommunications. This arises from the remarkable break-through in digitalization, i.e., abandoning analogue in favour of digital signals, usually transmitted as binary codes. This is no longer limited to computing but has penetrated office automation, manufacturing, the new digitalised networks and the telematic services and terminals.

The interdependence of information technology and telecommunications and the extensive overlaps between them, are reflected by common areas of standardization which it would be mistaken to treat separately.

This interdependence must also be reflected in adequate and effective coordination between the committees concerned by these directives, including the committee concerned by directive 83/189.

THE STANDARD IS BECOMING THE BASIS OF THE COMMUNICATION PROCESS

Modern communications depend on respect for conventions which allows them to develop satisfactorily.

Non-communication for certain new services (TELETEX, VIDEOTEX, cellular radiotelephony, etc.) arises when standardization has not really played its role, and penalises exchanges at the Community and international levels. Community programmes, such as CADDIA and INSIS, constantly confront such obstacles and one begins to measure the cost of the lack of standardization.

THE EASE OF IMPLEMENTING STANDARDS IS A CONDITON OF THEIR CREDIBILITY

The credibility of international standardization suffers from the difficulties experienced by those who want to implement standards to ensure the most current exchanges of information. Using international standards has often been complicated by the lack of means to verify conformance of products to these standards. The draft Directives have taken into account some aspects which contribute to a better application of standards or common technical specifications and ensure the verification of conformance.

II. OBJECTIVES OF THE TWO DRAFT DIRECTIVES

The two draft Directives, taken together, have the following main objectives :

- 1) to instigate satisfactory procedures for establishing, by technically specialized organisations, standards (for information technology) and common technical specifications (for telecommunications) whose priority has been recognized by the Community through appropriate procedures and allowing a harmonized implementation of international standardization in the Community framework ;
- 2) to ensure that the regulatory mechanisms which concern exchange of data and the interoperability of systems in information technology and telecommunications are subject to procedures which complete those of Directive 83/189/EEC, and that the work achieved at Community level is not duplicated and/or impeded by work undertaken in parallel at the national level ;
- 3) to see to it that European standards in information technology and common specifications in telecommunications serve as references in public purchasing by the Community institutions and the Member States ;
- 4) to set up progressively a procedure for the mutual recognition of tests for telecommunications equipment made by laboratories approved in the Member States, on the basis of common specifications adopted at Community level.

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Complementary measures of a technical and organisational nature should be taken, which will facilitate their application and will reinforce their implementation.

In particular, it concerns :

- the application of new concepts such as functional standards and development of experimental standards ;
- to encourage and assist European organisms responsible for publishing standards and/or common technical specifications to improve their organization and accelerate their work ;
- to establish ways of improving and harmonizing test procedures and conformance certification of products to standards ;
- to improve the methods and infrastructure for the realisation of tests.

C O N C L U S I O N S

The two draft directives form a coherent set of measures and an effective contribution along the guidelines adopted by the Council on 16 July 1984.

In each of the areas concerned, the two directives lay the basis for organising the definition of the standards and the common technical specifications necessary for the realisation of the Community market and the encouragement of a more competitive European industry in a pragmatic manner which takes account of the particular aspects of each area.

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A - SUMMARY

The draft Council Directive relating to standardization in the field of information technology and telecommunications follows the traditional approach to standardization problems in the Community context and at the same time makes allowance for the specific aspects of information technology and telecommunications.

The growing importance of standards in this field, and in particular the role they play in ensuring the exchange of information on the basis of agreed conventions and the compatible working of systems processing and communicating that information, provides ample justification for the Community to step up the activities already under way and to supplement them by more precise action including :

- alignment with international standardization,
- the performance of technical work to be entrusted to the competent technical bodies as the need emerges and following consultation with a Standing Committee,
- due consideration given to standardization when drawing up technical rules,
- the stricter application of standards to which reference should be made in public procurement orders.

B. EXPLANATORY MEMORANDUM

I N T R O D U C T I O N

In the context of the implementation of a Community information technology and telecommunications strategy, the question of standards was found to be a vital factor for :

- the establishment of a Community information technology market,¹
- the establishment in the information technology sector of better coordinated industrial strategies between Community companies,
- the success of the work undertaken under the ESPRIT programme,
- the implementation of a European telecommunications policy.²

The implementation of a Community-wide coordinated strategy is essential because of the special role played by information technology and telecommunications standardization and its urgency for the future of IT in the Community.

1 Council meetings (Internal Market) on 26 October and 25 November 1983 and 8 March 1984.
2 Communication for the Commission to the Council on Telecommunications. Lines of action - COM(83)573 final of 29 September 1983.
Communication from the Commission to the Council on Telecommunications. Progress report on the thinking and work done in the field and initial proposals for an action programme - COM(84)277 final of 18 May 1984.
Conclusions of the Industry Council of 17 December 1984.
Conclusions of the European Council of 29 and 30 March 1985.

I - THE IMPORTANCE OF STANDARDIZATION IN THE FIELD OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS

1. The role of standards in this field

Standardization has a very direct impact on the operation of computerized equipment, systems and networks.

In the early days of computers, computer centres were operated in comparative isolation, and a few conventions were sufficient for the exchange of punch cards, magnetic tapes and programmes written in high-level programming languages.

The first decisive development took place in the early 1970s when data bases started to be more widely used and terminals, communicating on the basis of more precise conventions, were required. This development was intensified with the widespread introduction of growing numbers of mini- and microcomputers that can theoretically use a wide range of programmes ; in actual fact, it is difficult to use software written for one machine on hardware made by a different manufacturer.

More recently, with the advent of public data transmission networks, it has become possible to interconnect a wide range of equipment performing a varied range of functions, examples being the systems installed or planned in banks, travel agencies, business and industry (advanced office systems, computer-integrated manufacturing).

The needs of users and manufacturers are now expressed in terms of interoperability and the capacity of systems and equipment to communicate and cooperate with each other.

2. Economic repercussions of the absence of a Community policy

The general aim of standardization in information technology and telecommunications, as in other economic sectors, is to remove technical barriers that impede the establishment of an harmonized internal market and distort competition by creating captive markets.

The situation is, however, more serious in the field of information technology and telecommunications than in other economic sectors.

The delay in tackling standardization and the large number of *de facto* standards (manufacturers' specifications) which are neither public nor stable have encouraged the establishment of captive markets, not just for a few products but for the whole information technology and telecommunications field because of the trend towards the setting-up of computerized systems and networks.

Because the cost of software is increasing in relation to that of hardware, independent manufacturers are tending to tailor their products to the equipment having the largest market shares.

A Community information technology and telecommunications standardization policy must therefore help to :

- create a market and support the development of these technologies while at the same time removing barriers to the functioning of the market ;
- bring about more efficient exchanges of information which are essential to the proper functioning of economic life ;

- save individual users and companies pointless conversion costs owing to incompatibility.

3. The specific nature of information technology and telecommunications standards

The nature of the standards and the standardization process in the field of information technology and telecommunications stand out as a very special field by virtue of three characteristics :

First of all the standards are particularly complex because they have to be sufficiently detailed to guarantee data communication and in some cases the interoperability of systems. This complexity increases with the sophistication of the hardware and software. It calls for extreme precision if the requirements of the various levels of interaction of the systems are to be met.

The information, whether it consists of the actual data or instructions concerning their processing, transmission or presentation, is expressed in the form of groups of sequences consisting of noughts and ones.

They are interpreted according to codes and their exchange requires interfaces or protocols which are conventions that are often also expressed and coded in binary form.

Because of the density of this information, its high throughput rate and the way in which it is presented, it is becoming more and more difficult to come to grips with it.

Data processing standards are a closed book to users, unlike the situation in other sectors where a standard is accepted and understood by users who can implement it immediately without prior research, as in loading a film in a camera or fitting a tyre to a wheel made by a different manufacturer.

The digitization of networks and the development of specifications for terminals required to equip new computerized telecommunications services will result in the same degree of complexity in future in the telecommunications sector.

Secondly, information technology and telecommunications standardization is of great urgency for both technological and economic reasons. Because of the speed and nature of technological development it is essential to reach the required degree of precision in standards very rapidly, otherwise texts arising from standardization work will be obsolete before they are produced, especially when different provisional solutions have had to be adopted by manufacturers. The standard is then outdated and no longer offers the stability that users are entitled to expect of it. Economically, many firms will be unable to survive in this industry if they have to continue to operate and compete in the market on the basis of proprietary company standards and captive software systems.

Finally, the information technology and telecommunications standardization activities must be carried out in the context of international standardization.

