# COMMISSION OF THE EUROPEAN COMMUNITIES

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#### COMMUNICATION FROM THE COMMISSION

to the European Parliament and the Council on trans-European data communications networks between administrations

Proposal for a COUNCIL DECISION

on a series of guidelines for trans-European data communications networks between administrations

Proposal for a COUNCIL DECISION

adopting a multiannual Community programme to support the implementation of trans-European networks for the interchange of data between administrations (IDA)

(presented by the Commission)

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#### Summary

The purpose of this communication is to propose a set of measures to enable national administrations and Community institutions and bodies to process and interchange the information necessary to the functioning of the internal market and implementation of common policies, by the establishment and use of appropriate trans-European data communications networks.

The volume and variety of information to be processed or interchanged between the relevant administrations and the applicable deadlines are such that these operations are only possible using computers and advanced telecommunications networks.

Based on the provisions of the Treaties and measures taken in Community pilot programmes in recent years, the Commission is proposing four series of measures to attain these objectives.

First, the adoption of a master plan of measures to be taken by national and Community administrations to set up trans-European data communications networks enabling them to process and interchange the necessary information. The guidelines covered by the plan define common objectives, priorities and broad lines of action, and identify projects of common interest.

Secondly, the adoption of a multiannual programme entitled IDA (interchange of data between administrations) representing the Community contribution to the implementation of projects of common interest and to the measures necessary to ensure interoperability of the networks concerned. Observing the principle of subsidiarity, the IDA programme will cover all the preparatory work, feasibility studies and harmonization work relating to the projects of common interest, and a small proportion of the cost of implementing and operating the networks for the projects which have top priority for the completion of the internal market.

Thirdly, the setting-up of a high-level coordination group responsible for assisting the Commission with the execution of the multiannual IDA programme.

Finally, the Commission proposes to begin exploratory discussions with non-Community countries, the EFTA countries in particular, to assess how far the extension of the data communications networks between administrations to those countries could facilitate the management of the European Economic Area.

This communication is accompanied by two proposals for Council Decisions, one on the overall guidelines, the other on the multiannual Community IDA programme.

# I. <u>DATA COMMUNICATIONS NETWORKS BETWEEN ADMINISTRATIONS:</u> THE NEED FOR A NEW APPROACH TO INTEGRATE AND EXPAND CURRENT ACTION

1. The Community and the Member States must take effective measures to fulfil their commitments, within the time allowed, notably in order to ensure the elimination of controls at frontiers within the Community, and more generally to ensure real freedom of movement of persons, goods, capital and services, and the implementation of common policies. The growing complexity and gradual integration of the Community decision-making process also imply that its procedures must be made more efficient.

The move towards European Union is resulting in a large number of new rules within the Community; systems must therefore be introduced to enable these rules to be applied and to function under satisfactory conditions.

2. Among the measures made necessary by these developments, steps should be taken to ensure that the national and Community administrations concerned use the most appropriate data communications tools, systems and networks to process and interchange the relevant information.

Should such measures not be properly implemented within the times required, the Member States and the Community would lack effective means to control and prevent fraud, once the establishment of the Community economic area has eliminated traditional border controls.

3. In order to conduct Community affairs on a joint basis all the parties concerned must have access to the information needed for day-to-day running and decision-making. This inevitably leads to a substantial increase in the volume of information to be processed and exchanged.

There are several ways of doing this. The postal service, telex and telephone will sometimes be sufficient. Fax could also be used systematically, but the operational inefficiency and cost of such an approach would quickly become prohibitive for all users. In most cases the time constraints associated with the complexity of the processing and transmission of the data to be provided and used are such that it will be indispensable, from the standpoints of efficiency and economy, to use advanced processing and communications facilities in the form of powerful data communications networks linking the various administrations together.

4. The completion of the internal market and the development of European Union open up new possibilities for implementing these management facilities. As a first step the Community must prepare a strategic vision of the development of data communications networks between administrations, satisfying the needs expressed by users and covering the undertakings which will have to be given jointly by the Member States and the Community; this series of guidelines will set out the objective pursued by the Community, the priorities and broad lines underlying the objective, and will identify projects of common interest that will contribute to the achievement of the objective.

Within this general framework, the second step will be to establish the terms of a Community contribution to the implementation of this series of guidelines, especially the projects of general interest.

5. These two stages are the subject of this Communication and the two attached proposals for Decisions.

These documents embrace the perspectives described in Communications COM(92)2000 and COM(92)2001 (1), and especially in the Communication to the Council of 10 December 1990 on trans-European networks<sup>(2)</sup>, supplemented by the Communication of 2 October 1991 on requirements for the exchange of information between administrations to ensure the functioning of the internal market <sup>(3)</sup>.

- 6. The comprehensive two-stage approach set out above, especially the second stage on the Community contribution to the implementation of the projects of common interest, must integrate, on a scale appropriate to the circumstances, the measures already taken by the Community in the field of the processing and transmission of data between national and/or Community public administrations, namely the CADDIA and INSIS programmes. Furthermore, the development of trans-European data communications networks between administrations could benefit from the relevant results of the ENS research and technological development programme. Finally, the data communications tools made available to administrations will make use of the results of the initiatives and programmes on electronic message interchange, notably TEDIS.
- 7. The CADDIA programme (4) , which came to an end on 1 June 1992, aimed to coordinate the activities of the Member States and the Commission relating to the use of data communications systems for the monitoring of imports and exports, the management and financial control of the organization of the agricultural market, and the collection and dissemination of statistical data on intra-Community trade. CADDIA was a precursor of the involvement of the national statistical administrations and the synergy between the three sectors taking parts customs, agriculture and statistics. It also made a substantial contribution to the development of data communications networks between administrations made necessary by the elimination of internal frontier controls on 1 January 1993.

<sup>(1)</sup> COM (92) 2000 and 2001 - 12.2.1992.

<sup>(2)</sup> COM (90) 585 final, 10.12.1990.

<sup>(3)</sup> SEC (91) 1752 final, 2.10.1991.

<sup>(4)</sup> CADDIA: Cooperation in automation of data and documentation for imports/exports and agriculture. Council Decision of 26 March 1985 extended for five years on 1 June 1987.

- 8. The INSIS programme (5) aims to improve communication between Community institutions and bodies, and between them and the Member States, by stressing the coordinated and harmonized use of information technology and telecommunications. The programme's priorities are electronic transmission of written texts, systems for accessing information of Community interest, and teleconferencing systems. Many institutions are taking part in the programme's activities: the Commission, the Council, Parliament, the Court of Justice, the Economic and Social Committee and several administrations in the Member States, notably the offices of the permanent representatives to the European Communities and certain national agencies and ministries.
- 9. These activities must now be grouped under a coherent umbrella. The Community contribution to the implementation of the projects of common interest must include the CADDIA and INSIS programmes, updated and expanded, and be extended to other fields. This multiannual Community programme is known as IDA (interchange of data between administrations) and is described in Chapter IV below.
- 10. The third research and technological development framework programme has enabled measures to be taken, under the specific programme "telematic systems of general interest", to support the coordinated development of electronic data interchange between administrations (European Nervous System ENS programme). The aims of activities in this field are to define common requirements for electronic information systems, study the needs for interoperability between Member States' networks, and to carry out studies and pre-standardization research with a view to solving network compatibility and interoperability problems.

These initiatives have been backed up by the TEDIS programme<sup>(6)</sup> whose aims include standardization of the content of the messages exchanged.

Finally, they have been supported by numerous activities taking place under the Community standardization policy for telecommunications and information technology.

11. It is highly likely that the spawning and growth of data communications networks between administrations will give rise to new technical problems and lead to increased reliance on the support provided by the various R&TD and standardization activities. Coordination between these measures and IDA must therefore be systematically continued and stepped up.

<sup>(5)</sup> INSIS: Interinstitutional integrated services information system. Council Decision 82/869, 13.12.1982

<sup>(6)</sup> Trade Electronic Data Interchange System. Council Decisions 87/499 of 5 October 1987 and 91/385 of 22 July 1991.

#### II. GUIDELINES (MASTER PLAN)

12. The need for close coordination between all the parties involved in the introduction of data communications networks between administrations implies that a series of guidelines constituting a development framework for the networks must first be established. These guidelines will define the projects of common interest which will contribute to the achievement of the objective of effective management of the Community area without frontiers, according to a timetable based on acknowledged priorities, and supported by broad lines of action. It will provide a satisfactory framework at the present stage of the Community's development, but it must be able to evolve in line with progress towards European Union.

#### A. Objective

13. The objective of the Member States and the Community alike is to contribute to the effective management of a Community area with no internal frontiers by using a combination of data communications tools, systems and networks. This objective aims in particular at the completion and functioning of the internal market and, as a priority, the elimination of controls at internal frontiers. It also covers the implementation and full exercise of the four freedoms of movement, the management and coordination of common policies and the improvement of the Community decision-making process.

Special attention must be paid to strengthening economic and social cohesion, ensuring that the advantages of the large common economic area spread to all the regions of the Community, notably as regards the quality and performance of data interchange facilities. This objective of cohesion requires the problems specific to island, landlocked and peripheral regions of the Community to be taken into account.

14. Community support measures can only be developed where Member States give clear commitments. Subject to this condition, coordinated initiatives between the Member States and the Community will therefore aim essentially to help to set up electronic data interchange systems to enable national administrations and the Community institutions and bodies to meet their new responsibilities. This is a joint task, based on a partnership arrangement, within which the respective responsibilities and obligations of the various participants must be clearly recorded, applying the principle of subsidiarity and avoiding duplication.

#### B. **Priorities**

15. The priorities are closely linked to the objective set out above.

A first set of priorities relates to the completion of the internal market. The Member States and Community institutions and bodies have an urgent need for data communications systems appropriate to the data interchange needs arising out of the elimination of controls at frontiers within the Community and the strengthening of controls at the Community's external frontiers.

- 16. The deadline of 1 January 1993 has forced the priority projects referred to above, which are currently being introduced, to go ahead without the benefit of a satisfactory set of trans-European telecommunications bearer services (electronic mail, file transfer, universal access to databases). However, for the continuation of the work, the availability of such services becomes imperative in order to ensure satisfactory interoperability between data communications networks and to ensure coherent execution of the projects of common interest. This is therefore an absolute priority in horizontal terms.
- 17. Besides the two priorities identified above, the priorities associated with the specific measures involved in the execution of the projects of common interest, and the timetable for implementing each measure, will be determined on the basis of both economic and political criteria which will have to be defined jointly in the context of coordination between user administrations. Moreover, these priorities will have to be adapted constantly to progress towards union.

The various areas in which such choices will have to be made are set out below.

In order to guarantee the exercise of each of the freedoms of movement enshrined in the Treaty, data interchange systems must be introduced between the competent national administrations, the Community institutions and bodies concerned, economic operators and individuals, to enable them to derive maximum advantage from an economic area without internal frontiers.

Another aspect concerns the preparation and management of common policies contributing to the harmonious functioning of the Community area without frontiers, such as the introduction of tools, supported by data communications networks, to manage the common agricultural, environment, education and health policies; statistics is a good example of such a tool to help prepare and manage the common policies.

Finally, the continued introduction of the internal market after the elimination of internal frontier controls implies that the Community decision-making process must be adapted to take account of the new conditions affecting the process.

18. A precondition to the introduction of such data communications networks is guaranteed interoperability between information systems, especially computer applications, the computer equipment processing the data to be interchanged and between this equipment, the accompanying software and the telecommunications networks. This precondition can only be satisfied by the introduction of compatible methodologies and administrative procedures, definition of common technical specifications and harmonization of the standards used. This will help to encourage operational systems to evolve and converge, in the medium term, towards a common data communications architecture allowing optimization of information flows and lower operating costs.

