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# ANNUAL REPORT BY THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

on the setting-up of the CADDIA computerized telecommunications systems and the implementation of the long-term development programme

1 July 1991 to 30 June 1992

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#### **EXPLANATORY MEMORANDUM**

- 1. The CADDIA programme and activities derive from Council Decision 85/214/EEC of 26 March 1985 concerning the coordination of the activities of the Member States and the Commission related to the implementation of a long-term programme for the use of telematics for Community information systems concerned with imports/exports and the management and financial control of agricultural market organizations.
- 2. The long-term CADDIA development programme has been prepared, updated and approved by the CADDIA Steering Committee set up by the Council Decision referred to above.
- 3. This report, which is expressly provided for in Article 4 of the Decision, describes the various activities and operational applications either under development or planned up to 1993 and covers the work of the Committee during the period 1 July 1991 to 30 June 1992 (the Committee first met in October 1985).
- 4. Council Decision 87/288/EEC of 1 June 1987 extended by five years the initial period of validity laid down in Article 5 of Decision 85/214/EEC and Article 6 of Decision 86/23/EEC.

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#### ANNUAL REPORT ON THE CADDIA PROGRAMME

1 July 1991 to 30 June 1992

#### **SUMMARY**

The CADDIA programme concerns the coordination of the activities of the Member States and the Commission related to the implementation of a long-term programme for the use of telematics for Community information systems concerned with imports/exports, the management and financial control of agricultural market organizations and the collection and dissemination of Community trade statistics.

The CADDIA programme was set up by the Council Decision of 26 March 1985 for an initial period of two years. The Decision provided for the creation of a Steering Committee made up of representatives of the Member States and the Commission officials responsible for the sectors concerned. The Committee is chaired by the Commission and is responsible for drawing up and updating the CADDIA development programme and for ensuring that work is carried out in accordance with this programme. At the end of the initial two-year period the Council decided to extend the CADDIA programme for a further five years.

This seventh annual report covers the period from 1 July 1991 to 30 June 1992, during which the CADDIA sectoral committees and the CADDIA Steering Committee met three times (in October 1991, April 1992 and June 1992).

The Steering Committee was kept regularly informed of the progress of the sectoral and joint work scheduled in the work programme and approved the continuation of this work.

In the customs sector, the work provided for in the CD project continued. The main activities were concerning the development of systems for the management of tariff quotas and binding tariff information, the completion of detailed technical specifications for the TARIC 2 project, the definition of standards for the management of the CD project, the ongoing development of a system of control for the movements of goods within the Community, the analysis of the legal problems arising from national customs legislation, cooperation with the EFTA countries on subjects of mutual interest, continuation of the analysis of the codes for customs information, and the development of EDIFACT messages for customs purposes. A start has also been made on evaluating the possible computerisation of Simplified Procedures on a harmonized or compatible basis.

Work also began on the task of assessing the possibility of computerizing the Simplified Procedures along harmonized and compatible lines.

In the agricultural sector, priority was given to concentrating resources and efforts on the projects directly related to the attainment of the internal market, viz. SHIFT (Systems for animal Health Inspection at Frontier posts) and PHYSAN (Phytosanitary applications). Nevertheless, development work also continued on infrastructure projects such as AMIS (Agricultural Market Intelligence System), IDES (Interactive Data Entry System) and FIS (Fast Information System). The PAP (Prices of Agricultural Products) project enables institutional prices to be consulted via FIS. In the EAGGF, work also continued. AGREX (Agricultural Guarantee Fund Expenditures) is now operational, as is FBF (FEOGA Budget Forecasting). Work is continuing on the development of FAUDIT (FEOGA Audit). Other ongoing developments such as SICAMOR-ED, AIN-ED and TREE-ED are intended to facilitate the exchange and quality of data passing between the Commission and the Member States.

In the statistical sector, work continued on the development of all the projects in the general fields of infrastructure and agricultural and external trade statistics. During this period efforts were consolidated and redirected with a view to facilitating the establishment of the statistical systems necessary for the compilation of intra-Community trade statistics pursuant to the INTRASTAT Regulation. These projects constitute an integral whole which is intended to cover infrastructure requirements for the interchange of statistical information between Eurostat, the European institutions, the Member States and the partner bodies.

In the area of external trade statistics, operating priorities were adjusted in order to comply with the 1993 deadlines associated with the establishment of the internal market.

The aim of the COMEDI project is to promote the establishment of a computerized infrastructure for the collection, validation, grouping and dissemination of statistical data.

As regards agricultural statistics, work was concentrated mainly on the EUROFARM project (data bases on agricultural structures) and on the procedure whereby each Member State consults and approves the tabular data base.

For the exchange of structured data between the Commission and the Member States, DG XIII suggested that the Member States set up national servers.

A national server is a data-switching system for the exchange of structured information between the Commission's computer systems and those of the national administrations involved in the CADDIA programme.

#### 1. INTRODUCTION AND BACKGROUND

- 1.1. Council Decision 82/607/EEC of 28 July 1982 (OJ L 247, 23.8.1982, p. 25) provided for the Member States to coordinate with the Commission a series of preparatory activities with a view to analysing the needs, feasibility, costs and benefits of a concerted ten-year programme for the use of computerized telecommunications systems in the areas covered by CADDIA.
- 1.2. A report and proposals were presented to the Council and the European Parliament by a Preliminary Task Force (PTF) made up of representatives of the Member States and the Commission.
- 1.3. The PTF's conclusions and recommendations, drawn up late in 1983, served as the basis for the preparation of the communication from the Commission to the Council of 13 March 1984 and the accompanying proposal for a Council Decision (COM 84/119 final).
- 1.4. The CADDIA¹ programme and its activities arise out of the Council Decision of 26 March 1985. This Decision requires the Commission to report to Parliament and the Council once a year on the setting-up of the CADDIA computerized telecommunication systems and on the implementation of the long-term development programme. That is the purpose of this seventh report, which covers the seventh year of the CADDIA Steering Committee's work. The previous annual reports sent to Parliament are as follows:

COM(87) 42 for the year 1985/86 COM(88)242 for the year 1986/87 COM(88)801 for the year 1987/88 SEC(90) 79 for the year 1988/89 COM(91) 12 for the year 1989/90 COM(92)433 for the year 1990/91

- 1.5. The CADDIA long-term development programme was drafted and approved by the CADDIA Steering Committee set up by the above-mentioned Council Decision.
- 1.6. On 1 June 1987 the Council decided to extend the initial period for a further five years (OJ L 145, 5.6.1987, p. 86).

#### 2. GENERAL REPORT ON THE CADDIA PROGRAMME

#### 2.1. Customs sector

During the past year, work on the CD project has continued in accordance with the objectives set out in the previous CADDIA reports. The principal activities carried out between 1 July 1991 and 30 June 1992 were as follows:

- development and implementation of an initial operational on-line system for the management of tariff quotas;
- specification and development of an operational system to manage binding tariff information (BTI);
- production of the functional and technical specifications for the TARIC 2 project;

Cooperation in the Automation of Data and Documentation for Imports/exports and Agriculture.

- production of in-house standards for DG XXI from the CD project control office;
- development of a pilot project to assist with the control of movements of goods under the Community TRANSIT procedures;
- assessment of the possible computerization of the simplified procedures on a harmonized basis;
- on-going activities:
  - analysis of the legal problems and constraints in the customs field relating to the pertinent Community and Member State legislation;
  - participation in reviews of the requirements for completion of the internal market;
  - cooperation with EFTA on subjects of mutual interest;
  - analysis of customs coded information used within the Community;
  - participation in the development of EDIFACT messages, especially those for customs purposes.

In 1991/92, the workplan for the CD project includes the continuation and finalization, as appropriate, of activities currently in hand and the initiation of work in the following fields:

- adoption and implementation of international standards in the various customs projects by the various partners concerned;
- completion of the system construction of TARIC 2;
- the development of various aids to tariff classification to enable Member States to improve their procedures;
- the specification of a computer system to assist with the management of valuation information:
- the encouragement of mutual assistance consisting of the exchange of information and better cooperation between the Commission and the Member States and among the Member States themselves;
- the adoption of a more effective telecommunications policy which is closer to international standards;
- the extension of certain nationally managed customs measures to the Community level within the framework of the completion of the internal market;
- completion of the system construction for the EBTI system;
- the system construction and installation of a pilot experiment within a limited number of Member States to assist with the control of Community transit movements;
- pre-analysis and feasibility study of a procedure linked to that of transit for the control of goods subject to excise duties;
- a study into the provision of certain customs information systems to Member States to improve the management and the application of customs procedures, for example the

chemical directory, the list of Community transit offices, a data dictionary for customs purposes, etc.

- evaluation report (and recommendations for pilot projects) for the computerisation of simplified procedures;
- the installation and evaluation of the first phase of a pilot system in selected offices of a limited number of Member States and EFTA countries, to assist with the control of goods movements under Community/common Transit Arrangements.

# 2.2. Agricultural sector

During the period covered by the report, the SHIFT (System for animal health inspection at frontier posts) project has received the priority due to it as an important element in the harmonization of inspection procedures in preparation for the completion of the internal market. The feasibility of using FIS (Fast Information System) for making relevant information available for consultation at frontier posts has been demonstrated. Joint studies, including frequent and regular meetings with national administrations, have made substantial progress in the development of this project.

The infrastructure projects, which have been described in previous reports, continue to evolve while providing important services. The AMIS (Agricultural Market Intelligence System) serves as an important system primarily in the field of market management. The basic communications applications IDES (Interactive Data Entry System) and FIS (Fast Information System) facilitate information flows. Further evolution of these two applications is envisaged and described below. The PAP (Prices of Agricultural Products) project has established a bridge between AMIS and FIS making institutional prices available for consultation on FIS. Extension of this application to other prices will enhance the dissemination of up-to-date information relating to agricultural products.

The CADDIA phase in the development of systems relating to the EAGGF has been relatively limited during the past year. The AGREX (Agricultural Guarantee Fund Expenditures) system is operational.

A future use of FIS for dissemination of AGREX information is under study. Development of FAUDIT (FEOGA audit) continues (based on non-CADDIA resources) building on the initial study supported by CADDIA.

The FBF (FEOGA budget forecasting) application, which makes extensive use of data from the AGREX and AMIS systems, is fully operational. The SICAMOR-ED project (Information system for coordination of actions in favour of the rural world - exchange of data) is at the stage of a feasibility study. This application will facilitate data exchange to and from associated applications currently under development.

Other developments relating to data exchange, including AIN-ED (Exchange of data relating to State Aids) and TREE-ED (Exchange of data relating to the annual forest damage survey), are under study. Each of these should yield considerable benefits in the form of more efficient information flows.

The CACTI (Common agriculture - customs transmission of information) project has made good progress and development of two pilot applications is under way. This project will strengthen the liaison between DG VI and DG XXI in establishing coordinated communication of information between the Commission and the Member States.

#### 2.3. Statistical sector

In the statistical sector, EUROSTAT has continued the development of general infrastructure systems and projects concerning external trade and agricultural statistics relevant to the CADDIA programme. During this period, work was intensified and given a new orientation in order to contribute to the installation of the statistical systems necessary to develop intra-Community statistics according to the Intrastat rules.

The general systems cover the following fields:

- electronic transmission of statistical data (STATEL project);
- analysis and introduction of standards in the statistical applications (STANORM project);
- standardization of the production and distribution of statistical reports (STRINGS project);
- the setting-up of a collection centre for statistical data (STADIUM project);
- feasibility study on, and completion of, a prototype server for the distribution of statistical nomenclatures using EDI techniques (EDINOMEN project).

These projects constitute an integrated whole intended to cover infrastructure requirements for the reciprocal exchange of statistical information between EUROSTAT, the European institutions, the Member States and other participating bodies.

As far as external trade statistics are concerned, work has been intensified following the priority accorded by the Commission in 1991 to projects linked to the opening-up of the internal market. Acordingly, work priorities in the statistical sector have been adapted in order to meet the deadlines.

Council Regulation (EEC) No 3330/91 on INTRASAT lays down the procedures for the compilation of intra-Community trade statistics with effect from January 1993. The object of the COMEDI project is to promote the establishment of a computerized infrastructure to simplify the following operations:

- entry of INTRASAT declarations for undertakings subject to the compulsory registration requirements;
- collection, validation, grouping and dissemination of statistics on the exchange of goods for the competent national departments.

The essential elements of the COMEDI infrastructure will need to be operational by the first quarter of 1993, in order to cope with the first influx of declarations from undertakings subject to the compulsory registration requirements.

Although set up as a priority measure under the INTRASTAT Regulation, the resulting data-processing systems will be of a sufficiently generic nature to meet the collection and distribution requirements of other statistical sectors.

The COMEDI project comes under the supervision of the COMEDI Task Force, in which all of the Member States are actively involved.

