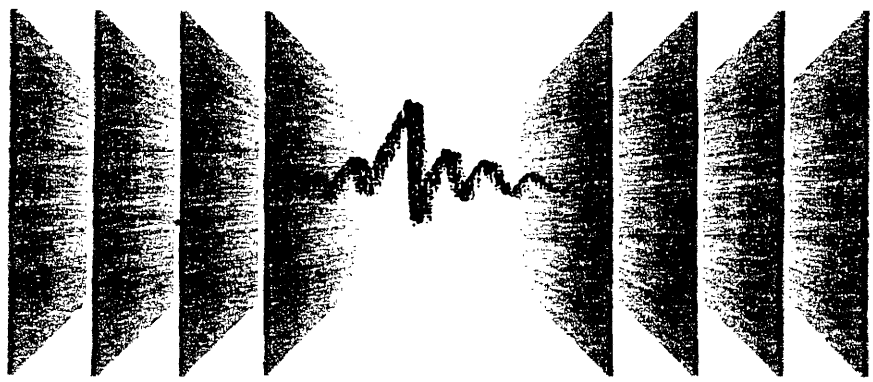
Trade EDI systems programme



TEDIS

Interim report 1991

Trade EDI systems programme

Interim report 1991

Commission of the European Communities
Directorate-General XIII
Telecommunications,
Information Industries and Innovation

Published by the
COMMISSION OF THE EUROPEAN COMMUNITIES

Directorate-General
Telecommunications, Information Industries and Innovation

L-2920 Luxembourg

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Luxembourg: Office for Official Publications of the European Communities, 1992
ISBN 92-826-4201-1
© ECSC-EEC-EAEC, Brussels. Luxembourg, 1992
Printed in Belgium.

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Preface

The free movement of information and data between economic operators and Member States is a vital prerequisite for the free movement of goods and services and for the development of cooperation between businesses on a European scale.

In this respect the work of the Tedis programme prepares the way for the creation of those pan-European networks which will allow the single market to function effectively. In the spirit of the Treaty of Maastricht, the programme aims to encourage a favourable environment for competitiveness by ensuring that developments in information and communication technologies are oriented towards the needs of industrial applications.

The results of the first phase of the programme have already demonstrated that the development of EDI can serve to reinforce the efficiency and productivity of European enterprises and help them to establish a stronger position in increasingly competitive world markets.

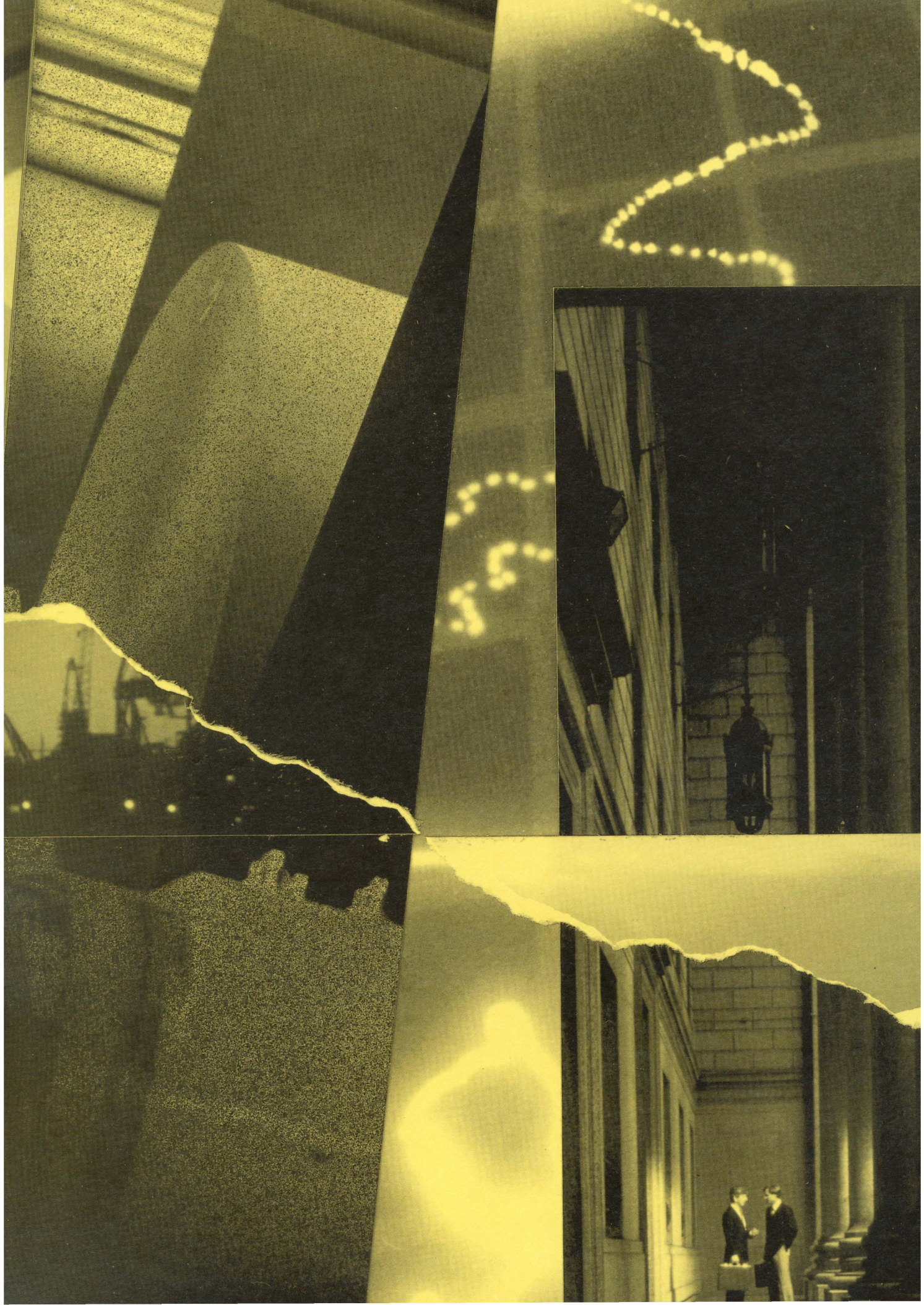
European firms are keen to intensify cooperation and attain the level of competitiveness demanded by technological developments and worldwide competition. The role of Tedis is to coordinate EDI developments in different industry sectors and ensure their coherence in a multisectoral environment. The rapid growth of EDI is symptomatic of the impressive wave of change and restructuring in the Community's industrial fabric. The Community must seek to anticipate and cushion the impact of this ever increasing rate of technological and industrial change in order to turn it to best advantage. These changes do not only affect large manufacturers; indeed the impact of EDI on their component suppliers, many of whom are small businesses, illustrates equally how important it is to improve the supply of information and encourage cooperation amongst small and medium sized firms.

In consequence the Community's efforts in this second phase must concentrate on three priorities: to ensure the integration of current developments in different Member States and industry sectors; to examine the wider social and economic impact of EDI; and to continue to raise the level of awareness of potential users of EDI systems, in particular small and medium sized businesses.

This interim report for 1991 shows how Tedis has begun to encourage and harmonise the development of EDI in Europe. It is our strong hope that users will take full advantage of the lead which the Community has given.

In the context of the Single Market,
the rapid and reliable transfer of information and data will be an indispensable precondition for the free circulation of goods and services. Electronic data interchange (EDI) is one of the most effective means of ensuring this.

For trade within the Community administrative costs account from anything from 3.5% to 15% of the value of the goods. Even a slight reduction in these costs by using EDI will mean economies of billions of ecus.



Phase II of the Tedis programme.

The Community has been promoting the coordination of EDI systems through the Tedis programme. Building on the achievements of the first phase (launched in 1988 with a budget of ECU 5.3 million over two years), the second phase was established by a Council decision on 22 July 1991, with an agreed budget of ECU 25 million for 1991 - 1994.

In the second phase of Tedis three main objectives have been identified:

- the integration of EDI implementations and activity in the Member States across different sectors
- the examination of the economic and social repercussions of EDI and its impact on the management of public and private companies
- increasing the awareness of potential users, particularly small businesses, and potential hardware, software or service providers.

The integration of various initiatives in different industry sectors and in different Member States will involve continued work on the standardisation of messages, the interconnection of Value Added Data or Network Services, the establishment of secure EDI facilities and the creation of an appropriate legal environment. Coordination will continue to be assured at an international level through the appropriate bodies such as the United Nations or the International Standards Organisation.

Hand in hand with the creation of this technical and legal infrastructure throughout the Community must go an increase in understanding how the organisation of industry can be improved as a result. The process of change must be managed, and the benefits realised in a fair and equitable manner.

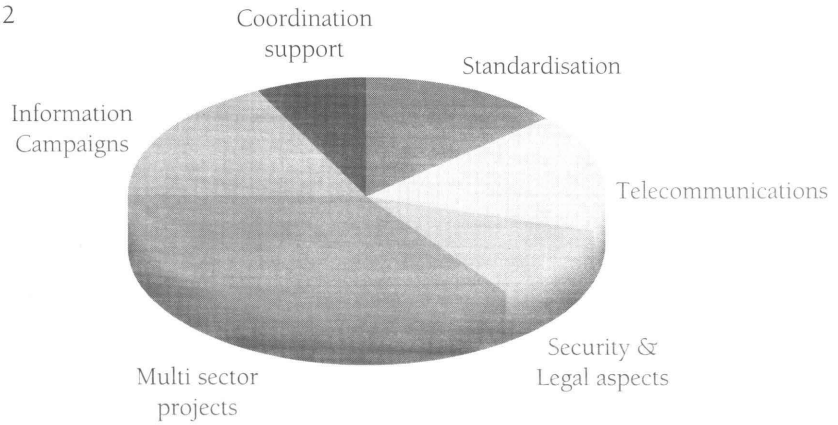
Raising the level of awareness of EDI is a continuing task. In the first phase the need for regional awareness centres in order to provide information and support at a local level and in the appropriate language to potential users in each Member State was clearly identified. In the second phase the work of these centres will be linked and coordinated through the Tedis programme.

The programme will continue to contribute to the realisation of a wider European Economic Space. Agreements for participation with the EFTA countries have already been negotiated in the first phase of Tedis. These will continue to apply within the second phase. In addition there will be a need to establish interfaces with the EDI systems of the Mediterranean, Central and Eastern European countries. In these latter, the opening up of modern market economies will place a new emphasis on EDI to complement new trading practices.