#### C. Broad lines of action

19. The setting-up and operation of data communications networks between administrations will be based on broad lines of action focusing on two major areas: sectoral activities in the various fields of administration concerned, and generic activities designed to harmonize certain aspects of the sectoral activities, with a view to cutting their costs and improving efficiency through increased interoperability.

These lines of action are aimed at satisfying users' needs. They must therefore be implemented on the basis of a partnership relationship between these users, especially the national administrations concerned and the Community institutions and bodies.

In the context of this partnership, whenever one of these lines of action is applied, it will be necessary to consider whether, in accordance with the principle of subsidiarity, the Community is justified in taking action. In particular, the Community may not encroach upon the financial responsibilities of the Member States for their share of the implementation and operation of data communications networks.

20. At the sectoral level, an initial line of action will relate to the drafting of specifications for data communications networks which will contribute to the implementation of the projects of common interest (see Chapter II.D below). With the exception of certain fields connected with the achievement of the free circulation of goods and for which networks already exist, it will often be necessary to carry out feasibility studies (including a validation phase if necessary) to establish the technical specifications for each data communications network designed to fulfil a specific need for data interchange in a particular administrative field.

A <u>second line of action</u> will cover the physical installation of these networks by the partners concerned, and their integration within a single project of common interest. It will also involve launching common initiatives to accelerate the start-up of specific data communications networks where very short deadlines require national and Community administrations to make a special joint effort.

The third line of action will lead to the introduction of mechanisms and procedures for joint implementation of the operational networks and projects of common interest (see Chapter V below on coordination matters). Logistical support will have to be put in place for all the data communications activities of the administrations concerned so as to manage the exercise of subsidiarity in an efficient manner. This logistical support must accompany and support the operation of the system as a whole, notably by clearly establishing where responsibilities lie and coordinating the work programmes proposed and managed by each partner.

21. As for horizontal activities, an <u>initial line of action</u> will cover the development and implementation of components that will guarantee satisfactory interoperability, first between administrations within the same field, later between the fields taking part in the same project of common interest and, finally, as far as is possible, between all the administrations concerned, whatever the field in which they work. This first line of action will lead to the design of common architectures on the basis of a general strategy with the main objective of ensuring interoperability between the various networks, making use, as far as possible, of proven technologies and commercially available products.

This line of action will lead to the adoption of common tools (standards, network architectures, bearer services, servers, etc.) which will allow the reliability of these networks to be improved and operating costs to be reduced. It will be necessary to adopt a pragmatic attitude, using the available tools as far as possible, or developing new tools consistent with the existing ones.

The first stage will involve carrying out feasibility studies to look at existing constraints and the needs expressed by users with a view to identifying a common denominator for all the administrative fields concerned. Account will naturally have to be taken of projects in progress. Indeed, in the highest priority field of eliminating controls at internal frontiers, the implementation phase has already begun: some systems are fully or partially operational and several networks are being set up or being validated on a limited sample. Nevertheless, owing to time constraints and the compartmentalization of the administrations concerned, these various initiatives have generally been implemented independently, and in particular without an overall view.

Therefore, while supporting current activities, we must aim for the convergence of data communications networks towards common data communications architectures, extending any common specifications that are adopted to all the participants concerned and to all aspects of data processing and transmission.

A <u>second horizontal line of action</u> will aim to provide users with a set of bearer services to enable them to interconnect via a number of trans-European communication services offering technical facilities (standards, reliability, protection) and administrative facilities (addressing, one-stop office, etc.) adapted to their needs. The aim in particular will be to stimulate the development of trans-European services such as electronic mail, database access or file transfer, to handle the routing of the information between the bodies concerned.

A <u>third line of action</u> will be devoted to user awareness and training. Awareness will relate to either electronic data interchange or common data communications architecture. Its objective will be to inform and train administrations directly or indirectly concerned by the problems of trans-European data communications networks.

A <u>fourth line of action</u> will cover relations between Community and non-Community countries. In the context of the introduction and management of the European Economic Area (EEA) it will have to deal as a matter of urgency with the introduction of cooperation mechanisms between administrations in the Community and in the EFTA countries, as required by the recent EEA agreement, and the interoperability of Community data communications networks with their counterparts in those countries (see Chapter II below on cooperation with non-Community countries).

#### D. Projects of common interest

- 22. The identification of the projects of common interest follows directly from the analysis of the obligations of the national administrations and Community institutions and bodies: rules have been laid down, so the competent public authorities must now be given the means to apply them. The strategy for implementing the necessary networks will therefore consist of responding to an operational demand, expressed in terms of administrative management functions.
- 23. A project of common interest may call upon a set of specific data communications networks which are interoperable and can hence carry out a given administrative function. Thus for example, indirect taxation management is a project of common interest; it will make use of a number of data communications networks interconnecting specific administrative fields in addition to indirect taxation, such as customs and statistics. An administrative function covered by a project of common interest is ready when all its specific components have reached the operational stage.

In the short term, projects on the completion and functioning of the internal market which, in view of the imperative deadline of 1 January 1993, have top priority, are mostly in preparation or progress. Moreover, the Commission, in close cooperation with the competent national authorities, is proceeding with the identification of priorities and a detailed definition of the content of the projects of common interest which will be undertaken either to supplement action taken in priority fields, or to satisfy needs expressed by the other administrative sectors concerned.

### Elimination of controls at the Community's internal frontiers

- 24. Five priority projects of common interest will enable the completion and functioning of the internal market and in particular the elimination of the Community's internal frontiers: management of external frontiers, statistics on intra-Community trade, fraud prevention, mobility of persons and indirect taxation. These five projects of common interest will link data communications networks specifically interconnecting five areas of administration: indirect taxation, customs, veterinary and phytosanitary inspections, controls of persons, and statistics.
- 25. The management of external frontiers involves networks concerning the customs union and the common commercial policy. These networks correspond essentially to the implementation of databases to which the administrations must have access on-line or by file transfer. Some of these databases are managed entirely by the Commission (e.g. Taric, Quota, control of classification and coding), while others are updated by the national administrations (Transit, customs value, binding tariff information).

As regards veterinary and phytosanitary inspections, the Shift and Physan networks will be composed of central databases interrogated and updated by the national administrations and inspection services at external frontiers, possibly supplemented by distributed databases and electronic mail systems. Animo will be an electronic mail system giving information on movements of live animals on Community territory, especially for intra-Community trade.

After the end of 1992, statistics on trade in goods between the Community and other countries will continue to be established on the basis of customs declarations (SAD). Council Regulation (EEC) No 1736/75, covering the collection and processing of these statistics has been amended accordingly.

- 26. The <u>statistics</u> on intra-Community trade in goods and services will be managed principally by the Comedi project, which will use EDI techniques to collect statistical declarations from economic operators or anyone making declarations on their behalf. These will be sent in the form of standardized electronic messages and fed into the information systems of the national administrations and Eurostat. After harmonization and validation, systems for interrogation and the return of information will be set up for all the parties concerned. Council Regulation (EEC) No 3330/91 on internal trade statistics, as supplemented by Commission implementing regulations, governs the establishment of these statistics.
- 27. <u>Fraud prevention</u> is managed mainly by the investigation systems which must be set up for the purpose. They require fast transmission of sensitive data, which must also be encrypted (e.g. Scent and SID in the field of mutual assistance). The information is transmitted by electronic mail, and there must be a database to store the messages exchanged. Users of the network must also be offered access to specialized databases.
- 28. The management of controls on the mobility of persons should be based on an extension of the Schengen system, which involves the use of electronic mail and file transfers, and at a later date accompanying files using multimedia technologies, for electronic transmission of personal identity descriptions.
- 29. Indirect taxation management is based on the VAT information exchange system (VIES), plus the excise monitoring system. It will allow tax administrations to access VAT coding data and quarterly figures on trade between taxpayers, using file transfers, electronic mail and on-line transfers. Another system will allow interchange of information on intra-Community trade under the excise duty arrangements. Finally, the Member States are designing a system to improve coordination of VAT and excise fraud prevention measures; this will probably be based on an electronic mail service.

#### The four freedoms of movement in the Community

- 30. The urgency of the measures described below is imposed by the deadline of 1 January 1993. However, the change from a fragmented Community territory to a large area without frontiers will mean far-reaching changes in relations between public authorities and with their citizens. These changes are being incorporated into a new regulatory framework, which will have to be introduced in accordance with a timetable to be agreed between the administrations concerned. The various functions which will allow joint management of the area without frontiers are described in the following paragraphs.
- 31. Members of the public, economic operators and public authorities will derive full benefit from the internal market only when all four freedoms of movement laid down in the Treaty are effectively ensured. To this end, computerized management facilities will be implemented under a project of common interest for each freedom.
- 32. Regarding free movement of goods, work already begun should be continued and extended beyond what is strictly necessary for the elimination of controls at internal frontiers.

Concerning indirect taxation, preparations must be made for the change from the transitional system due to begin in 1993 to the final system to be introduced on 1 January 1997. This change implies a complete recasting of the VIES network and an upgrade of the excise monitoring system.

The networks required by customs relate to both customs activities at the Community's external frontiers and the movement of goods being imported into or exported from Community territory. There are many of them: by way of example, the customs information system (CIS) must be substantially developed, as must Transit and Taric. The latter in particular must evolve constantly throughout the transitional period. A Community system covering coding (VAT, importers, bonded warehouses) will be set up. The European binding tariff information (EBTI) network will ensure a consistent application of the classification of goods in the customs nomenclature; traders must have access to it. A central database must be set up to ensure the consistency of the tariff classification at Community level. A specific system must be set up for automated exchange of information on the temporary suspension of customs duty. A system to help assess the value of goods for customs clearance will also be set up. It will be supplemented by an information network on the customs processing rules to be applied according to the product and country of origin (Origin).

As regards mutual assistance and fraud prevention, Scent fiscal must be remodelled to take account of the new VAT collection procedure to be introduced in 1997, and SID developed and extended.

The veterinary and phytosanitary inspections to be introduced in 1993 must be stepped up and extended, especially Shift and Physan which relate to trade at external frontiers, and Animo and Europhyt which cover intra-Community traffic. In the short term these networks will cover only needs for the opening of internal frontiers; they will be extended to offer access to technical databases harmonized at Community level.

Among the networks specific to the movement of goods at the external frontiers of the Community, there is a need to continue improving the management of the tariff quotas (Quota) and to ensure uniform application of Community legislation by developing a new Taric II using the technical developments of EDI. Other networks must be set up to ensure proper trade management: for example, improved management of the processing system, quantitative limits (Tequila), controls of the exports of goods and dual-purpose technologies.

Statistics, as horizontal activities, process data obtained from most of the sectoral networks as part of the master plan for the distributed statistical information system (DSIS) set up by Eurostat. The statistical network, built around the backbone of Comedi for statistical activities on Community trade, should therefore be able to adapt continually in step with developments in the other networks.

In terms of strengthening the internal market for goods, networks must be set up which can manage efficiently the procedures for the harmonization of the Community area and the laws in force. In the area of industrial standards, networks must be set up to speed up the exchange of information needed notably for the management of Directive 83/189/EEC and the "new approach" Directives. In the area of public procurement, networks must be set up to allow proper management of the Directives on the award of public contracts (Simap) and on review procedures (89/665/EEC), and set up databases to enable such management. Finally, specific laws have been adopted for certain industrial sectors (food additives, pharmaceutical products, etc.); the Community must be given the means to manage them in the form of appropriate data communications networks.