In the agricultural statistics sector, development activities have concentrated mainly on:

- the compilation and utilization of the agricultural structures data base (EUROFARM project);

- the procedure whereby each of the Member States can consult and approve the tabular data base.

# 2.4. Joint projects

DG XIII/D/5 is responsible for the coordination of the CADDIA programme.

This mainly involves:

- budget management, i.e. the allocation and control of resources granted to sectoral projects;
- administration of experts' contracts;
- supervision of sectoral projects.

The coordination of CADDIA is also aimed at promoting the technological options necessary for the harmonized implementation of electronic data interchange.

The following activities have been undertaken:

- Use of the Eurokom service for electronic document transfer

Following a preliminary analysis carried out in 1989 to determine the scope for establishing an environment for the electronic transfer of documents between the Commission and the Member States, the use of an information system including, for each sector concerned, the references of all documents transmitted in connection with working meetings was recommended.

In order to meet the requirements and wishes of participants in the Member States, DG XIII proposed temporary use of the Eurokom service which is managed by University College, Dublin.

The Eurokom service is an electronic mail system, i.e. a set of mailboxes where users can leave or pick up messages. Other facilities such as conferencing are also available.

A conference is a mailbox which is shared by a user group (conference participants) through which several users can exchange information. This information is accessible to the entire group.

Enrolment forms were sent to the Commission officials responsible for the various sectors and to all the official representatives of each sector in the Member States.

Under the CADDIA programme the Twelve Member States use Eurokom to exchange information and files with the Commission departments. Training in the use of the Eurokom service will be provided to Member States which request it. A PCU utility facilitating the use of Eurokom is available.

- Progress of the national servers project
  - a) Preparation for the pilot project in the 5 Member States

The following Member States have been involved in feasibility studies: Denmark, France, Greece, Luxembourg, United Kingdom.

# Globalisation Of The 5 Member States Feasibility Studies

The recommendations from the 5 feasibility studies are put together to form a global recommendation on how to proceed to setup a Pilot Project involving all partners.

A Collaboration Agreement is prepared for discussion with all partners. Its purpose is to ensure a proper understanding by all parties of the goals of the Pilot Project and to make the necessary commitments to achieve those goals.

Bilateral meetings (CEC - Member States) are held to clarify further specific aspects pertaining to the Member States where necessary, and to discuss the Collaboration Agreement.

#### National Server internal configuration

The internal architecture of a National Server will be as follows:

- a pure X.400 MTA (CCITT recommendations 1984), local User Agents;
- OSI stack and application layer communication protocols for the Member States Administration not equipped with X.400 (FTP in some cases);
- transport layer X.25 and IEEE 8802/3 (Ethernet);
- generic development : management software (network management, statistics on traffic, directory of users).

# Application layer architecture

The following X.400 MTAs will be procured:

- Denmark Statistics
- Denmark Customs
- France Agriculture
- Greece Agriculture
- Greece Customs
- Greece Statistics
- Luxemburg CIE (Centre Informatique de l'Etat), Agriculture, Customs, Statistics and Ministry of Foreign Affairs Departments
- United Kingdom (Agriculture on behalf of the 3 sectors)
- Brussels DG VI (Agriculture)
- Brussels DG XXI (Customs)
- Luxemburg Eurostat (Statistics)

In addition, X.400 MTAs of Denmark Agriculture and of Luxemburg Permanent Representation will be integrated as well as TEDECO users of ATLAS 400 in France.

The X.25 network provision of services for the link between the CEC Directorate Servers and the MS National Servers could be based on the PSDN of the various intervening MS or on trans-european VANs providing the adequate level of support, quality of service and single shopping facilities.

#### Technical Specifications preparation

These bilateral discussions have allowed the development of the full Technical Specifications for the Invitation to Tender.

This invitation to tender will cover the following lots:

- (1) Provision of a global managing contractor, responsible for interoperation of all hardware and software, delivered within the context of this project, both during the installation and in the operational stage.
- (2) Hardware platforms:

Delivery and installation of the X.400 MTA, and interconnection to networks.

- (3) X.400 and OSI software for all platforms.
- (4) Specific software and/or developments: provision of other protocols (FTP), of the directory and the management software.
- (5) Provision and operation of an international X.25 network service with one-stop shopping.

#### Publication in the Official Journal

The invitation to tender was published in the Official Journal on the 18.1.92.

The 92 companies which expressed interest have been provided with the full Technical Specifications and administration annexes.

An information meeting is held with all interested tenderers.

18 tenders were received on 21.4.92.

A National Servers Pilot Project Selection Committee is set-up with representatives from most partners of the Member States and the Commission.

After careful evaluation, 3 proposals are shortlisted.

These companies are asked to demonstrate a prototype and to deliver an Acceptance Test Plan by mid-September, when the Selection Committee will make a final recommendation and the Pilot Project will start.

b) Feasibility study in the 7 Member States

The purpose of this study is to provide all information needed to expand the NSPP to the 12 Member States, based on the results obtained in the five Member States.

This includes both the choice of the pilot applications and of the X.400 infrastructure.

The consortium has carried out a study, for each of the partners involved, on the informatics infrastructure, the national communication infrastructure and the data communication applications.

It will propose a migration strategy for the selected applications, a description of all software/hardware components needed, responsibilities and a global project plan, budgets for the CEC and MSA as well as an alternative solution, where applicable.

- The activities of the coordination sector also include close cooperation with the TEDIS programme as regards the standardization of messages and, in particular, cooperation between the private and public sectors in this field.

# 2.4.1. Pilot projects for the exchange of data

In 1991/92, the CADDIA sectors continued to implement the following pilot projects, which have been extended to other applications or have undergone certain improvements:

- <u>SCENT</u> (System Customs Enforcement Network) (customs sector): exchange of urgent messages concerning fraudulent evasion of customs and agricultural regulations.
- Automation of customs procedures in the new German provinces (Länder). The object of the project is to connect the airports at DRESDEN and LEIPZIG to the ALFA system (Automatisiertes Luftfrachtabwicklungsverfahren). Two phases have been defined for the execution of the project:
  - Phase 1: Feasibility study
  - Phase 2: Pilot installation

The feasibility study is due to be completed before the end of June 1992, and the pilot sites should be operational before the end of the same year.

- <u>TARIC</u> (TARif Intégré Communautaire) (Customs Sector) : transmission of tariff data in all official Community languages.
- QUOTA MANAGEMENT (customs sector): under the generalized system of preferences, data are exchanged with several countries.
- <u>EBTI (European Binding Tariff Information)</u> (customs sector): transmission of binding tariff information and consultation by the Commission and the Member States of the various criteria, using keywords.
- <u>IDES</u> (Interactive Data Entry System) (agricultural sector): notification of animal diseases and communication of market prices for pigmeat, beef and veal, and sheepmeat, and monthly reporting of EAGGF guarantee expenditure.
- <u>FIS</u> (Fast Information Systems) and MCAs (Monetary Compensatory Amounts) (agricultural sector): consultation of agricultural information.
- <u>STATEL</u> (STAtistics TELetransmission) (statistical sector): in addition to the continuation of the teletransmission pilot trials with the Member States, the STATEL project is concentrating on the development of an applications library to support a variety of communication protocols (KERMIT, UUCP, FTP, X.400) for the transfer of files.
- <u>STADIUM</u> (<u>STA</u>tistical <u>Data Interchange Universal Monitor</u>) (statistical sector): the setting-up of the collection centre has been extended to include other statistical sectors.

At the same time, a new version of the STADIUM system is currently being developed in order to provide a more effective tool for meeting the needs of automation, integration in the collection projects and portability in the Member States (e.g., COMEDI project).

STRINGS (STatistical Report Integrated Generation Service) (statistical sector): the STRINGS infrastructure (hardware, software and pivot marking format) has been extended to include the production and dissemination of other statistical reports.

The level of automation attained and the use of standardized representation (cf. SGML<sup>2</sup>) for the establishment of pilot experiments involving the electronic interchange of statistical reports with specialized services in the Member States (e.g., printers, distributors).

- EDINOMEN (EDI server for the distribution of statistical nomenclatures) (statistical sector): following the functional analysis and implementation of a prototype server for the distribution of statistical nomenclatures, it will be possible to launch the first pilot experiments by the end of 1992.

The measures needed to standardize exchanges between this type of server have been identified, and initiatives have been launched as part of the work on the UN/EDIFACT<sup>3</sup> standard (cf. STANORM project).

Equipment for these trials was loaned to the partner bodies in each sector in the Member States. The Commission selected hardware and software approved under its data-processing policy. The aim of the technical solutions adopted by the sectors is to stabilize the interfaces between each applications environment and the telecommunications infrastructures provided by the public telecommunications operators or following initiatives by the Commission (e.g., national servers). The aim of the Commission's policy and of CADDIA programme coordination is to achieve the widest possible adoption of standards in force in the field of telecommunications.

With regard to the transfer of data between computer systems, the aim is to use products based on the OSI (Open Systems Interconnection) model and, more particularly, products conforming to the FTAM4 standard or CCITT X.400 recommendations.

# 2.4.2. Standardization of data interchange

2.4.2.1. Major CADDIA activities are under way in this field:

Customs sector:

#### Developments in UN/EDIFACT standard:

Four Customs messages were approved for "UN Recommendation" (Status 2) at the UN/ECE/WP.4 September 91 session. These messages are:

CUSDEC - (Customs Declaration Message)

CUSRES - (Customs Response Message)

CUSCAR - (Customs Cargo Report Message)

CUSREP - (Customs Conveyance Report Message)

<sup>&</sup>lt;sup>2</sup> SGML: Standard Generalized Mark-up Language - ISO 8879 and ISO 9069.

<sup>&</sup>lt;sup>3</sup> UN/EDIFACT: Electronic Data Interchange for Administration Commerce and Transport - ISO 9735.

<sup>&</sup>lt;sup>4</sup> FTAM: File Transfer and Access Method.

Two other Customs Messages were approved for Status 0 (information status):

CUSEXP - (Customs Express Consignments Declaration Message)

PAXLST - (Passenger List Message)

Also during the September session, all the supporting material was adopted by WP.4 as Directories and Codes Lists.

Assistance was provided to the UN/EDIFACT Statistical Group MD.6 in the development of the <u>INSTAT messsage</u>, as a sub-set of the CUSDEC message to fulfil statistical data-capture requirements on the movements of goods between Member States as established by the INTRASTAT regulation.

Studies have been started concerning the development of a VATDEC message for datacapture of VAT returns, as well as the additional VAT summary data requirements to be declared by the trader under the new Community VIES system.

A major development during this period has been the production of the "CUSDEC USER GUIDE" to provide the necessary assistance and information in the implementation of the CUSDEC message. It was the result of a joint effort between EC Member States, EFTA countries and US Customs service under the leadership of DG XXI. The manual has been offered to the CCC (Customs Cooperation Council) for wide distribution and maintenance as a universal Custom's manual for CUSDEC.

The CUSRES user manual is the process of finalisation.

CORRELATION tables between the SAD form and CUSDEC electronic message for the basic customs procedures IMPORT, EXPORT, TRANSIT are under development. Once agreed, they will be annexed to the CUSDEC User Guide.

DG XXI continues the support to the UN/EDIFACT MD.3 group and provides for its Chairmanship and Secretary.

As a consequence of the expansion of growth in the use of UN/EDIFACT in the different economic areas, the MD.3 group reviewed and up-dated its terms of reference, the group was renamed "CUSTOMS and TAXATION" Group.

Four working sub-groups were created in order to encourage and proceed developments in the following areas:

#### WG.1 - Customs and related matters

The sub-group is to consider the possibilities of developments in Edifact Standard of the accompanying documents of a Customs declaration such as licences, visas, certificates, analysis, etc..

#### WG.2 - VAT declarations

This sub-group will look at the different requirements concerning the development of an Edifact message covering VAT issues.

# WG.3 - EXCISE declarations and documentation

The sub-group will analyse the information flows covering issues concerning EXCISE and make proposals regarding the development of EDIFACT messages.

## WG.4 - Technical Support

The sub-group will concentrate on the technical aspects of the UN/EDIFACT standards and will analyse new technical developments.

2.4.2.2. The statistical sector is responsible for the operation of the statistical group WE/EB-MD6 of the EDIFACT Board for Western Europe.

# a. Work on the UN/EDIFACT project

The work of the WE/EB-MD6 group involves the design and management of the standardization process for standardized messages (UN/EDIFACT).

The main areas of operation of WE/EB-MD6 are:

- Exchange of associated statistical information. The GESMES message (Generic Statistical Message) was accorded status 0 at the meeting in September 1991 of the UN/ECE/-WP4 group. The GESMES message will be nominated for status 1 by the end of 1993. This message will permit the exchange of data and associated metadata. Initial experiments and implementation attempts are under way. Other sectors (customs, finance, insurance, etc.) are interested in this GESMES message for the exchange of recapitulative information.
- Exchange of statistical nomenclatures. The messages necessary for the exchange of statistical nomenclatures, their interrelationships and the interrogation of the distribution server centres (cf. EDINORM project) are in the process of elaboration.