The removal of physical and fiscal barriers is necessary, but is not enough on its own to ensure the successful functioning of the Single Market. It is also necessary to have in place the material conditions of a single market by interconnecting the Community's information and administrative systems.
Businesses and individuals must be able to rely on an integrated EDI infrastructure to support the provision of services in areas such as health care, transport and banking across borders as well as within each Member State. Tedis will make an important contribution to the effective integration of these trans-European networks.

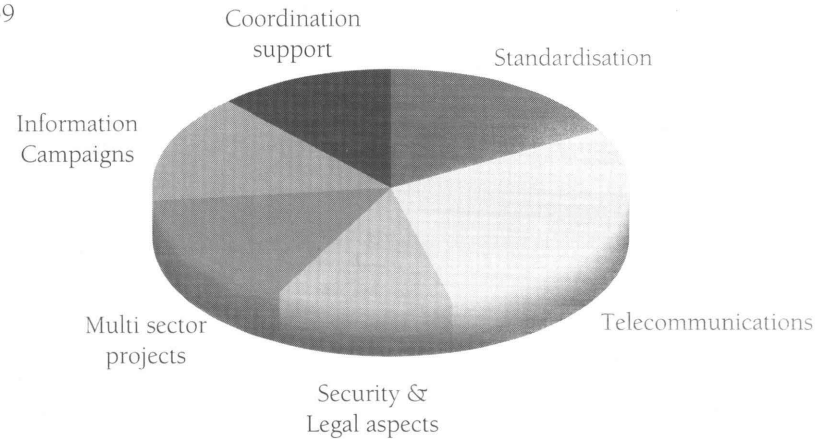
Estimated Budget 1991 - 4*

	ECU Millions
Standardisation	4.2
Telecommunications	4.9
Security & Legal aspects	3.1
Multi sector projects	10.7
Information Campaigns	5.3
Coordination support	2.2



Budget 1991

	ECU Thousands
Standardisation	685
Telecommunications	1154
Security & Legal aspects	476
Multi sector projects	615
Information Campaigns	595
Coordination support	469



* proposal includes EFTA funding

EDI not only allows major savings of time and administrative cost, but forges new links between the different enterprises. The benefits from closer cooperation between enterprises in the Community and between enterprises and administrations are considerable: closer cooperation at this level will facilitate current efforts in restructuring certain industry sectors and will reinforce Community industrial policies.

COUNCIL DECISION

of 22 July 1991

establishing the second phase of the Tedis programme (Trade electronic data interchange systems)

(91/385/EEC)

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 [1],

Having regard to the opinion of the European Parliament [2],

Having regard to the opinion of the Economic and Social Committee [3],

Whereas one of the Community's tasks is, by establishing a common market and gradually reducing the gap between the economic policies of the Member States, to promote the harmonious development of economic activities throughout the Community and closer relations between its constituent States;

Whereas the Commission White Paper on the completion of the internal market stresses the importance of the future development of new transfrontier services and the contribution made by telecommunications networks based on common standards towards the creation of a market free of barriers at Community level;

Whereas the exchange of computerized data (EDI) can contribute increasingly towards the competitiveness of European undertakings in the production and services sectors;

Whereas there is rapid growth at present in public and private initiatives for putting into service within a company or group of companies or sector of activity, at national and international level, electronic data interchange systems which are not compatible;

Whereas, as regards electronic data interchange, the diversity and fragmentation of initiatives taken at national level or more generally by a company, group of companies or sector of activity may lead to the creation of incompatible and non-communicating systems and to preventing suppliers of equipment and services, and users, from deriving maximum benefit from the advantages created by the growth in electronic data interchange;

Whereas, in line with the Council Resolution of 22 January 1990 on trans-European networks [4] and the conclusions of the Strasbourg and Dublin European Councils, the smooth running of the internal market depends on undertakings and authorities involved in it being able to exchange data as part of their activities by making use of compatible systems which enable genuine pan-European data interchange networks to be developed;

Whereas Tedis needs in particular to be dovetailed with the specific programme of research and technological development in communications technology (1990 to 1994), the specific programme of research and technological development in the field of telematics systems of general interest (1990 to 1994) and the specific programme for information technology (1990 to 1994) which are part of the Community's third framework research programme;

Whereas the work already initiated in the field of electronic data interchange (EDI) during the first phase of the Tedis programme (1988 to 1989) established by Decision 87/499/EEC [5] makes it possible to envisage the establishment of such pan-European networks, provided that this work is continued and expanded by instituting a second phase to the programme;

Whereas a programme lasting three years is called for;

Whereas an amount of ECU 25 million is estimated as necessary to implement this multi-annual programme; whereas, for the period 1991 to 1992, in the framework of the current financial perspective, the funds estimated as necessary are ECU 10 million;

Whereas the amounts to be committed for the financing of the programme for the period after the budget year 1992 will have to fall within the Community financial framework in force;

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[1] OJ No C 311, 12. 12. 1990, p. 6.
[2] OJ No C 106, 22. 4. 1991, p. 167.
[3] OJ No C 102, 18. 4. 1991, p. 13.
[4] OJ No C 27, 6. 2. 1990, p. 8.
[5] OJ No L 285, 8. 10. 1987, p. 35.

Whereas, by Decision 89/241/EEC [1], the Council amended the initial Decision on the Tedis programme to allow non-member countries, in particular Member States of the European Free Trade Association (EFTA), to be associated with the Tedis programme and, in accordance with Article 228 of the Treaty, authorized the Commission to negotiate agreements with the EFTA Member States;

Whereas, by Decision 89/689/EEC [2], 89/690/EEC [3], 89/691/EEC [4], 89/692/EEC [5], 89/693/EEC [6] and 89/694/EEC [7], the Council approved the agreements on systems for the electronic transfer of data for commercial use concluded between the European Economic Community and, respectively, Austria, Finland, Iceland, Norway, Sweden and Switzerland;

Whereas the Treaty does not provide, for the adoption of this Decision, powers of action other than those of Article 235,

HAS DECIDED AS FOLLOWS:

Article 1

1. A second phase of the Tedis (Trade electronic data interchange systems) Community programme concerning the exchange of electronic data (EDI) in trade, industry and administration, hereinafter called the 'programme', is hereby set up.

The programme shall last three years.

2. The Community financial resources estimated as necessary for its implementation amount to ECU 25 million, of which ECU 10 million is for the period 1991 to 1992 in the framework of the 1988 to 1992 financial perspective.

For the subsequent period of implementation of the programme, the amount shall fall within the Community financial framework in force.

3. The budget authority shall determine the appropriations available for each financial year, taking into account the principles of sound management referred to in Article 2 of the Financial Regulation applicable to the general budget of the European Communities.

Article 2

The objectives of the programme are to ensure that electronic data interchange systems are established to the best effect, in view of the socio-economic importance of such systems, and to mobilize the necessary resources to achieve this end at Community level.

Article 3

In order to achieve the objectives defined in Article 2, measures will be taken and continued in the following areas:

— standardization of EDI messages,
— specific EDI needs as regards telecommunications,
— legal aspects of EDI,
— security of EDI messages,
— multi-sector and Europe-wide projects,
— analysis of the impact of EDI on company management,
— information campaigns.

A list of the proposed measures is given in Annex I. These measures shall be implemented under the procedures provided for in Articles 6 and 7.

Article 4

The implementation of the programme shall be coordinated with existing or planned Community policies and activities concerning telecommunications particularly in respect, where necessary, of initiatives under the Open Network Provision Framework Directive (90/387/EEC) [8], the information market (Impact programme), security of information systems and standardization, and in particular with the Caddia programme and the CD project, so as to ensure the necessary interaction with the specific requirements of the exchange of electronic data.

Article 5

Contracts arising from the programme shall be concluded with undertakings, including small and medium-sized enterprises, research establishments, national administrations and other bodies established in the Community, in the member countries of the European Free Trade Association or in a third country with which the Community has concluded an agreement associating that country with the programme.

Article 6

1. The Commission shall be responsible for implementing the programme. 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.

2. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft, within a time limit which the Chairman may lay down according to the urgency of the matter, if necessary by taking a vote.

[1] OJ No L 97, 11. 4. 1989, p. 46.
[2] OJ No L 400, 30. 12. 1989, p. 1.
[3] OJ No L 400, 30. 12. 1989, p. 6.
[4] OJ No L 400, 30. 12. 1989, p. 11.
[5] OJ No L 400, 30. 12. 1989, p. 16.
[6] OJ No L 400, 30. 12. 1989, p. 21.
[7] OJ No L 400, 30. 12. 1989, p. 26.
[8] OJ No L 192, 24. 7. 1990, p. 1.

3. The opinion shall be recorded in the minutes; in addition, each Member State shall have the right to ask to have its position recorded in the minutes.

4. The Commission shall take the utmost account of the opinion delivered by the Committee. It shall inform the Committee of the manner in which its opinion has been taken into account.

Article 7

1. Notwithstanding the provisions of Article 6, the following procedure shall apply in drawing up the work programme as set out in Annex I, the breakdown of the relevant budgetary expenditure and the assessment of projects and actions provided for in that Annex of a total value of above ECU 200 000, and the estimated amount of the Community's contribution to them.

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

3. The Commission shall adopt measures which shall apply immediately. However, if these measures are not in accordance with the opinion of the Committee, they shall be communicated by the Commission to the Council forthwith.

4. In that event, the Commission shall defer application of the measures which it has decided for a period of three months from the date of communication.

The Council, acting by a qualified majority, may take a different decision within the time limit referred to in the foregoing subparagraph.

Article 8

At the end of the Tedis programme, the Commission shall present to the European Parliament, the Council and the Economic and Social Committee a final report containing an assessment by independent experts of the progress made towards each of the objectives set under the programme on the basis of the criteria and indicators as set out in Annex II to this Decision.

Article 9

This Decision shall take effect on 1 July 1991.

Done at Brussels, 22 July 1991.

For the Council

The President

P. DANKERT

ANNEX I

1. **Standardization of EDI messages :**

   — support the development work of the international Edifact standard and in particular the work of the Edifact Board for Western Europe ; coordinate work regarding elaboration of Edifact messages and provide the necessary technical assistance,

   — supply the appropriate means to ensure conformity to Edifact of, on the one hand, EDI messages and, on the other hand, of conversion software,

   — adapt, if necessary, the Edifact standard to take account of the new developments in EDI, such as graphical EDI, technical EDI and interactive EDI,

   — support 'migration' towards the use of international standards and particularly towards the use of Edifact,

   — seek compatibility between the American standard ANSI X12 and the international Edifact standard.