33. Several data communications networks will be involved in achieving <u>freedom to provide services</u>, most to ensure correct operation of the mutual recognition rules to which many tertiary activities are subject. The information systems concerning road goods transport licensing and airline flight crew licensing are examples of networks which help to implement these rules.

The same applies to the setting-up of procedures to apply and monitor mutual recognition of Community financial institutions and bodies (for this type of initiative, the concept of 'administration' must clearly be extended to include public services or bodies set up in the public interest).

34. <u>Free movement and freedom of establishment of persons</u> is broken down into several parts including the job market, training and education, social security and health care.

The measures which help to give the Community a social dimension include the Sedoc/Eures network, a Community-wide clearing house for job vacancies and applications, and must also allow Community legal obligations to be satisfied regarding the exchange of information to facilitate free movement of workers (Council Regulation 1612/68), and the Sosenet network which covers social security (Council Regulations 1408/71 and 574/72).

In order to cover all the measures designed to guarantee this freedom, this project of common interest must include the management of intergovernmental agreements or conventions concerning public security, the coordination of justice and drug control, and immigration matters, such as the European information system, spread of the Schengen system, or the measures for the joint management of the right of asylum and immigration.

35. The <u>free movement of capital</u> will be improved by the setting-up of data communications networks designed in particular to allow the execution of the work necessary for the preparation and implementation of economic and monetary union. The foundation stone for EMU requires that both economic and monetary policy be carried out coherently and in accordance with relatively strict rules of cooperation between Member States. Consequently, from the second phase of the union process, it will be necessary to set up data communications networks between administrations, owing to the obligations of both the administrations responsible for the conduct of economic policy and the European system of central banks.

Data communications networks will allow balance of payments statistics to be communicated between the central banks and Eurostat; the preparation of the Community balance of payments will be greatly facilitated by the shortening of lead times. This project will then allow the network to be expanded to include the European Central Bank, as provided for in the Maastricht Treaty which requires an information system to be set up, for stage three of EMU, between the central banks and the European Central Bank.

In addition, the completion of the single market depends inter alia on the existence of powerful and inexpensive transfrontier payment services. It is therefore necessary to support the implementation of links between the automated national clearing houses and to improve the automated networks in regions where they are hardly or poorly developed.

Finally, the implementation of the Council Directive of 10 June 1991 on prevention of the use of the financial system for the purpose of money laundering (91/308/EEC) implies the development of an information network between financial institutions and the authorities responsible for the prevention of money laundering.

#### Support for Community policies

- 36. The creation of a real Community area will be achieved not only by adopting the measures necessary for free movement but also by supporting Community policies, notably those on agriculture, environment, competition, education and training, employment and health. Projects of common interest should be implemented for the management and evaluation of each of these policies, giving priority to those which contribute to both the completion and the functioning of the internal market.
- 37. The management of the common agricultural policy is a project of common interest. The complexity of the sector and the diversity of public-sector assistance already allow a number of networks to be defined. It should be borne in mind, however, that in this area, as in many others, constantly changing Community procedures require a continuous review of measures in progress and the establishment of rolling plans.

In this context, the following initiatives can be taken as an example: networks will have to be set up to allow electronic billing of expenditure under the EAGGF guarantee section (Agrex), lists of national aid notifications, market monitoring, sending of periodic agricultural acts and numerical annexes, updating of reference prices in connection with the customs authorities, control of public storage expenditure declarations, etc.

- 38. The acknowledged importance of problems linked to the environment has led the Community to define its policy in the field in an international perspective and to link it to its other policies. Management of environment policy is therefore a project of common interest. In this context, information systems and data communications networks will have to be introduced that allow a global approach that takes account of the environmental concerns of many sectors. For example, in the field of civil protection, it is planned to set up an information exchange network designed to improve the means of preventing and combating natural or man-made disasters (SEC(89) 2094).
- 39. Competition policy has always been an important Community instrument for the promotion of European integration, but the move towards European union now implies greater transparency in this policy, improved joint management with the Member States and its extension to include the EFTA countries. Management of competition policy is therefore a project of common interest. With the present state of affairs, two data communications networks should contribute to the implementation of the project: the setting-up of a network to accelerate the procedures for consultation with the competent authorities of the Member States, and the creation of a procedure for close cooperation with the anti-trust organization recently set up by the EFTA countries in the context of the European economic area.

- 40. As regards training and education, Community action will take on a new dimension in the framework of the single market, notably measures to encourage mobility of students and workers; it seems appropriate that the coordinated management of the Community policy that embraces these measures should become a project of common interest. In particular, the Eurydice and Cedefop networks should be in a position to interconnect training centres and include a database on higher education and qualifications. Cedefop and Eurydice are two consolidated networks operating respectively in the fields of vocational training and education systems and policies in the European Community. They operate on the basis of national units located in the Member States' education ministries. The main aim of the information exchanges is to support Community cooperation in education and thus promote exchanges of students and workers.
- 41. In other sectors, efforts will have to be made to contribute to the application and management of all the common policies. A number or projects of common interest will be linked to these measures. For example, management of structural policies will be strengthened by the implementation of a system for the management and monitoring of measures jointly funded by the European Regional Development Fund; the management of fishing authorizations will be facilitated by the introduction of a system for catch reporting (Regulation EEC No 170/83) and price management. In the field of energy, a system will be developed to collect statistics from Member States on crude oil production and medium-term forecasts (Regulations EEC 1893/79 and 2592/79).

#### The Community decision-making process

42. Finally, the <u>functioning of the Community decision-making process</u>, involving input from many sources, requires a greater use of data communications techniques for the preparation, processing and transmission of official documents, and the management of the decision-making procedures, including cooperation and codecision. Thus, the existing network, which links certain permanent representatives' offices with one or more relevant national ministries and departments and also with the Commission, may be extended to include all the Member States and Community institutions and bodies. The establishment of these various interinstitutional networks, which began under the INSIS programme, must be able to continue in the form of a project of common interest, linking all the Community institutions and bodies, and all the Member States via their permanent representatives and national or, where appropriate, regional ministries and departments with the Community institutions and bodies. This project will take advantage of the synergies arising out of the growing use of common specifications and protocols.

The measures which could improve the operation of the Community procedures include the introduction of a system for structuring texts and a network for electronic transmission of documents involved in the Community legislative process (Commission proposals, opinions of Parliament and the Economic and Social Committee, common positions of the Council, adopted acts, etc.), the monitoring of the implementation and application of the treaties and Community law, the creation of a transmission network for the agendas of Community bodies, the management of new cooperation and codecision procedures, dissemination and publication of documents, etc.

- 43. The INSIS programme is a precursor in this field. After ten years' work it has succeeded in bringing together all the Community institutions and all the Member States in the same work programme. The partners are involved in the following activities:
  - the communications infrastructure for electronic mail, notably the introduction of an identical communications protocol (X.400) for all the Community institutions;
  - initial computer processing of the principal formal Community documents, such as certain Commission proposals, agendas of the Council and Parliament bodies, Parliamentary questions, etc.;
  - the development of data communications tools facilitating end-user access to data communications services and databases.

Thus the partners in the INSIS programme have already had an opportunity to consider and lay the first foundations for a common data communications architecture that is in line with international and/or European standards where these exist.

### III. COOPERATION WITH NON-COMMUNITY COUNTRIES

- 44. The aim of trans-European data communications networks between administrations is to allow efficient management of the Community area. However, owing to the increasingly close ties between the Community economy and the EFTA countries and, in the more distant future, the Central and Eastern European countries, it can be assumed that the use of similar networks could facilitate the management of the wider European Economic Area. Furthermore, some of these countries, which have applied for membership of the European Community, will have to be rapidly equipped with administrative data communications networks carrying out the same functions and satisfying the same conditions as those to be introduced between the present Member States.
- 45. It would therefore be worthwhile exploring, with the EFTA countries, and possibly those of Central and Eastern Europe, how administrative data communications networks could make the implementation of existing and future Community agreements with those countries more efficient, thus contributing to greater economic vitality in Europe as a whole. A Council conclusion along these lines will be proposed.

# IV. THE COMMUNITY CONTRIBUTION: THE MULTIANNUAL IDA PROGRAMME

#### A. Introduction

46. The aim of the multiannual IDA programme (interchange of data between administrations) is to give Community support, where considered necessary and where Member States' commitments are forthcoming, to the projects of common interest identified in the guidelines described in Chapter II.D above.

The programme is in two parts. The first, sectoral part includes activities to support the projects of common interest, while the horizontal activities of the second part aim to ensure interoperability, improve reliability and cut costs of data communications networks.

However, before embarking on the measures set out below, it will be necessary to ensure that the administrations concerned have defined, formalized and adopted specific agreements on information and data interchange.

47. As the implementation of the IDA programme proceeds, account will be taken of relevant results obtained during the development of the projects launched under the part of the research and technological development programme on telematic systems in areas of general interest relating to data communications systems for administrations.

## B. Community support for the projects of common interest

48. Community support for the projects of common interest covers two broad categories of action: one concerns feasibility studies, the other support for the implementation of data communications networks between administrations notably in the fields of the elimination of internal frontiers in the Community (management of external frontiers, intra-Community trade statistics, fraud prevention, mobility of persons, and taxation), the four freedoms of movement on Community territory (movement of goods, services and capital, movement and establishment of persons), support for Community policies (agriculture, environment, competition, training and employment, health care, etc.) and the functioning of the Community decision-making process.

## Feasibility studies

49. This covers Community support, in the context of the projects of common interest, to the national administrations, sectoral organizations and other Community bodies concerned, for the carrying-out of feasibility studies to prepare the development of new data communications networks and the extension of existing networks to enable them to handle new applications, or new data communications services, or the evolution of existing networks on the basis of common architectures or more economic management. The ultimate objective of the feasibility studies is to draw up specifications for each of the data communications networks that will contribute to the execution of the projects of common interest.

- 50. As a first stage, a feasibility study should help to define, for all the projects to be carried out and operations to be managed, alternative or additional technical solutions, along with implementation scenarios and assessments of costs and risks. Methodology and coordination problems must have been examined. The various possibilities must be weighted to take account of the means available to the administrations concerned. This initial stage is concluded by a provisional choice of solution.
- 51. A second stage of the feasibility study is intended to help users in the Member States and Community institutions and bodies to manage the risks inherent in the choice of a particular theoretical solution. It must enable the parties concerned to validate their choice and to test the essential functions of the solution adopted on a small scale. Validation may take account of subsets of functions, flows, geographical partners, or an appropriate combination of these aspects. This practice of validating theoretical choices by means of limited scale tests, before operational implementation, is particularly desirable for trans-European data communications projects. Indeed, the fact that the network specifications have to be applied each time to at least twelve independent bodies whose management systems are neither similar nor equivalent nor integrated, creates many uncertainties which can only be removed, where appropriate, by practical tests.
- 52. All these activities will be concluded by the drafting of design, construction, management and maintenance specifications. These will be included in the preparation of the common tender specifications, after which, under current Community legislation, tenders will be invited, on a coordinated basis, from the partners interested in setting up and running the operational network.