This approach ensures :

- that standardized products can be distributed on the world market ;

- that the technical capacity is available to cope with the gradual amalgamation of data-processing and telecommunications standards as required by the convergence of systems with the development of IT networks.

The international OSI (Open Systems Interconnection) standard now being prepared in the International Standardization Organisation (ISO) provides the theoretical basis for a set of standards common to both systems, even though telecommunication has a standardization body of its own in the CCITT.

II - THE OBJECTIVES

1. Helping to establish a genuine Community information technology and telecommunications market.

The rapid implementation of a Community-wide coordinated strategy for standards is essential in view of the urgency and importance of this issue for the future of information technology and telecommunications in the Community.

The adoption of common standards is vital to :

- the establishment of a more transparent and competitive Community information technology and telecommunications market,
- the ability of Community industry to gain maximum advantage from the Community dimension and to satisfy the pressure of demand for fast-developing products and systems that are more and more frequently interconnected.

2. Improving conditions of competition

The Community market is today divided between the customers of the different firms. Such a commercial and industrial strategy requires that firms obtain a large enough market share, either on the basis of their own products or on the basis of licensing or subcontracting agreements enabling them to supply all the products and services required.

Very few companies in the Community are in this position and not one of them is of European origin.

Until such time as the work on the OSI model achieves operational results, there will be a risk of *de facto* standards and architecture gradually becoming established in order to meet market requirements.

3. The efficiency of information exchanges in the Community

Information exchanges are increasingly dependent on conventions established between data-processing systems connected by networks. Standardization provides an essential basis for these exchanges and their efficiency is directly dependent upon it. It must, however, be effected in such a way that IT standards and common technical specifications which apply to the telecommunications sector contribute to the efficiency of these exchanges throughout the Community.

4. Taking user requirements into account

Users are faced with incompatibility problems that can only be solved by costly conversions and that reduce the reliability of their systems. User requirements, especially as regards the compatible working of systems, must be taken into account so that they can assemble their equipment as a function of the work profiles required.

III - THE PRELIMINARY WORK

In recent years the Commission has already begun preliminary work on standardization in the field of information technology.

The vital role played by standardization in the implementation of a Community strategy has emerged very clearly in recent months and as a result the Commission proposes that standardization activities be stepped up by bringing them under a wider and more vigorous policy.

In May 1984 the Commission departments submitted to the Council (Industry) proposed guidelines³ for the implementation of the measures necessary for the drawing up of a joint action programme. Once these guidelines were confirmed the Commission called several meetings of the Senior Officials Group for Information Technology Standardization and consulted it with a view to continuing its examination of the problems raised by the definition of a common standardization policy.

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³ SEC(84) 796 of 15 May 1984 - Commission Working Paper

As a result of this examination it :

- (a) emphasized the urgent need for action in this field ;
- (b) confirmed the value of making use of the expertise of the European standards institutions, which were asked to state how they could organize themselves to tackle problems specific to IT standardization ;
- (c) recognized that the commitment of the joint organization CEN/CENELEC and the proposed adaptations to structures and procedures submitted at the meeting of 25 July 1984 satisfied the necessary conditions for tackling the specific field of information technology ;
- (d) took into consideration the growing importance of the common areas corresponding to technical overlaps between information technology and telecommunications and confirmed that the association of CEPT with the work of CEN/CENELEC would strengthen the coherence of the standardization effort;
- (e) determined priorities for the establishment of the first work programme ;
- (f) realized the need to establish conformance testing facilities.

With the availability of all these data which, thanks to the efforts of the standards institutions and the representatives of the administrations, were assembled in a relatively short time, it is now possible to define proposals for the implementation of a strategy in this field.

IV - PRESENTATION OF THE DRAFT DIRECTIVE

Standardization problems have always been one of the Community's main concerns since its establishment and in past years satisfactory solutions have been found in various sectors.

In tackling the problem of information technology and telecommunications, the Community is far from devoid of resources, since it already has a firmly based tradition in the field of standardization and, in addition to the experience it has already gained, the existing instruments can be used in order to attain the desired results more rapidly.

The draft directive takes this situation into account when proposing :

- alignment on international standardization,
- the use of existing directives,
- the allocation of responsibilities on the basis of the roles traditionally played by the Commission, the Standing Committee consisting of Member States' representatives and the standards institutions responsible for the technical work.

In order to benefit from this tradition, however, adjustments must be made in the light of the aspects specific to this sector.

1. Definition and performance of the necessary activities

The activities to be carried out are essentially designed to ensure harmonized application of international standardization within the Community. They are not intended to compete with work going on in international bodies, but aim to increase the efficiency and encourage the alignment of this work and to fill the gaps which often prevent the direct use of international standards and recommendations for the most common exchanges of information.

In pursuing these objectives a number of activities must be properly coordinated.

1.1 Taking requirements into account

Standardization work is generally undertaken as a result of requirements expressed by manufacturers, users and other interested parties. The harmonized application of standards must satisfy requirements that govern the choice of priorities and this means that at a later stage it is necessary to verify that the standards produced have properly satisfied these requirements.

1.2 Carrying out the technical work

The technical work necessary to restore the credibility of international standards is in principle assigned to the European standards institutions and the CEPT in accordance with the now traditional procedures in European standardization which have already proved their worth in practical application.

It must be made clear that the work to be carried out forms a chain in which each link is of importance, for example :

- the choice of reference standards corresponding to the needs expressed ;
- the polishing of standards to make them directly useable or the development of functional standards to provide services based on the chaining of several reference standards ;
- conformance testing without which applications would inevitably differ ;

and that these links correspond to shortcomings identified when the current situation was analysed and cannot be separated from each other.

It should be noted that the standardization work is mainly intended to cover the conventions essential for exchanges of information between heterogeneous equipment on bases that must be easy for all manufacturers to implement, do not place undue constraints on the internal organization and optimization of systems and do not hamper innovation. Some of the work will be to establish common technical specifications based on international recommendations in the telecommunications sector.

1.3 The role of the Committee

The Committee plays a vital role in defining general guidelines, analysing requirements and determining priorities. The technical work will have to be carried out in the light of requirements and with a view to obtaining practical results, especially as regards the exchanges of information that must be guaranteed on the basis of these standards or common technical specifications. The Committee therefore has an important function to perform in coordinating all the activities undertaken and in assisting the Commission to see that the technical work is done to provide efficient facilities for the exchanges of information essential to the Community.

1.4 The list of projects

The list of projects attached to the draft directive was drawn up in order to :

- (a) provide a more detailed description of the projects planned for the initial period;
- (b) allow a periodic review which, after the Standing Committee has been consulted, will take into account any developments in requirements and the rapid changes that are typical of information technology and telecommunications;
- (c) ensure greater management flexibility by enabling budget estimates to be geared to the type and volume of the projects, the financing arrangements which are ill-suited to the more rigid definition of a multiannual plan.

2. The best use of standardization within the regulatory framework

Numerous technical specifications are drawn up in the course of the regulatory activities of the Member States and often produce incompatibilities that seriously handicap any attempt at harmonization. Such harmonization has little chance of succeeding in the Community or in the wider international framework as it comes at too late a stage and the investment already made drastically compromises the chances of any alignment proposals succeeding.

The proposals made are not designed to restrict the regulatory power of the Member States but to ensure that, instead of hampering standardization, their regulatory activities become an effective way of promoting it.

It has been found that many technical rules specify aspects that could easily be covered by existing standardization if reference were made to the number of the standard and to the test method described in a standard on testing. The failure to refer to the standard and the current practice of redefining in each and every case aspects that could more easily and more correctly be described by the standard necessarily encourage the fragmentation of the market and deprive the Community of one of the most effective ways of applying international standards.

Where European standards institutions or the CEPT have been given standardization briefs, these should be taken into account in the drafting of technical rules. Clearly the standardization work is jeopardized if the experts responsible for it know that regulations in the process of formulation prejudice the outcome of the convergence process that is necessary to carry out their task.

The case of technical specifications that could be covered by standardization work carried out rapidly represents a change in comparison to the existing directives.

The need to act at this early stage has already been mentioned with reference to information technology and is adequate justification for the proposals that strengthen the machinery set up by Article 7 and 8 of Directive 83/189/EEC. Notification of a draft technical rule comes at a stage when several months of work have already been devoted to its drafting and since manufacturers have often made a start in the design of products in line with the preliminary draft the conditions for alignment are far from ideal. It is therefore proposed that at the preliminary stage, i.e., when there is an intention to draw up technical rules, an opportunity should be provided to see whether the technical work cannot be carried out jointly and to take advantage of Community solidarity at a

time when it has the best prospects of succeeding. This kind of reasoning is particularly valid in the telecommunications sector, since the digitization of networks results in convergence being achieved in the early stages, and experience has shown that it is very difficult to make corrections once large investments have been made in the infrastructure. It should be noted that in the event of failure the application of Directive 83/189/EEC is still valid and that at a later stage the notification of the draft technical rule remains applicable.