This elaboration should be terminated by the end of 92.

Other message development groups, including the ISO Secretariat, have expressed interest in this work. The EDIFACT regional structure rapporteurs have asked that the other message development groups be kept informed of developments in this area.

The messages currently being elaborated will be nominated for status 0 at the Spring 1993 session of the UN/ECE-WP4 group.

- Definition of messages for the exchange of statistical information from the economic operators

Two groups of messages are being defined for international trade and balance-of-payments statistics. Studies are being carried out with a view to defining generic messages for the collection of statistical questionnaires or surveys.

# i) International trade statistics

In the context of the implementation of the Community's INTRASTAT rules, the WE/EB-MD6 group has defined a subset of the CUSDEC customs message, known as INSTAT, which will be nominated for status 1 at the Autumn session of the WP4. In addition, work is under way on the definition of procedures for the exchange of statistics with third countries (cf. STATEM message). Work on this topic is being carried out in close cooperation with the customs sector and the WE/EB-MD6 customs working party.

# ii) Balance-of-payments statistics

The scenario for the collection of statistical information necessary for the elaboration of the balance of payments is currently being finalized with the banks, central banks and statistical organizations.

These collection flows will require the elaboration of five messages (BOPSTA, BOPDIR, BOPCUS, BOPINF, BOPBNK).

International organizations such as the International Monetary Fund and the World Bank are becoming increasingly interested in this work.

The foundations are being laid for collaboration with the representatives of the banking sector (cf. WE/EB-MD4 Finance).

Under the chairmanship of EUROSTAT and the vice-chairmanship of SWISSPRO, the WE/EB-MD6 group is working regularly with the satisfactory involvement of national statistics institutes (EEC and EFTA), international organizations active in statistics and trade facilitation organizations.

The international organizations (UN/ECE, UN/STAT, OECD, IMF, WB, etc.) support the activities of the WE/EB-MD6 group aimed at facilitating the collection, transmission, processing and re-use of statistical information. International cooperation is beginning. The group's results are presented at the UN/EDIFACT Joint Rapporteurs' Team meeting.

Contacts have already been established with a view to setting up equivalent groups in other regional structures of the UN/EDIFACT Board (cf. Pan-American - PAEB, Australia/New Zealand - AZEB, Asia - ASEB). A group similar to the WE/EB-MD6 is due to be created in the near future within the PAEB.

The WE/EB-MD6 work is also being coordinated with the statistics groups whenever they meet at internatioal level.

# b. Work on the SGML (Standard Generalized Markup Language) standard

The statistical sector identifies instances requiring involvement in standardization work covering the exchange of statistical documents containing text, tables, graphics and images.

Using the SGML standard, it is possible to exchange information without structural loss. Suggested software available on the market and offering SGML interfaces will facilitate the distribution, consultation, display and re-use of statistical documents.

The statistical sector plans to define standard structures for SGML statistical documents. Technical monitoring of the developments affecting this family of standards is essential if the long-term validity of the solutions chosen is to be assured (e.g., SGML/CALS<sup>5</sup>, ODA<sup>6</sup>, etc.).

<sup>5</sup> CALS: Computer-aided Acquisition and Logistic Support (CALS).

<sup>6</sup> ODA: Office Documentation Architecture.

# 3. ORGANIZATION AND RESOURCES

# 3.1. Internal organization

#### 3.1.1. Internal coordination

The CADDIA programme is implemented at the Commission by four departments:

- DG XXI Directorate for General Matters (CD project)
- DG VI Directorate for General Matters (agricultural projects)
- EUROSTAT Directorate for Dissemination and Computerized Statistics
- DG XIII Directorate for Telecommunications (joint projects, technical coordination and project administration)

The CADDIA Policy Interdepartmental Group (CPIG), consisting of the Director for Telecommunications of DG XIII (chairman), the Director for External Tariff Questions of DG XXI, the Director for Informatics of DG IX, the Director for General Matters of DG VI and the Director for Dissemination and Computer Processing of Statistics of EUROSTAT, supervises the coordination of the various Commission departments involved in CADDIA. The work is done by a team consisting at present of the head of the CADDIA sector and one permanent member of staff. In addition, two experts working with the central team concentrate on the technical supervision of the projects and studies and the definition and setting-up of national servers.

The CADDIA coordination team is also responsible for keeping administrative files on the external contractors recruited for the various sectoral projects.

Apart from administrative and budgetary management, the CADDIA sector is responsible for liaison between and coordination of sectoral projects, the implementation of joint projects and any technical assistance that may be necessary under these projects.

#### 3.1.2. Human resources

The present dearth of posts for officials at the Commission has obliged it to turn to private-sector contractors in order to cope with all the CADDIA work. The breakdown of resources was approximately as follows in 1990/91:

	Customs	Agriculture	Statistic	Central Team
Officials	6	10	5,5	3
External	15	9	17	2

Most of the external staff are required only during the development of specific applications. However, provision must also be made for some posts for officials to maintain and manage the systems set up under the CADDIA project.

# 3.2. Expenditure

3.2.1. The expenditure committed during 1991 and planned for 1992 is set out in the table below. It is financed from budget items B5-4022 and B8-5622.

	1991		1992 (prevision)		1st Semester 1992 (engaged)
Sectors	ECU '000	%	ECU '000	%	ECU '000
Customs	3.541	37	1.193	9	882
Agriculture	1.799	19	1.233	9	318
Statistics	2.944	31	9.700	73	688
Joint projects (Programme Office)	648	7	362	3	279
Management expense	es 643	7	812	6	411
TOTAL	9.575	100	13.300	100	2.577

This expenditure can be broken down into the following basic items for 1991:

Remuneration of experts	80%
Joint projects - Studies	6%
Administrative backup for experts	4%
Management expenditure (cost of meetings and contract administration)	6%
Purchase/leasing of computer equipment	2%
Cost of using data transmission networks	2%

# 4. **CONCLUSION**

CADDIA activities have continued in accordance with the objectives set out in the previous report.

The main events during the period under review were:

- preparation by the Commission departments of a proposal for a new work programme taking account of the priority activities needed as from 1993 with a view to the large internal market;
- preparation of a pilot project plan for the setting-up of computer systems at national level for the exchange of data between the Commission and the Member States;
- definition of messages for electronic data interchange, particularly in the customs and statistics sectors.

#### 1. DETAILED PROGRAMME OF THE CUSTOMS SECTOR

# 1.1. Introduction

- 1.1.1. The development of computer systems to meet customs and fiscal requirements is essential if the objective of a single market is to be achieved by 1993. Also, one important priority is the development of a communications network to enable files and messages to be exchanged electronically between the Commission and the Member States, and among the Member States themselves.
- 1.1.2. The electronic data interchange (EDI) system within DG XXI for the transmission of TARIC updates to Member States continues to play an important role. The way forward needs further definition, and in this respect the progress of the National Server project and the European Nervous System will need careful evaluation. The development stage of TARIC 2 (Production Database System) has begun, and the system is scheduled to be implemented by the beginning of 1994, the slippage of the timetable being due to difficulties encountered with the external contractor.
- 1.1.3. Member States are at various stages of customs systems development, and this is a factor which makes it difficult to ensure the uniformity of treatment necessary for the achievement of the single market. A feasibility study into the more widespread use of computerized simplified procedures is under way, and a report is expected by the end of 1992, but it is already clear that this could be a new growth area for customs.
- 1.1.4. Hitherto, very little attention has been paid to the development of fiscal computer systems, but with certain ECOFIN decisions already in place more effort is being required in this area. Computerized fiscal systems are not included in the CADDIA budget as, by definition, CADDIA covers information exchanges between Member States and the Commission and *vice versa*, but not between Member States themselves, which is a requirement for fiscal control.

Nevertheless, under the global provisions of the European Nervous System in association with CADDIA, INSIS and TEDIS and in liaison with DG XIII, development of these systems will be undertaken.

- 1.1.5. There will be a need to ensure much greater harmonization and homogeneity of customs operations throughout the Community, and customs administrations will have to work much more closely together with the Commission in the pursuit of fraud and illegal import and export operations.
- 1.1.6. Following discussion with Member State administrations, it was agreed that the highest priority should be accorded to the following projects:
- standardization
- TARIC interface
- customs tariff classification
- mutual assistance
- CADDIA telecommunications policy
- 1.1.7. A shortage of technically qualified staff with the relevant customs experience continues to represent the major constraint on systems development. The situation is exacerbated as several experienced staff have left, and others must shortly leave to comply with the three-year rule. Replacement staff will need to be fully trained before becoming effective.
- 1.1.8. Finally, as projects become operational they fall within the operational budget for resourcing. However, due to the small amounts approved under the operational budget, these limited resources are being increasingly stretched to maintain operational systems.

As a result, development of new systems without new resources and an adequate operational budget becomes more and more problematic.

# 1.2. Coordination of the CD project

1.2.1. The Project Control Office (PCO), which was developed under the CADDIA programme as reported last year, is now fully operational and thus has moved out of CADDIA.

# 1.3. Intra-Community trade subsystems

1.3.1. The scheme for controlling transit movements for traders who do not benefit from simplified procedures has now progressed to pilot project status and is described in section 5

# 1.4. Import and export subsystems

## 1.4.1. SCENT

#### 1.4.1.1. <u>Progress</u>

The system is now operational in 33 locations as follows: Belgium (4), Germany (4), Denmark (2), Greece (1), Spain (2), France (2), Ireland (3), Italy (2), Luxembourg (1), the Netherlands (5), Portugal (1), the United Kingdom (2), the United Nations INCB (1) and the Commission (3).

All installations are using version 1.5.

Training has been provided for all users (except Italy). This consisted of a new training package developed by the SCENT support team dealing with all aspects of the SCENT messaging system and use of the WORD text processing facility.

A help desk is now operational and available to all users.

#### 1.4.1.2. Medium-term prospects

Version 1.6 of the SCENT system is being tested in the Commission and will be released to all users as soon as testing is completed. It will be accompanied by a new version of the user manual, completely rewritten and incorporating all the latest improvements to the system.

Installations for DG VI correspondents will continue during 1992.

The feasibility study concerning the use of SCENT by VAT investigators will be launched in the second half of 1991.

The MAG '92 group have decided in principle to adopt SCENT as the basis for their CIS (Customs Information System).

### 1.4.2. Management of quotas and ceilings

# 1.4.2.1. Description of the context

A data base (QUOTAS), managed centrally at the Commission, has been developed to handle quotas and ceilings (System of Generalized Preferences and Mediterranean Protocols) following the ruling by the Court of Justice against the apportioning of quotas among the Member States. A computerized data interchange system is currently being developed.

#### 1.4.2.2. Aims

The aims of this project are as follows:

- to permit effective and swift quota management
- to ensure the continuous monitoring of the ceilings and goods under supervision
- to avoid the successive encoding procedures which lead to delays and errors
- to improve the service provided to traders by the customs administrations
- to develop the procedure aimed at reducing delays in replying to importers.

# 1.4.2.3. Progress

Certain modifications have been made to the system in order to permit the transfer of the quotas for the countries of Central Europe from the SPG base to the MED base, subject to a 10% increase in the balance.

Consultation of the ceilings base by DG I has been studied and defined and will become operational by the end of 1992. Improvements have been made to the management of the ceilings and goods under inspection so as to simplify the user interface. Notification telexes showing instances where the thresholds of 75% and 100% have been exceeded are generated automatically in the nine Community languages.

Electronic data interchange with the United Kingdom has been implemented. Portugal is conducting tests and will enter the operational phase in the second half of 1992, thereby joining Ireland, Benelux, Denmark and France which are already operational.

The development of the interface for the other Member States is under way.

# 1.4.2.4. Medium-term prospects

Electronic data transfer in respect of quotas should be operational in nine Member States by the end of 1993. This would make it possible to reduce delays in the period elapsing between the submission of the application and the reply.

Consultation of the ceilings base by DG I will be developed and tested during the second part of 1992.

The electronic transfer of ceilings data will be studied, defined and tested in collaboration with a Member State.

# 1.4.3. EBTI (European Binding Tariff Information)

# 1.4.3.1. <u>Description of the context</u>

The EBTI database is a system set up in pursuance of Council Regulations 1715/90 and 3796/90 which entered into force on 1 January 1991.

This database is a centralized system for storing the national administrations' BTI (Binding Tariff Information) and also the legal information, known as "legal tables", which serves as a potential basis for tariff classification.

At present the EBTI database is consulted by the Commission's DG XXI/B4, and users responsible for tariff classification in the Member States will have access to it by the end of 1992.