#### Support for implementation

- 53. If data communications networks are actually to be implemented, Community action must go further than feasibility studies and horizontal measures to ensure interoperability. Once the specifications of a data communications network designed to satisfy data interchange needs in a particular field of administration between national administrations and the Community institutions have been drawn up, it is essential that they then be implemented, which is mainly the responsibility of the national administrations. However, implementation is currently facing problems with organization and funding.
- 54. Indeed, the data interchange needs arising out of the completion of the internal market often appear to the national administrations as a new challenge which they are ill prepared to take up. Administrative computing is organized differently even within Member States, in particular with very varied degrees of coordination, technical maturity and training. This variety hinders the search for common solutions for linking together existing data communications networks in each department at national or regional level. The difficulties are considerable at the definition stage and even greater at the stage of network implementation and operation which involve financial and human resources of much greater magnitude. The move up from national to intra-European level only adds to the difficulties to be overcome.

- 55. It emerges from studies by the Commission, confirmed by the work of the TAG (Telematics in Administrations Group)<sup>(7)</sup> and the implementation of certain priority applications, that the financial resources available to administrations for introducing and operating the necessary computers and data communications networks will be inadequate. The same is true of human resources.
- 56. The setting-up of European data communications networks requires a joint effort on the part of the national and Community administrations. The question is what is the most effective way of defining and then allocating the tasks and financing them in line with the principle of subsidiarity and avoiding duplication.
- 57. It is therefore proposed to proceed as follows:

Each Member State is responsible for the collection and processing of data which, after formatting, are transmitted, some between national, regional or local administrations, and others to other Member States or Community institutions and other bodies. These tasks are carried out by applying common formatting rules, functional specifications and protocols, defined and applied in accordance with the procedures set out in Chapter IV.C below. The Community institutions and bodies do likewise.

Where it appears to be necessary for the successful introduction of a complete data communications network, or to enable it to begin operating, the Community may, in accordance with the principle of subsidiarity and for a limited period, give a modest amount of financial support, where this has a significant catalytic effect.

- 58. The measures described above may nevertheless be insufficient to enable the administrations of the Member States on the periphery of the Community to upgrade to modern computer systems. The investments they will have to make to take part in the implementation of the networks will be much greater than those required of the central countries. However, any delay in the implementation of the priority networks is liable to create obstacles to the completion of the internal market or increase opportunities for fraud. Adequate use of the means provided for in the Treaty is therefore essential.
- 59. Specific Community support for developing data communications in the national administrations of countries which receive assistance from the European Regional Development Fund will contribute, either directly or indirectly, to boosting the activity of small and medium-sized enterprises in the regions concerned. In the first place, the new markets opened up by the setting-up and operation of the data communications networks will create considerable opportunities for SMEs in the various sectors concerned. Furthermore, one of the major spin-off effects of the priority given by the master plan to the provision of bearer services (see 16 above) should be to stimulate the supply of these services throughout the economy. SMEs, whose growth, and in some cases, survival, depends on their capacity to communicate and exchange information, will be the first to benefit. Local SMEs will also have less red tape to contend with, which will make their services more competitive.

<sup>(7)</sup> TAG: see Chapter V.

- 60. Whatever the methods used to determine the allocation of Community financial support to the implementation and operation of data communications networks between administrations, this action will not be able to develop in a operationally effective and economically satisfactory manner without close coordination between networks. In the general context of the support it gives to Member States, and with their support and cooperation, it is for the Community to provide this coordination.
- 61. Coordination is indispensable at the implementation stage, since the networks will not be interoperable or economic unless common standards and architectures are adopted. In order to enable the partners to maximize their advantages, coordination must cover all trans-European data communications networks between administrations.
- 62. Coordination must be maintained at the same level throughout the operational life of the data communications networks. The natural evolution of each network, as a result either of the incorporation of technological innovations, upgrading or expansion of the functions or hardware, or even the simple updating of certain programs, can, unless care is taken, create incompatibilities between local systems and lead to information bottlenecks. In order to guarantee consistency between networks and their interoperability over time, it is therefore essential that the coordination structure set up ensures constant monitoring of the evolution of the networks. To that end, the Member States and the Community institutions and bodies may give appropriate undertakings, notably in the form of protocols, which may include joint funding of the projects of common interest.

# C. <u>Measures to ensure the interoperability of data communications networks and applications</u>

63. There are four such measures: common architectures, standardization, information and training, and provision of data communications bearer services.

#### Common architectures

64. The description of a data communications network is generally based on the concept of architecture, which defines not only the physical topology (physical architecture), but also the functions carried out by each of its elements (functional architecture) and management mechanisms (architecture of operational management system).

One of the main difficulties of setting up networks between administrations is the diversity and incompatibility of the national systems, each of which has been developed separately but which must now be interconnected and made interoperable. The definition and introduction of jointly devised architectures is one way of solving the problem while at the same time cutting investment and operating costs.

The main purpose of a common data communications architecture for networks between administrations will therefore be to create and optimize the conditions under which the administrations' independent information systems are to intercommunicate over the telecommunications networks.

65. The definition of common concepts will help to configure a data communications architecture appropriate to each project, taking account of the constraints of the volume of data to be processed and transmission times or, if appropriate, to foster the migration of existing architectures towards common architectures.

This architecture will in principle tackle only the data communications aspects and should, wherever possible, leave in place the existing local architectures for local processing. These local architectures can nevertheless impose constraints on the common architecture in terms of processing and storage capacity and management. Where these constraints place restrictions on the whole network, the feasibility study should indicate how to solve the problem efficiently and economically.

- 66. The telecommunications services to be used to transmit the information between local systems must also be chosen. These choices will have to be validated and approved by the administrations concerned.
- 67. In order to arrive rapidly at concrete results, the proposed solutions will be based in the first instance on existing technology. Where justified, however, they should be upgradable at a later date to incorporate technologically more advanced solutions, in particular those developed in the part of the R&TD framework programme on data communications systems for use by administrations.

- 68. In accordance with Community standardization policy, the common architectures will be based on European and international standards where these exist. It will therefore be essential to establish and maintain a dialogue with the European standards bodies (ETSI, CEN-Cenelec) and with the specialist committees bringing together the representatives of the administrations and bodies concerned by standards (Sogits for information technology, SOGT for telecommunications and Sogis for computer security).
- 69. An essential condition for the success of the work planned under this part of the programme is consultation between all the parties concerned. Consultation mechanisms must be put in place notably between the administrations' IT managers, telecommunications network operators, relevant service providers and industry. Where appropriate, consultation will cover public procurement, work on computer security, legal aspects and confidentiality issues including protection of personal data raised by the introduction of data communications networks.

#### Standardization

- 70. Since a major objective in the implementation of efficient data communications networks is interoperability between the various parts of a particular network and between different networks, the use of common message formatting and communication standards is a condition of success. In accordance with Community standardization policy, data communications networks will use European and international standards wherever available.
- 71. Three areas of standardization are to be considered:
- (a) In many instances of message interchange between administrations, operations will be easier, quicker and more economical if a common message format has been agreed. Work on standardizing the format of trade and administrative messages has been in progress for some years under EDIFACT<sup>(8)</sup>, a structure for standardizing electronic data interchange (EDI) to which the Community's TEDIS programme makes an important contribution. Care will have to be taken to ensure that relevant results of EDIFACT work are used in the development of data communications networks between administrations.
- (b) The data interchanges considered in this communication take place in the form of <u>file transfers</u>, interrogation of <u>databases or message exchange</u>. It is therefore important to monitor and possibly to stimulate the work carried out in the standards bodies (CEN, Cenelec and ETSI) on these various kinds of service (notably the FTAM and X.400-X.500 message-handling standards).

<sup>(8)</sup> EDIFACT: Electronic Data Interchange For Administration, Commerce and Transport.

- (c) Finally, wherever it appears that information can be transmitted between administrations more advantageously using the public telecommunications services rather than leased lines, the solution will be to use available basic telecommunications services (such as ISDN) using standards that can be applied across Europe. Here again, the relevant standards should therefore be monitored and where appropriate their development stimulated in the standards bodies, notably ETSI. Moreover, the provision of such trans-European services may be supported by the activities on trans-European ISDN and broadband networks which will be proposed to the Council.
- 72. In order to facilitate the adoption of these common standards by the administrations concerned, they will be included in the model tender specifications drawn up by the EPHOS Committee<sup>(9)</sup>. Account will also be taken of standardization work on document interchange, such as SGML and ODA.

#### Information and training

- 73. In addition to all these activities, awareness campaigns will aim to inform and train administrations directly and indirectly concerned by the issues of trans-European data communications networks, and to facilitate coordination and monitoring between administrations at national and European levels.
- 74. Firstly, information will be made available to administrations in the most appropriate forms seminars, publications and databases concerning the series of guidelines for data communications networks between administrations, especially objectives, priorities, broad lines of action and projects of common interest, and on the work carried out and results obtained in the data interchange and common architectures parts of the IDA programme. Next, the same administrations will be offered more specific training, on the basis of needs, covering methods, techniques, standards and organization, to enable them to manage appropriately the problems of data interchange, in particular when interchange is not covered by a project of common interest and therefore receives no Community support.
- 75. Information and training in the Community, national, regional and local administrations concerned will also aim to promote European standards on open systems, their widespread use in any new application and the migration of existing applications, on the basis of the standards adopted.

<sup>(9)</sup> EPHOS: European Procurement Handbook for Open Systems.

#### Bearer services

76. Analysis of users' needs in the various areas of administration involved in data interchange shows that three types of bearer service will generally be required: electronic mail, file transfer and access to databases for interrogation or updating.

Electronic mail is the transmission, to one or more addressees, of free-text or formatted messages generated in a computer system. A message sent instantaneously by a trans-European electronic mail service is the electronic equivalent of a "paper" document (letter, note, form, list, report, etc.) sent by conventional means (post, telex, fax).

<u>File transfer</u> is a set of functions or communication protocols to ensure errorfree transmission of computer files throughout the Community.

A <u>trans-European database access service</u> will enable an authorized user, located in any Member State, to interrogate databases anywhere in the Community.

Many data interchange operations between administrations, which are today carried out by conventional means (post, telex, telephone or fax), should be able to migrate without much difficulty to electronic mail applications.

- 77. These bearer services will allow a large number of data communications applications to be generated, each designed to satisfy a specific need for administrative data interchange. Available throughout the Community and able to exchange documents or files very simply, these bearer services should be supported by network administration functions such as management of closed user groups and addressing.
- 78. Community action in this area should take account of the general guidelines of telecommunications policy, notably as regards competition on the services market. This sector should not therefore be given direct financial support, but rather stimulation, through incentives compatible with competition rules, of development at trans-European level of bearer services complying with European standards and able to serve as a basis for the introduction of a common architecture for data communications networks between administrations.
- 79. Finally, it is interesting to note that the types of service best suited to interchange between administrations are also those which are most often used by all economic operators. Therefore, an initiative aimed at stimulating the emergence of the provision of trans-European bearer services should also benefit the whole Community, especially small businesses.

#### D. Funding

- 80. It is proposed that the Community budget fund only the initial phase of the introduction of data communications projects of common interest between administrations, namely the feasibility studies (including the validation of the solutions) resulting in the definition of technical specifications for data interchange networks between national and/or Community institutions, and the horizontal work aimed at ensuring the interoperability of those networks. In this way, the Community budget would cover the launch of projects which would depend on coordinated funding by the Member States.
- 81. The same proposal applies to a minimal, as yet undecided, proportion of expenditure on implementation and, on a temporary basis, of the operating expenditure of administrative data communications networks, where this Community contribution is needed to ensure that these networks are launched in the highest priority fields, notably those affected by the elimination of internal frontiers.

Joint funding of this kind would have the advantage of speeding up the introduction of the highest priority networks, ensuring that they are interoperable, and playing a pilot and catalytic role for the development of other networks complying with the same specifications and protocols.