3. The use of standards in public procurement

The application of standards in public procurement is an inseparable part of the proposed approach and is justified by a dual relationship :

- (a) the preparation of specifications referring to standards allows genuinely competitive tendering and the lack of standards that can be directly used for this purpose is a serious obstacle to the opening-up of the market ;
- (b) the use of standards for public procurement helps to promote them and many users outside the public sector readily follow the example given once they know that these standards are in common use.

When computers were used in isolation the application of standards could more easily be confined to the problems of managing a computer centre and was essentially a matter for technicians. The information technology boom has radically changed this situation and computer systems are now used for exchanges of information essential to the functioning of a modern society. It must be possible to carry out such

exchanges on the basis of officially standardized conventions that are independent of the choice of supplier as was the case earlier with the Morse or teleprinter codes.

At present the technical specifications used in tender documents for most official contracts rarely mention international standardization (or its national equivalent) but refer to manufacturers' specifications although these references do not have a status ensuring everyone of free access or merely pay lip service to compatibility with existing systems.

This situation is particularly worrying in view of the fact that many information systems financed from public funds are set up to provide information to a very wide public and the specifications for such systems affect the ordering of terminals, for which it is impossible to refer to international standards.

Directive 77/62/EEC⁴ applicable to data processing since 1981, does not provide an adequate basis as far as standardization is concerned.

- It merely states in Article 7 that technical specifications may make reference to standards.
- The number of contracts for IT published in the Official Journal of the European Communities is extremely low.
- The implementation of standards should not be linked to the minimum financial value for which the Directive is applicable, as it is relevant to all equipment.
- It does not cover the telecommunications sector which means that the application of European standards and common technical specifications can be promoted without difficulty.

⁴ OJ No. 31 of 15 January 1977.

It is therefore proposed that the use of international standards should be applicable in public procurement orders.

The application of standardization in this context naturally calls for a progressive approach :

- the standards that can currently be used for this purpose are not yet very numerous if only because there is a desperate shortage of conformance testing facilities and these are essential for harmonized implementation ;
- the standards applicable on a priority basis are those governing exchanges in open mode, in particular through public networks, and applying to only one part of the information technology complex.
- the common technical specifications required in the telecommunications sector have a particular bearing on future computerized telecommunications services, i.e., on the digitization of networks and on the new generations of terminals.

CONCLUSION

The problems raised by IT standardization do not call into question international standardization but directly concern the possibility of easy implementation of these standards to solve practical problems.

Applications requiring exchanges of information in open mode, for which international standardization is obviously ideal, are increasingly numerous and make the case for a minimum of conventions, inevitable in any organized society, based on international standards. The Commission's proposals are designed to ensure that activities relevant to this objective are henceforth better coordinated by the Member States in the Community.

Proposal for a
COUNCIL DIRECTIVE

on standardization in the field of information technology
and telecommunications

(submitted to the Council by the Commission)

PROPOSAL FOR A
COUNCIL DIRECTIVE
ON STANDARDIZATION IN THE FIELD OF INFORMATION
TECHNOLOGY AND TELECOMMUNICATIONS

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 213 thereof,

Having regard to the proposal from the Commission,

Having regard to the Opinion of the European Parliament¹,

Having regard to the Opinion of the Economic and Social Committee²,

1 OJ No. ,

2 OJ No. ,

Whereas the standards applicable in the field of information technology and the activities necessary for their preparation are of a special nature and involve the following :

- the complexity of the technical specifications and the precision required to ensure the exchange of data and the compatible operation of systems ;
- the need to ensure rapid publication of standards so that undue delays do not result in the early obsolescence of texts that have been overtaken by the speed of technological change ;
- the need to ensure the application of international standards on a basis which will guarantee their credibility from the standpoint of practical implementation ;
- the economic importance of the role played by standardization in contributing to the creation of a Community market in this field ;

Whereas Council Directive 83/189/EEC¹ enables the Commission, the Member States and the standards institutions to be informed of the intentions of standards institutions to draw up or to amend a standard, and whereas under the terms of that Directive the Commission may establish terms of reference for work on standardization of common interest to be undertaken jointly and at an early stage ;

¹ OJ No. L 109, 26.4.1983, p. 8

Whereas that Directive must be expanded so that in the field of information technology and telecommunications the Commission and the Member States are informed, from the very beginning, of the drafting of technical rules and whereas the standstill procedure which is applicable to them must be modified to enable the competent technical organizations to draw up common technical specifications or European standards ;

Whereas the telecommunications sector is of economic importance both from the point of view of industrial activity in this sector and by reason of its contribution to the efficient exchange of information throughout the Community and in the light of the conclusions of the Council of 17 December 1984 on a Community telecommunications policy ;

Whereas the increasing amount of technical overlap between the different fields of standardization, particularly in the case of information technology and telecommunications, is such as to justify close cooperation between standardization bodies, which should collaborate in order to deal with these matters of common interest ;

Whereas the agreements recently concluded by the Commission

- within the framework of the Memorandum of Understanding signed with the European Conference of Postal and Telecommunications Administrations (CEPT),

- and in the context of the general guidelines agreed with the joint European standardization organization CEN/CENELEC

now make it possible to assign responsibility for the drafting of common standards and technical specifications particular to those two fields to those specialized technical organizations, without prejudice to any further procedures that may need to be set up ;

Whereas application of the Council Directive on the initial stage of implementation of the mutual recognition of type approval for telecommunications terminal equipment¹ will necessitate the planning of work on the drawing-up of common technical specifications in the telecommunications sector ;

Whereas the field of public sector procurement constitutes a particularly suitable area for the application of standards and technical rules and whereas Council Directive 77/62/EEC² needs to be supplemented so as to reinforce the reference made to standardization ;

Whereas a Standing Committee, composed of representatives appointed by the Member States, should be set up to help the Commission to draw up guidelines and to define priorities in respect of the proposed activities ;

1. Directive proposed on the same date.

2 O.J. No L 13, 15.1.1977, p.1

HAS ADOPTED THIS DIRECTIVE :

Article One

For the purposes of this Directive :

- 1) "technical specification" means a specification contained in a document which lays down the characteristics required of a product, such as levels of quality, performance, safety or dimensions, including the requirements applicable to the product as regards terminology, symbols, testing and test methods, packaging, marking or labelling ;
- 2) "common technical specification" means a technical specification which has been drafted with a view to uniform application in all the Member States of the Community ;
- 3) "standard" means a technical specification approved by a recognized standards body for repeated or continuous application, compliance with which is not compulsory ;
- 4) "test standard" means a standard concerned exclusively with test methods, sometimes supplemented by other provisions relating to the test in question and covering such matters as sampling, the use of statistical methods and the test sequence ;
- 5) "international standard" means a standard adopted by a recognized international standards body ;
- 6) "European standard" means a standard which has been approved pursuant to the statutes of the standards bodies with which the Community has concluded agreements ;

- 7) "development standard" means a standard with a satisfactory degree of stability, proposed by the standards bodies with which the Community has concluded agreements and which has been tried out in practice before being formally adopted as a European standard;
- 8) "functional standard" means a standard that has been drawn up for the purpose of fulfilling a more complex function such as is required in order to ensure systems interoperability, that is generally obtained by linking together several reference standards which have already been adopted, and that has been approved pursuant to the statutes of the standards bodies with which the Community has concluded agreements ;
- 9) "harmonization document" means a document approved as such pursuant to the statutes of the standards bodies with which the Community has concluded agreements ;
- 10) "technical regulation" means the technical specifications, including the relevant administrative provisions, the observance of which is compulsory, de jure or de facto, in the case of marketing or use in a Member State or a major part thereof, except those laid down by local authorities ;
- 11) "certification of conformity" means the activity whereby the conformity of a product or service to given standards or other technical specifications is certified by means of a certificate or mark of conformity ;
- 12) "information technology" means the systems, equipment, components and software required to ensure the transmission, processing and storage of information in all centres of human activity (home, office, factory, etc.) whose application generally requires the use of electronics or similar technology.