#### 1.4.3.2. Aims

The aims of this project are as follows:

- to harmonize tariff classification procedures throughout the Community by providing access to information
- to permit the implementation of phase II at the legislative level so as to validate throughout the Community all BTI issued by a national administration.

### 1.4.3.3. Progress

The central system was set up in November 1991, and the task of transferring the BTI stored in the intermediate system has now been completed.

The consultation and local input station due to be installed on loan in the Member States has been developed and is currently being tested.

A study on the development of a thesaurus in the nine Community languages with a view to facilitating access to the BTI is under way.

The transfer of the "legal tables" from existing storage media is also going ahead.

A user guide on how to consult the EBTI base and to use the local station assigned to the Member States has been compiled in French, English and German.

### 1.4.3.4. Medium-term prospects

The PCs loaned to the Member States by CADDIA are in the process of being delivered, and the Twelve Member States should be connected to the central system in the next few months.

The introduction of the multilingual thesaurus will coincide with the implementation of the second phase of the procedure at legislative level whereby all BTI will be valid throughout the Community.

Other feasibility studies are being planned for the medium term: distribution of non-confidential information to traders and introduction of images in the database.

## 1.5. Pilot projects

#### **1.5.1. TRANSIT**

# 1.5.1.1. <u>Progress</u>

Both the central site system software and the PC software for a single national system have been written and tested. English, French, Spanish, Norwegian and German versions of the national software have been produced.

It is anticipated that the phase I system will commence operation on 6 July 1992 and will be evaluated over a period of six months.

This initial version of the system will provide the minimal functionality proposed in Commission document XXI/1331/88 Rev. 2. The system will consist of a central database mounted on Commission hardware, which will perform the matching function. It will also include national data capture and reporting software operating on PCs. These PC systems, which will provide basic functionality, will be installed in 14 selected offices located throughout the 5 countries taking part in the Pilot Project Working Group.

Two studies have also been launched to identify possible functional enhancements to the phase I system and to plan for the development of a more stable telecommunications infrastructure.

# 1.5.1.2. Medium-term prospects

The results of the phase I pilot, plus the outcome of the two studies being undertaken should be available early in 1993. These will allow realistic plans to be constructed for a phased implementation of an operational system.

#### 1.6. Trade interfaces

# 1.6.1. Progress

This work has been subsumed within Data Interchange Standards and is reported upon within section 8.

#### 1.7. Commission systems

#### 1.7.1. <u>TARIC</u>

- 1.7.1.1. Both the TARIC database and interface systems continue to function well, and Member States benefit once a week from high-quality electronic transfer of TARIC data.
- 7.1.2. Improvements to both the database and interface systems continue to be made, although the database system has now reached some of its design limits. A number of changes have been made to improve the performance of the interface system to handle large files. Consequently, significant resources are necessary to implement the program changes involved in these enhancements. Additionally, the system documentation for the Member States has to be maintained in three languages (EN, FR, DE):
- File, Record, Data Item Specifications (XXI/744/89)
- Transmission User Guide (XXI/746/89)

Thus, the two permanent officials have been supplemented by Member State experts and a number of contract analyst/programmers.

#### 1.7.2. TARIC Database System

## 1.7.2.1. <u>Progress</u>

- 1) The pilot project for the extraction from the TARIC database of updates to the Combined Nomenclature has continued between DG XXI and the Office for Official Publications (00PEC). The results are currently being evaluated of the processing by OOPEC of the extracted files, produced using SGML (Standardised General Mark-up Language).
- 2) Other enhancements to the TARIC database system have included program changes:
  - to improve the layout and content of the annual TARIC publication;
  - to improve the content of the control listings used to verify the data input to the database;
  - to provide better control over the relationships of data within the database.

- 3) The TARIC 2 project for a production Database System has progressed as follows:
  - the Detailed Functional Specifications were completed on 30.6.92
  - the invitation to tender for the System Construction stage has been prepared by DG XXI for issue by DG IX under the "contrat cadre (100)" arrangements. This will necessarily involve significant resource effort from DG XXI in assisting companies to prepare their tenders and in subsequent evaluation of the tenders.
- 4) Significant assistance has been given by DG XXI to the systems supplier of the TARIC 2 project, particularly in producing the Logical Data Model first using Excelerator for the Functional Specification, later converted onto CASE DICTIONARY. Additionally, quality assurance reviews have been preformed on all end products, especially the new Detailed Functional Specifications. This has involved members of the Interface and Database teams together with representatives of the user services and Member States.

#### 1.7.2.2. Medium-term prospects

- Evaluation of the response to the TARIC 2 invitation to tender and selection of the most appropriate tender in order to award the contract for part of the system construction stage of TARIC 2.
- The initial Production Database System is expected to go operational at the beginning of 1994.
- Development of the relevant extraction programs for transforming the data from TARIC 1 to TARIC 2.
- Assistance with the testing of the new TARIC 2 Production Database System and the subsequent data conversion from TARIC to TARIC 2.

# 1.7.3. TARIC Interface System

# 1.7.3.1. <u>Progress</u>

- The interface system continues to be upgraded to allow automatic processing from the initial extraction of the updates from the TARIC database, conversion from EBCDIC to ASCII characters, transfer from the SIEMENS machine in Luxembourg to the UNIX system in Brussels, and preparation of the various output files needed for each Member State. The final stage of transmitting the output files to Member States is only commenced when the control file has been satisfactorily verified. A number of changes have been introduced to improve the performance of the transmission system.
- Difficulties have continued in trying to transfer the interface system from UNIX (NCR) to UNIX (OLIVETTI 3B2) due to problems with versions of software on the OLIVETTI 3B2. Trials have now commenced to try to transfer the interface system to newly installed BULL DPX 2/360 equipment. Until these trials are successfully completed the UNIX (NCR) will continue to be used.
- The electronic "fault reporting" and "change control" system, introduced in 1991 to replace the existing manual reporting procedures, continue to function well.
- The strategy of replacing KERMIT file transmissions to the OLIVETTI M240 PC located in each Member State has been limited by the lack of suitable FTAM file transfer products, the implications arising from the timetable for installing a National Server, and the potential difficulties in Member States of developing their own software to receive and process the transmission files.

- The transmission file specifications supported by State Action Diagrams have improved Member States' comprehension and will assist them in developing programs capable of processing the transmitted data.

# 1.7.3.2. Medium Term Prospects

- Complete the development of a new TARIC Production Database System (UNIX/ORACLE) by 1.1.94.
- Convert the existing TARIC data for the new Production Database System.
- Phase in the introduction of new sources of input data for TARIC, by taking extracts of suitable data from existing databases.
- Upgrade the existing TARIC Interface System by 1.1.94 for the delivery of transmission files to Member States (and other Commission services).
- Create, by 1.1.94, a new Data Dictionary System to maintain the File, Record and Data specifications for all recipients of TARIC transmission files.
- During 1993, commence the Pre-analysis and Feasibility Study for a TARIC Data Dissemination System.

# 1.7.4. Simplified Procedures for Imports and Exports

#### 1.7.4.1. <u>Progress</u>

Several Member States already operate simplified procedures for traders operating approved computerised stock control and accounting systems. These systems are generally based upon the principles of periodic declarations and control by means of systems audit techniques. The need has been identified to harmonise these existing systems so that traders operating in more than one Member State are not required to use widely differing national control procedures. Little progress has been made in this area of work due to a lack of resources. However, one Member State has now provided an "Expert National Détaché" in January '92 to progress this work and a firm of consultants has been engaged to undertake the initial pre-analysis study, the results of which will be presented to D.G. XXI by the end of 1992.

A committee of ad hoc experts from national customs administrations has been created to follow the work of the study, and a Customs Advisory Committee (CAC) consisting of trade representatives has been setup to ensure that the trade views are taken into account by the Commission.

#### The objectives are to:

- Follow-up recommendations based on the Treaty on European Union for improved working methods;
- collect information on current usage of simplified procedures in Member Sates;
- analyse associated control procedures;
- outline a strategy for extending usage of simplified procedures, initially via pilot systems.

# 1.7.4.2. Medium Term Prospects

- Computerised Pilot projects of selected simplified procedures will be set up in some Member States involving both Customs administrations and traders.
- Depending on the results of the pilot projects, Functional Specifications will be produced to assist Member States in introducing computerised simplified procedures.
- A publicity campaign explaining the benefits of using computerised simplified procedures will be launched in conjunction with the customs administrations.

#### 1.8. Data interchange standards

#### 1.8.1. Customs messages

# 1.8.1.1. Progress/Medium Term prospects

Further work on CUSEXP and PAXLST to be progressed from Status 0 to Status 1

Further analysis and consideration of the requirements for VAT and EXCISE message developments under UN/EDIFACT

Further consideration of the requirements for TRANSIT messages

Recasting the USER GUIDES on the 93.2 Directory.

#### 1.8.2. Codes

# 1.8.2.1. Progress/Medium term prospects

Work on codes is an ongoing task. Maintenance and intersectoral alignment continues to be the prime interest.

# 1.9. Legal problems and requirements

A working group on "Legal aspects on the application of EDI in Customs and Indirect Taxation" has been established to examine existing Customs legislation in order to identify the constraints for EDI and to recommend proposed amendments for consideration by the relevant legislative area.

The Working Group has been meeting regularly and a draft proposal has been agreed and forwarded for possible inclusion in the Implementing Provisions for the Community Customs Code.

# 1.9.2. Medium Term prospects

Analysis must proceed in the Indirect Taxation area.

# 1.10. EFTA Cooperation

## 1.10.1. Progress

The pattern of meetings has continued with representatives of the EFTA countries and the EFTA Secretariat. Advice and guidance on general policy have been provided as necessary by DG I. As indicated in section 5, representatives of three EFTA countries are actively involved in the development of a pilot project to assist in the control of the movement of goods under the common transit procedures.

## 1.10.2. Medium-term prospects

EFTA continues to make a valuable contribution to the work being undertaken on EDIFACT message development through the MD3 Group and the Standard Messages Working Group. Their ongoing support in the wider context of the Customs Cooperation Council, the Joint Rapporteurs' meetings and the ECE/WP.4 in Geneva has been greatly appreciated.

#### 2. DETAILED PROGRAMME OF THE AGRICULTURAL SECTOR

# 2.1. **AMIS**

# 2.1.1. Context and objectives

AMIS (Agricultural Market Intelligence System) is an integrated computer system in the Directorates responsible for managing the common organization of agricultural markets. AMIS also provides basic market data to the Directorate responsible for management of the guarantee section of the EAGGF (European Agricultural Guidance and Guarantee Fund).

AMIS processes the data necessary for the day-to-day management of the common agricultural policy:

- producer prices on the Community's internal market;
- offer prices on the world market for imported products;
- statistics on import and export licences applied for and issued;
- statistics relating to the system for the surveillance of trade flows between Spain and Portugal and the other Member States (Supplementary Trade Mechanism);
- statistics on stocks:
- statistics on consumption;
- statistics on production;
- statistics on various forms of agricultural expenditure (intervention buying, aid, export refunds).

AMIS also covers the systems for the management of export and intervention tenders under the common organization of various agricultural markets, and the system for managing tenders under food aid programmes.

AMIS also contains institutional data fixed by the Council or the Commission:

- the institutional prices in ECU fixed by the Council and the prices derived therefrom;
- threshold prices.

AMIS data are used in the periodic acts published in the Official Journal of the European Communities and communicated to the appropriate authorities (agriculture and customs) of the Member States:

the unit amounts of import levies and export refunds;

the unit amounts of Community aid.

In addition there are the data needed for agri-monetary management:

- the representative (or green) exchange rates;
- the exchange rates used to determine world market prices;
- monetary compensatory amounts.

All these data are currently stored on an internal production database in the Directorate-General for Agriculture and are not directly accessible for consultation by the outside world.

Access will be provided to a selection of these data for consultation purposes via the FIS system (q.v.), which receives its data from AMIS.

# 2.1.2. Progress and medium-term prospects

AMIS is an operational computer tool and has become essential for the day-to-day management of the common agricultural policy; its development was made possible by the CADDIA programme. The AMIS management team is currently carrying out maintenance and development work in line with the development of the rules for the management of the common agricultural policy in the various agricultural sectors.

### 2.2. <u>IDES (Interactive Data Entry System)</u>

### 2.2.1. Context

IDES is an Interactive Data Entry System developed for the purpose of transmitting agricultural data electronically between Member States and the Directorate-General for Agriculture at the Commission. It is intended to replace existing traditional telex transmissions. It has been developed by the Data Processing Division of the Directorate-General for Agriculture, DG VI/A/4, with the financial support of CADDIA.

#### 2.2.2. Objectives

The ultimate objective of IDES is to create a message for each numerical data type sent by the Member States to the Directorate-General for Agriculture and used as input for the DG VI informatics applications.