- 82. To summarize, the IDA programme would fund all preparatory work, feasibility studies and harmonization work for the projects of common interest. It would also fund a small proportion of the cost of implementing and operating the networks corresponding to the highest priority projects.
- As indicated above, if the administrations of the peripheral Community 83. countries, where computerization is generally less advanced than in the other Member States, are to take part on an equal footing in the setting-up of the data communications networks required by the Treaty obligations, they must make substantial investments. In the context of the strengthening of economic and social cohesion, it therefore seems advisable that the Member States concerned should consider the possibility of the structural Funds, particularly the European Regional Development Fund, taking appropriate action to help develop and upgrade the computer systems of the administrations concerned. By taking an initiative of this kind, these countries will be lending direct support not only to their businesses in the sectors concerned, but, on a much wider scale, to the entire fabric of the business community in all sectors, which is made up to a large extent of SMEs. This action, therefore, has implications which go far beyond simply computerizing administrations, leading to strengthened economic and social cohesion.
- 84. The amount of appropriations made available on this basis will be decided at a later date, as the feasibility studies progress.

#### V. COORDINATION OF NATIONAL POLICIES

85. The implementation of trans-European data communications networks between administrations requires close cooperation between Member States, and between them and the Community institutions and bodies. Indeed, the setting-up and subsequent operation of these networks is possible only if each of the parties involved makes the appropriate contribution in each of the fields of administration concerned, observing the common rules defined in broad terms by the guidelines adopted and in detail by the IDA programme.

The data communications networks must be complete, implying that all the parties must make their contribution, otherwise there will be serious problems for managing the whole of the Community area. Experience in fact shows that any failure on the part of an administration to fulfil its obligations is liable not only to cause it considerable difficulties in its relations with its partners, but also harms them by hindering exchanges of information and prevents the whole Community from functioning properly.

This close interdependence between all those involved, especially in the traditional context of relations between the Member States and the Community institutions and bodies, should be managed within a cooperation structure based on the partnership model.

- 86. Each Member State is responsible for making its own contribution, as part of its own national policy for computerizing its administrative departments, which must incorporate the common rules referred to above. These aim to ensure interoperability within a particular network an essential condition for data interchange to take place in a given field of administration and between specific networks to enable economies of scale by the use of common parts by several specific networks and so that data can be interchanged between these networks. This is so important that the coordination of national policies is essential to the success of the introduction of data communications networks between administrations.
- 87. The Commission has already begun this coordination work by bringing together those responsible for administrative computerization at national level in the TAG (Telematics in Administrations Group). The remit of this group is to help establish and develop data interchange between administrations as required for the establishment of a European administrative area, notably by monitoring the progress of the approved measures, at both national and Community levels, and encouraging such progress by appropriate coordination.
- 88. Each member of the TAG has the heavy responsibility of coordination in his administration. Awareness of the importance of coordination should lead each Member State to take measures, at the highest decision-making level, to facilitate it and ensure that each Member State does actually make its contribution to the implementation of data communications networks.

89. The coordination role of the TAG is very important during the period the networks are being set up, but the coordination effort must be maintained, to ensure that the national parts of the data communications networks between administrations evolve in a consistent manner and that they remain interoperable. In its communication on data communications networks, the Commission had already referred to a number of problems that the Member States had in common for the implementation and operation of networks. It suggested that a common coordination structure be set up, which could be achieved by strengthening the TAG.

The Commission proposes that this group be institutionalized and if necessary structured into subgroups responsible for coordinating specific areas, without affecting the responsibility of each partner for its part of the systems. The TAG would equally be the committee that the Commission would consult for the management of IDA.

- 90. The following questions are likely to be discussed within the TAG:
  - in the context of joint responsibility established between the partners, the TAG should therefore contribute to the coordination between all the parties as regards the global, sectoral and intersectoral strategies and the development, implementation and operation of data communications networks between administrations; this essential activity should be supplemented by the coordination of joint funding (sharing of costs between partners, joint funding of central and/or shared systems, delegation of the management of common systems to one partner, etc.);
  - monitoring of the application of the master plan, especially the implementation of the projects of common interest and the contribution of each partner; estimate of resources required for overcoming difficulties encountered along the way;
  - adoption of common rules and methods, generally devised under the IDA programme, relating in particular to technical interoperability (architectures and standards) and administrative interoperability;
  - establishment of coordination on equipment, allowing convergence, if appropriate, towards a common equipment policy;
  - establishment of joint undertakings between the various partners in order to guarantee their contribution to the implementation and operation of the networks, in the context of common rules;
  - gradual introduction of joint mechanisms for efficient management of systems and networks.

#### VI. SUBSIDIARITY

91. As mentioned already in point 3, the use by the national and Community administrations concerned of the most appropriate data communications tools, systems and networks is the necessary response to the considerable upsurge in the volume and variety of the data to be processed and interchanged in managing Community affairs. Their use is crucial to the full development of the single market, exercise of the four freedoms of movement provided for by the Treaty, effective establishment and management of Community policies and improvement of the Community decision-making process.

In view of the nature of the operation, it is clear that the first condition which must be met if these networks are to be developed is for all the user administrations to assume fully the technical, administrative and financial responsibilities which devolve upon them. It is therefore absolutely essential to establish a genuine partnership between all the administrations concerned.

In addition, the attention given to the specific problems of the Community's islands, enclaves and outlying regions will enable a significant contribution to be made to strengthening economic and social cohesion.

92. The Community for its part must first promote the coordination of the Member States' domestic policies in the field of data communications in administrations, and create the instruments needed to manage the development and operation of the common systems and networks, which its own institutions will also be using.

Furthermore, the experience acquired in implementing the Community's Insis and Caddia programmes confirms that interoperability of the systems and networks linking numerous administrations in different sectors in the twelve Member States and the Community institutions can only be achieved in an effective and economical manner if the Community's contribution supports the development of the necessary tools, while respecting the areas of competence of each participant.

The Community contribution to setting up data communications networks between administrations will be confined to areas where the objectives which have been set cannot be attained satisfactorily by the Member States on their own and, owing to the scale and implications of the measures envisaged, are best achieved at Community level.

The impact of this contribution will be undiminished even if the amount constitutes only a small percentage of the total funds which the Member States will have to release in order to set up and operate the networks over the next five years.

#### VII. CONCLUSIONS

93. This Communication demonstrates that the Community needs to implement data communications networks between national and Community administrations to enable the Community area to be managed efficiently, taking account in particular of the elimination of controls at internal frontiers.

In that light, it is proposed that the Council and Parliament adopt the following instruments, proposals for which are attached to this Communication.

- 94. Decision on a series of guidelines for trans-European data communications networks between administrations. This Decision involves the adoption of a "master plan" for data communications networks between administrations, covering the objective, priorities, broad lines of action and projects of common interest.
- 95. Council Decision on a multiannual Community programme to support the implementation of trans-European networks for interchange of data between administrations (IDA). This multiannual programme represents the Community contribution to the implementation of data communications networks between administrations, which must be linked with the contributions to be made by each Member State under its own responsibility. The proposal includes the setting-up of an advisory committee for the programme.
- 96. In addition, the Council is asked to invite the Commission to begin exploratory talks with the EFTA countries in the first instance and subsequently with the Central and Eastern European countries, with a view to assessing the advisability of extending trans-European networks between administrations to those countries, and to report back on the outcome of the talks.

# Proposal for a COUNCIL DECISION

on a series of guidelines for trans-European data communications networks between administrations

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Proposal for a COUNCIL DECISION

adopting a multiannual Community programme
to support the implementation of
trans-European networks for the
interchange of data between administrations (IDA)

#### **EXPLANATORY MEMORANDUM**

- The Community instruments establishing the internal market include measures
  which involve substantial interchange of information between the individuals,
  economic operators and administrations concerned.
- 2. The Community and the Member States must therefore take effective measures to fulfil their commitments, within the time allowed, notably in order to ensure the elimination of controls at frontiers within the Community, and more generally to ensure real freedom of movement of persons, goods, capital and services, and the implementation of common policies. The growing complexity and gradual integration of the Community decision-making process also imply that its procedures must be made more efficient.

The move towards European Union is resulting in a large number of new rules within the Community; systems must therefore be introduced to enable these rules to be applied and to function under satisfactory conditions.

3. Among the measures made necessary by these developments, steps should be taken to ensure that the national and Community administrations concerned use the most appropriate data communications tools, systems and networks to process and interchange the relevant information.

Should such measures not be properly implemented within the times required, the Member States and the Community would lack effective means to control and prevent fraud, once the establishment of the Community economic area has eliminated traditional border controls.

4. The volume and variety of information to be processed or interchanged between the relevant administrations and the applicable deadlines are such that these operations are only possible using computers and advanced telecommunications networks.

- 5. The purpose of this communication is to propose a set of measures to enable national administrations and Community institutions and bodies to process and interchange the information necessary to the functioning of the internal market and implementation of common policies, by the establishment and use of appropriate trans-European data communications networks.
- implementing trans-European data communications networks between administrations, where the objectives of the proposed measures cannot be adequately attained by the Member States and are therefore, by virtue of the scale and the implications of the measures in question, best carried out at Community level.
- 7. Based on the provisions of the Treaties and measures taken in Community pilot programmes in recent years, the Commission is proposing four series of measures to attain these objectives.
- 8. First, the adoption of a master plan of measures to be taken by national and Community administrations to set up trans-European data communications networks enabling them to process and interchange the necessary information.
- Secondly, the adoption of a multiannual programme entitled IDA (interchange of data between administrations) representing the Community contribution to the implementation of projects of common interest and to the measures necessary to ensure interoperability of the networks concerned.
- 10. Thirdly, the setting-up of a high-level coordination group responsible for assisting the Commission with the execution of the multiannual IDA programme.
- 11. Finally, the Commission proposes to begin exploratory discussions with non-Community countries, the EFTA countries in particular, to assess how far the extension of the data communications networks between administrations to those countries could facilitate the management of the European Economic Area.

#### Proposal for a

#### **COUNCIL DECISION**

on a series of guidelines for trans-European data communications networks between administrations

#### THE COUNCIL OF THE EUROPEAN COMMUNITIES

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 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<sup>(2)</sup>

Whereas the internal market establishes an area without internal frontiers in which free movement of goods, persons, services and capital must be guaranteed; whereas in order to ensure each of these freedoms the Community acts adopted or being adopted provide for measures involving substantial interchange of data between individuals, economic operators and the competent administrations; whereas such interchange can be ensured using trans-European networks;

Whereas the aim of establishing trans-European networks is to enable this interchange of data to take practical form, in order to allow the internal market to function in a number of areas, in particular as regards the effects of removing border controls, full exercise of the four freedoms of movement, support for Community policies and the operation of the Community decision-making process;

<sup>(1)</sup> J.O. ....

<sup>(2)</sup> J.O. ....

Whereas the smooth functioning of the internal market calls for closer cooperation between the administrations in the Member States and, to a far greater extent than hitherto, for a systematic interchange of information with very short deadlines which can only be met by using data communications methods; whereas this entails having access to internal data interchange systems which are compatible and interoperable with those of the other administrations; whereas national measures and resources, possibly supplemented by Community resources, are required in order to set up these systems;

Whereas trans-European data communications networks between administrations form an integral part of trans-European telecommunications networks;

Whereas it is important, for the purposes of the internal market, to facilitate the movement of goods, services, persons and capital between the Community and non-Community countries, and more specifically the member countries of the European Free Trade Association; whereas this calls for interchange of information between the administrations in the countries concerned; whereas this in turn requires cooperation with these countries in order to promote data communications projects of common interest and ensure the interoperability of networks;

Whereas appropriate Community action is needed to establish adequate coordination between Member States, in order to ensure consistency in the implementation and operation of data communications networks between administrations; whereas failure to adopt a Community decision on the setting-up of trans-European data communications networks between administrations would be liable to result in a lack of interconnection and interoperability between national networks and in limiting access to those networks:

Whereas the only legal base provided by the Treaty for adoption of this decision lies in Article 235;

#### HAS DECIDED AS FOLLOWS:

#### Article 1

This Decision lays down the guidelines identifying the objectives, priorities, broad lines of action and a number of projects of common interest in the field of trans-European data communications networks between administrations.