2. **Specific EDI needs as regards telecommunications :**

   — to make proposals for improving technical interconnectivity between EDI users in Europe, ensuring close liaison with existing Community activities in this area and in particular ONP, namely :

     (a) encouraging the use of standardized communication protocols suitable for EDI in underlying services, especially P-edi, X.400 (1988) or X.500, coordinating where necessary with the ONP plans to harmonize for instance standards for packet switched data services and leased lines ;

     (b) encouraging the existence of gateways between existing EDI services ;

     (c) helping to establish a system of registration authorities, to ensure the solution of the problem of identifying the names and addresses of EDI users in a multisectorial and trans-European context,

   — to encourage the increased use of integrated services digital networks for EDI,

   — to favour the gathering of the EDI interest groups dealing with telecommunications aspects,

   — to encourage the practice of 'one-stop shopping/billing' concepts in EDI.

3. **Legal aspects of EDI :**

   — finalize the draft European EDI agreement,

   — set up and investigate thoroughly the constraints and needs of a legal nature in specific areas,

   — undertake the thorough legal analysis of media and means of storage and of the electronic signatures for EDI messages,

   — prepare a discussion document on the adaptation and harmonization of European legislations in order to integrate into the legal regimes the necessary provisions for the use of EDI ; define the proposal of adaptation and harmonization required,

   — ensure, from a legal aspect, that functions accomplished by EDI messages are also valid in order to carry out functions of a legal and reglementary nature,

   — analyse the impact of EDI messages on the traditional functions of negotiability,

   — follow the issues of data protection and confidential data in order to take account of the specific needs which could arise with the development of EDI,

   — ensure the coordination between Member States on legal matters in connection with EDI and participate in the international coordination.

4. **Security of EDI messages :**

   — create an informal expert group in this specific area,

   — organize each year workshops which will treat different themes related to the security of EDI messages,

   — increase the awareness of EDI users and of other appropriate groups to EDI message security,

   — facilitate the development of procedures, methods, services and standards related to EDI security,

— examine the user environment ; identify the constraints, quantify the risks and investigate, if possible, an appropriate model to ensure EDI security,

— examine the security requirements related to new forms of EDI and the impact of new technologies,

— evaluate the services and products available to ensure the security of EDI messages, and if necessary examine the question of certification,

— examine from the EDI security viewpoint open multi-service environments.

5. **Multi-sector and Europe-wide projects :**

— establish and keep up-to-date a permanent inventory of existing or potential EDI projects in Europe,

— ensure the coordination of sectoral projects to meet industry and user needs,

— support of development of an intersectoral forum for EDI measures,

— encourage the launch of intersectoral projects to meet industry and user needs,

— encourage the participation of national administrations and Community institutions in the intersectoral projects,

— support the promotion of EDI systems to ensure wider use of EDI in Europe,

— identify long-term actions liable to progressively stimulate and interface EDI systems in countries of the Mediterranean, in Central and Eastern Europe.

6. **Analysis of the impact of EDI on company management :**

— identify and analyse changes in the methods of management and organization brought about by the introduction of EDI ; small and medium-sized enterprises (SMEs) should particularly be taken into account,

— examine the economic and social effects of EDI,

— measure up the cost benefit of introducing EDI in private or public sectors,

— elaboration of a general implantation model of EDI in administrations, private and public enterprises,

— study the opportuneness of setting up a mechanism of coordination on a European level with regard to intercompany relations based on EDI.

7. **Information campaigns :**

— conduct regular surveys on the development of EDI in Europe and of available EDI products and services,

— undertake detailed studies more particularly of certain countries, regions or industrial sectors,

— publish the studies, analyses and other results of actions undertaken within the framework of the programme,

— support the setting up of national and/or regional awareness centres. Ensure the coordination, the provision of material support and contribution to their awareness activities,

— encourage in particular actions designed to make SMEs more aware of EDI.

ANNEX II

Guidelines for assessing progress made towards the objectives of the Tedis programme

In order to achieve the objectives defined in Article 2, several measures, referred to in Article 3, will be taken and continued. The progress thereby achieved will then be assessed.

1. For *standardization*, this will mean assessing the influence of the Tedis programme on :

   (a) the development and use of the Edifact standard in Western Europe ;

   (b) the availability and use of conversion software and its conformity to the international Edifact standard.

2. *Interconnection of EDI services*: assessment of the Tedis programme's impact on the capacity of data networks to operate together and the availability of Europe-wide EDI services.

3. *Legal aspects :* examination of how the measures taken under the Tedis programme have helped ensure the legal validity of EDI data interchange in each Member State and how they have encouraged the introduction of 'paperless trading'.

4. *Security of messages*: examination of how the Tedis programme has helped protect the EDI message itself and the security of EDI messages in an interlinked business environment.

5. *Multi-sector and Europe-wide projects :* measuring how far support for the launching of multi-sectoral pilot projects has contributed towards the sectoral and geographical integration of EDI projects.

6. *Management :* assessment of the value of studies and analyses — in particular concerning SMEs — carried out under the Tedis programme to assess the impact of EDI on company management and its economic and social impact.

7. *Information campaigns*: assessment of the impact of measures — in particular concerning SMEs — taken under the Tedis programme on the use of EDI in Western Europe.

As firms reorganise on a European scale to take full advantage of the Single Market of the future, Tedis has a dual role. Firstly it is essential that EDI standards and services exist at a European rather than a purely national level. Secondly it must make sure that the fragmentation into national markets is not replaced by a rigid electronic demarcation between different sectors of the economy. The EDI infrastructure must be both European and also integrated across all sectors. This infrastructure will be as important in the future European economy as the road and rail networks are today.

The work programme

As laid down in articles 6 and 7 of the Council decision the Commission is assisted by a committee of an advisory nature, the Tedis Advisory Committee. This committee gives guidance to the Commission on budget allocation and approves all projects exceeding ECU 200,000. The committee met three times in 1991 to approve this work programme, the budget allocation, the specifications of the 1991 call for tenders and the award of contracts resulting from that call.
This work programme has been set up according to the list of proposed measure contained in Annex 1 of the Council Decision, and approved by the Tedis Advisory Committee according to articles 6 and 7 of that decision during November 1991.
For each item of the Annex, a brief description of the particular actions or work to be undertaken is given. It is on the basis of this work programme that particular invitations to tender will be published or particular measures implemented.

1. Standardisation of EDI messages

1.1. Edifact Board Secretariat

To support the development work of the international Edifact standard and in particular the work of the Edifact Board for Western Europe; coordinate work regarding elaboration of Edifact messages and provide the necessary technical assistance.

a) Personnel and secretarial costs

b) Studies to support the work of the Western European Edifact Board secretariat
Development of a common/generic data element directory.
Data to be used for EDI are to be found in the TDED (Trade Data Element Directory), but also other-than-TDED directories do exist. This is not satisfying because of consistency of understanding and interpretation, it is essential that parties involved in EDI use a common vocabulary, so that the data transmitted results in accurate communication.
The most effective and efficient way to handle this requirement of accuracy and consistency is to have a single stable directory of data, that all parties subscribe to. Most appropriate seems an expanded TDED i.e. a directory containing not only trade data element, but also, either directly or indirectly, data elements from other areas.
To bring this about a feasibility study should be performed examining the need and the further technical details of a plan for the development of a common/generic data element directory.

c) CEBIS data base
Enhancements of the CEBIS system to include new functionalities aimed at, mainly, message validation and assessment, automatic production of standard documents, follow-up of change requests and provision of electronic directory and message interchange. Maintenance of the system.

d) Edifact Reference Center
Maintenance and improvements of the information system of the Edifact reference centre containing the standardised directories and messages. Improvement of access and retrieval facilities. Envisage compatibility with regional reference centers. Identify the implications for multilingual aspects of the documentation.

1.2. Conformance testing
Supply the appropriate means to ensure conformity to Edifact of, on the one hand, EDI messages, including subsets, and on the other hand, of conversion software.

1.3. Edifact adaptations

Support, if necessary, the proposals for adapting the Edifact standard to take account of the new developments in EDI, such as security issues, graphical EDI, technical EDI and interactive EDI.

1.4. Migration to Edifact

The aim is to support organisations which are engaging in a migration process from a pre-existing proprietary standard to UN/Edifact. This support may involve pre-study, feasibility studies, functional specifications for modification to existing computerised systems and coordination costs. The support should be envisaged for sectors or groups of users and not for individual companies.

1.5. Compatibility Edifact X12

Seek an agreement on the modalities of compatibility between the American standard ANSI X12 and the international Edifact standard.

2. Specific edi needs as regards telecommunications

2.1. Improving technical interconnectivity

a) Support the enforcement of European Standards with regard to EDI, namely, a European EDI global naming and addressing scheme, a European EDI Directory Services profile and a European OSI application architecture for EDI. The objective is not to set up specific EDI standards for naming and addressing but to profile them for EDI use. Other areas will also be latterly tackled such as Open EDI and TP and ISDN for EDI. Workshops will be organised to present the results of these activities.

b) Gateways between existing EDI services

"Interconnectivity platforms": all the means of processing and/or storage of information, hardware and software, centralised or not, which are used to extend the access to a telecommunication service and its management towards users of another service to which it is physically connected.

"One-stop-shopping": commercial and technical concept which allows a particular user to only need to have one intermediary, chosen by him, in his relations with his correspondents, either in relation to the establishment of links ("one-stop-ordering"), in billing ("one-stop-billing") or for the regular operations (terminal configuration management, aid in the event of difficulty, breakdown diagnosis, training).

In this area it is envisaged joint calls for proposals with the one-stop-shop issue; indeed there is no rationale to have a one-stop-shop service without gateways and there is little utility to have gateways without one-stop-shop service.

Also an economic study of the EDI support services will be launched in 1991 in order to assess the impact of standardisation on EDI development.

c) Registration authorities

First, there is a need for standardisation as mentioned under point 2.1.a) for 1991.

In 1992, a call for proposals will be launched to select organisations for naming and addressing in the framework of the ISO 7498-3 standard, X.500 services committed to implement EDI profiles, with demonstration of interoperability.

2.2. ISDN

Here again, there is the need for a first phase of standardisation as mentioned under 2.1.a). Then a pre-study will assess the marketing aspects of open EDI and ISDN, OSI-TP or mobile communications.

Then calls for proposals will be launched to demonstrate the impact of these new technologies for EDI services. Due to budgetary constraints, these calls for proposals will be delayed until 1993.

2.3. EDI Telecom Forum

To favour the gathering of the EDI interests groups dealing with telecommunication aspects, an EDI Telecom group will be launched in 1991, as part of the EDI users forum (see 5.3).

2.4. One-stop-shop

As mentioned before (2.1.b), this activity will be conducted jointly with the one on gateways between EDI services. However, we think that a last call for proposals will only be devoted to the "one-stop-shop" concept in 1993, namely for ISDN based services.