# 2.2.3. Progress

Several telex message types are being used successfully by most of the Member States.

The veterinary messages are fed into the ADNS application (Animal Disease Notification System), while those concerning internal market prices are fed into the PMI (prix Marché Intérieur) sub-application of the AMIS application (Agricultural Management Information System). After preliminary validation, messages concerning monthly expenditure declarations are fed into the AGREX system (AGRicultural EXpenditure).

A range of new messages has been implemented in the course of the period covered by this report and training has been provided for new users.

New facilities have been developed to improve on-line validations and simplify the user input.

Finally, the whole application has been revised and reorganized so as to provide additional security against transmission errors or disruptions.

# 2.2.4. Medium-term prospects

A feasibility study has been launched (code name IDES X.400) in order to respond to the need to exchange long structured messages, on the one hand, and in order to use the facilities offered by the National Server project, on the other.

The results of this feasibility study are expected to be available by September 1992.

IDES X.400 aims to provide electronic messaging facilities for all IDES partners and is complementary to the existing interactive IDES applications.

#### 2.3. FIS (Fast Information System)

# 2.3.1. Context and objectives

The number of computer applications relating to the management of the common agricultural policy has been increasing constantly in recent years. Considerable amounts of data stored on computer were accessible to officials through the use of specialist software, and information was generally disseminated in the form of written documents.

To supplement these more traditional procedures, an electronic system has been developed to allow rapid access to the maximum amount of information consistent with the requirements of confidentiality.

FIS, the Fast Information System, is an electronic journal which provides user-friendly consultation of agricultural information, for both internal Commission use and restricted external use by Member States. It can be accessed via the most basic TTY terminal equipment.

#### 2.3.2. Progress

FIS is operational but the process of development continues. It has enormous potential as a means of disseminating all kinds of agricultural information: tables, reports, agenda and minutes of management and other committee meetings, numerical annexes of the Official Journal (e.g. MCAs, levies), etc.

DG VI/A/4 is continuing to promote FIS. Data which had already been identified have been included in FIS, and new types of information are constantly being added.

In parallel to the promotion and training tasks, complementary developments have been made in the following directions:

- user interface improvement;
- new modules permitting easier loading or updating of the FIS pages by the data owners;
- control module permitting follow-up of the updates.

In the context of the SHIFT project (see para. 2.9 below), FIS is being used as an interim vehicle for disseminating information relating to the conditions of importation of animals and animal products to the Community's external frontier posts. FIS has also been extended to cope with the aspects of multilingualism.

# 2.3.3. Medium-term prospects

The system is operational and in use on a day-to-day basis.

It is envisaged that FIS will eventually replace many telex transmissions from the Commission to the Member States. In order to achieve this objective, new modules will be developed to enable the field of data covered by FIS to be enlarged.

In response to proposals from national administrations and other users, work is being undertaken to enable users who have specific requirements to access FIS data for further processing.

# 2.4. MCM (Monetary Compensatory Amounts)

# 2.4.1. Context and objectives

The MCM application enables the Member States to download the monetary compensatory amounts to PC and has replaced the telex transmission of these data to the Member States.

The MCM application is stabilized, and is being widely and regularly used by the Member States. The number of users has increased to 23, thus confirming its success.

As the MCM application is operating successfully at present and is being used by all Member States, there are no plans for further development in the near future.

# 2.4.2. Medium-term prospects

In the expectation of new guidelines for the agri-monetary regime, the MCM application will be adapted to meet new requirements.

The principles of data transmission and PC downloading in place of telex transmission will remain.

# 2.5. FBF (FEOGA budget forecasting)

#### 2.5.1. Context and objectives

The objective of the FBF (FEOGA budget forecasting) computer system is to provide a set of tools automating the manual procedures for forecasting and drawing up the EAGGF budget, which accounts for some 60% of the Community's budget. In view of current budgetary constraints, including the increased budgetary discipline affecting agricultural expenditure, a flexible system is needed enabling the trend of expenditure over the year to be estimated and compared with actual cash movements, enabling the budgetary requirements of the coming year to be forecast and providing a rapid interrogation and simulation tool during negotiations for the extrapolation of the main trends over 5 years.

Using data on expenditure from AGREX, market and trade data from AMIS and the SOEC databases and monetary and agri-monetary data from AMIS, the system makes it possible to draw up:

- a draft budget over two years,
- a monthly out-turn revision based on the draft budget and the latest available data,
- a comparison of the model with actual budget expenditure,

- a simulation of the impact on expenditure of measures under negotiation at the Council,
- an extrapolation of expenditure over five years for all budget headings.

This also includes adaptation to the Council decisions of July 1987 concerning the machinery for the automatic phasing-out of MCAs resulting from the realignment of currencies participating in the EMS exchange rate mechanism.

#### 2.5.2. Medium-term prospects

The system is operational.

# 2.6. AGREX (AGRicultural guarantee fund EXpenditures)

# 2.6.1. Context and objectives

The expenditure of the guarantee section of the EAGGF accounts for some 60% of the Community's budget. The Directorate-General administers a computerized system of monthly accounts of payments and follow-up of expenditure declared by the Member States for the support of agricultural markets.

In addition, since the European Council of February 1988 it has been necessary to monitor agricultural expenditure very strictly, chapter by chapter, and an alarm system has been set up to detect anomalies by comparison with the forecasts.

The system is linked to the budget forecasting system (see FBF) and the agri-monetary applications (see AMIS).

# 2.6.2. Progress and medium-term prospects

The system is operational. FIS already contains a set of AGREX data.

# 2.7. FAUDIT (FEOGA audit)

#### 2.7.1. Context and objectives

The FAUDIT project (FEOGA auditing system), in the framework of the CADDIA programme, involves a study of the feasibility of computerizing control of monthly and annual declarations of EAGGF expenditure including public storage communicated by the Member States to the Commission pursuant to Regulations (EEC) Nos 1883/78 and 3247/81.

The aim is to optimize control by loading the basic data into a computerized system for category II expenditure and detecting any anomalies.

# 2.7.2. Progress and medium-term prospects

The system is operational and is being used systematically for the "monthly expenditure" section. Development of the "annual expenditure" section has begun and will be completed by mid-1993.

A data interchange system (code name FAUDIT-ED), which will eventually be incorporated in FAUDIT, is currently being studied, and there are plans to establish links between FAUDIT and the FIS and AMIS systems.

The FAUDIT functional analysis was financed by CADDIA.

2.8. <u>APACO/ANA</u> (Actes périodiques agricoles et comités de gestion/Agricultural Numerical Annexes)

# 2.8.1. Context

The numerical annexes form an integral part of the periodic agricultural acts published on a daily, weekly, monthly or occasional basis by the Commission.

The numerical annexes are the numerical part of these acts (fixing or amending the amounts of levies, aids, refunds), which concern all agricultural products covered by the common agricultural policy.

Most of the numerical annexes are prepared (collection of basic information, standardization, calculation of amounts) by the computers of the Directorate-General for Agriculture and, in particular, the AMIS system.

The annexes are circulated to the national administrations by DG VI's AGREC telex and in the Official Journal, in which the numerical annex is an actual annex to the periodic act.

# 2.8.2. Objectives

The aim is to circulate the numerical annexes to the Member State administrations by electronic means, so that the national administrations receive them quickly and can process the data in good time.

The project is closely linked to the FIS project and the AMIS system.

# 2.8.3. State of the dossier and medium-term prospects

The APACO/ANA system is now being widely used as part of the procedure for the preparation and distribution of the periodic acts.

Automatic dispatch of the annexes relating to export refunds has begun in respect of two sectors of the common agricultural policy (dairy products and poultry-keeping).

The linking of the APACO/ANA system and the FIS system has already proved its worth on several occasions.

Ongoing efforts are being made as regards data integrity and the absolute reliability of the transmission system, and there are plans to employ new technology and methods in this area.

2.9. SHIFT (System for health control of imports from third countries at frontier inspection posts)

## 2.9.1. Context

The purpose of the SHIFT project is to establish a computerized system for the harmonized veterinary control of animals and animal products from third countries at the point of entry into the Community. These veterinary controls must be identical, irrespective of the point of entry. This project is one of the priority projects linked to the completion of the 1993 internal market and, from the point of view of the removal of Community frontier controls, its introduction is absolutely essential.

A veterinary control consists of a documentary and identity check to ensure that the documents accompanying a consignment comply with the regulations in force in the public and animal health sectors and correspond to the consignment. These controls are followed by a physical check in the course of which samples may be taken for analysis.

#### 2.9.2. Aims

The SHIFT project envisages several elements:

- A system of information in the event of a batch being reforwarded by the official veterinarian at a frontier inspection post.
- The maintenance and use of databases on conditions governing the importation of animals and products into the Community
- The maintenance and use of databases on the importation of animals and products into the Community

These objectives are set out in the proposal for a Council Decision [COM(92) 167 final] of 4 May 1992, due to be adopted in the coming months.

The completion of the entire SHIFT project is planned over a period of at least five years, and a phased approach has therefore been adopted. The first two phases are:

# PHASE I: Veterinary information system

This phase consists in making available to the veterinarians manning the frontier inspection posts information drawn up in the official languages of the Community and relating to the veterinary conditions governing the importation into the Community of animals and animal products (list of approved third countries and of approved establishments in third countries, Community models of veterinary certificates valid for imports into the Community).

# PHASE II: System for reforwarded consignments

This system will enable the frontier posts to record and consult information relating to consignments not authorized for importation into the Community.

It should be noted that the SHIFT system of veterinary controls on imports into the Community will need to interface with the ANIMO system, which handles intra-Community movements.

# 2.9.3. Progress

During the period covered by this report, numerous actions have been launched, e.g.,

- documentary study on the paperwork exchanged in the course of veterinary controls;
- study of the Italian system comparable to the system envisaged for SHIFT;
- adoption of the veterinary information in all the Community languages
- new operational functions in FIS (DG VI's electronic journal) to provide complete multilingual support. It should be noted at this juncture that SHIFT Phase I is based on FIS. With a view to testing the technical and operational feasibility of Phase I, pilot equipment is being supplied to the Member States.
- functional analysis of Phase II.

2.10. <u>SICAMOR-ED</u> (Système d'information et coordination des actions en faveur du monde rural - Echanges des données)

#### 2.10.1. Context

A computer system for administering and monitoring actions for the rural community (FEORIENT system) is being developed by DG VI and financed by non-CADDIA resources.

# 2.10.2. Objectives

The aim of the SICAMOR-ED project is to set up a system for the exchange of data between the Commission and the Member States to supplement the FEORIENT system.

These data concern the Member States' plans, the Community support frameworks, the operational programmes and financial and economic data.

# 2.10.3. Medium-term prospects

A feasibility study should be ready for 1992.

The study - based on, among other things, interviews with all the national administrations involved - will contain a precise description of the relevant administrative procedures, a description of electronic data interchange requirements as well as quantified proposals (on costs, timetable, etc.) for the establishment of a data interchange system.

# 2.11. TREE-ED

### 2.11.1. Context

The unit responsible for forestry matters at the Directorate-General for Agriculture administers a computerized inventory of forestry damage pursuant to Council Regulation (EEC) No 3528/86 of 17 November 1986. The inventory is updated each year: the data are processed starting in November of each year and used in a report presented to the Council in about May of the year after. The new data are sent in by the forestry departments using standard report forms. Each form represents one 16 km square of a grid and gives data on the state of a sample of about twenty trees. Some 10 000 forms cover all the Member States.

Some Member States, such as Germany, produce these forms by computer, extracting the information from the databases of their national network.

Since processing the forms is a mammoth task to which the forestry division can afford to allocate only a small number of staff and a strict timetable must be adhered to, the aim of the project is to decentralize data acquisition and permit real-time error monitoring in the Member State departments concerned by developing a decentralized data acquisition module, possibly involving the installation of PCs in those departments.

# 2.11.2. Objectives

The aim of the project is to set up a system of decentralized data acquisition at the level of the competent authorities in the Member States, enabling standard summary reports of forestry damage in the Member States to be sent to the Commission.

# 2.12. PAP (Prices of Agricultural Products)

#### 2.12.1. Context

As part of its task of administering the common agricultural policy, the Directorate-General for Agriculture administers a whole range of prices of agricultural products.

These prices come from various sources: prices on Community markets and prices of imported products are communicated by the Member States, spot and future prices on the international exchanges come from information agencies, and institutional prices (reference prices, intervention prices, threshold prices, etc.) are fixed by Council Decision in accordance with the rules of the common agricultural policy.

Besides being essential factors in Commission decisions on periodic legislation (levies, aid, refunds, intervention buying), these prices are also used for other purposes, such as market monitoring and forecasting.

Many of these prices are available on the computers of the Directorate-General for Agriculture upstream and downstream of the computerized procedures which process them in various ways (AMIS system).