Article 2

In the field of the standardization of information technology and telecommunications, and particularly that part of it which is concerned with the preparation and application of standards and common technical specifications pursuant to the procedures laid down in Articles 4, 5 and 6, the following measures shall be implemented at Community level :

1. regular, at least annual, determination on the basis of international standards, draft international standards or equivalent documents of priority standardization requirements with a view to the preparation of work programmes and the commissioning of such European standards and common technical specifications as may be deemed necessary to ensure the exchange of information and systems interoperability ;
2. on the basis of international standardization activities :
 - a) the clarification and supplementing of existing international standards and recommendations so as to ensure that the quality of their definition guarantees the precision required by users for the exchange of information and systems interoperability, having recourse, if necessary, to the drafting of functional standards ;
 - b) direct action to ensure the preparation of technical specifications which may form the basis of European standards in the absence of international standards, or when such action is justified by excessive delays ;

c) measures to facilitate the application of the standards and common technical specifications, in particular by means of:

- the verification of the conformity of products and services to the standards and common technical specifications, preferably on the basis of test standards;
- the certification of conformity to standards and common specifications in accordance with properly harmonized procedures ;
- the organization of demonstrations of ways in which standards are being developed so as to ensure credibility ;

d) promotion of the application of standards and common technical specifications relating to information technology and telecommunications in public sector procurement.

The specific objectives and the activities proposed are detailed in the Annex. That Annex may be revised by the Commission following consultation of the Committee referred to in Article 6 ; it shall be updated at least once every three years.

Article 3

1. When technical regulations are being drawn up in the fields covered by this Directive, the Member States shall refer to European standards and common technical specifications when they relate, even partly, to the technical specifications necessary for the establishment of those technical regulations.
2. The Member States shall refrain from drafting technical regulations in the fields covered by this Directive when the technical specifications correspond to aspects covered either by the

tasks or approved standardization programmes entrusted to the European standards institutions or by the work entrusted to the specialized technical bodies in the telecommunications sector with a view to drawing up common technical specifications.

3. If no European standard or common technical specification exists and if the European standards institutions or the specialized technical bodies in the telecommunications sector are not working on one, the Member States shall communicate to the Commission their decision to commence work on the drafting of technical rules, if necessary in the form of programmes, in the sectors which make up the field covered by this Directive with a view to ensuring the necessary exchange of information and systems inter-operability and which correspond to the priorities laid down by the Commission after consultation of the Committee provided for in Article 6.

The Commission shall inform the other Member States without delay and invite them to state whether they wish to see a European standard or a document resulting in common technical specifications prepared.

Within three months of being notified of the intentions of a Member State, and after consulting the Committee provided for in Article 6, the Commission may assign the task to the European standards institutions or ask the specialized technical bodies in the telecommunications sector to undertake the work of drafting common technical specifications.

4. If, at the end of the period laid down for the tasks assigned to the standards institutions or for the drafting of common technical specifications, the technical specifications requested have not been prepared

or

if, at the end of the three-month period referred to in the third subparagraph of paragraph 3, no decision has been taken on whether to assign the task of preparing European standards or common technical specifications to the European standards institutions or to the specialized technical bodies in the telecommunications sector

the Member State will be free to prepare the technical rules referred to in paragraphs 2 and 3 in accordance with the obligations laid down in Directive 83/189/EEC.

Article 4

The Commission, taking into account the information procedure laid down in Directive 83/189/EEC and in consultation with the Committees referred to in Article 6, shall determine the priority needs of the Community in the fields covered by this Directive on the question of standards and common technical specifications and the verification of conformity with the standards or common technical specifications. It shall draw up programmes in line with these needs with a view to assigning the technical work to the competent technical organizations in accordance with the following procedures :

- a) In the information technology sector covered by the European standards institutions, the Commission, after consulting the Committee provided for in Article 6, shall entrust the technical work to these organizations requesting them, if necessary, to draw up corresponding European standards.

b) In the telecommunications sector, the Commission after consulting the Committees provided for in Article 6, shall request the specialized technical bodies in the telecommunications sector to draw up common technical specifications within an agreed period in accordance with the procedure laid down in Article 5 of Directive¹.....

c) In the field common to information technology and to telecommunications, the Commission, after consulting the Committees provided for in Article 6, shall request the European standards institutions and the specialized technical bodies in the telecommunications sector to submit to it within a period of three months a joint proposal for the organization of the work which will take into account :

- the level of convergence to be ensured,
- the participation of experts from associated sectors,
- a definition of the framework in which the work will be carried out.

After receiving this proposal, the Commission shall entrust the work to be carried out to these organizations in accordance with the procedures described in points a) and b) as a function of the need to draw up either European standards or common technical specifications.

Article 5

The Commission shall ensure that the standards, the harmonization documents and the common technical specifications defined in this way are applied in the case of all Community projects and

¹ Directive proposed on the same date.

programmes, including public procurement orders financed from the Community budget.

Member States shall take all necessary steps to ensure that reference to European standards, harmonization documents and common technical specifications is made in public procurement orders relating to information technology and telecommunications and that those standards or common technical specifications are used as the basis for the exchange of information of public interest.

Application of this Article shall take account of the need for the continuity of operation of existing systems and their extension during the transitional period required for their adaptation to technical progress.

These provisions amend the application of Article 7 of Directive 77/62/CEE to public supply contracts in respect of information technology equipment.

Article 6

A Standing Committee with the task of assisting the Commission in attaining the objectives and conducting the activities laid down by this Directive, composed of representatives appointed by the Member States, who may be assisted by experts or advisers, is hereby established under the Chairmanship of a representative of the Commission.

The Commission shall consult the Committee on the definition of general guidelines, the analysis of requirements, the determination of Community priorities, the drawing up of programmes, the verification of conformity with standards and with common technical specifications and other subjects connected with standardization in the field of information technology, telecommunications and fields in which they overlap.

The Commission shall coordinate the activities of this Committee with those of Committees existing in related sectors - where necessary on the basis of joint meetings - particularly in areas of technical overlap.

Article 7

1. The Committee shall meet at least twice a year.
2. The Committee shall draw up its own rules of procedure.
3. The activities of the Committee and the information submitted to it shall be confidential. Nevertheless, subject to the necessary precautions, the Committee and the national authorities may seek the expert advice of natural or legal persons in the private sector.

Article 8

Every two years the Commission shall submit a progress report to the European Parliament and the Council on standardization activities in the information technology sector. This report shall refer to the implementing arrangements adopted within the Community, the results obtained, the application of those results in public procurement contracts, and, in particular, their practical significance for certification.

Article 9

Member States shall take the measures necessary to comply with this Directive by¹ at the latest and shall forthwith inform the Commission thereof.

Article 10

This Directive is addressed to the Member States.

¹ Three months after the adoption of the Directive.

ANNEX (1)

STANDARDIZATION MEASURES IN THE FIELD OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS

1. A I M S

- a) to contribute to the integration of the internal Community market in the information technology and telecommunications sector ;
- b) to improve competitive conditions by enabling manufacturers to ensure the compatibility of their equipment on the basis of precisely defined international standards or common technical specifications to which unrestricted access is guaranteed ;
- c) to facilitate the exchange of information throughout the Community, by reducing the obstacles created by incompatibilities arising from the absence of standards or their lack of precision ;

(1) This annex reproduces some of the technical content of sections 1.1 and 1.2 (Standardization policy and public procurement) of the Annex to Council Decision 84/559/EEC in respect of general measures in the field of data processing (OJ No. L 308, 27.11.84).

- d) to ensure that user requirements are taken into account by giving users greater freedom to assemble their systems in a manner guaranteeing an adequate degree of operating compatibility and, consequently improved performance at a lower cost ;
- e) to promote the application of standards and common technical specifications in the public procurement sectors.

2. DESCRIPTION OF MEASURES AND ACTIVITIES TO BE UNDERTAKEN

2.1 PREPARATION OF WORK PROGRAMMES AND DEFINITION OF PRIORITIES

The drawing up of work programmes and assignment of priorities takes account of Community requirements and the economic impact of these activities from the standpoint of both users and producers. The tasks to be performed at this level include, in particular :

- 2.1.1 operations designed to gather detailed information on the basis of national and international programmes, presentation of that information in a form which facilitates comparative analysis and preparation of the summaries required for the work of the Committee ;
- 2.1.2 the dissemination of that information, the examination of requirements and the consultation of interested parties ;
- 2.1.3 synchronization of the work programmes with international standardization activities ;

2.1.4 the management of work programmes, preparation of specific tasks and contracts, drawing-up of timetables and monitoring of their implementation and the transposition of European standards into national standards ;

2.1.5 the preparation of reports describing the execution of the activities and the practical results of their implementation.

2.2 THE EXECUTION OF STANDARDIZATION ACTIVITIES IN THE FIELD OF INFORMATION TECHNOLOGY

Execution of the work programmes necessitates the implementation of a series of activities, responsibility for which is generally entrusted to CEN/CENELEC and to the CEPT and which correspond to the different stages of activity that must be completed in order to ensure the credibility of standards.