3. Legal Aspects

3.1. European Model Agreement

Finalisation of the draft European Model EDI Agreement started in the first phase of the Tedis programme, in order to provide EDI users with a contractual framework for the use of EDI in their commercial activities.

3.2. Legal constraints in specific areas

The results of the first phase of Tedis have shown a need for an in-depth analysis of specific areas such as transport, accountancy, administration and means of payment where specific requirements may lead to potential obstacles to EDI.

3.3. Legal analysis of support and signature

Harmonisation and adaptation of law require that principles to evaluate, from a legal point of view, data stored on electronic media and authentified by the use of electronic authentication be defined. It is also necessary to ensure understanding of the functions of the available techniques, from a legal perspective.

3.4. Harmonisation of European Laws

A discussion paper with regard to the harmonisation and adaptation of European law will be prepared in order to ensure that the legal provisions necessary for the use of EDI are provided by national legal systems. If required a proposal for harmonisation will be submitted.

3.5. Legal evaluation of messages

Evaluation of EDI messages and their definitions and characteristics with regard to the performance of legal functions.

3.6. Negotiability

In depth analysis of the problem of negotiability in EDI. Negotiable documents are still required for commercial transactions but it seems not possible currently to ensure the negotiability functions by exchanging EDI messages.

3.7. Data Protection follow-up

New laws and the changes in law and regulation on personal data and confidential data need to be followed in order to take into account the specific needs of EDI or to evaluate their impact on EDI.

3.8. Coordination national and international

Coordination between the Member States on legal aspects linked with EDI and participation to the international coordination is essential for a balanced development in the legal area.

4. Security

4.1. Expert Group

"Create an informal expert group in this specific area."

There is a need to have an informal channel directly involving a wide range of specialists in this area to receive input and to explore possible future activities. The meetings will be concerned with the wider issues rather than the technical details of any particular aspect. The meeting will allow for a degree of coordination between the various security specialists in the different user groups and the different message development groups. While "membership" of the group will be open, attendance to meetings ought probably be restricted to about 25 experts.

There will be two meetings a year and the costs will be related to travel and subsistence.

4.2. Workshops

"Organise each year workshops which will treat different themes related to the security of EDI messages."

These workshops will be a shop window or launch pad for new ideas and concepts in EDI security. Each workshop will have a specific target audience and will treat one aspect of EDI security in depth. An attempt will be made to make each workshop different / novel. A deliberate attempt will be made not to duplicate the work of any of the current standardisation groups, for example. Work programme definition will not be one of the activities. The participants, in each case, will be experts and they will be expected to contribute actively in the event. A report will be produced for distribution.

Ideally the organisation of these events should be sub-contracted. The costs are related to travel and subsistence for participants (about 50 people for two days) and the costs of the rapporteurs / organisers.

The workshops will focus in turn on:

* Service aspects of Certificates
* Auditing and EDI
* Service architectures
* User environments
* Third parties

4.3. User Awareness

"Increase the awareness of EDI users and of other appropriate groups to EDI message security."

Studies will be carried which will result in material for dissemination. The topics to be covered include:

* User survey

  This will be integrated into the general survey on EDI awareness in 1992 and 1994.
* Security policies.

4.4. Standards

"Facilitate the development of procedures, methods, services and standards related to EDI security."

This issue is dealt with in the framework of Edifact adaptations (1.3), by the workshops (see 4.2), by the evaluation of services and products and in the telecommunications area. However a limited amount of funds will be reserved for particular small activities carried out by individual experts in this area.

4.5. User Environment

"Examine the user environment; identify the constraints, quantify the risks and investigate, if possible, an appropriate model to ensure EDI security."

Studies will be carried which will result in material for dissemination. The topics to be covered include:

* Risk analysis
* Usage constraints / inhibitions
* EDI security model

4.6. New Developments

"Examine the security requirements related to new forms of EDI and the impact of new technologies."

The topics to be covered include:

* Work stations
* QR-EDI
* Mobile EDI
* Hard copy EDI
* Protocols and mechanisms

4.7. Services and Products

"Evaluate the services and products available to ensure the security of EDI messages, and if necessary examine the question of certification."

The areas to be dealt with include:

* Product / service register (see 7.1)
* Network and data service definition
* Product certification
* Service level certification

4.8. Open environments

"Examine from the EDI security point of view open multiservice environments."

The areas to be dealt with include:

* X.500/X.509 usage
* Uniqueness
* State of the art

5. Multi sector and Europe wide projects

5.1. Inventory of EDI projects

A European-wide operating consultancy will have the task to establish a list of existing EDI projects and to make this list commonly available. It has actively to approach business partners

in order to get hold on information of potential projects. It will collect information, addresses and contact points of those partners who are willing to establish an EDI link in a certain market area and act as an information exchange bourse. The outlined activities have to be repeated on a yearly basis.

5.2. Coordination of sectoral projects
The creation of new sectoral user groups or new activities of sectoral groups will be supported and coordinated.

5.3. Intersectoral forum
This intersectoral forum should act as a coordination instance for the sectoral projects. In order to carry out measures which will be defined by the forum as of common interest to all industry sectors, an appropriated budget has to be foreseen, thus providing an actively operating forum rather than to create a new discussion round. After 1993 this forum should be able to work on its own.

5.4. Intersectoral projects
Because of budgetary constraints it is recommended to reduce our ambitions to the setting up of new applications and to concentrate our financial resources on the critical point of all intersectoral EDI projects, namely on the over-proportionally high coordination expenses in the first phase of such projects. In order to promote European business integration, intersectoral projects should cover at least 3 different sectors. In order to have as broad coverage as possible and to get the largest impact possible, it seems to be useful to launch about 30 projects in total, which are described below.

5.4a Participation of National administrations
Intersectoral projects with a particular regard to the participation of national administrations, Community institutions and key organisations i.e. banking and transport. Call for tenders to be published early 1992.

5.4b Promotion of EDI
Intersectoral projects with particular regard to the promotion of EDI systems to ensure wider use of EDI in Europe, with particular attention to the problems of SME's.

5.5. Extra-European projects
Projects with particular regard to special cases and to interfaces with the rest of European and Mediterranean countries. This implies coordination of projects and studies undertaken by external countries.

6. Analysis of the impact of edi on company management

6.1. Changes in management of the enterprise
Produce a report showing all the necessary steps and implications of the introduction of EDI applications in the enterprise: modelisation of Commercial, financial and administrative activities and analysis of the underlying data flows and of their possible changes due to the introduction of EDI. Give indications on the possible or necessary changes in the management of the enterprise, taking into account more specifically small and medium sized enterprises.

6.2. Economic and social effects and cost/benefit studies
Examine the economic and social effects of EDI and measure the costs and benefits of introducing EDI in private or public sectors.

6.3. Implementation model
Elaboration of a general implementation model of EDI in administrations, private and public enterprises. This model should also meet the needs of SMEs.

6.4. Coordination study
Study the opportuneness of setting up a mechanism of coordination on a European level with regard to intercompany relations based on EDI. This study will envisage the setting up of an organization devoted to the follow up of the economic and social effects of the introduction of EDI.

7. Information Campaigns

7.1. Survey of EDI developments
Conduct regular surveys on the development of EDI in Europe. These surveys will be conducted in 1992 and 1994 and extend the work carried out in Tedis phase one.

7.2. Detailed studies
Actions undertaken under these headings will encourage the production of training and information material. This will consist in the production of studies of particular topics relevant to EDI - ie EDI in the banking sector, in the Mediterranean Countries, amongst SME's.
A first call for proposals for studies of two or three specific topics will be published in 1991. A second one will be launched in 1993.

7.3. Publication of studies
Publish the studies, analyses and other results of actions undertaken within the framework of the programme.

7.4. National Awareness Centers
A major conclusion of Tedis phase one was that the promotion of EDI must be done in a decentralised but coordinated way. A variety of existing bodies undertake awareness activities in some Member States, but there is little overall European dimension to their strategies or coordination between them.
Thus the main thrust of the awareness actions will primarily be to coordinate a network of regional centres for promoting awareness of EDI through seminars, conferences, training courses and especially the distribution of information material such as that produced as part of the Tedis programme.
These centres will be encouraged to develop a programme of activities to promote the use of EDI, in close conjunction and cooperation with existing organisations (EDIFORA, COMPRO's, Euro Info Centres, BC Net Intermediaries, Chambers of Commerce, Educational Institutes, Technology Centres...).
They will be encouraged to take part to common European wide projects which may include

for example:

- the creation of an EDI reference centre;
- production, translation and distribution of promotional and informative material;
- organising seminars;
- coordination and support for the awareness activities of user groups and other EDI initiatives at a national and European level.

The centres will be encouraged to form close relations with each other, exchange experiences, information and promotional material and to propose European wide awareness projects that respond to the needs of their respective user communities, in particular SMEs.

7.5. Actions for SME's

It is not envisaged that isolated actions in favour of SME's will be undertaken: rather the specific needs of SME's will be taken into account in all of the activities of the programme. This will be a general policy guideline rather than an isolated aspect. Moreover, the Commission will ensure the appropriate synergy with the activities in DG XXIII.

There are still a number of difficulties facing the growth of trade electronic data interchange: EDI users must be guaranteed a high quality technical interconnection; the constraints and inadequacies of the Member States' legal systems must be identified, and the storage methods, media and authenication methods analysed from the legal point of view. The use of security techniques related to open EDI must be encouraged. Campaigns to raise awareness of the potential benefits of EDI must be coordinated and stepped up. Furthermore a specific inventory of EDI projects and applications in Europe must be drawn up. The creation of new Pan-European sectoral projects groups or initiatives from existing groups must be encouraged. Finally there is an urgent need to assess the social and economic impact of the introduction of EDI in Europe.

Specification of tasks for 1991

A. INTRODUCTION

Subject :
The work programme is an elaboration of the measures to be undertaken in Annexe I to the Council decision establishing the second phase of the Tedis programme. Following the agreement on the work programme a range particular tasks were identified that could be carried out in 1991. These tasks are explained in the specifications which follow. They formed a part of the documentation issued following a call for proposals published in the Official Journal of the European Communities on 20 August 1991 (no S 156/60) with a deadline for submission of tenders of 10 October 1991. In effect these specifications are the detailed explanations of certain tasks which the workprogramme elaborated on the basis of the Annexe to the Council decision.

Other calls for proposals will be published in future years.