The Member States are informed of these prices through the Official Journal (institutional prices), various Commission publications (annual report on agriculture, "Agricultural Markets" publication), and hardcopy documents presented to the management committees.

# 2.12.2. Objectives

The aim is to give Member State administrations systematic computer access to all the agricultural prices used by the Directorate-General for Agriculture so that they can consult and process these data in good time.

# 2.12.3. Progress and medium-term prospects

At present, a subset of the institutional agricultural prices of all agricultural products subject to price arrangements is available to the Member States via FIS. Also distributed to the Member States via FIS are the Community market prices (prices on the internal market) of products subject to price monitoring rules, currently stored in the AMIS database and regularly updated under the rules in force. Improving the reliability of the data and the procedures for processing them for dissemination is a major medium-term objective.

# 2.13. AIN-ED (Aides nationales - Echange de données)

# 2.13.1. Context

The Directorate-General for Agriculture manages a computerized system listing national aid notifications. Following the Council Resolution of 2 October 1974 on the monitoring of the strict application of the rules of the EEC Treaty on State aid (Articles 92 and 93), the Member States communicate a full list of agricultural aid measures, including the planned amounts and the amounts actually disbursed. Following each update the system produces lists by Member State and by category of aid which are sent to the Member States for information and agreement.

# 2.13.2. Objectives

The aim of this project is to supplement the computerized system listing notifications of national aid with a module permitting standardized notifications to be loaded at source (Member States) and the list to be sent to the various administrations via the public

network, thus permitting local processing and the uploading of any changes to the system in place at the Commission.

The installation in the Member States of equipment permitting local processing is envisaged.

# 2.13.3. Medium-term prospects

A project feasibility study is currently being carried out and will be finalized by the end of 1992.

As it currently stands (June 1992), the study recommends the setting-up, over the medium term, of a data codification and transmission system and, over the longer term, of a more complex and complete system (based on the abovementioned system) providing advanced documentary processing facilities.

# 2.14. <u>CACTI</u> (Common Agriculture - Customs Transmission of Information)

# 2.14.1. Context

Several measures of the common agricultural policy, administered by the Directorate-General for Agriculture of the Commission, are applied in the Member States by the national customs authorities.

The main measures concerned are the arrangements for trade in agricultural products with third countries. For example, the countervailing charges on imports of fresh fruit and vegetables are essentially fixed by DG VI, communicated to the competent departments in the Member States and thence to the national customs posts.

DG XXI, for its part, integrates the nomenclature of these products in TARIC and at the same time indicates the type of measure (countervailing charge) attached to these codes. When this nomenclature changes or the scope of the measure is enlarged or reduced, the customs authorities of the Member States are informed electronically via the TARIC interface. It would be desirable for this system to include the rates of Community duties which the national customs authorities must also apply. This information is available at DG VI. The situation is the same for the other measures of the common agricultural policy.

Certain other measures which change less frequently (e.g. reference prices for wine) are administered by DG VI and communicated *inter alia* to the national customs authorities via DG XXI's TARIC interface system.

# 2.14.2. Objectives

The aim is to set up a means of communication between DG VI and DG XXI, on the one hand, and between the Commission and the national authorities on the other, which can communicate these data rapidly to the Member States.

Before this can be done, these data must be organized in such a way that they can be made available in a form of use to both Directorates-General, the computer systems which currently administer these data must be linked, and the most appropriate form, procedure and means of making them available to the Member States must be selected.

#### 2.14.3. Progress and medium-term prospects

Two pilot applications have already been identified for this project, and development started in 1991. These are the free-at-frontier reference prices of wine and the

countervailing charge on fresh fruit and vegetables. The first pilot application gave rise to an analytical dossier and the development of an application now nearing completion.

The second pilot application is nearing the end of the analytical stage.

The pre-analysis of DG XXI's TARIC II system, which provides *inter alia* for the transmission of agricultural data to the national customs authorities, presupposes preliminary processing by DG VI of the data to be extracted for TARIC II.

# 2.15. **MARKETS**

## 2.15.1. Context and objectives

The existing AMIS (Agricultural Market Intelligence System) together with IDES (Interactive Data Exchange System) and FIS (Fast Information System) serves the needs of the market divisions of DG VI for the management of the CAP. The electronic exchange of information using IDES and FIS has grown in recent years and continues to expand.

Currently AMIS consists of almost 600 separate but interrelated COBOL programs. The original concept has proved its worth and has demonstrated its flexibility by evolving to meet the changing needs of the CAP over the past ten years.

The changes currently under discussion for all aspects of agricultural policy will give rise to major changes in the needs for objective information both at the Commission and in the Member States. The purpose of the MARKETS project is, in its first phase, to establish the needs for exchanges of information relating to agricultural markets not only between national administrations and the Commission but also potentially between national administrations in the past 1992 environment of a reformed CAP. The first phase would concentrate on collecting and analysing requirements, considering the extent to which these requirements can be met by the evolution of existing and proposed systems and possibly the need for new systems.

# 2.15.2. Progress

No progress was made due to lack of resources (no budget allocation was granted for this project).

# 2.16. PHYSAN

#### 2.16.1. Context

Among the dossiers processed by the competent Commission departments (Directorate-General for Agriculture, Unit VI/BII.1 "Legislation relating to crop products and animal nutrition"), reference may be made to the following: type approval of pesticides, seed certification, food additives, plant protection (against harmful organisms).

For these dossiers, as for many others, the advent of the internal market will entail considerable changes. Community acts already adopted or in the process of being adopted provide for measures which presuppose increased cooperation and a greater degree of data interchange than in the past, at potentially very short notice. Against this background, the implementation of an efficient information system is a key factor for success.

# 2.16.2. Aims of the project

Establishment of an information system covering legislation in the field of plant products and animal nutrition in support of the internal market. The PHYSAN project is a generic project grouping together all projects relating to plant health in the context of the internal market.

A subproject, known as EUROPHYT, was identified from the very outset and, in view of the urgent need for its implementation, this subproject has been dealt with separately.

#### **Aims of EUROPHYT**

The aim of this project is to set up a plant health information system (to be known as "EUROPHYT") pursuant to Directive 77/93/EEC and its subsequent amendments (notably Article 19bis, point 6, Directive 89/439/EEC of 26 June 1989 - OJ L 212, 22.07.1989). This project seeks to promote the exchange of information on plant protection, and rapid access to such information, in support of the introduction of the single market in January 1993.

The short-term objectives of this network are to facilitate:

- the exchange of information among Member States of information on all seizures for reasons pertaining to plant health - of plants or plant products originating in third countries or in another Member State;
- the notification by the Member States of any occurrence or development, in a previously identified source, of organisms that are harmful to plants or vegetable products within the Community.

Other demands of a more or less long-term nature will also have to be met. The creation of a technical and biological database for national plant health inspectors is envisaged.

## Other projects

Apart from EUROPHYT, other subprojects have been identified, some of which are peculiar to a specific sector, with others of a more general nature affecting the entire sector concerned with legislation relating to crop products and animal nutrition:

#### Specific projects:

- system for the exchange and management of technical information on pesticides and pesticide residues,
- management of the names of plant varieties: the management of the rights of producers of plant varieties on a Community scale necessitates the introduction of a standardized system for the allocation of names to plant varieties,
- system for the management, updating and production of the common catalogue of varieties (published several times a year by EUROFFICE). This project should ensure swift and efficient communications with the Member States (source of the information) and EUROFFICE.

# Joint project:

The amount of technical information received and processed in this sector is considerable: voluminous dossiers, letters, notifications, etc., various transmission modes such as hardcopy correspondence, fax, telex, etc., and numerous correspondents. In order to carry out this work effectively, an integrated information management system must be set up.

#### 2.16.3. <u>Progress</u>

Two studies have been launched during the period covered by this report:

- preliminary study covering the entire sector, with a view to identifying the various requirements and drawing up a timetable for the gradual introduction of the overall system.
- feasibility study for the EUROPHYT network.

In order to enable Member States to collaborate on these projects, a Working Group on Plant Health Information and Data Processing has been set up (in the framework of the Working Group on Plant Health Legislation).

The meetings of this Group have provided an opportunity for the Member States to submit their projects and for the Commission to give briefings on the progress of the EUROPHYT project and of the preliminary study.

Both of these studies are due to be completed in the summer of 1992.

# 2.16.4. Medium-term prospects

Specific actions will be launched on the basis of the findings of the current preliminary study. This work should extend over a period of approximately five years.

For EUROPHYT the current feasibility study pinpoints the short-term objective (notification network) which needs to be brought into operation very quickly (Target 93). A pilot experiment is due to be carried out before the end of the year using test equipment provided by the Commission to each of the Member States. In the medium term, EUROPHYT will need to be supplemented by a technical and biological information base. The number of users will be increased, and the data interchange techniques employed should be geared towards X.400.

Among the studies envisaged in the future, mention may be made of the following:

- Structured messages in X.400
- Alarm system: feasibility study on the replacement of the telexes by another system
- Semi-structured messaging/information system interface
- Study on the technical and scientific information system: study on the classification and representation of information (scientific, geographical and technical data and images).

# 3. DETAILED PROGRAMME OF THE STATISTICAL SECTOR

# 3.1. STATEL project (STAtistiques TELétransmission)

#### **3.1.1.** Context

This project covers:

- the study of telecommunication protocols permitting file transfer, interactive access to computer applications, electronic mail and remote operation;
- the evaluation and experimentation of technical solutions such as network architectures, communication protocols or software which are at the experimental stage (X.25, X.400, MFTS, FTAM, KERMIT, uucp, etc.);

- the definition of organizational and computerized procedures for automating interchange, modifying existing applications and ensuring that security and confidentiality requirements are taken into account;
- the definition of a computer architecture detailing the hardware and software configurations to be installed by the interchange partners and the communications systems to be used (network, protocol, national servers, etc.).

### 3.1.2. Objectives

The aim of the STATEL project is to construct an architecture for electronic data interchange allowing communication between applications located in the Member States and EUROSTAT applications (e.g. communications between Member States and between Member States and EUROSTAT).

The STATEL project is aimed at making data interchange between partner bodies and EUROSTAT more efficient by:

- reducing data transmission times;
- automating interchange procedures;
- avoiding the retyping of data.
- exploiting the computerized telecommunications architecture already in place in the Member States, including the CADDIA national servers architecture

STATEL enables the computerized communication prerequisites for interconnection of the information systems to be met.

# 3.1.3. Progress

The STATEL project has been operational since 1988. The technical solutions used allow experimentation in real situations where files are transferred between Member States and EUROSTAT.

All the Member States are now involved in the pilot teletransmission trials. The transition to production and the extension of the solutions adopted in geographical terms and to other fields of statistics are impeded by the following factors:

- heterogeneous nature of computer architectures in the Member States,
- unavailability or inadequate capacity of packet switching networks (X.25) and international transit nodes,
- non-automation of the sending of data to the data-processing environment of the Member States (cf. MS-DOS),
- limitations of communication protocols (cf. KERMIT, uucp) for the authorization of reliable, secure transfers.

Faced with this situation, the STATEL project has set about defining and developing an application program interface (API') capable of supporting several communication protocols.

<sup>&</sup>lt;sup>7</sup> API : Application Program Interface.

This program interface will offer facilities for the secure transfer of files based on the X.400, FTP, UUCP and KERMIT protocols. A prototype version will be available in June 1992, followed at the end of 1992 by the definitive version for the MS-DOS and UNIX operating systems.

All of the statistical applications due to be installed in the Member States, e.g., the applications developed under the CADDIA programme, will be able to use the STATEL program interface for exchanges in both directions (Member States to EUROSTAT and vice versa).

The STATEL program interface will be able to draw on the computerized telecommunications infrastructure already in place in the Member States and, in particular, on the establishment of the CADDIA National Servers.

# 3.1.4. Medium-term prospects

The statistical applications developed under the CADDIA programme are to be adapted to the STATEL program interface. Initially, this will affect the STADIUM, IPFT, PC-SIMPLE and EDINOMEN projects.

There are also plans for the acquisition applications linked to the INTRASTAT regulations (see COMEDI project) to use the STATEL program interface.

In the light of the outcome of the experiments, of the experience acquired and of developments in the technological field, the STATEL program interface will be adapted, and new communication protocols will be incorporated (e.g., FTAM, ISDN<sup>8</sup>, etc.).

The other CADDIA sectors are examining the possibility of using the STATEL program interface.

# 3.2. STANORM project (STAtistique NORMalisation)

# 3.2.1. Context

The STANORM project was set up because of the lack of standards for the exchange of statistical data. This is due in part to the wide variety of areas of statistics combined with the large number of partners involved.