These activities include :

2.2.1 the refinement of international standards in an effort to remove the ambiguities and options that distort the function of standards designed to guarantee the exchange of information and the compatible operation of systems ;

2.2.2 the drafting of development standards in cases justified by the excessive delays of international standardization procedures, or of standards required in the Community context in the absence of international standards ;

2.2.3 the definition of the conditions to be fulfilled in order to claim complete conformity to a standard ;

2.2.4 the development of sufficiently detailed operating standards or specifications to ensure the compatible working of systems which operate on the basis of standards ;

2.2.5 the management of public enquiry procedures ; the formal adoption of standards and monitoring of their transposition into national standards ;

2.2.6 the preparation of test standards and the organization of procedures and structures to enable test laboratories to check conformity to those standards on a properly harmonized basis.

2.3 ACTIVITIES AFFECTING THE TELECOMMUNICATIONS SECTOR

The standardization measures which concern the telecommunications sector include two types of activity :

- the drafting of common technical specifications applicable to telecommunications networks which, in certain cases, are indispensable as a basis for the information technology standards which depend on these networks for the long-distance exchange of information. This work comes under the harmonization activities carried out in the telecommunications sector ;
- the work to be carried out in the field common to information technology and to telecommunications requires increased cooperation between the competent technical bodies. It should raise the degree of convergence so that the standards and common technical specifications can be applied in as many ways as possible and in a harmonized manner.

2.4 COMPLEMENTARY MEASURES

This part of the programme covers measures taken in direct support of the above-mentioned activities and includes

2.4.1 specific metrological activities relating to :

- test and validation instruments,
- formal description techniques,
- recourse to references, particularly in the case of applications requiring the use of functional standards based on a number of standards in combination ;

2.4.2 the provision of guidance manuals for the final user ;

2.4.3 the organization of demonstrations in respect of the operating compatibility achieved as a result of the application of a standard. The main aim of this action will be to make the test and metrological instruments defined in 2.4.1 available for use in different projects and to ensure that development standards are experimented with ;

2.4.4 the creation of a suitable structure for arrangements that go beyond the framework of industrial standardization, depend on agreements concluded in particular fields of professional activity and contribute to the efficient exchange of information (travel agency transactions, automation of money transactions, computerization of customs documents, etc.) ;

2.4.5 measures to be taken in respect of production automation, office automation and micro-computing which will affect interface standardization in particular ;

2.4.6 studies and projects relating specifically to standardization in the field of information technology.

3. MEASURES RELATING TO THE APPLICATION OF STANDARDS IN THE PUBLIC PROCUREMENT SECTOR

3.1 Determination of the most efficient methods of ensuring the rapid application in the public procurement sector of the standards and technical specifications drawn up in the context of the above-mentioned activities.

3.2 Examination of the effects in the public procurement sector of the complete application of the relevant Community rules, involving in particular :

- a comparison of the progress made by the European industry in the light of the measures taken by the Member States in connection with public procurement in the data-processing field ;
- collection of the necessary statistics ;
- promotion of equal conditions of access to Community public procurement contracts for undertakings within the framework of Council Directive 77/62/EEC of 21 December 1976 coordinating procedures for the award of public supply contracts.

- 3.3 Coordination of national measures in respect of general systems evaluation and, in conjunction with national research centres in the data-processing field, the adoption of principles with a view to the definition of evaluation criteria.
- 3.4 Examination of the possibility of establishing a number of principles to be applied in evaluating proposals.
- 3.5 Examination of the possibility of establishing common principles for the definition of specifications.
- 3.6 Coordination of the exchange of technical experience between national bodies responsible for public procurement and the promotion of such exchange through coordination of the activities of the national research centres in the data-processing field.
- 3.7 Identification of topics likely to lead to the development of projects of common interest to public procurement agencies.

FINANCIAL RECORD

1. Budget heading

7717 Standardization : Information and Telecommunications Technologies

2. Legal Basis

- Article 100
- Conclusions of the Council meeting on standardization of 16 July, 1984
- 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 (OJ L.109 of 26.4.83)
- Council Directive on standardization in the field of information technology (draft under preparation)

3. Proposed classification as obligatory/non-obligatory spending

Non-obligatory spending

4. Description and justification

The project proposed consists of standardization work specific to information technology and covering some areas of overlap between information technology and telecommunications. The relevant technical bodies (e.g. : CEN/CENELEC and CEPT) will be responsible for the work, with a view to defining European standards (EN) derived from international standards or, in the absence of such international standardization, defining the required standards in the Community context.

These actions also include the work required to allow users to apply these standards, notably in the area of public procurement, i.e. detailed definition, user-guides to implementation, conformity testing and certification.

4.1 Objectives

These actions aim at the definition of the necessary standards for information exchange and interoperability between heterogeneous systems, i.e. essentially at the interfaces for both hardware and software.

They are also designed to encourage :

- the establishment of a Community market for information technology and network terminals
- the implementation of more convergent industrial strategies between Community enterprises
- greater efficiency in the information exchange essential to successful business management and the reduction of the overheads paid by users due to incompatible systems
- the application of standards under public sector purchasing

4.2 Administration

TF-ITT (Standardization and Type Approval Unit)

5. Type of expenditure and method of calculation

5.1 Type of expenditure

Contracts, commissioning of standards, provision of experts' services, etc...

5.2 Method of calculation

- organisation of consultations/meetings
- standardization contracts (on the basis of order forms corresponding to detailed commissions or programmes - average cost estimated at ECU 120,000 per contract)
- establishment of conformity testing procedures ; promoting conformity testing centres and organising demonstrations of interoperability based on the application of standards (contracts drawn up with testing centres following calls for proposal)
- auxiliary and temporary staff
- drafting of technical specifications with a view to public sector purchasing (studies and contracts in the framework of the activities of the PPSC Committee, public sector purchasing/data-processing)
- data-processing equipment
- publication and dissemination of information

6. Financial implications of the project in respect of appropriations for expenditure

6.1 Timetable for commitments and payments

	<u>Commitments (MioEcu)</u>		<u>Payments (MioEcu)</u>			
		1985	1986	1987	1988	1989
1986	6.0	-	2.5	2.5	1.0	-
1987	7.0	-	-	3.0	2.0	2.0
1988	8.0	-	-	-	3.5	4.5
1989	8.0	-	-	-	-	3.5
*1985	4.0	3.0	1.0	-	-	-

(appropriation entered under chapter 100)

6.2 Share of Community financing (%) in the overall cost of the project

Community financing to cover 100% of the work required by the Community.

7. Remarks

The work is prepared after consultation with the Senior Officials Group for Information Technology Standardization (SOGITS). It takes into account the state of progress of international standardization and the needs of the Community in this area. The work undertaken in this context replaces the standardization programme covered by the multi-annual data-processing programme 1979-1983. During the transition period (end of 1984 and 1985), initial work will be financed under budget heading 7702 (Council Decision of 22 November 1984 : 84/559/EEC).

8. Financial implications in respect of staffing and running costs

8.1 Staff required full-time

2 A5/4 - 2 A7/6 - 2 B - 3 C

8.2 - 8.3 - 8.4 Necessary appropriations

See § 7.

Proposal for a
COUNCIL DIRECTIVE

concerning the first phase of the establishment of the mutual
recognition of type approval for telecommunications
terminal equipment

(submitted to the Council by the Commission)

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C. DRAFT PROPOSAL FOR A COUNCIL DIRECTIVE CONCERNING THE FIRST PHASE OF THE ESTABLISHMENT OF THE MUTUAL RECOGNITION OF TYPE APPROVAL FOR TELECOMMUNICATIONS TERMINAL EQUIPMENT

A. SUMMARY

In accordance with one of the objectives approved by the Council of Ministers on 17 December 1984, the Commission is proposing a Directive concerning the first stage of the establishment of the mutual recognition of type approval for telecommunications terminal equipment. This first stage consists of the mutual recognition of the results of conformity tests on terminal equipment carried out by approved laboratories on the basis of a common conformity test specification. This Directive will help to establish a European telecommunications area that will contribute towards the harmonious development of the Community's economic activities; it has two objectives :

- to ensure that telecommunications terminals can exchange information and allow interworking;
- to ensure that tests to verify conformity with a common technical specification are carried out only once to obtain type approval in the ten Member States (type approval at this stage still being granted by the competent authority in each Member State).

The proposed Directive endeavours to cover all the operations necessary to attain the abovementioned objectives, i.e. :

- (a) The choice of types of terminals to be given priority.
- (b) The drawing up of common technical specifications for conformity tests on these terminals.
- (c) The adoption of these specifications.