#### Article 2

The objective of trans-European data communications networks between administrations is to contribute to the efficient management of a Community area without internal frontiers by means of the joint use of data communications networks.

#### Article 3

The priorities for the attainment of the objective referred to in Article 2 are as follows:

- to provide within a short time data communications systems which are adapted to the need for data interchange arising out of the abolition of border controls within the Community and the stepping-up of controls at the Community's external frontiers;
- to further the full exercise of free movement of goods, services, persons and capital within the Community;
- to further the management of common policies which contribute to the smooth functioning of the Community area without frontiers;
- to further the adaptation of the Community decision-making process;
- to promote the development and convergence, in the medium term, of operational systems towards a common data communications architecture allowing data flows to be optimized and operating costs to be cut;

- to promote the interoperability of information systems by implementing compatible administrative methods and mechanisms, defining common technical specifications and harmonizing standards;
- to encourage the establishment of a satisfactory range of trans-European telecommunications bearer services such as electronic mail, file transfer and universal access to data bases.

#### Article 4

The broad lines of action designed to attain the objective referred to in Article 2 shall be as follows:

#### Sectoral measures:

- drawing up technical specifications for data communications networks which will contribute to projects of common interest, by means of feasibility studies which will include a validation phase where appropriate;
- implementation of these networks by the partners concerned, incorporating then into a single project of common interest and ensuring their maintenance and subsequent development, with particular reference to the networks required for managing the internal market;
- launching common initiatives designed to accelerate the setting-up of specific data communications networks in areas where very short deadlines call for a special joint effort on the part of the national and Community administrations;
- setting in place mechanisms and procedures enabling the operational networks and projects of common interest to be operated jointly.

#### Horizontal measures

- devising common architectures to ensure interoperability between the various networks, making maximum possible use of proven technologies and commercially available products. This will lead to the adoption of joint instruments such as standards, network architectures and bearer services;
- promoting the provision to users of bearer services such as electronic mail, access
  to data bases and file transfer in order to ensure that the information is passed
  among those concerned;
- launching an information campaign for administrations directly or indirectly concerned by the problem of trans-European data communications networks;
- introducing mechanisms for cooperation between Community administrations and those in non-member countries.

#### Article 5

The trans-European data communications networks between administrations to be implemented under this Decision shall be covered by projects of common interest. The projects planned are set out in Annex 1.

#### Article 6

The Member States shall mobilize the financial, technical and management resources and introduce the organizational measures necessary for the implementation of trans-European data communications networks between administrations.

#### Article 7

The Commission is hereby authorized to open negotiations with non-Community countries likely to conclude agreements with the Community designed to allow them to participate in the projects of common interest referred to in Annex I and to improve the interoperability of the data communications networks linking their administrations to those of the Community Member States.

#### Article 8

This Decision is addressed to the Member States.

#### Article 9

It shall take effect 21 days after the date of its publication in the Official Journal of the European Communities.

Done at Brussels,

#### Annex I

# Projects of common interest for trans-European data communications networks between administrations

#### 1. Elimination of internal border controls

- management of external borders;
- management of statistics on Community trade;
- management of fraud prevention and control;
- management of mobility of persons;
- management of indirect taxation.

#### 2. Full exercise of the four freedoms of movement

- free movement of goods;
- free movement of services;
- free movement of persons;
- free movement of capital.

#### 3. Support for Community policies

- management of the common agricultural policy;
- management of environmental policy;
- management of competition policy;
- management of training and education policy.

#### 4. Operation of the Community decision-making process

### Proposal for a COUNCIL DECISION

adopting a multiannual Community programme
to support the implementation of
trans-European networks for the
interchange of data between administrations (IDA)

#### THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 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),

Whereas the Council adopted Decision [...] <sup>(3)</sup> on a series of guidelines for data communications networks between administrations;

Whereas in Decision 85/214/EEC of 26 March 1985 (4) the Council, having taken note of the Commission's report and the proposals put forward in accordance with Decision 82/607/EEC of 28 July 1982 (5), agreed that the Commission would be responsible for implementing the coordination measures necessary for the specification, implementation and use by the Member States and itself of the Caddia data communications facilities relating to the interchange of information in the areas of agriculture, customs and statistics, inaccordance with an agreed development programme; whereas in the absence of a development programme at the time the above mentioned Decision was adopted, the validity of the decision was restricted to an initial period of two years, ending on 2 April 1987; whereas Council Decision 86/23/EEC of 4 February 1986 (6) laid down the detailed arrangements for implementing the CD project as part of the Caddia long-term development programme; whereas Council Decision 87/228/EEC of 1 June 1987 (7) extended by five years the period of validity of Decision 85/214/EEC of 26 March 1985, which therefore expired on 31 May 1992;

<sup>(1)</sup> J.O. ....

<sup>(2)</sup> J.O. ....

<sup>(3)</sup> J.O. ....

<sup>(4)</sup> J.O. n° L 96/35, 3.4.1985

<sup>(5)</sup> J.O. n° L 247/25, 23.8.1982

<sup>(6)</sup> J.O. n° L 33, 8.2.1986

<sup>(7)</sup> J.O. n° L 145/86, 5.6.1987

Whereas Council Decision 82/869/EEC of 13 December 1982 (8) introduced a Community Interinstitutional information system (Insis) designed to allow electronic interchange of data between the administrations of the Community institutions and the Member States;

Whereas Council Decision 91/385/EEC of 22 July 1991 (9) established the second phase of the Tedis programme (Trade Electronic Data Interchange Systems), which makes a significant contribution in particular to harmonization activities in the field of electronic data interchange (EDI);

Whereas in Decision 91/353/EEC of 7 June 1991 (10) adopting a specific programme of research and technological development in the field of telematic systems in areas of general interest (1990-94), activities are planned with the aim of giving technological support for the setting-up of trans-European networks between administrations;

Whereas there is a need amongst the Community institutions for support for the creation of pan-European services, so as to give the Community industry new ambitions;

Whereas cooperation is also appropriate with non-Community countries in order to promote projects of common interest and ensure interoperability of the data communications networks between administrations;

Whereas the Community consequently needs to establish a framework for the contribution of the Community to implementing trans-European data communications networks between administrations, where the objectives of the proposed measures cannot be adequately attained by the Member States and are therefore, by virtue of the scale and the implications of the measures in question, best carried out at Community level;

Whereas the only legal base provided by the Treaty for adoption of this Decision lies in Article 235;

<sup>(8)</sup> J.O. n° L 368/40, 28.12.1982

<sup>(9)</sup> J.O. nº L 208/66, 30.7.1991

<sup>(10)</sup> J.O. n° L 192/18, 16.7.1991

#### HAS DECIDED AS FOLLOWS:

#### Article 1

A multiannual Community IDA programme (interchange of data between administrations) as defined in Annex I, hereinafter referred to as the "programme", is hereby adopted. It shall run for five years from the date of the Decision.

#### Article 2

The objectives of the programme are:

- to support projects of common interest on data interchange between administrations in the Community, identified in Decision [...] (11); interchange will relate to the information, data and documents needed for the functioning of the Community, in particular the completion and functioning of the internal market;
- to ensure the interoperability of data communications networks and applications.

#### Article 3

The contents of the programme are set out in Annex I.

#### Article 4

- The implementation of the programme shall be closely coordinated with Community policies and measures concerning the completion and functioning of the internal market.
- 2. This coordination shall apply notably to the specific programme on telematic systems in areas of general interest and to the following areas: trans-European telecommunications networks, security of information systems, standardization, data interchange in the various sectors of administration, and the legal aspects and confidentiality issues raised by the introduction of data communications networks.

<sup>(11)</sup> J.O. ....

#### Article 5

The Commission is hereby authorized to negotiate and conclude agreements with non-Community countries with a view to their full or partial involvement in the programme.

#### Article 6

- 1. The Commission shall be responsible for the implementation of the programme.
- 2. The procedure laid down in article 7 shall apply to:
  - the drawing up of the workprogramme for feasibility studies;
  - the adoption of the recommendations of feasibility studies;
  - the progress of implementation and management of specific trans-European networks;
  - the adoption of technical solutions of interconnection for the interworking of telematic networks and applications;

#### Article 7

- The Commission shall be assisted by a committee of an advisory nature composed
  of the representatives of the Member States and chaired by the representative of
  the Commission.
- The Commission representative shall submit to the committee a draft of measures
  to be taken. The committee shall deliver its opinion on thedraft, voting if
  necessary, within a time limit which the chairman mayset depending on the
  urgency of the matter concerned.

The opinion shall be recorded in the minutes; each Member State shall beentitled to ask for its position to be recorded in the minutes.

The Commission shall give serious consideration to the committee'sopinion. It shall inform the committee of how it has taken account of the opinion.

 The Committee may examine any question relating to the interchange of data between administrations.

#### Article 8

- 1. Every year the Commission shall report on activities to the Council andthe European Parliament.
- 2. At the end of the IDA programme, the Commission shall present a finalreport to the Council and the European Parliament, including anassessment of the extent to which each of the objectives laid down forthe programme has been attained, on the basis of the criteria and indicators set out in Annex II, and propose any further action which maybe needed.

#### Article 9

Decision 82/869/EEC of 13 December 1982 is hereby repealed.

#### Article 10

This Decision is addressed to the Member States.

#### Article 11

It shall take effect 21 days after the date of its publication in the Official Journal of the European Communities.

Done at Brussels.

#### Annex I

#### Definition of the IDA programme

1. The IDA programme consists of two closely linked parts.

Part one covers Community support for projects of common interest on computerized interchange of administrative information, data and documents between administrations within the Community.

Part two deals with measures to ensure interoperability of data communications networks and applications, increase reliability and reduce costs.

2. The part on **projects of common interest** for the interchange of administrative information, data and documents aims to coordinate and support the development of systems for the interchange of data inparticular sectors between national administrations, and between these administrations and the Community institutions and bodies.

The measures envisaged in this part of the programme take the form of feasibility studies and support for implementation.

**Feasibility studies** for projects of common interest generally comprise the following stages:

- analysis of the legal or de facto, national and Community bases giving rise to data interchange;
- analysis of the type and conditions of existing or likely interchange;
- description of data, data flows, frequency and volume of interchanges, and transmission time available;
- identification of missing links of data communications applications, including links which do not exist and those which are unsuitable and need altering or replacing;

- preparation of a comprehensive plan setting out all the relevant action to be taken;
- examination of the problems of methodology and coordination;
- proposal of one or more alternative or supplementary recommendations concerning all the work to be carried out and operations to be managed, along with an execution plan and an assessment of the costs and risks of all the structures to be set up or altered;
- validation, on a small scale, of the essential functions of the solutions adopted;
- comparison of the recommendations proposed and the conclusions of the validation exercise;
- drafting of technical installation, management and maintenance specifications for the introduction of operational systems.

In addition to the feasibility studies there will be regular monitoring of the measures and projects undertaken by the administrations of the Member States and Community institutions and bodies with a view to the introduction of the operational data communications networks which result from the feasibility studies.