STANORM project activities are directed towards the following fields:

- standards in heterogeneous data processing environments, e.g. UN/EDIFACT standard, UNTDID (United Nations Trade Data Interchange Directory) standard,
- standards specific to certain fields of application, e.g. SGML (Standard Generalized Mark-up Language) standard, ODA (Office Document Architecture) standard, a standard which is currently being defined for the format of digital optical disks (e.g. DON, CD-ROM), etc.,
- close coupling between computerized statistical applications (e.g. ASN-1).

# 3.2.2. Objectives

The aim of the STANORM project is to make a centre of expertise on standards available to all CADDIA applications and to those responsible for them.

<sup>8</sup> ISDN: Integrated Services Data Network.

The work involves studying and testing international standards for computerized statistical applications, ensuring that they are adequate and promoting them.

The STANORM project provides application developers with expertise and advice on the selection of standardized solutions in accordance with Commission policy.

# 3.2.3. <u>Progress</u>

# (i) Heterogeneous computer environments

The STANORM project has taken an active part in action to promote, coordinate and experiment with international standards (e.g. UN/EDIFACT) within various working groups such as the Western Europe EDIFACT Board or, more directly, by encouraging the statistical group (WE/EB-MD69) set up within this structure.

EUROSTAT chairs the WE/EB-MD6 group and actively participates in the various working groups which have been set up within it:

WG1 Interchange of aggregated statistics: definition of standardized messages which can be used for the interchange and dissemination of prepared statistical information.

This group has drawn up a generic message for the interchange of aggregated data (GESMES), containing the data and associated metadata. This message was accorded status 0 at the meeting of WP4 held in autumn 1991 and will be nominated for status 1 in autumn 1993. Experiments involving the GESMES message are already under way.

WG3 Statistical aspects of code lists: methodology, definition, use and circulation of lists of codes or nomenclatures in the field of statistics, adaptation of UNTDID to statistical requirements.

This group studies the messages to be drawn up for the interchange of statistical nomenclatures used in statistical applications or by those providing statistical information.

Messages necessary for the exchange of statistical nomenclatures, their interrelationships and the interrogation of the distribution server centres are currently at the design stage. Experiments involving these messages are being carried out on the basis of distribution server prototypes (cf. EDINOMEN project). International coordination measures on this topic are being organized.

WG4 New techniques for collecting basic statistical information: facilitation of interchange of information between companies and administrations, from administrative information to statistical information.

From the replies to the questionnaire distributed among the statistical organizations with a view to identifying the EDI and pre-EDI projects and after consultations with those responsible for statistical applications in the Member States, this group has identified the statistical areas where simplification of the collection procedures for the economic operators would most beneficial:

- structural statistics on company activities and investments. These statistics are closely related to company and national accounting systems.

<sup>&</sup>lt;sup>9</sup> WE/EB-MD6: Western Europe/Edifact Board - Message Development group 6 (statistics).

- social statistics where the public administrations are payees.
- production statistics based on the declarations submitted by the companies and their representative organizations.

Discussions are currently being held with the aim of defining generic messages for the collection of questionnaires or statistical surveys.

WG5 External trade statistics: design and development of statistical messages for the collection and dissemination of international trade statistics.

This group is preparing the messages necessary for the implementation of the Community's INTRASTAT rules under the COMEDI project.

To this end, the WE/EB-MD6 group has defined a subset of the CUSDEC<sup>10</sup> customs message, known as INSTAT, which will be nominated for status 1 at the autumn meeting of WP4.

Work is also under way on the definition of messages concerning statistics on external trade with third countries (cf. STATEM message). Work on this topic is being carried out in close cooperation with the customs sector of the CADDIA programme and the WE/EB-MD3<sup>11</sup> customs group.

WG6 Balance-of-payments statistics: design and development of statistical messages for the collection of information needed to draw up balance-of-payments statistics.

The scenario for the collection of the statistical information needed in order to work out the balance of payments is currently being finalized with the banks, the central banks and the statistical organizations.

For the purposes of these collection flows, five messages need to be drawn up (BOPSTA, BOPDIR, BOPCUS, BOPINF, BOPBNK).

International organizations such as the International Monetary Fund and the World Bank are taking an increasing interest in this work.

Steps are being taken to facilitate collaboration with the representatives of the banking sector (cf. WE/EB-MD4<sup>12</sup> Finance).

The work of the WE/EB-MD6 group is supported by the national statistical institutes of all the Member States (including EFTA Member States), ministries, trade organizations, trade facilitation groups and European and international standardization bodies.

Highlighting the crucial impact of EDI on the work of statisticians, the architecture of statistical systems in the run-up to the single market in 1992 and their interconnection must be accompanied by appropriate measures to coordinate and promote work and to support specific actions.

<sup>&</sup>lt;sup>10</sup> CUSDEC: CUstom DEClaration.

WE/EB-MD3: Western Europe / Edifact Board - Message Development group 3 (Customs).

WE/EB-MD4: Western Europe / Edifact Board - Message Development group 4 (Finance).

The STANORM project works in collaboration with:

- the STADIUM project as regards the introduction of the GESMES message, once it is finalized, as the standard collection message,
- the COMEDI project as regards helping to design and implement the INSTAT and STATEM messages.

In addition to the support given to the definition of standardized messages, the team in charge of the STANORM project participates in the specification of the computer applications to be installed for the introduction of EDI solutions (cf. EDIFACT translators).

# (ii) Standards specific to fields of application

The STANORM project, in collaboration with the STRINGS project, has studied the use of the SGML (Standard Generalized Mark-up Language) standard for the interchange of statistical information for publication and dissemination. These studies resulted in the adoption of mark-up languages (cf. SGML) as a technique for describing information (text, tables) exchanged between publication and dissemination environments (printers, photo-typesetting machines, electronic servers, etc.) as well as between application-oriented and publication environments.

The SGML standard enables statistical documents to be exchanged without loss of structural information. Software providing SGML interfaces is available on the market to facilitate the distribution, consultation, display and re-use of statistical documents.

The statistical sector plans to define standard structures for SGML statistical documents. Technological monitoring of developments involving this category of standard is essential if the permanence of the solutions adopted is to be assured (e.g., SGML/CALS, ODA).

Little progress has been made on the standards currently being formulated for the format of digital optical disks (e.g. DON, CD-ROM). No standard is at present forthcoming. However, tools enabling application-oriented environments to interface with the optical disk manufacturing environment are coming on to the market. These tools need to be evaluated.

Digital optical disk technology needs to be investigated as it is useful for storing large amounts of information on a compact and widely used medium.

# (iii) Close coupling techniques

Little progress has been made on experiments with tools supporting standards such as ASN-1, since very little software has become available.

However, application-to-application close coupling techniques have made good progress under the PC-Simple project.

#### 3.2.4. Medium-term prospects

#### (i) Heterogeneous computer environments

Work will focus on EDI standardization related to the WE/EB-MD6 Statistics group. The messages defined by the WE/EB-MD6 group, such as GESMES and INSTAT, will be implemented in dispatch and receipt applications (Member States and Commission).

Other statistical sectors (e.g., company statistics, services, tourism, transport) are interested in activities involving the standardization of messages for direct collection from the economic operators.

# (ii) Standards specific to fields of application

Work will cover experimentation with the interchange of statistical reports in SGML format with specialized partners such as publication offices, printers and information offices.

Another aim of this work will be to bring the use of mark-up languages more into line with the SGML standard.

Evaluation of software supporting the SGML standard will continue, with special reference to the consultation, display and retrieval of statistical reports based on user environments in the Member States.

# (iii) Close coupling techniques

Evaluation of the software and programme libraries supporting the ASN-1 standard will continue.

# 3.3. PC-Simple

#### 3.3.1. Context

The PC-SIMPLE project has been devised to access EUROSTAT dissemination databases from a personal computer connected to a computerized telecommunication network.

The principal databases involved are CRONOS<sup>13</sup>, REGIO<sup>14</sup> and COMEXT<sup>15</sup>.

The internal architecture of PC-SIMPLE will make it easy to add new EUROSTAT dissemination databases.

The sets of data are defined and selected by means of a description which is generated for each user; this description contains metadata such as the structure of the databases, associated literals and descriptive information.

The information retrieved must be reusable in the user's environment, particularly in the form of statistical tables.

# 3.3.2. Objectives

PC-SIMPLE is used to define, select, retrieve and structure sets of data to be retrieved from dissemination databases.

# 3.3.3. Progress

The spreadsheet format generated is now compatible with SYMPHONY, LOTUS, EXCEL, etc. Other formats have also been made available to users, in order to open up the PC-SIMPLE software to other software.

<sup>&</sup>lt;sup>13</sup> CRONOS: database of time series.

REGIO: database of regional statistics.

<sup>15</sup> COMEXT: database of external trade statistics.

Additional tools for displaying and manipulating information retrieved from PC-SIMPLE in multi-dimensional tabular form have been developed. These tools, grouped under the collective name of CUB.X, seek to manipulate data upstream and downstream of PC-SIMPLE and to facilitate the integration of the latter into the user's environment. For instance, these tools enable information retrieved from PC-SIMPLE to be converted into formats such as GESMES (cf. STANORM).

The number of installations has increased considerably during the reference period.

Automatic installation, configuration and documentation update procedures have been improved.

The major problem, however, remains the mediocre quality of existing communications protocols (e.g., file transfer, execution of remote procedures) between the user environment (situated in the Member States) and the EUROSTAT environment where the EUROSTAT dissemination databases are located.

Various "message mode" communications techniques have been tested, as has a version based on the new STATEL principle (cf. STATEL project).

The PC-Simple tool exists in two versions:

- one uses non-standardized communication primitives (cf. KERMIT software) for external users,
- the other exploits the specific EUROSTAT computer environment (e.g. ETHERNET local network) for internal users.

# 3.3.4. Medium-term prospects

#### Work will now cover:

- incorporation of ideas on the formalization of data structures and the distribution of the PC-SIMPLE application (e.g. pre-standard definition of data formats and client/server protocol),
- integration of the various communication techniques (cf. STATEL),
- expanding the product by introducing new databases and new functions requested by users, particularly in the case of the COMEDI project,
- extension and integration of the tools (CUB.X) in the collection and distribution of statistical information phases (these developments to be coordinated with current work on interchange standardization cf. STANORM project),
- further distribution of the product in the Member States and provision of support for new configurations (e.g. UNIX computers).

# 3.4. STADIUM project (STAtistical Data Interchange Universal Monitor)

#### 3.4.1. <u>Context</u>

EUROSTAT currently receives statistical data transmitted mainly on magnetic tape (approximately 10 000 tapes a year), on diskette, on paper and by data transmission (cf. STATEL project). The volume of data received is roughly 3 000 million characters a year, of which some 20 million are on paper and therefore require typing.

At present, each EUROSTAT section uses its own organizational and technical procedures for data collection. These procedures are supported by computer environments which are heterogeneous and, quite often, placed under an operating responsibility external to EUROSTAT.

# 3.4.2. Objectives

The STADIUM project is aimed at setting up a collection centre for statistical data which will enable EUROSTAT to handle the process of receiving data regardless of the type of physical medium used (e.g. paper, diskette, electronic transmission, magnetic tape) for all interchanges between partner organizations in the Member States and EUROSTAT.

The STADIUM project handles the monitoring, management and archiving of dispatches before routing them to the target statistical applications.

The aims of the STADIUM project are:

- to improve the effectiveness of data collection by setting up a specialized infrastructure and to rationalize and automate communications between the various computer environments (senders and receivers);
- to make computer systems more independent by specifying clearly defined technical and organizational interfaces;
- to help take account of constraints and directives concerning the confidentiality of statistical data;
- to rationalize the flow of statistical information, especially by reducing redundant flows and using multiple-routing techniques;
- to introduce gradually new data transport techniques (e.g. data transmission, new media) without forcing any modification of statistical applications;
- to introduce standards covering the content, structure and format of data transmitted (cf. UN/EDIFACT, ASN-1).

For some of the above items, the STADIUM project will make use of the results obtained by the STATEL and STANORM projects.

# 3.4.3. Progress

The STADIUM project has been operational since the end of 1989.

Production in the Member States started early in 1990 with the definition of dispatches to the reference base. Since then the use of the STADIUM service has been increasing regularly.

The dispatches cover several fields of statistics, including business activity indicators for industry, energy, steel, weather and agriculture.

Such a tool must be made available and adopted for all electronic data transmissions if electronic data interchange is to become generalized (cf. EDI).

In the case of dispatches received by electronic data transmission, STADIUM fully automates the recording and transfer of the statistical data to the target applications.

The operational implementation of STADIUM as a service offered to users highlights the relative importance of organization compared with technology. The STADIUM project

provides an opportunity for full-scale testing of the technical and organizational complexity of future EDI projects.

The envelope used for STADIUM dispatches is written in UN/EDIFACT syntax, and software (STADIUM-MS) has been developed for installation in the dispatch environment.