Objectives :
This call for proposals was directed towards the production of information and training material to increase awareness of EDI; it included actions to improve the technical interconnection between users of EDI; it involved equally the improvement of certain legal points of particular concern to EDI and the study in more detail of the requirements for the security of EDI messages in order to ensure that these are more widely appreciated. The support given to sectoral projects was also to be maintained, with the emphasis however on new activities. (The support of intersectoral initiatives will be dealt with later in the programme.) The impact of EDI on organisations would also be examined.

B. DESCRIPTION OF TASKS TO BE UNDERTAKEN

B1 Standardisation :

Development of a common / generic data element directory.

Introduction :
Data elements to be used in EDI are to be found not only in the TDED but also in other directories. This is not very satisfactory because of the problems in consistency of understanding and interpretation. It is essential that the parties involved in EDI use a common vocabulary so that data transmitted results in accurate communication.

Objectives :
The most effective and efficient way to handle the requirements for accuracy and consistency is to have a single stable directory of data that all parties can subscribe to. The most appropriate solution seems to be that of an expanded TDED which includes data from other directories. To bring this about a feasibility study should be performed examining the need and the further technical details of a programme for the development of a common/generic data element directory.

B2 Telecommunications 1 :

"Interconnectivity platforms" and "one-stop-shopping".
Introduction :

EDI users often find themselves in the situation where they must connect to several services/networks in order to reach all their potential partners. In order to improve this situation it is proposed to implement "interconnectivity platforms" using the concept of "one-stop-shopping".

Definitions :
Telecommunications service: all the means of communication and/or processing or storage of transported information accessible to the subscribers to the service through terminals, and hardware and software interfaces. This definition is restricted to equipment which is of use for EDI and to services provided by a supplier on a commercial basis. However, an expanded definition of "terminal" could be considered to include the case of the connection of a private network to such a service.
Communication channel: all the means of communication, of processing of information and of intermediate storage which link two users of the telecommunications service within a complete transaction. This could include one or more "interconnectivity platforms".
"Interconnectivity platforms": all the means of processing and/or storage of information , hardware and software, centralised or not, which are used to extend the access to a telecommunication service and its management towards users of another service to which it is physically connected.
"One-stop-shopping": commercial and technical concept which allows a particular user to only need to have one intermediary, chosen by him, in his relations with his correspondents, either in relation to the establishment of links ("one-stop-ordering"), in billing ("one-stop-billing") or for the regular operations (terminal configuration management, aid in the event of difficulty, breakdown diagnosis, training).

Objectives :
Two priorities emerge when considering the short-term aspects of the interoperability of the existing EDI supporting telecommunication services: "one-stop-shopping" and the implementation of "interconnectivity platforms" between services. This involves encouraging the demonstration aspects of platforms connecting existing EDI services integrating harmonized procedures for the user management of the interconnected services.
Proposals are therefore requested, at the technical and commercial level, for implementing such services and their qualification by means of actual use by users, with the constant aim of integrating the SMEs into this phase.
This call for proposals therefore treats these two aspects jointly insofar as they are considered together operationally. However, a proposal may, if necessary, focus on only one of them.
A general solution for the implementation of "one-stop-shopping" is to consider the benefits that EDI technology itself could bring to the telecommunication service suppliers, in the same way that it has already been able to influence the organization of the technical and trade exchanges of other sectors of activity. Indeed, it offers tested technical and organisational solutions making it possible to define messages (Edifact) and numerous tools to treat these messages. It is possible to envisage message formats corresponding to each function described in the "one-stop-shop". Thus, the negotiations between operators could come down to the formalization of commercial practices, as is already the case in other EDI sectors. One of the advantages of this approach is to bring the largest transparency in the "invoicing" part of the "one-stop-shop" and thus to make sure that this operation is carried out in the strictest compliance with the competition rules of the Community. EDI can therefore be regarded as the most adequate tool to carry out the "one-stop-shop".

Content of proposals :
The presentation of a response to this call for tenders will have to include the following points, enabling the Commission to be sure of the quality of the project:

- organization of the project, geographical coverage and respective roles and obligations of its members;
- analysis of the technical problems to be dealt with, a plan for specification, development, testing and service acceptance of interoperable services;
- description of end-to-end facilities permitted by interoperation, in particular in the fields of security and of management; close attention will be given to the transparency of the criteria of invoicing of the services using the interconnection;
- consideration of the operators' responsibilities, from the legal point of view, for the services involving the proposed interoperability;
- potential "value-added" connected with interoperability (directory, key management, etc);
- indication of the use of international or European standards. If necessary, migration plan towards the use of such standards.

Each project will study the use of results of other Tedis work or its own potential contribution to other Tedis work. This is the case in particular for the legal aspects (interchange agreement, operator's responsibility, etc.) or for security (management of the certificates, digital signatures, etc.).
The eligible projects can run over a period of one year or more and can go as far as the end of this phase of the Tedis programme. However, continuation will involve at least an annual review of each project by independent experts. The result of this may lead to the abandonment or to the redefinition of the aims or the support granted to the project.
In the proposal's financial section, the details on organization and project supervision have to appear clearly both for the specification stage and for the implementation stage, because they correspond to the costs that the Commission will be able to bear.

Specific criteria for evaluation of proposals :
Geographical coverage, synergy with other Tedis topics and use/promotion of standards.

B3 Telecommunications 2 :

Evaluation of the guide-lines regarding telecommunications.
Introduction :
The Tedis programme with regards "telecommunications" anticipates a first step in the economics area, the aim of which is to consolidate the work directions envisaged in stimulating the offer of communication services and their harmonization in particular by the interconnection of the networks and support services for EDI.

Objectives :
In order to be able to evaluate the impact of the Tedis programme on the development of the telecommunication services carrying EDI in Europe, it is proposed to set up a tool for the quantitative evaluation (for example an econometric model) of EDI activity in Europe. This model will be then used throughout the rest of the second phase of Tedis.
The study will therefore gather statistics available on the market for EDI and to model the EDI activity in Europe quantitatively; this model has to provide the opportunity of describing scenarios relating to market trends in the light of the strategic guide-lines laid down by the

various actors and the aims of Tedis and, in particular, those identified in this call for proposals. The model must be prepared so that it can be installed on the hardware and software available to the Commission.

B4 Legal Aspects 1 :

Detailed examination of the legal constraints and inadequacies connected with the use of the EDI in the fields of transport and of accountancy.

Introduction :
The results of the analysis in the first phase of the Tedis programme indicated a number of constraints of a general nature in the various legislations of the Member States. However certain sectors, among them transport and accountancy, pose specific problems.
A better knowledge and understanding of the specific requirements in these fields is necessary to correctly identify the needs and the levels of adaptation and harmonization necessary to allow the optimum use of the EDI in general and in these sectors in particular.

Objectives :
The task will:

a) provide for each area a report (transport and accountancy) examining in detail the constraints and inadequacies related to EDI existing currently in legal systems.
b) determine the needs for adaptation and for harmonization which arise from the current situation, either within a general framework, or more strictly at the level of the field concerned.
c) indicate with precision the nature of the changes necessary, and detail the measures which can solve the identified problems.

In producing the reports, the following elements will be taken into consideration:

- the already identified constraints will generally constitute a first working basis. These will be more closely examined and extended according to requirements.
- the examination of these constraints and inadequacies not only European and national legislations and regulations, the International Conventions but also the commercial practices and the administrative practices directly connected to these.
- the appraisal of the constraints and inadequacies, of the needs for adaptation and for harmonization and of the measures to be taken will be carried out by taking into account the existing UN/Edifact messages or those in preparation in the fields concerned and in current EDI projects in certain sectors or countries.

Insofar as the legal rules sometimes differ considerably, the approach will be on a comparative basis.

B5 Legal Aspects 2

Detailed legal analysis of the means of storage and of computer and electronic supports and of electronic means of authentication. Impact of coding.

Introduction :
The optimum development of the EDI requires the generalized replacement of the traditional conservation and authentication methods (primarily paper) by data-processing and electronic

means. The generalization of EDI in commercial transactions means that a satisfactory level of legal security needs to be reached in its use.
Owing to the constant developments in the storage technologies for the data exchanged by electronic means and of the means of authentication, their evaluation is possible only in terms of functionality. The level of comprehension of the functions provided by the new methods conditions their acceptance, in particular within a legal process.
The demonstration of the principles and criteria allowing an evaluation, from a legal point of view, of the methods and means used for the storage and for the authentication of EDI messages by considering their functions is therefore necessary.
The use of codes being widely spread in EDI, an analysis of the consequences, at the legal level, of the use of codes, in particular but not exclusively in identification and authentication, has to be carried out in this same context. The determination, if necessary, of principles and criteria to be respected at the time of the use of these codes, for their evaluation or to ensure their validity at the legal level, is envisaged.

Objectives :
The results of this project will lead on the one hand to the development of principles and basic criteria of a technical, legal and administrative nature which, if necessary will be able to contribute to the drawing up of a preliminary discussion document for an adaptation or a harmonization of legislation, and on the other hand should constitute a working tool both for the users and for the lawyers called to intervene in the field of EDI.

The results of the project will appear as a report covering both theoretical analysis and practise. Within this framework, the task will:

- synthesize the essential characteristics and the functions of the traditional means of conservation (papers, books, registers etc) and of the traditional means of authentication (signatures);
- index, on the one hand, the means of storage available and/or used for the recording and the conservation of the EDI messages and on the other hand, the means of authentication available and/or used for EDI;
- analyse the functions of the new technical methods available and/or used for the conservation of the messages and for their authentication, and indicate up to what point these fulfil the traditional functions;
- determine the criteria and principles which have to prevail in an evaluation, from the legal point of view, of these means and methods;
- specify how these criteria and principles can be implemented;
- examine the existing legal limitations regarding the use of certain electronic authentication methods;
- examine the impact use of codes in particular on the identification and authentication, and to determine, if necessary, the principles and criteria which should be considered at the time of use or of the evaluation of those.

In the development of this report the following elements will be taken into account in particular:

- the acceptance or the degree of acceptance of the national administrations regarding the use of the means and methods mentioned above and the conditions which match this use;
- the concerns relating to proof and to accounting, tax and administrative requirements;
- the differences between the legal systems of the Member States;

- the existing work in this field, including that from the first phase of the Tedis programme, which will constitute a preliminary working basis;
- work regarding quality control.

B6 Security 1

User security environment

Introduction :
In Annex 1 to the Council decision it is stated that Tedis will Examine the user environment; identify the constraints, quantify the risks and investigate, if possible, an appropriate model to ensure EDI security."
Proposals are invited to carry out tasks which will result in material for dissemination by the Tedis programme.
The first topic to be covered is risk analysis.