- (d) The approval of test laboratories.
- (e) The use of common conformity test specifications for recognition of the results of conformity tests on terminals.
- (f) The use of common conformity test specifications in public procurement contracts.

B. EXPLANATORY MEMORANDUM

I) INTRODUCTION :

In the conclusions of its meeting of 17 December 1984, the Council approved, on the basis of a communication from the Commission, the main objectives of a Community telecommunications policy. These were :

- (a) the creation of a Community market for telecommunications terminals and equipment;
- (b) improving the development of advanced telecommunication services and networks;
- (c) improved access for the less-favoured regions of the Community, through the appropriate use of Community financial instruments, to the benefits of the development of advanced services and networks;
- (d) coordination of negotiating positions within the international organizations dealing with telecommunications, based on discussions held jointly with the Senior Officials Group for Telecommunications.

The draft Directive presented to the Council today concerns the first objective which the Council agreed to attain by :

- a standardization policy aimed at the effective implementation in the Community of common standards derived from international standards;

- the progressive application of procedures for the mutual recognition of type approval for terminals.

II) THE AIM OF THE PROPOSED DIRECTIVE

The proposed Directive proposes the implementation of a first stage towards the mutual recognition of type approval for terminals, i.e. the mutual recognition of the results of conformity tests on terminals carried out by approved laboratories. At present type approval for a telecommunications terminal - i.e. authorization to connect it to the telecommunications network - is given in each Member State on the basis of the results of tests to verify conformity with a national technical specification, and in most cases these tests are carried out by a national laboratory. This situation has two major disadvantages :

- (a) If the various national technical specifications are not identical for a terminal providing a given service - and this is generally the case - terminals given type approval in two different States cannot generally communicate with each other.
- (b) With the present system, the industrialist who wants to market a terminal in the ten countries of the Community has to practically recommence the tests 10 times in order to obtain type approval, which causes delays and considerable expense.

The system proposed in the Directive has two objectives:

- to ensure that telecommunications terminals can exchange information and allow interworking;
- to ensure that the tests to verify conformity with a technical specification are carried out only once to obtain type approval in all the Member States (type approval at this stage still being granted by the competent authority in each Member State).

III) THE APPROACH ADOPTED :

To obtain these results it is necessary to have a common base : this will be provided by a procedure for the drawing-up of common technical specifications. There are three essential requirements to be covered in the field of telecommunication terminals :

- user safety
- network safety
- interworking of terminals.

Safety requirements for the user are already covered by the "Low Voltage" directive (1). As they concern essential requirements constituting network security and interworking of terminals, it is necessary to define them to include an important quantity of detailed technical specifications of construction for each type of terminal. The fact that previous specifications were elaborated in organizations which did not have the statute of a recognized standard organization makes it impossible at the present time to adopt the approach of reference to standards.

The common base ensuring interworking of terminals and allowing recognition by all Member States of conformity tests carried out by approved laboratory in any one of them is the common conformity test specification.

Owing to the fact that this specification is drawn up by bodies which do not have the status of recognized standards institutions, a procedure for the adoption of the common specifications has to be provided. To bring about a situation in which conformity tests on a given terminal are carried out only once in the Community, it is necessary to introduce mutual recognition of conformity tests carried out by approved laboratories. This Directive establishes the chain of activities ranging from international standardization to the mutual recognition of conformity tests.

(1) ref. 73/23/EEC of 19 February 1973

The Commission took the view that a Directive was the most suitable way of establishing this procedure. Although the proposed activities are deployed pragmatically on the basis of existing organizations and procedures, this does not alter the fact that for practical application a minimum of common discipline is necessary and this discipline must be accepted at all levels in the bodies having responsibilities in the field of telecommunications. The Directive is an instrument enabling common provisions to be incorporated in the laws of each Member State, thereby allowing flexibility in the attainment of the different operational levels concerned.

The proposed Directive endeavours to cover all the operations necessary to attain the objectives. These are:

- (a) The choice of types of terminals to be given priority.
- (b) The drawing-up of common technical specifications for conformity tests on these terminals.
- (c) The adoption of these specifications.
- (d) The approval of test laboratories.
- (e) The use of common conformity test specifications for recognition of the results of conformity tests on terminals.
- (f) The use of common conformity test specifications in public procurement contracts.

For implementation of the Directive the Commission will be assisted by a Committee consisting of the Senior Officials Group for Telecommunications set up by the Council on 4 November 1983.

IV) THE CHOICE OF TYPES OF TERMINALS TO BE GIVEN PRIORITY :

The first thing is to choose the types of terminals to be given priority for the establishment of common technical specifications which will serve as a basis for the mutual recognition of conformity tests.

The Commission can provide guidance by means of its own studies, on the basis of criteria relating to the development of services, the market, the situation of competitors, etc. It will also consult the circles concerned (carriers, industry, users). On that basis, and in consultation with the Committee, which can give the views of the circles concerned in the Member States, it will draw up a list of priority terminals and of the standards and technical specifications needed to define these terminals. This list will be updated every year and is accompanied by a timetable.

V) DRAWING-UP OF COMMON TECHNICAL SPECIFICATIONS :

The drawing-up of technical specifications for terminals that can be used by all network carriers in the Community so as to ensure interworking of terminals is a complex technical operation that has to be carried out by competent experts in specialized technical organizations. The organization is selected by the Commission in consultation with the Committee. In actual fact the work has already started on the basis of an initial list of technical specifications and priority terminals adopted by the Commission in consultation with the Senior Officials Group for Telecommunications. The work has been entrusted to the CEPT under a Memorandum of Understanding signed between the Commission and the

CEPT in July 1984.

The CEPT has introduced the Commission's priorities into its work programme and has to draw up common technical specifications for these terminals. The work is to be based on the technical specifications recommended at international level (by the CCITT, ISO, IEC, etc). These specifications often leave options open, are sometimes incomplete and generally do not stipulate the conformity tests. Consequently the CEPT must eliminate the ambiguities, add the missing characteristics and specify in precise terms the tests to be carried out in order to verify that the terminals conform to a specification. As the Directive aims at the mutual recognition of conformity tests, the Commission is asking the CEPT to give priority to drawing up common specifications for conformity tests on terminals. In addition to the common test core, these specifications may include the definition of any tests justified by national network peculiarities in each Member State. These additional provisions would gradually have to be discarded as the national networks become more homogeneous following the implementation of new services.

To carry out this work close coordination has to be established between the CEPT and CEN-CENELEC, to which the Commission has given a similar brief for information technology. Since there are areas that are common to both information technology and telecommunications, it is important to ensure harmonization of the work done by the two organizations. For this purpose the CEPT and CEN-CENELEC have already set up a common Steering Committee. In addition joint meetings will be organized whenever necessary between the two committees that will assist the Commission in its work in these two fields.

VI) ADOPTION OF COMMON SPECIFICATIONS FOR CONFORMITY TESTS :

As the CEPT does not have the status of a recognized standards institution, a procedure for adoption of the common specifications is necessary. The Directive proposes this procedure. It makes provision for the Commission to submit to the Committee proposals for common conformity test specifications based on the work of the CEPT. The Committee will deliver an opinion by a qualified majority on the suitability of these common specifications to serve as a basis for mutual recognition. When the Committee's opinion is favourable, the Commission will adopt the common specifications and publish them in the Official Journal. When it is unfavourable, there is a procedure for submitting the matter to the Council.

In its work the Committee may be assisted by a technical committee.

After adoption, the common technical specifications for conformity tests on a terminal have to be used by the approved laboratories in carrying out these tests.

VII) APPROVAL OF TEST LABORATORIES :

To ensure that the results of tests to verify the conformity of a terminal with a given specification, carried out by a laboratory in a Member State, can be recognized in another Member State and serve as a base for terminal type approval, a climate of confidence must be established between all those concerned : national laboratories and national authorities empowered to grant type approval.

The Member States are responsible for appointing the "approved laboratories" that will carry out the tests on

the basis of the common specifications. They must first verify that these laboratories meet criteria of competence and reliability established by specialized bodies : ISO guides 25 and 40 already exist in this field.

Confidence can be built up by the holding of seminars and the organization of reciprocal visits by members of the laboratories.

Community resources can be used to equip these laboratories so as to harmonize the level of performance.

The period prior to the entry into force of the Directive could be used to identify approved national laboratories and to carry out confidence building operations.

A special effort should be made to ensure that there is not too great a difference in the costs of conformity tests from one laboratory to another.