Community support for the implementation of projects of common interest will comprise partial support for national administrations and Community institutions, so as to encourage the implementation of the projects whenever this should prove necessary in order to ensure the interconnection and interoperability of the Community networks. This support will take whatever form is most appropriate to the specific needs and urgency of each project.

Without prejudice to existing or future specific action plans, the support will also comprise assistance for the <u>implementation and management of indvidual trans-European data communications networks</u>, and in particular:

networks in the field of statistics within the Community;

- networks in the field of indirect taxation and customs;
- networks in the field of data interchange on animal and plant health;
- networks in the field of education and training;
- networks in the field of export controls and managing Community quantitative restrictions.
- 3. The part concerning the interoperability of data communications networks and applications consist of providing technical interconnection solutions enabling the independent information systems of the administrations to communicate with one another via the telecommunications infrastructure. These will also facilitate the execution of feasibility studies on the interconnection of systems, conducted under part one of the programme.

The measures planned, which will be based on existing technologies, areset out below:

- defining the common data communications architecture to be used and, where appropriate, encouraging migration from existing architectures towards a common architecture;
- defining common communications protocols and technical interfaces between independent systems;
- choosing between telecommunications services;
- laying down detailed technical interconnection rules;
- drawing up management rules;
- setting up small-scale integrated systems in an appropriate environment as demonstration platforms;

- organizing consultations with the parties concerned, namely the national administrations and the Community institutions' computer specialists, telecommunications network operations, relevant service providers and representatives of industry;
- taking account of the work carried out in the European standards institutes and work on computer security and confidentiality;
- incorporating, as they become available, the results of R&D work under the part of the framework programme that relates to data communications systems for the use of administrations;
- promoting the development of trans-European bearer services which meet the European and international standards and can be used as the basis for setting up a common architecture;
- providing user information and, in particular, informing and training the national administrations and the Community institutions directly and indirectly concerned with trans-European data communications networks, and facilitating coordination and monitoring between administrations at national and European level.

#### Annex II

#### Criteria and indicators for assessing the IDA programme

- 1. The part of the programme on projects of common interest for the interchange of administrative information, data and documents
  - (a) identification of end-users' needs: determine whether they have been properly taken into account and how far users' interest has been aroused;
  - (b) projects of common interest: assess progress on feasibility studies and project implementation, and compliance with deadlines;
  - (c) interoperability: assess the solutions described in each project of common interest and how far they are compatible;
  - (d) information, data and document interchange methods: assess the effectiveness of these procedures and the level of user satisfaction.

# 2. Part concerning the interoperability of data communications networks and applications

- (a) interconnection of systems: determine whether appropriate assistance has been given and whether practical and effective solutions have been devised and implemented in the projects of common interest;
- (b) methodology for implementing a common architecture: check whether technical guides making reference to standards have been drawn up, whether management rules have been laid down and how far they are effective and appropriate to the various areas of application;
- (c) consultation of parties concerned: determine whether the action taken involves them all and the level of their involvement;
- (d) standards, and security and confidentiality aspects: assess the conformity and the level of security and confidentiality of the practical solutions recommended for sectoral applications;
- (e) transfer of results of R&D work: assess how far these results have been taken into account during the IDA programme;
- (f) user support, training and information: assess the effectiveness of assistance and the level of user satisfaction.

#### Summary of financial statement

#### concerning

## the multiannual Community programme for the interchange of data between administrations (IDA)

(detailed financial statement for budget heading B5-721 attached)

#### 1. Definition of IDA programme

- (a) Feasibility, validation and interoperability of trans-European data communications networks
- (b) Support for the implementation and management of trans-European data communications networks, in particular in the following fields:
  - (b1) statistics within the Community (Comedi);
  - (b2) indirect taxation and customs;
  - (b3) interchange of information on animal and plant health;
  - (b4) education and training;
  - (b5) export controls and management of Community quantitative restrictions.

#### 2. Budget headings involved

- (a) B5-721, ex B5-4021 and B5-4022;
- (b1) B5-722, ex B5-605;
- (b2) B5-7230, ex A-354;
- (b3) B5-7231, ex B2-5101 (in part);
- (b4) B5-7232;
- (b5) B5-7233, ex B5-314.

#### 3. Legal basis

- Article 235 of the EEC Treaty;
- Proposal for a Council Decision of ... on a series of guidelines for data communications networks between administrations;
- Proposal for a Council Decision of ... adopting a multiannual Community programme to support the implementation of trans-European networks for the interchange of data between administrations (IDA);
- Council Resolution of 22 January 1990 on trans-European networks (OJ C 27, 6.2.1990);
- Conclusions of the Council on trans-European networks, adopted on 31 March 1992.

In addition, the following legal bases relate to specific budget headings:

- B5-722 Council Regulation (EEC) No 3330/91 (Intrastat)
  - Proposal for a Council Decision of ... on intra-Community trade statistics (Comedi)
- B5-7230 Council Regulation (EEC) No 2658/87 (Taric)
  - Council Regulation (EEC) No 1715/90 (BTI)
  - Directives 81/117/EEC and 82/347/EEC (Transit)
  - Regulation (EEC) No 218/92 (VAT information and SCENT on tax)
- B5-7231 Directive 90/425/EEC (Animo)
  - Directive 92/438/EEC (Shift)
  - Directive 77/93/EEC (Physan)
- B5-7233 Proposal for a Council Regulation forwarded by the Commission on 31 August 1992 on the control of exports of certain dual-use goods and technologies and of certain nuclear products and technologies.

#### 4. <u>Description of operation</u>

#### 4.1 Specific objectives of operation

To introduce measures constituting the Community's contribution to implementing the networks identified in the "master plan" for trans-European data communications networks between administrations.

4.2 **Duration**: 1993 to 1997.

#### 4.3 Target population

The Community institutions, Member States' administrations including economic operators, and regional and local authorities and, in certain specific cases, associations (notably in the agricultural sector), research institutes, universities and the media.

#### 5. Classification of expenditure/revenue

Non-compulsory expenditure; differentiated appropriations

#### 6. Type of expenditure/revenue

- Complete funding of the development and implementation of the central systems.
- Joint funding will involve only the public sector (administrations of the Member States, including regional and local authorities, and the Community institutions) and, where appropriate, economic operators or other sources in the private sector, and will take the form of financial cooperation to ensure completion of the measures envisaged. The contribution of the public sector will take different forms, namely provision of management and technical staff, payment of part or all of the telecommunications and maintenance costs, purchase of data communications hardware on expiry of the rental period, etc.

The arrangements for joint funding will be worked out individually for each project.

The Community shall provide support for computer services companies and value added network operators for work on incorporating declarative and statistical analysis modules into commercial software, and for adjustments made necessary by the specific nature of the statistical messages. This may take the form of interest-rate subsidies and loan guarantees to facilitate the necessary investments. The overall budget allocation needed is estimated at approximately ECU 5 million.

Incentives are needed for financing, whether public or private, in these areas, as the investments involved are substantial and are often slow to produce a return. Experience has shown that operators tend to defer such investments, on the basis that there is no immediate commercial gain to be made. However, they are essential in order to lend vitality to trade within the Community, the growth of which will make the investments profitable in the medium term.

#### 7. Financial impact

#### 7.1 Total cost of the operation (million ECU)

B5-721: 180 B5-722: 75 B5-7230 to B5-7233: 85 TOTAL: 340

#### 7.2 Tentative schedule of commitment appropriations (million ECU)

	1993 BUDGET	TENTA	Total			
		1994	1995	1996	1997	1993 to 1997
B5-721	17	23	50	48	42	180
B5-722	0	10	20	23	22	75
B5-7230 to B5-7233	• <b>13</b> • •	: 17	20	19	16	85
Total	30	50	90	90	80	340

#### 8. Anti-fraud measures planned

Checks on financing and performance of services will be carried out by the Commission's departments before payment, taking into account contractual obligations and the principles of economy and sound financial or overall management. Anti-fraud provisions (checks, submission of reports, etc.) will be included in all the agreements or contracts concluded between the Commission and the recipients of payments.

#### 9. Elements of cost-effectiveness analysis

#### 9.1 Objectives

This operation is a necessary element in achieving a wider objective which concerns both the Member States and the Community, and consists in ensuring efficient management of a Community area without internal borders by means of common use of data communications tools, systems, and networks.

The overall objective concerns in particular the completion and functioning of the internal market, including the abolition of internal border controls. It covers the implementation and full exercise of the four freedoms of movement, and the management and coordination of common policies.

The aim is to provide Community support for implementing trans-European data communications networks, as defined in a set of guidelines, where it is deemed to be necessary and the commitments of the Member States are forthcoming.

#### 9.2 Grounds for the operation

The Community and the Member States must take effective action to meet their commitments, notably by ensuring that the national and Community administrations concerned, as well as economic operators or other entities, have access to the most appropriate data communications tools, systems and networks to process and interchange the relevant information, which is rapidly increasing in volume and complexity.

Should such measures not be implemented and produce tangible results in time to meet the obligations imposed by the Treaties, the Member States and the Community would lack effective means to control and prevent fraud, once the establishment of the Community area has eliminated traditional border controls.

The experience acquired in implementing the Community's Insis and Caddia programmes confirms that interoperability of the systems and networks linking numerous administrations in different sectors in the twelve Member States and the Community institutions can only be achieved in an effective and economical manner if the Community's contribution supports the development of the necessary tools, while respecting the areas of competence of each participant.

The Community contribution to setting up data communications networks between administrations will be confined to areas where the objectives which have been set cannot be attained satisfactorily by the Member States on their own and, owing to the scale and implications of the measures envisaged, are best achieved at Community level.

The impact of this contribution will be undiminished even if the amount constitutes only a small percentage of the total funds which the Member States will have to release in order to set up and operate the networks over the next five years.

Satisfactory coordination between the Member States via appropriate Community action is necessary in order to ensure consistency in the setting-up and operation of the data communications networks between administrations. Failure to take Community action in this field would be liable to result in a lack of interconnection and interoperability between the national networks and in limiting access to the networks.

#### 9.3 Monitoring and evaluation of the operation

Evaluations are to be carried out at least once a year for each project, and an overall report drawn up on the basis of the information gathered. The evaluations will be carried out by independent experts.

At the end of the operation a final report will be drawn up containing an evaluation by independent experts of the extent to which each of the objectives has been achieved.

Annex: Financial statement for budget heading B5-721

#### FINANCIAL STATEMENT

Article B5-721: Feasibility, validation and interoperability of data communications networks - IDA (Interchange of Data between Administrations)

	orized 1992	Approps requ	ested 1993	Difference in %		
			Payments	Commitments	Payments	
1	2	3	4	5	6	
7.350.000	8.200.000	17.000.000	9.000.000	+ 131.3	+9.76	

#### 1. Title of operation

Feasibility, validation and interoperability of trans-European data communications networks between administrations.

#### 2. Budget headings involved

B5-721, ex B5-4021 and B5-4022.

#### 3. Legal basis

- Article 235 of the EEC Treaty
- Proposal for a Council Decision of ... 1992 on a series of guidelines for data communications networks between administrations
- Proposal for a Council Decision of ... adopting a Community programme to support the implementation of trans-European networks for the interchange of data between administrations (IDA)
- Council Resolution of 22 January 1990 on trans-European networks (OJ C 27, 6.2.1990)
- Council conclusions on trans-European networks adopted on 31 March 1992.

#### 4. Description of operation

#### 4.1 Specific objectives of operation

- To introduce measures constituting the Community's contribution to implementing the networks identified in the "master plan" for trans-European data communications networks between administrations.