Objectives :
A formal analysis of the current and anticipated informatics security risks associated with a commitment to EDI has to be carried out.

Methodology :
The work should be based as far as possible on the impact and frequency of actual failures in information security practice as related to EDI.
The work should take into account the different phases involved in EDI implementation and development, the different styles of usage of EDI, the different trading environments and the different types and sizes of organisations involved in EDI.
The work should take into account generally accepted risk analysis methodologies and tools but should not be biased towards any particular product or service.
The work may require the development of a simple generally applicable model for EDI security.
The informatics risks should be put in context (infrastructure failures in transport and communication, normal trading risks, etc.).

B7 Security 2

Security in open environments

Introduction :
In Annex 1 to the Council decision it is stated that Tedis will"Examine from the EDI security point of view open multiservice environments."
Proposals are invited to carry out tasks which will result in material for dissemination by the Tedis programme.
The first topic to be covered is that of uniqueness and other security attributes.

Objectives :
A report is to be produced on the new security techniques / services coming from research which can be used in an open EDI environment to meet the necessity for uniqueness and other

attributes currently available with paper documents. The use of these techniques and services in EDI must be explained and their commercial feasibility should be examined.

Context :
Progress has been made in ensuring that the origin and the integrity of EDI messages can be proved. In particular work has been undertaken to show how digital signatures can be fruitfully used with many current EDI messages. However, in extending the scope of EDI to cover more types of transaction and to replace different types of document certain limits become apparent.
The content of some documents or messages is almost redundant from the pure business point of view. The content of a normal invoice, for example, can be controlled in context. The sending of the invoice is in the business sense only a trigger to indicate that payment is expected. In this respect self-billing in certain sectors has become conceivable.
Other documents, or their EDI-message equivalents, can tolerate being duplicated in the event of suspected failure in communication. For example, duplicate orders, including payment orders, can be differentiated from repeat orders by giving each order a unique number or timestamp. The context and the appropriate business protocol is then sufficient to allow the duplication to be identified and catered for.
In certain circumstances however it is important to enforce a greater degree of uniqueness in the transaction so that value can be transferred and / or ownership established.
The commonest example of this is payment by presenting cash, bank notes which are each unique and have an implicit value. While payment can be made electronically, through an EDI payment order for example, there is as yet no direct generally-accepted electronic equivalent of the bank note.
There are also transactions where proof of precedence or of the ownership of message content will be important. This could be the case where intellectual property rights are concerned, for example.

Methodology :
The work should be based on a clear understanding of the state of the art with regards EDI security, and in particular the developments in UN/Edifact and the transaction intent within various commercial practices.
The limits, technical and commercial, of the current approaches need to be stated.
New techniques and concepts coming from the research world have to be examined in terms of the role(s) they could play in increasing the scope and utility of EDI.

B8 Multisector and Europe-wide projects 1

Inventory of EDI projects

Introduction :
The evaluation of the Tedis pilot projects has shown that the availability of information, related to EDI and the general possibilities of information exchange, has a very high priority. It is therefore proposed to establish an inventory of information related to EDI and with this create a information exchange in order to encourage cooperation between potential users of EDI.

Objectives :
As a basis for a general information exchange on a European level, it is first necessary to collect information about EDI projects, about those that exist and those beginning. The information should be made available in such a form, that its use in an information exchange will be possible. The exchange itself will then be used in order to support the establishment of new EDI groups.

Content of proposals :
The proposal should cover the following phases:
(1) Development of a clear pattern of description.
This should serve as a framework for the gathering of information.
The experience gained from the work carried out in describing the Tedis pilot projects should be taken into consideration.
(2) Gathering of information.
The focus should be on projects with an international dimension, where at least one European country is involved. The gathering of information will involve the review of available publications and inquiries to national and international organisations already active in this area.
The inquiries could be carried out in two steps:
(a) collection of basic data via a questionnaire
(b) completion of this data via interviews, preferably by telephone.
(3) Supplying the collected information to Tedis.
The collected data should be made available in electronic form to the Commission so that it should then be possible to use something like SQL, in a UNIX environment, for queries.

It is assumed that the described tasks will be repeated on a yearly basis. Therefore, a distinction has to be made between the single set-up phase (once) and the following update phases (three times). The updates will be negotiated when information on the successful implementation of the first phase is available.

B9 Multisector and Europe-wide projects 2

Coordination of sectoral projects.

Introduction :
Existing EDI activities may be supported and encouraged in different ways: (1) by national organisations for trade facilitation , (2) by national EDI organisations, (3) by European EDI user groups, (4) by European industry associations, (5) by international trade organisations and (6) other interest groups. All these organisations might represent a strong force for the development and promotion of EDI.

Objectives :
In the past, the work of sectoral user groups has been viewed positively by industry. However, the development of groups, which are able to promote the implementation of EDI using their in-depth knowledge of specific industry sectors, is a continuous process. In the future, this kind of activity should be re-enforced. A coherent orientation of the sectoral groups should be enhanced by appropriate coordination and the creation of new user groups

should be encouraged by the support of specific activities. These activities will concern mainly the intersectoral coordination of these groups.
Support will be aimed specifically at starting up new strategic activities and, in particular, ensuring the availability of information on the state of EDI development for a large audience.

To achieve the proposed objectives, two different instruments should be applied:

(A) Support for the coordination work of sectoral user groups, particularly that focused on the production and diffusion of EDI related documentation inside and outside the specific industry sector. Included in the activities that could be supported are user group activities related to the intersectoral forum mentioned below.
The intention is that the development of new groups will be stimulated and that new activities would be encouraged.

(B) Support for the creation of an intersectoral EDI user forum which will act as a coordination agency for all sectoral projects.
The intention is that, even with a multitude of different user groups, a coherent orientation on the same objectives will be assured.
Medium and long-term activities which could fall into the framework of the EDI user forum are not subject of this invitation and will follow in a later stage.

Content of proposals :
In the framework of the coordination, certain types of activities for a sectoral user group are of a special interest:

- new activities related to the improvement of the EDI development process in the particular context of the sector;
- maintaining a stock of material (brochures, documents, etc.) describing the structure and organisation of the group and lists of members and EDI projects under development;
- ensuring the widest possible diffusion of key documents (studies, reports, minutes of decisive meetings) particularly through the use of information systems (E-mail, databases, etc.).
- introduction of industry specific messages (subsets) into their database and the exchange of their industry subsets with the Edifact reference centre.

The above mentioned activities should be carried out initially for a period of 12 months.
Prolongation of the support is envisaged but will be in conjunction with yearly calls for tenders.
The contractors will supply to the Commission a yearly report presenting all the progress achieved.

Specific criteria for evaluation of proposals :
A sectoral EDI user group should be able to represent the essential companies and actors of the industry sector on a European scale. This invitation to tender is directed to any organisation, which can demonstrate either that they already have acceptance, recognition and support of an existing European group of users, or can demonstrate that such an acceptance would be possible in the near future.
Priority in each case will be given to the support of new activities.

B10 Information campaigns 1 :

Network of Awareness Centres.

Introduction :
Though a great deal of awareness activities can be performed by sectoral user groups (see B9) the importance of a European network of effective awareness centres in promoting EDI has been underlined in studies carried out in the first phase of Tedis. The need for local centres for the diffusion of information has been recognised, in particular, for linguistic reasons. The tasks of these centres might include, but need not be restricted to:

- the creation of an EDI standards reference centre;
- production, translation and distribution of promotional and informative material;
- organising seminars;
- coordination and support for the awareness activities of user groups and other EDI initiatives at a local level.

In many Member States, but by no means all, such awareness activity is already undertaken by organisations such as an EDIFORUM or a COMPRO. However there is still inadequate coordination of their activities at European level. There is also a need for coordination between these organisations and other bodies at a local level such as Technology or Information centres, Chambers of Commerce, Euro Info Centres, BC Net Intermediaries, educational institutes etc., all of whom have a role to play in promoting EDI.
It is not intended to finance EDI centres directly through the Tedis programme, although certain assistance may be offered to support new ventures and common coordination activities or in support of other particular aims and objectives of the Tedis programme.

Objectives :
The aim of this work item will be to

- examine the current and potential EDI awareness activity in the Member States (and EFTA Countries),
- to make recommendations regarding how it can be improved, and
- to draw up a work programme, after consultation with the organisations involved, for implementing those recommendations progressively over the next three years.
  Particular attention should be paid to the long term aim of mobilising sufficient financial and human resources to ensure that a network of awareness centres can be self supporting.
  The objective of raising awareness particularly amongst Small and Medium sized Enterprises should be respected.

B11 Information campaigns 2 :

EDI and financial operations.

Introduction :
The financial sector has been one of the important leaders in the use of EDI. However, the types of information now being exchanged, the types of system now being developed and the changes in the environment make it useful to examine the current situation and to identify trends for the future. This should be done not only to have a clearer view of this vital sector but also to allow other sectors to benefit from some of the experience acquired.

Objectives :
A study of the current and future use of EDI, in its widest sense, in financial operations and in the financial sector is to be carried out. National, Community and international aspects will need to be quantified and presented.

Context :
The development of single European market with the associated evolution in the regulatory framework and the increasing use of the ECU will change the environment for trans-border payments and the role and nature of automated clearing systems.
In the past the information related to a financial transaction and which was exchanged between banks was limited to that which was of direct concern to the banks concerned. Increasingly banks are beginning to integrate new services into what they offer by providing more data oriented services - from including data captured at the point of sale into an individual's statement of account through to transmitting information between two EDI trading partners. The types of system now being implemented, not only by banks but also by other organisations, are extending the scope of electronic means of payment. The changes affect the services offered to private individuals, to organisations in direct contact with individuals (such as in the retail sector), to corporate clients and those used between financial institutions themselves.
Use of EDI by their clients has already presented the banks with the challenge of increased transparency towards their customers and of inter-corporate netting. In some EDI application areas banks compete with other organisations - credit card companies, retailers, network service suppliers, etc..
Banks and other financial institutions now regularly offer terminal oriented services (cash dispensers, home-banking, self-banking) to their own clients and increasingly, in the case of cash dispensers for example, to the clients of their competitors. E-POS (electronic point of sales) systems are becoming fairly common. Electronic purse applications are being proposed in certain Member States. These are possible areas where the techniques referred to as QR-EDI or interactive EDI could be used.
Banks are however not only involved in simply providing the mechanisms for handling payments electronically. They also provide other similar services related to the dematerialisation of other business documents, including shares for example.

Methodology :
The work will survey the state of the art in terms of business practice and technology use.
Where appropriate statistical information should be presented.
Key new developments will be identified, again both from the business and the technology point of view.
Possible future developments should be identified.