VIII) THE USE OF COMMON CONFORMITY TEST SPECIFICATIONS FOR THE MUTUAL RECOGNITION OF THE RESULTS OF CONFORMITY TESTS

It is above all in this phase that there must be a minimum of Community discipline in order to attain the purposes of the Directive.

The common conformity test specifications must be used by the approved laboratories as a basis for testing the terminals submitted to them. The certificate of conformity issued after these tests, provided the results have been satisfactory, must be recognized by the national authorities responsible for type approval as a basis for granting type approval.

There is a safeguard clause which allows a Member State not to recognize a certificate of conformity issued for

a terminal if it has good reason to believe that this terminal does not meet one or more of the essential requirements mentioned in section III. Because of the wide variety of situations that may occur it is difficult to define more precisely the circumstances in which the safeguard clause may be invoked. However, the obligation on the Member State using the safeguard clause to inform the Commission and the other Member States, stating the reasons for its decision, and the procedure that follows this notification should prevent any abuse of this facility.

The Member States must also recognize certificates of conformity with their national standards issued by approved laboratories in other Member States in respect of terminals for which there are no common technical conformity test specifications.

IX) THE USE OF COMMON CONFORMITY TEST SPECIFICATIONS IN PUBLIC PROCUREMENT CONTRACTS :

The introduction into public procurement contracts of references to common conformity test specifications, where the contracts are for terminals covered by such specifications, is a highly effective way of promoting these specifications and has a knock-on effect on the private sector. It is in any case only natural that the administrations of the Member States should show a sense of common purpose in pursuing the objectives laid down by the Council with the aim of establishing a vast internal market, to which the use of common specifications and standards in this field will make a great contribution.

X) CONCLUSIONS :

The attached proposal organizes the first stage towards the mutual recognition of type approval as requested by the Council of Ministers on 17 December 1984. In the two years following the adoption of this Directive, the Commission will make a proposal on the following stage.

The Council is therefore requested to adopt the attached proposal for a Directive.

**PROPOSAL FOR A
COUNCIL DIRECTIVE
ON THE INITIAL STAGE OF IMPLEMENTATION OF THE
MUTUAL RECOGNITION OF TYPE APPROVAL FOR
TELECOMMUNICATIONS TERMINAL EQUIPMENT**

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

(1)

(2)

Whereas the mutual recognition of type approval for telecommunications terminal equipment features in the Communication from the Commission to the Council on Telecommunications of 18 May 1984, in the recommendations of 12 November 1984 concerning the implementation of harmonization in the field of telecommunications and the first phase of opening up access to public telecommunications contracts, and in the conclusions of the Council meeting of 17 December 1984 concerning a Community telecommunications policy;

Whereas the market in telecommunications terminal equipment and use of the full potential of the new telecommunications services are of considerable importance for the economic development of the Community;

Whereas it is absolutely essential to establish or consolidate a European industrial potential in the technologies concerned;

Whereas it is highly desirable to make rapid progress towards establishing a common market in this sector, in particular in order to offer the industry an improved base for its operations and to facilitate the adoption of a joint position with respect to non-member countries;

Whereas the mutual recognition of type approval for terminal equipment constitutes a major step towards the establishment of a common market in this sector;

Whereas, since situations differ and technical and administrative constraints exist in the Member States, progress towards this objective should be made in stages; whereas, in particular, the mutual recognition of type

approval for terminal equipment produced in quantity should be preceded by an interim stage during which there is mutual recognition of conformity tests on such equipment;

Whereas such an approach should be based on the definition of common technical specifications founded on international standards and specifications and on the harmonization of general technical requirements for testing, measuring and approval procedures in the areas of information technology and telecommunications;

Whereas a general standardization programme is being implemented in the information technology and telecommunications sector;

Whereas Council Directive X/X/EEC of on standardization in the field of information technology and telecommunications⁽¹⁾ provides a general framework for the drawing-up of standards or common technical specifications within which the work on telecommunications, because of its specific nature, should be organized more precisely and more fully with a view to the mutual recognition of the results of conformity tests on terminals;

(1) Directive proposed on the same date.

4

Whereas the Council Directives 73/23/EEC (1) of February 19th, 1973 on the harmonization of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits and 83/189/EEC (2) of March 28th, 1983 laying down a procedure for the provision of information in the field of technical standards and regulations are applicable in particular to information technology and telecommunications;

Whereas the Memorandum of Understanding between the European Conference of Postal and Telecommunications Administrations (CEPT) and the Commission concerning standards and type-approval for telecommunications equipment and the general guidelines agreed with the common European standardization organization CEN-CENELEC henceforth make it possible to entrust specialized technical harmonization work to those bodies;

Whereas it is necessary to set up a Committee, with the task of assisting the Commission in implementing this Directive and in progressively establishing the mutual recognition of type approval for terminal equipment;

HAS ADOPTED THIS DIRECTIVE :

(1) OJ No L 77, 26.3.1973, p. 29.

(2) OJ No L 109, 26.4.1983, p. 8.

Article 1

The mutual recognition of type-approval for telecommunications terminal equipment produced in quantity shall be established by stages. Its first stage, which is the mutual recognition of the results of conformity tests on terminal equipment, shall be attained in accordance with the provisions of this Directive.

Article 2

For the purposes of this Directive :

1. "telecommunications administrations" means the administrations or private operating agencies recognized in the Community and offering public telecommunications services;
2. "terminal equipment" means equipment directly or indirectly connected to the extremities of a public telecommunications network to send, process or receive information;
3. "technical specification" means a specification contained in a document which lays down the characteristics required of a product such as levels of quality, performance, safety or dimensions, including the requirements applicable to the product as regards terminology, symbols, testing and test methods, packaging, marking and labelling;
4. "international technical specification in telecommunications" means the technical specification of

all or some characteristics of a product, recommended by such organizations as CCITT or CEPT;

5. "common technical specification" means a technical specification which has been drafted with a view to uniform application in all the Member States of the Community;
6. "standard" means a technical specification approved by a recognized standards body for repeated or continuous application, compliance with which is not compulsory;
7. "international standard" means a standard adopted by a recognized international standards body;
8. "approved testing laboratory" means a laboratory the conformity of which with the accreditation criteria established by specialized bodies [see in particular ISO guides 25 and 40] has been verified by the appropriate Member State and which is approved by that Member State to conduct conformity tests on terminal equipment;
9. "certificate of conformity" means the document certifying that a product or service conforms to given standards or other technical specifications;
10. "type approval of terminal equipment" means the authorization delivered by the competent authority of a Member State to connect to a public network terminal equipment which has been recognized, on completion of tests carried out by approved laboratories, as being in conformity with a type-approval specification;

11. "conformity test specification" means a specification containing the essential technical characteristics of the relevant terminal equipment together with a precise definition of the methods for measuring each characteristic; the specification may also include requirements made necessary in a given State by historical network peculiarities or established national provisions concerning the use of radio frequencies;
12. "type approval specification" means a specification setting out the full and precise requirements that must be satisfied by terminal equipment to be granted type approval and in particular the requirements covering the essential objectives of user safety (in compliance with Directive 73/23/EEC), network safety and the inter-working of terminals; it includes the conformity test specification and also administrative requirements and, where appropriate, requirements concerning quality control operations to be carried out during the manufacture of the equipment;
13. "common conformity test specification" means a conformity test specification used in all the Community Member States by the authority competent for testing the conformity of terminal equipment; it includes the definition of all the tests required by each of the Member States for that purpose;
14. "common type approval specification" means a type approval specification which is used in all the Community Member States by all the authorities empowered to grant type approval for terminal equipment;

15. "mutual recognition of the results of conformity tests on terminal equipment" means a situation where, when an approved laboratory or the competent authority in a Member State issues a certificate, accompanied by test data and identification details, stating that a terminal is in conformity with a common specification of conformity tests or a part thereof, that certificate is recognized in the other Member States, so that if the terminal in question is the subject of an application for type approval in another Member State, it no longer has to be subjected to the tests for verifying conformity with that specification, or with the part of that specification concerning the tests carried out;

16. "mutual recognition of type approval for terminal equipment" means a situation where, when the competent authority of a Member State issues, on the basis of a common type approval specification, a type approval in respect of terminal equipment, that type approval is recognized in the other Member States, so that the terminal equipment can, without further technical verification, be connected to any Community network deemed to offer the service for which that terminal equipment was designed. It is assumed that the vendor will have set the terminal equipment to suit historical peculiarities of national networks or national provisions for radio-frequency spectrum use.