This master plan covers all the measures which have to be taken by the national and Community administrations in order to set up the trans-European information processing and interchange networks needed for the functioning of the internal market and implementation of the common policies.

The operation will encompass all the preparatory work, including network feasibility studies for the projects of common interest, and the harmonization work designed to ensure interoperability of the networks.

- It will encompass the activities carried out in the past under the Insis programme (Interinstitutional information system) and the Caddia programme (transmission system for data on customs, agriculture and external trade).

The main aim of overhauling and incorporating the Insis system is to help improve the Community decision-making process, by bringing together all the Community institutions and the Member States, through the intermediary of the Permanent Representatives' offices, as well as the national Ministers and departments which liaise with the Community institutions.

4.2 **Duration**: 1993 to 1997

#### 4.3 Target population

The Community institutions, Member States' administrations including economic operators, and regional and local authorities.

#### 5. Classification of expenditure/revenue

Non-compulsory expenditure; differentiated appropriations.

#### 6. Type of expenditure/revenue

The operation provides complete funding for the measures set out in the work programme, including the services which need to be provided. However, these measures come under the umbrella of projects for which various additional forms of financing are provided by the partners involved.

Joint funding will involve only the public sector (administrations of the Member States, including regional and local authorities, and the Community institutions) and, where appropriate, economic operators, and takes the form of financial cooperation to ensure implementation of the measures envisaged. The contribution of the public sector takes different forms, namely provision of management and technical staff, payment of part or all of the telecommunications and maintenance costs, purchase of data communications hardware on expiry of the rental period, etc.

The arrangements for joint funding are worked out individually for each project.

#### 7. Financial impact

#### 7.1 Method of calculating the cost

The amount of appropriations needed to finance the Community's contribution to preparation of the networks over a five-year period was assessed on the following basis:

- It is estimated that an average of three feasibility studies will be needed in each Member State during the five years, giving a total of 36 studies, only 3/4 of which will include a validation exercise. Experience with the Caddia and Insis programmes has shown that the average cost of carrying out a complete feasibility study is ECU 5 million, which drops to ECU 0.5 million if no validation exercise is needed.
- The total amount needed for horizontal activities concerning interoperability (common architectures, standardization) is estimated at ECU 21 million.
- Finally, the cost of awareness and reciprocal information campaigns is estimated at ECU 8 million.

The estimates therefore break down as follows:

	<u>Total</u>	ECU	180 million
	Awareness and reciprocal information campaigns		O IIIIIIOII
_	Awareness and reciprocal information campaigns	ECU	8 million
_	Horizontal measures on interoperability	ECU	21 million
-	Feasibility studies on the operation of the Community decision-making process (*)	ECU	22 million
-	Feasibility studies on the internal market and Community policies (*)	ECU	129 million

(Excluding management expenditure)

(\*) Includes the feasibility, the validation and support for the implementation, excluding sectoral action plans intended to support the implementation and management of specific trans-European telematic networks.

#### 7.2 Detailed breakdown

The appropriations for 1993 will be broken down as follows (million ECU):

CATEGORY	92 BUDGET	93 BUDGET	DIFFERENCE in %
Feasibility studies on internal market and Community policies (*)		13	
Feasibility studies on the operation of the Community decision-making process (*)	7.35	2	
Horizontal measures on interoperability		1	
Awareness and reciprocal information campaigns		1	
Operational total (million ECU	7.35 (1)	17	131.3

(1) B5-4021 (Insis) and B5-4022 (Caddia)

The tentative breakdown for 1993-1997 is as follows (million ECU):

CATEGORY	1993	1994	1995	1996	1997	Total
Feasibility studies on the internal market and Community policies (*)	13	15	32	37	32	129
Feasibility studies on the operation of the Community decision making-process (*)	2	3	5	6	6	22
Horizontal measures on interoperability	1	4	11	3	2	21
Awareness and reciprocal information campaigns	1	1	2	2	2	8
Operational total	17	23	50	48	42	180

#### 7.3 Tentative schedule of commitment appropriations (million ECU)

1992 BUDGET	1993 BUDGET	TEI	Total			
		1994	1995	1996	1997	1993 to 1997
7,35(1)	17	23	50	48	42	180

(1) B5-4021 (Insis) and B5-4022 (Caddia). Period of validity: 1993-1997.

#### 8. Anti-fraud measures planned

Checks on financing and performance of services and of feasibility and evaluation studies will be carried out by the Commission's departments before payment, taking into account contractual obligations and the principles of economy and sound financial or overall management.

Anti-fraud provisions (checks, submission of reports, etc.) will be included in all the agreements or contracts concluded between the Commission and the recipients of payments.

#### 9. Elements of cost-effectiveness analysis

#### 9.1 Objectives

Measures relating to the feasibility, validation and interoperability of data communications networks are a necessary element in achieving a wider objective which concerns both the Member States and the Community, and consists in ensuring efficient management of a Community area without internal borders by means of common use of data communications tools, systems, and networks.

The overall objective concerns in particular the completion and functioning of the internal market, including the abolition of internal border controls. It also covers the implementation and full exercise of the four freedoms of movement, and the management and coordination of common policies. Achievement of this objective is based on a set of guidelines adopted by the Member States.

The aim of the operation is to provide Community support for implementing trans-European data communications networks, as defined in this set of guidelines, where it is deemed to be necessary and the commitments of the Member States are forthcoming.

The operation consists of two parts. The first, of a sectoral nature, consists of activities to support projects of common interest, and aims to define specifications for the trans-European data communications networks needed by the national and Community administrations. The horizontal measures contained in the second part are aimed at ensuring the interoperability of the data communications networks, increasing their reliability and reducing costs.

#### 9.2 Grounds for the operation

The Community and the Member States must take effective action to meet their commitments, notably by ensuring that the national and Community administrations concerned have access to the most appropriate data communications tools, systems and networks to process and interchange the relevant information, which is rapidly increasing in volume and complexity. Should such measures not be implemented and produce tangible results in time to meet the obligations imposed by the Treaties, the Member States and the Community would lack effective means to control and prevent fraud, once the establishment of the Community area has eliminated traditional border controls.

The experience acquired in implementing the Community's Insis and Caddia programmes confirms that interoperability of the systems and networks linking numerous administrations in different sectors in the twelve Member States and the Community institutions can only be achieved in an effective and economical manner if the Community's contribution supports the development of the necessary tools, while respecting the areas of competence of each participant.

The Community contribution to setting up data communications networks between administrations will be confined to areas where the objectives which have been set cannot be attained satisfactorily by the Member States on their own and, owing to the scale and implications of the measures envisaged, are best achieved at Community level.

The impact of this contribution will be undiminished even if the amount constitutes only a small percentage of the total funds which the Member States will have to release in order to set up and operate the networks over the next five years.

The first part of the operation consists of Community support for projects of common interest in certain sectors.

In order to implement the projects of common interest, specifications first have to be drawn up for the trans-European data communications networks, by means of feasibility studies incorporating, if necessary, a validation phase. These specifications must be the same for all the national administrations and Community institutions concerned. The problems arising out of the differences between Member States in terms of organization, systems, etc., allied to the need to implement Community policies in a systematic fashion, make coordination at Community level necessary.

The second part consists of horizontal measures to ensure the interoperability of the trans-European networks between administrations, which fall directly within the scope of Community policy on telecommunications, standardization and the information market. The measures concern the definition of common architectures, systematic use of European standards, awareness and information campaigns for users, and the provision of the bearer services necessary for the functioning of the trans-European networks, for which the administrations will be the pioneer market.

Satisfactory coordination between the Member States via appropriate Community action is necessary in order to ensure consistency in the setting-up and operation of the data communications networks between administrations. Failure to take Community action in this field would be liable to result in a lack of interconnection and interoperability between the national networks and in limiting access to the networks.

#### 9.3 Monitoring and evaluation of the operation

#### Selected performance indicators:

The feasibility study for each project must indicate the objectives to be achieved, which may be quantitative or qualitative. An example of a quantitative objective would be the number of documents to be sent electronically, and the transmission time for each document. Other objectives might be, say, the number of network specifications drawn up, the number of common architectures adopted or the number of existing networks which have migrated to a common architecture.

Examples of qualitative objectives would be improvement of transmission security and greater flexibility in the use of products based on the MHS standard.

#### - Arrangement and frequency of evaluations:

Evaluations should be carried out at least once a year for each project, and an overall report drawn up on the basis of the information gathered. The evaluations will be carried out by independent experts.

At the end of the operation a final report will be drawn up containing an evaluation by independent experts of the extent to which each of the objectives has been achieved.

#### 9.4 Consistency with financial programming

- 9.4.1 The operation is incorporated in the Directorate-General's financial programming for the years in question.
- 9.4.2 Its objective is part of the broader objective of setting up trans-European telecommunications networks.
- 9.4.3 The main uncertainty surrounds the capacity of the national administrations to adapt to the type of data interchange necessary for the completion of the internal market.

#### 10. Administrative expenditure (Part A of the budget, 1993-1997)

#### 10.1 Service providers

A-1178

Total expenditure: ECU 940 000 annually

It is estimated that, starting in 1993, 10 service providers will be needed in order to manage an operation of this scale. These break down as follows:

- 2 A posts for the group of five projects of common interest on the abolition of internal border controls;
- 2 A posts for the group of four projects of common interest on full exercise of the four freedoms of movement;
- 2 A posts for the group of four projects of common interest on support for Community policies;
- 1 A post for the project of common interest on the operation of the Community decision-making process;
- 1 B post for administrative management;
- 2 C posts for the secretariat.

#### 10.2 Seconded national experts

A-1520

Total expenditure: ECU 210 000 annually

Six national civil servants, each responsible for two Member States, will need to be seconded to monitor the activities of the Member States on data communications networks between administrations.

#### 10.3 Operating expenditure

A-238

16 posts at a total cost of ECU 320 000 annually.

#### 10.4 Meetings of experts

A-250

Total expenditure: ECU 2 200 000 annually

In order to coordinate the projects of common interest which involve economic operators, six meetings of experts will need to be organized annually for each of the fourteen projects. This gives a total of 84 meetings a year at a cost of ECU 18 000 per meeting.

In addition, six meetings will have to be held to evaluate tenders for the feasibility part and for each of the five areas of implementation, giving a total of 36 meetings a year, at a cost of ECU 18 000 a meeting.

#### 10.5 Organization of conferences

A-2550

Total expenditure: ECU 500 000 annually

Three inter-sectoral conferences on average will have to be organized every year at a cost of ECU 100 000 each, as well as five sectoral conferences costing ECU 40 000 each. These will be attended by representatives of the national administrations, and may be held in the Member States.

#### 10.6 Committee meetings

A-2510

Total expenditure: ECU 1 100 000 annually

The IDA committee referred to in the Council Decision replaces the Insis and Caddia action committees.

This committee could set up eight sub-committees (one each on feasibility, validation and interoperability, and one each for the five areas of implementation).

This makes a total of nine committees meeting on average ten times a year, i.e. 90 meetings at a cost of ECU 12 000 each.

#### 10.7 Missions

A-130

Total expenditure: ECU 3000 000 annually

The missions will be carried out by the service providers and the seconded national civil servants, who will attend conferences in the Member States and monitor the projects of common interest in the administrations of the Member States.

#### 10.8 Publications

A-3410

Total expenditure: ECU 300 000 annually

This involves publishing summaries in all languages on the projects of common interest and the interoperability of the data communications networks.

Overall total from Part A of the budget: ECU 5 870 000 annually.