B12 Information campaigns 3 :

Case studies and training material for management.

Introduction :
Enterprises making use of EDI to transact their business are faced with both technical change, with regard to their computing and telecommunications systems, and with the organisational change. This process of change will have both short term and long term implications, both for

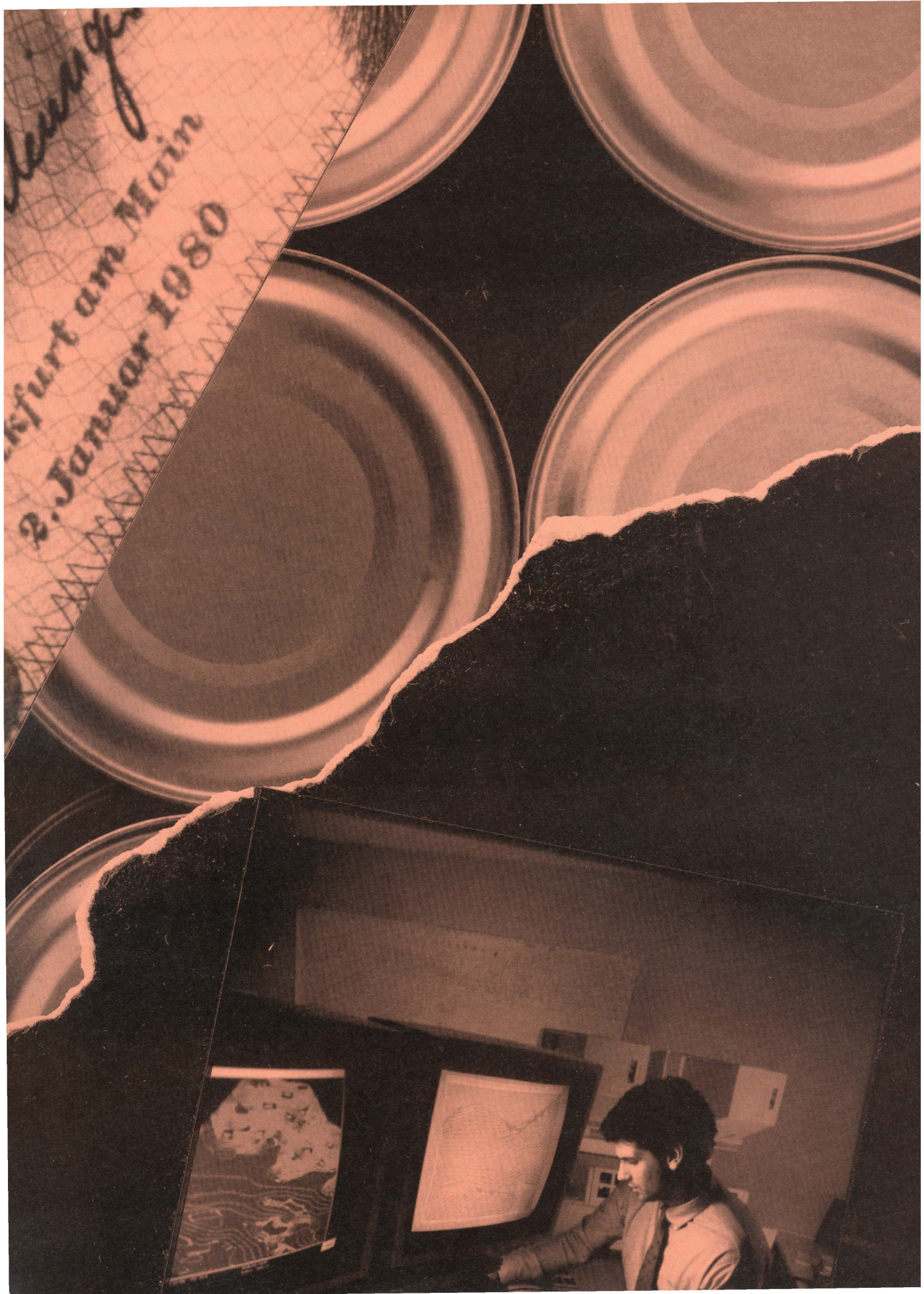
the enterprises themselves and for the society as a whole. Managing change is a task that must be understood at all levels of organisations if the use of EDI is to have positive results for the Community in general.
There is a widespread need for a broad range of high quality training material which explains with reference to actual experiences how to implement EDI within an enterprise, and also the changes which result from such an implementation. Small and medium sized businesses are particularly in need of such material.
More generally there is a need for an appreciation of the impact of EDI on the social and economic context in which these enterprises transact their business.

Objectives :
The aims of this work item can be considered in two parts.

1. To produce and distribute a series of case studies of EDI experiences and other training material suitable for enterprises undertaking EDI implementations.
2. To study the impact of EDI on enterprises in general, in a broad social and economic context.

In the first part, particular case studies and training material will be produced which concentrate either on the management and strategic aspects to be addressed by enterprises considering EDI, or on the technical aspects of their communicating computer applications. In either case potential readers or users of the material must be closely involved in order to ensure the form and content of the results correspond to their needs.
The material to be produced must be targeted at a European wide audience taking into account on the one hand differences in the level of understanding at different levels within organisations and on the other differences in business practice in different countries and industry branches. This material should be conceived within the framework of a broader understanding of the impact of EDI on the social and economic context as a whole.
Translation and distribution arrangements must be clearly determined from the outset of project, in order to ensure that the quality and style of the materials produced can be assessed in terms of whether they meet the requirements of the intended market.
In the second part a general theoretical model of the activity of enterprises in their commercial and administrative relations will be elaborated, which places them in the wider social and economic context as a whole, and evaluates the impact of EDI in that context.

As a result of the call for proposals published in the Official Journal on 20 August 1991, the Commission awarded 29 contracts for work under the second phase of Tedis. These contracts, which represent Community funding of ECU 2,881,178 are the first step in implementing the work programme which aims to encourage the wider use of EDI by industry and commerce and remove the remaining technical and legal barriers to electronic trade in Europe.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Contracts awarded as a result of the 1992 call for proposals.

The proposals submitted in response to the call for proposals in August 1991 were evaluated by a team of experts designated by the Member States. The results and recommendations of the evaluation teams were presented to the Tedis Consultative Committee for its approval and following negotiations a number of contracts were awarded. Brief details are presented here.

Two of the contracts involve consortia, led by Bull and Infonet respectively, which will provide interconnectivity platforms between users of EDI services in Spain, France, Ireland, the United Kingdom and Sweden, using international standards. The projects, with a total cost of ECU2.5m of which the Commission is funding almost 50%, will provide a blueprint for future interconnection between any EDI services.

Funding of ECU 500,000 is being given to support a range of industry user groups, ranging from fashion to construction, to promote and coordinate the development of EDI in their industry sector. In parallel, an inventory of EDI developments and their users will be drawn up under contract to the Commission by the UK based consultancy OVUM. This information, together with a database of standard EDI messages and conventions for their use, will be made available to businesses through a network of information centres throughout the Community.

Another contract for ECU 240,000 has been awarded to a consortium of universities in Germany, Denmark, France, Italy, Holland and Switzerland in order to study how the business environment changes with the adoption of EDI.

The remaining contracts include studies of EDI in the financial sector, an examination of legal constraints in the fields of transport and audit as well as legal issues connected with storage and authentication. The analysis of security risks, new security techniques for EDI in an open environment and specific issues of standardisation will also be adressed.

Fuller details of the contracts awarded, the consortium partners and a brief outline of each project are given below.

Further invitations to tender for other elements of the TEDIS work programme will be announced in 1992 and subsequent years.

Task:	B1 - Standardisation
Contract N:	56192
Title:	Development of a common/generic data element directory
Prime Contractor	**Country**
AFNOR	F
Consortium Partners	**Country**
SITPRO	GB
SWEPRO	S
ORIGIN International	B
Total cost of project (ECU):	83,000
Commission funding (ECU)/percentage:	75,000 90%

Description of project
The project will identify the steps and the organisation necessary to overcome the potential discrepancies between directories pertaining to distinct areas (trade, health, employment, ...).

Comments
This project addresses the entire EDI standardisation process on a horizontal basis. It might be followed by more concrete steps for the reconciliation of semantics between distinct directories.

Task:	B2 - Telecommunications 1 "Interconnectivity platforms" and "one-stop-shopping"
Contract N:	56197
Title:	EPARSE
Prime Contractor	**Country**
INFONET	GB
Consortium Partners	**Country**
INFONET	B
POSTGEM	IRL
S.T.I.	S
TS/1	E
Sub-contractor:	
LEVEL-7	GB
Total cost of project (ECU):	1,300,000
Commission funding (ECU)/percentage:	632,000 47%

Description of project
The consortium will specify, then offer a generic EDIFACT clearing centre to EDI services with clear and publicly reviewed interconnect conditions. It will be operational during the last 6 months of the contract.

Comments
Close coordination is in progress with another B2 project, CONCORDE. Both of them will publicly demonstrate interconnection in March 1993.

Task:	B2 - Telecommunications 1 "Interconnectivity platforms" and "one-stop-shopping"	
Contract N:	56198	
Title:	CONCORDE	
Prime Contractor	**Country**	
BULL	F	
Consortium Partners	**Country**	
EAN	B	
GENCOD	F	
TS/1	E	
EACOC	E	
Total cost of project (ECU):	1,044,000	
Commission funding (ECU)/percentage:	522,000	50%

Description of project
The consortium will specify interconnection of EACOC and ALLEGRO EDI services (retailing sector) by use of EDIFACT in the spirit of providing a solution expendable to the rest of Europe and offer it to its international customers.

Comments
Close coordination has been arranged with another B2 project, EPARSE, including a public demonstration of interconnectivity in March 1993.

Task:	B4 - Legal Aspects 1	
Contract N:	56195	
Title:	Legal constraints on EDI in transport.	
Prime Contractor	**Country**	
Gide, Loyrette, Nouel	F	
Consortium Partners	**Country**	
SDV	F	
GEIS	F	
Total cost of project (ECU):	120,000	
Commission funding (ECU)/percentage:	120,000	100%

Description of project
A thorough analysis of the legal constraints and inadequacies with regard to EDI in this particular area will be undertaken in order to determine the need for harmonisation.

Comments
Close collaboration between the partners will ensure the analysis will address the issues from a combined technical, practical and legal perspective.