Article 3

The Commission shall :

- (1) draw up each year, after consulting the Committee referred to in Article 4 and with due regard to the general programme of standardization in the information technology sector, a list of international standards and international technical specifications in telecommunications to be harmonized and a list of terminal equipment for which common conformity test specifications or possibly common type approval specifications should be drafted as a matter of priority; it shall also draw up a timetable for this work;
- (2) request a specialized organization, selected after consulting the Committee referred to in Article 4, to carry out, within the specified time limits, the technical work needed to arrive at the common conformity test specifications and common type approval specifications identified in the list of priorities referred to in point 1 above; the common type approval specification constituting the common conformity test specification shall be drafted as a matter of priority;
- (3) adopt by the procedure set out in Article 5 the proposals for common conformity test specifications and common type approval specifications, and publish them in the Official Journal; this publication shall include without modification the requirements made necessary in a given Member State by historical network peculiarities or established provisions concerning the use of radio frequencies;

(4) after consulting the Committee referred to in Article 4, establish the measures necessary to facilitate the implementation of this Directive; those measures may, in particular, concern the period of time allowed for the execution of the additional tests mentioned in Article 7(1).

Article 4

1. In the accomplishment of the tasks referred to in Article 3, the Commission shall be assisted by a Committee, which for the purposes of this Directive shall be the Senior Officials Group on Telecommunications. The members of the Committee may be assisted by experts or advisers, according to the nature of the question under discussion and the Committee shall be chaired by a Commission representative.

2. The Commission may consult the Committee on any matter falling within the scope of this Directive.

The Commission shall consult the Committee on:

(a) the broad objectives and the future needs of the telecommunications standardization policy,

(b) problems raised by the approval of testing laboratories,

(c) the adoption of proposals for common conformity test specifications and common type approval specifications under the conditions laid down in Article 5.

3. The Committee shall adopt its own rules of procedure.

4. The secretariat of the Committee shall be provided by the Commission.

Article 5

The procedure for the adoption of the common conformity test specifications or common type approval specifications shall be as follows :

- (1) the Commission shall submit to the Committee the proposal for a common conformity test specification or a common type approval specification drawn up on the basis of the work referred to in Article 3(2). The Committee shall deliver its opinion on that proposal within two months, adopting the opinion by a qualified majority. The votes of Member States within the Committee shall be weighted in accordance with Article 148(2) of the Treaty; the chairman shall not vote;

- (2) where the proposal is in accordance with the Committee's opinion as thus expressed, the Commission shall adopt the provisions submitted therein;
- (3) where the proposal is not in accordance with the opinion of the Committee, or in the absence of any opinion, the Commission shall forthwith submit the proposal to the Council in the form of a draft decision. The Council shall act by a qualified majority.

If, within two months from the date on which the matter was referred to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 6

1. Each Member State shall inform the Commission of the authority or authorities competent in its territory to issue type-approval for terminal equipment. The Commission shall publish a list of these authorities in the Official Journal.
2. Each Member State shall send the Commission a list of the laboratories which it has approved for the purpose of verifying the conformity of terminal equipment with the common conformity test specifications and shall regularly submit a report on the activities of these laboratories in the field covered by this Directive. Such lists and reports shall be transmitted to the Committee for information.
3. The common conformity test specifications shall be used by the approved laboratories for the conformity tests on the terminal equipment concerned. If a Member State considers it necessary, it may request that the part of the

conformity tests relating to historical network peculiarities or established national provisions concerning the use of radio frequencies be carried out by a laboratory under its jurisdiction.

4. The certificate of conformity with a common type approval or conformity test specification, accompanied by test data, issued by the competent authority on the basis of tests carried out by an approved laboratory, shall be recognized in each Member State for type approval of the relevant terminal equipment by the competent type approval authority. The certificate of conformity must be accompanied by the data obtained from the measurements performed during the conformity tests, all the information necessary for precise identification of the terminal equipment on which the tests were made, and the precise indication of the common conformity test specification, or part thereof, used for the tests.
5. The authorities empowered in the Member States to issue type approval for telecommunications terminals shall recognize for the purposes of type approval the certificates of conformity with their own national standards issued by approved laboratories in other Member States where there are no common specifications for such terminals.
6. The Governments of the Member States shall ensure that the administrations make reference to any existing common conformity test specifications and common type approval specifications when they purchase terminal equipment normally covered by such specifications.

7. The Member States shall consult within the Committee referred to in Article 4, so as to bring about the progressive alignment of the costs for carrying out the same series of conformity tests in all the approved laboratories.

Article 7

1. Where a Member State establishes, on the basis of an examination of the common conformity test specification and the test results, that terminal equipment, tests on which have been carried out by an approved laboratory in another Member State, does not meet one or more of the essential requirements referred to in Article 2(12), it may, before granting type approval, request within a reasonable period tests additional to those already carried out. It shall immediately inform the Commission and the other Member States thereof, stating the reasons for its decision.
2. When the finding referred to in paragraph 1 concerns the electrical safety for users of a terminal falling within the scope of Directive 73/23/EEC, the measures to be taken by a Member State shall comply with the procedure in Article 9 thereof.
3. The Member State shall inform the Commission and the other Member States of the results of the additional tests. If those results are such that the Member State regards them as unsatisfactory, the Commission shall decide within six weeks, after consulting the Committee, whether to endorse the safeguard measures taken by the Member State or whether to uphold the certificate of conformity, or whether, with the agreement of the party seeking type

approval, to request that a second set of additional tests be carried out in an approved laboratory in a third Member State before the final decision. If the results of the additional tests indicate that the safeguard measures should be maintained, the party requesting type approval shall bear their costs. If the results of the additional tests indicate that the safeguard measures should not be maintained, the Member State, or its authority empowered to give type approval if so specified by that State, shall bear the costs.

4. If the Commission considers that modifications to the common type-approval specifications are necessary, these modifications shall be made in accordance with Article 3(2) and (3). In this event, the Member State which has taken safeguard measures may retain them until such modifications have entered into force.
5. When a Member State finds that terminal equipment which has already been approved is a danger to the national network, its services or its users, it may take safeguard measures by suspending type approval, but shall immediately initiate the procedure set out in paragraphs 1 and 2.

Article 8

The Commission shall draw up detailed rules for the implementation, during a second stage of the mutual recognition of type-approval for terminal equipment, and shall submit a proposal to the Council within a period of two years following the adoption of this Directive.

Article 9

This Directive shall not prejudice the application of Directive 83/189/EEC.

Article 10

1. Member States shall bring into force the measures necessary to comply with this Directive by and shall forthwith inform the Commission thereof.

2. Member States shall ensure that the Commission is informed of the main provisions of national law which they adopt in the field governed by this Directive.

Article 11

This Directive is addressed to the Member States.

Done at Brussels, 20 June 1985

For the Council
The President

FINANCIAL OUTLINE

1. Budget line

7700 (formerly line 7730 of the 1985 budget) : Actions concerning conformity of telecommunications terminals and preparatory actions in this area.

2. Legal basis

- Article 100.
- Communications to the Council : COM(83) 329, COM(83) 573, COM(84) 277, Council recommendations of 12.11.84, conclusions approved by the Council on the basis of a Communication from Mr. Davignon, 17.12.84.
- Council directive on the first phase of the establishment of the mutual recognition of type approval for telecommunications terminal equipment (in preparation).

3. Classification

Non-obligatory spending (Art. 235).

Description

This action aims at the establishment of a common market for telecommunications terminals, through the definition and application of common standards and of common conformity specifications allowing mutual recognition of conformity tests for terminals. The method consists of supporting the work of bodies such as the CEPT, for the production of common standards and specifications, and of establishing a procedure to make the use of these specifications obligatory. Network operators are directly concerned by this action, which has very strong industrial impact, its justification lies in the necessity of giving the industry a broad base for its markets and of establishing coherent networks and services in the Community.

5. Cost and methods of calculation

The credits involved partly concern budget line 7700. They will be required to cover a contribution to the work done by the CEPT, under the terms of an agreement with the Commission reached in July 1984, for the production of common standards and specifications, as well as committee and working group meetings. These services rendered over

the next few years can be estimated at about 50 man-years of expert services annually and four meetings per year of a committee with 20 members.

6. Financial implication for intervention credits

6.1. Timetable for commitments and payments

Each year from 1986 onwards.

Commitments : ECU 5 million.

Payments : ECU 2.5 million, the rest the following year.

6.2. Share of Community financing in total cost of action

Although it is difficult to be precise, the Community's financial contribution should not amount to more than 30 % of the resources invested by the PTTs and industry in this work.

6.3. Methods of financing during current year

The initiation of this action in 1985 will be financed from line 7700 of the 1985 budget.

7. Financial implication for staff costs and running expenses

Staff required exclusively for this action :

2 A5/4; 2 A7/6; 1 B as from 1.7.85.