Task:	B4 - Legal Aspects 1	
Contract N:	56191	
Title:	Legal constraints on EDI in Accountancy/Audit.	
Prime Contractor CIREDIT	**Country** F	
Consortium Partners IT Law group	**Country** B E I D NL GB GR	
Total cost of project (ECU):	106,000	
Commission funding (ECU)/percentage:	70,666	66,6%

Description of project
A thorough analysis of the legal constraints and inadequacies with regard to EDI in the area of accountancy/audit will be undertaken in order to determine the need for harmonisation or changes in regulation.

Comments
Standardisation activities have already been undertaken in this area and the legal framework of the Member States needs to be evaluated in terms of this evaluation to allow full development of EDI in companies.

Task:	B5 - Legal Aspects 2
Contract N:	56196
Title:	Legal analysis of the electronic and computer means of storage and of electronic means of authentication. Impact of coding.

Prime Contractor	**Country**
Wilde Sapte	GB

Consortium Partners	**Country**
Cryptomathic	DK
Lafili & van Crombrugghe	B
Lassen & Ricard	DK
Baudel, Sales, Vincent & Georges	F
Pünder Volhard, Vincent & Axster	D
Kiriakis Degas	GR
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Piergrossi - Villa	I
Bonn & Schmitt	L
Nauta Dutilh	NL
Gonçalves Pereira, Vinhas, Castelo Branco e Ass.	PT
Maclay Murray & Spens	GB
Bufete Mullerat y Rosell	E
Hedberg & Co	S

Total cost of project (ECU):	75,000	
Commission funding (ECU)/percentage:	75,000	100%

Description of project
The study will review current developments in electronic storage and authentication techniques by focussing on their functionalities in order to increase the level of understanding from a legal perspective.

Comments
Elaboration of principles or criteria of evaluation of these means for legal purposes and determination of the needs for adaption of regulation or harmonisation of laws are the objectives of this study.

Task:	B6 - Security 1
Contract N:	56193
Title:	User security environment.
Prime Contractor KPMG	**Country** B
Total cost of project (ECU):	105,100
Commission funding (ECU)/percentage:	105,100 100%

Description of project
The project is to survey among companies already involved in EDI, the actual failures they have encountered in the setting up and running of their EDI applications.

Comments
The survey will be conducted in 3 Community Member States; extensions are envisaged to include some EFTA countries as well.

Task:	B7 - Security 2
Contract N:	56194
Title:	Security in open environments.
Prime Contractor CRYPTOMATHIC	**Country** DK
Consortium Partners MBLE	**Country** B
Total cost of project (ECU):	105,000
Commission funding (ECU)/percentage:	105,000 100%

Description of project
Study of security mechanisms for new forms of EDI.

Comments
The consortium will organise a workshop in April 1991 to review its proposals.

Task:	B8 - Multisector and Europe-wide projects 1	
Contract N:	56199	
Title:	Inventory of European EDI projects	
Prime Contractor OVUM Ltd	**Country** GB	
Consortium Partners XCOMS International S.A.	**Country** B	
Total cost of project (ECU):	105,000	
Commission funding (ECU)/percentage:	105,000	100%

Description of project
The consortium will establish a list of European EDI projects (= EDI user communities). The resulting information will be made available in a database and may act as an information exchange bourse.

Comments
The inclusion of EFTA countries is in preparation. This task will be repeated on a yearly basis.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56200	
Title:	Book industry	
Prime Contractor Book Industry Communication	**Country** GB	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56201	
Title:	Automotive supply	
Prime Contractor	**Country**	
Society of Motor Manufacturers and Traders Ltd	GB	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56202	
Title:	Copyright organisations	
Prime Contractor	**Country**	
Stichting Stemra	NL	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56203	
Title:	Tourism	
Prime Contractor	**Country**	
(CEOE) Confederacion Española de Organisaciones Empresariales	E	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project

Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"
Contract N:	56204
Title:	Textile industry
Prime Contractor	**Country**
ENEA (Italian Commission for New Technologies, Energy and Environment)	I
Consortium Partners	**Country**
ASTER Srl (Agenzia per lo Sviluppo Tecnologico dell' Emilia Romagna)	I
CITER (Emilia Romagna Textil Information Centre)	I
Gruppo SOI SpA	I
CCS (Centro de Calculo de Sabadell) S.A.	E
CETIH (Centre d'Etudes Techniques des Industries de l'Habillement)	F
CTH (Clothing Technology Centre)	GB
VTT (Technical Research Centre of Finland)	SF
Total cost of project (ECU):	30,000
Commission funding (ECU)/percentage:	30,000 100%

Description of project

Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56205	
Title:	Clothing Industry	
Prime Contractor	**Country**	
ECLA European Clothing Association	B	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56206	
Title:	Audit and Accounting	
Prime Contractor	**Country**	
OEC (Conseil Supérieur de l'Ordre des Experts Comptables et des Comptables Agreés)	F	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56207	
Title:	Agriculture	
Prime Contractor CFCA (Confédération Française de la Coopération Agricole)	**Country** F	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56208	
Title:	Building industry	
Prime Contractor EDIBUILD	**Country** F	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56209	
Title:	Retail and distribution	
Prime Contractor EDITER SpA	**Country** I	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56210	
Title:	Electronics	
Prime Contractor EDT S.A.	**Country** F	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"
Contract N:	56211
Title:	Furniture industry
Prime Contractor FENA/UEA	**Country** B
Total cost of project (ECU):	30,000
Commission funding (ECU)/percentage:	30,000 100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"
Contract N:	56212
Title:	Health services
Prime Contractor Stichting ITN	**Country** NL
Total cost of project (ECU):	30,000
Commission funding (ECU)/percentage:	30,000 100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"
Contract N:	56213
Title:	Energy
Prime Contractor EDIA (UK)	**Country** GB
Total cost of project (ECU):	30,000
Commission funding (ECU)/percentage:	30,000 100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"
Contract N:	56214
Title:	Phonographic industry
Prime Contractor GFI	**Country** F
Consortium Partners	**Country**
Total cost of project (ECU):	30,000
Commission funding (ECU)/percentage:	30,000 100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56215	
Title:	Aerospace	
Prime Contractor EANS	**Country** F	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"	
Contract N:	56216	
Title:	Transport	
Prime Contractor Fundación CETMO	**Country** E	
Total cost of project (ECU):	30,000	
Commission funding (ECU)/percentage:	30,000	100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B9 - Multisector and Europe-wide projects 2 "Coordination of sectoral projects"
Contract N:	562XX
Title:	Pharmaceutical industry
Prime Contractor	**Country**
NOMECO A/S	DK
Total cost of project (ECU):	30,000
Commission funding (ECU)/percentage:	30,000 100%

Description of project
Undertaking coordination activities, for example maintaining and distributing EDI promotion material or exchanging industry specific EDI information, particularly on EDI projects and EDIFACT subsets, with the EDIFACT Reference Centre.

Task:	B10 - Information campaigns 1
Contract N:	56188
Title:	Network of Awareness Centres
Prime Contractor	**Country**
Intégration	F
Consortium Partners	**Country**
Communications Planning	GB
Inforama	D
Total cost of project (ECU):	138,912
Commission funding (ECU)/percentage:	138,912 100%

Description of project
This task consists of an evaluation of the network of existing and potential regional awareness centres and the formulation of a detailed work programme for their development over the next three years.

Comments
This task will identify suitable participants in a network of regional information centres which will become the main channel for gathering and relaying information on EDI related subjects to potential users.

Task:	B11 - Information campaigns 2	
Contract N:	56189	
Title:	EDI and financial operations	
Prime Contractor	**Country**	
Applied Network Research	GB	
Consortium Partners	**Country**	
KPMG - Deutsche Treuhand	D	
Cranfield School of Management	GB	
Minerve Consulting	B	
EDICONSULT	F	
OA Consulting	N	
Total cost of project (ECU):	182,500	
Commission funding (ECU)/percentage:	182,500	100%

Description of project
The objectives of the study are to review the current and probable future developments of EDI in the financial sector at a European level with some comparison to developments in other parts of the world and to draw appropriate conclusions.

Comments
The recommendations should be of interest to the Commission, consumers, the major players in the European financial sector, standardisation bodies and Member States.

Task:	B12 - Information campaigns 3	
Contract N:	56190	
Title:	Case studies and training material for management	
Prime Contractor	**Country**	
Universität Hohenheim	D	
Consortium Partners	**Country**	
Copenhagen Business School	DK	
University Bern	CH	
Universiteit Brabant	NL	
INSEAD	F	
Universidad Navarra	E	
SDA Bocconi	I	
Total cost of project (ECU):	240,000	
Commission funding (ECU)/percentage:	240,000	100%

Description of project
The consortium will produce 14 studies of EDI implementations which are innovative and important for the European economy. The work will focus particularly on small and medium sized enterprises and intra community trade.

Comments
The results of this task will be used as a basis for further evaluation of the long term social and economic impact of EDI throughout the Community.

Publications

The following publications have been produced by the Tedis programme. Most are still available either directly from the Commission or via regional awareness centres. They are available in all Community languages unless otherwise indicated.

- a folder containing leaflets on Tedis in general, Telecommunications and EDI, Legal aspects, EDI message security and Edifact (EUR 12293)
- a booklet "EDI in Perspective" (EUR 11883)
- a booklet "Secure EDI - a management overview" (EUR 13794)
- the Tedis Activity Report 1988-1989 (COM(90) 361 Final)
- the Commission Communication on Electronic Data Interchange (EDI) using telecommunications services networks, together with a Proposal for a Council Decision establishing the second phase of the Tedis programme (COM(90) 475 Final)
- a report on the "Legal Situation in the Member States regarding trade electronic data interchange" (only available in English or French)
- a report on the "Legal Situation in the EFTA Member States regarding trade electronic data interchange" (only available in English or French)
- a report on "Trusted third parties and similar services" (only available in English or French)
- a report on "Formation of contract by EDI" (only available in English or French)
- a survey of the current level of implementation, use and general awareness of electronic data interchange in all the EC Member States and the EFTA countries (1989-1990) (only available in English)
- a brochure "Introduction to UN/Edifact" (only available in English)
- a report on EDI legal workshop held in Brussels on 19-20 June 1989 (only available in English)
- a report on EDI security workshop held in Brussels on 20-21 June 1989 (only available in English)
- a report on EDI telecom workshop held in Brussels on 22-23 June 1989 (only available in English)
- the proceedings of the Tedis Conference held in Brussels on 12-13 July 1989 (only available in English)
- 8 Case studies of actual EDI implementations (only available in English)
- the "UN/EDIFACT training guide" (only available in English)

European Communities - Commission

Trade EDI systems programme: Interim report 1991

Luxembourg: Office for Official Publications of the European Communities

1992 – 64 pp. – 21 x 28 cm

ISBN 92-826-4201-1

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