The STADIUM-MS software is available in MS-DOS and UNIX environments, in interactive and command modes.

The pilot trials undertaken mean that work can now start on promoting awareness and training partners in EDI techniques (communication aspects, protocols, standards, organization).

Extensions to the STADIUM project have been specified following the analysis of the first production period. The requirements of the COMEDI project have also been taken into consideration.

#### The extensions will be concerned with:

- use of the results of the STANORM project and work carried out by the WE/EB-MD6 Statistics group, particularly regarding the description of data using standardized messages (cf. GERMES);
- consolidating the architecture by developing a client/server protocol between the sender and recipient environments; the STADIUM-MS software will need to be adapted accordingly;
- improving the user interface for sending, follow-up of reception, error detection and error recovery tasks and the dispatch of acknowledgments of receipt by electronic mail or facsimile;
- the extension made to the STADIUM data model in order to take better account of the variety of means of dispatch of statistical data between EUROSTAT partners: frequency, content, batching;
- studying dissemination mode operation on a subscription basis, whereby implementation is made possible by the availability of STATEL project "store and forward" telecommunication primitives;
- modularity and portability of the STADIUM system with a view to its installation in the Member State environments;
- integration in the computerized telecommunications environment, whereby the user notification mechanisms will be integrated with the electronic mail and the facsimile dispatch systems.

# 3.4.4. Medium-term prospects

The new version of STADIUM (Version 2) will be available by the end of 1992. Installation and production start-up are planned for early 1993.

The STADIUM project will play a key role in the introduction of EDI techniques in the statistical organizations with regard to the statistical information collection and dissemination phases, notably in the context of the COMEDI project.

The establishment of the system on an operational scale will require a major effort as regards the organization and adaptation of the existing interchange procedures. Interfaces will need to be developed and computerized applications worked on, in order to automate the exchanges. As a result of rationalization, the statistical organizations will be able to

operate more efficiently and achieve a better degree of coordination. The issues at stake are highlighted in the initial reports to emerge from the DSIS<sup>16</sup> study.

The level of service offered will depend on progress made in the STANORM project (cf. standards and tools which support them) and STATEL project (cf. telecommunication architecture and high-level communication protocols).

# 3.5. STRINGS project (STatistical Report INtegrated Generation Service)

#### 3.5.1. Context

The statistical reports may take such varied forms as regular or one-off publications, pages in electronic bulletin boards or structured downloading of information from dissemination databases.

A statistical report is made up of a structured set of text components (analysis, comment, methodological notes), tables (numerical information and associated wording), graphics and illustrations.

The STRINGS project is aimed at facilitating the integration of these various components (e.g. text, tables, graphics, images) which appear in a publication by adopting and using interfaces that have been standardized with the reference environments containing the statistical information.

Publications produced under STRINGS are produced as independently as possible from the final dissemination medium (e.g. hard copy, electronic documents, pages in a data communications server, digital optical disks).

### 3.5.2. Objectives

The aim of the STRINGS project is to construct an architecture for the production and dissemination of statistical information by means of statistical reports in electronic format.

The ultimate objectives of the project are to increase the efficiency of production, improve quality and promote a wide variety of dissemination media and the re-use of statistical information.

#### 3.5.3. Progress

The activities of this project are organized in two ways:

- a comprehensive analysis of the process of producing and disseminating statistical reports (conceptual, technical and organizational aspects);
- a pragmatic approach based on experimentation with the technical solutions now available on the electronic publishing market which can be used to validate the options adopted by the comprehensive approach.

The STRINGS project initially set itself the task of studying the state of the art and defining a strategic and methodological approach. This initial phase resulted in the selection of a software and hardware infrastructure which made it possible to continue the work (particularly for the integration of tabular components).

DSIS: Distributed Statistical Information Services (DSIS).

Having defined the approach and selected an infrastructure, STRINGS developed a set of tools and masks which make it possible to integrate components produced in the EUROSTAT computer environment (chiefly text and tabular components).

Pilot trials have highlighted the technical and organizational constraints.

The tools developed by STRINGS have been put into production for publishing since 1990.

#### The STRINGS tools environment includes:

- interfaces with spreadsheet formats (SYMPHONY, LOTUS, EXCEL, SAS, etc.),
- interfaces with generators of statistical tables (OSIRIS, ACUMEN, etc.),
- interfaces in mark-up language format (e.g. extracts from statistical, nomenclature or documentary databases),
- interfaces with electronic publishing software (e.g. Ventura Publisher, Interleaf TPS4),
- a production environment listing the associated publications, authors and style catalogues.

The current state of the STRINGS infrastructure is such that statistical reports based on the availability of data in the reference applications environment can now be produced on a completely automated basis. Reports can be produced in printable format (e.g., POSTSCRIPT) or mark-up language format (e.g., SGML). The STRINGS infrastructure is gradually taking over responsibility for an increasing proportion of the statistical reports produced within EUROSTAT, and user training sessions have been organized.

As a result of STRINGS, it has been possible to set up a system for the interchange of statistical reports in electronic format.

# 3.5.4. Medium-term prospects

# Work will cover:

- developments permitting the production of statistical reports in which all types of components are uniformly incorporated: text, tables, graphics and images,
- the start-up of pilot trials for the transmission of publications in electronic format (e.g. SGML) with specialist partners (e.g., printers, EUROP<sup>17</sup>),
- bringing the mark-up language used in the STRINGS interfaces into line with the SGML standard, so as to ensure that it can be re-used in target environments,
- the integration of tools permitting the manipulation, consultation or retrieval of statistical information in electronic format produced by STRINGS. A study will be carried out on the software available for this range of tools based on structured representative samples of the electronic reports (e.g., SGML),
- the technical upgrading of the software used in the STRINGS architecture and the adaptation of the interfaces (e.g., introduction of the new Interleaf 5 version).

The technical solutions adopted by the STRINGS project (hardware, software, standards) in the field of electronic publishing can be used to study and test the preconditions for using

EUROP: Office for Official Publications of the European Communities.

computerized telecommunication tools to exchange statistical reports in rich text format for re-use by the recipient in the Member States.

The availability of SGML interfaces at the output of the STRINGS infrastructure will enable the first interchanges of electronic reports to be envisaged with specialist bodies (e.g. Publications Office of the European Communities, printing firms, database hosts, etc.) and to set up pilot trials for the dissemination of information with national statistics institutes in all the Member States, ministries, trade organizations, printers and database hosts which receive EUROSTAT publications.

The development of these exchanges of electronic reports will highlight the need for recourse to standardized solutions. There are plans to step up activities in the field of standardization (cf. SGML, CALS, ODA) and the definition of a common strategy on this subject with the Member State administrations concerned. A major coordination effort will need to be planned in order to obtain the supreme prize, viz. the upgrading and re-use of statistical information.

# 3.6. EDINOMEN project (EDI server for the dissemination of NOMENclatures)

#### 3.6.1.Context

The various statistical sectors resort to statistical nomenclatures to translate concepts, methods and variables used to observe phenomena and monitor their development. The statistical nomenclatures (activities, products, services, countries, geographical or territorial units) are devised and drawn up by statistics groups which play a considerable coordinating role at national, European and international level.

The statistical nomenclatures are often interlinked (e.g., activities and products, countries and territorial units). The retention of these links determines the cohesion of the statistical system as a whole (national, European, international) and the lasting ability of investment to establish these links between nomenclatures.

Systems for the collection of statistical information from the economic operators require that the nomenclatures (classification systems) be available at the input stage. Similarly, the upgrading and re-use of the statistical information are based on the premise that the distribution systems provide not only for the exchange of data (figures) but also of the classification systems used (e.g., codes, multilingual labels, explanatory notes, annotations).

# 3.6.2. Aims

The aim of the EDINOMEN project (EDI server for the dissemination of nomenclatures) is to set up an efficient infrastructure for the exchange of nomenclatures covering the various categories of users:

- nomenclature specialists belonging to organizations responsible for the compiling, upkeep and interlinking of nomenclatures,
- statisticians using nomenclatures managed by other statistical organizations,
- the general public, e.g., economic operators and other administrations wishing to use the nomenclatures either for the purpose of replying to surveys or statistical questionnaires or for consulting statistical information.

The EDINOMEN project has a crucial role in the dissemination and use of the statistical nomenclatures and their upgrading. It will provide a means of meeting the increasing demand for statistical nomenclatures pertaining to statistical organizations following the

introduction of new Community rules (e.g., INTRASTAT and Combined Nomenclature (CN) rules, NACE<sup>18</sup> Regulation, PRODCOM Regulation).

# 3.6.3. Progress

The EDINOMEN project was launched at the beginning of 1992 following the organization of a specific meeting of the CADDIA Sectoral Committee on Statistics in late 1991 on the topic "system for the exchange of nomenclature". The meeting was attended by representatives from numerous national, Community and international organizations responsible for the management or use of nomenclatures (e.g., INSs, EUROSTAT, ILO<sup>19</sup>, DG XXI - Customs, FEBI<sup>20</sup>).

As a first step, a fundamental analysis was carried out to clarify the position of the EDINOMEN project in relation to the other nomenclature server projects currently under development in certain administrations (e.g., consultation server).

This functional analysis has identified the following EDINOMEN server functions:

- importation of nomenclatures from a reference environment,
- management of distribution on a subscriber or exchange-query basis,
- construction of exchange queries for remote users,
- retrieval and construction of EDI messages containing the nomenclatures and/or cross-references.

A prototype EDINOMEN server is currently being developed. An initial version will be available in mid-1992, with the final version planned for the end of 1992.

This prototype will be interfaced with the STATEL project telecommunication primitives, so as to handle all aspects relating to the interchange mechanisms between the server and other servers of the same type, the query construction mechanism or the general public accessing the EDINOMEN server through public messaging services of the X.400 type.

Extremely promising work is going ahead in the area of EDI message standardization under the STANORM project (cf. WE/EB-MD6/WG3 - statistical aspect of the code lists). Three messages using the UN/EDIFACT standard are currently being developed (CLASET, CLATAB, CLAREQ).

# 3.6.4. Medium-term prospects

The work will cover the following aspects:

- coupling of EDINOMEN servers in operational environments,
- feeding the server with reference nomenclatures, registration of subscribers,
- experiments involving the exchange of nomenclatures between environments equipped with EDINOMEN servers or query construction facilities,

NACE : Nomenclature générale des Activités Economiques dans la Communauté Européenne.

<sup>&</sup>lt;sup>19</sup> ILO: International Labour Organization

<sup>&</sup>lt;sup>20</sup> FEBI: Fédération Européenne des Branches Industrielles.

- adaptation to standards (cf. EDIFACT messages or SGML representations defined under the STANORM project) of the interfaces for importing or exporting nomenclatures in the EDINOMEN server,
- interfacing of the EDINOMEN servers with other applications using the nomenclatures, e.g, consultation server.

The EDINOMEN project and the measures to standardize nomenclature exchange are increasingly attracting the attention of the organizations working on the nomenclatures or of the standardization bodies (e.g., ISO<sup>21</sup>, UN/EDIFACT), and a major coordination and promotion campaign is planned. The standardization measures are basic, and a synergy between the national and the Community administrations must be created.

# 3.7. External-trade statistics

# 3.7.1. Collection of INTRASTAT data - COMEDI project

# i) Context and aims

In view of the opening of the internal market and having regard, in particular, to Council Regulation (EEC) No 3330/91 on INTRASTAT which lays down procedures for compiling intra-Community trade statistics with effect from January 1993, the aim of the COMEDI project is to establish and promote a computerized infrastructure designed to simplify the following operations:

- inputting of INTRASTAT declarations for companies with a statutory obligation to make such declarations;
- collection, validation, approval and distribution of statistical data on trade in goods for the competent national departments.

In particular, this infrastructure will seek to take advantage of EDI<sup>22</sup> and OCR<sup>23</sup>.

The essential elements of the COMEDI infrastructure will need to be operational by the first quarter of 1993, in order to cope with the processing of the first wave of INTRASTAT declarations based on the BTI. In view of the impending deadline, the emphasis must be placed on tangible results and pragmatic conclusions.

The target public is made up of companies having a statutory obligation to submit declarations (estimated to number 350 000), competent national departments, EC Commission departments and economic operators likely to be involved in the formulation and management of the COMEDI infrastructure.

The COMEDI project is supervised by the COMEDI Task Force, in which all Member States play an active role.

Although they were set up under the priority provisions of the INTRASTAT Regulation, the resulting computerized systems will be sufficiently generic to meet the collection and distribution needs of other statistical sectors.

<sup>&</sup>lt;sup>21</sup> ISO: International Standards Organization.

EDI: Electronic Data Interchange.

OCR: Optical character recognition.

# ii) Description

As a result of the priority accorded to the COMEDI project by the Commission at the end of 1991 and in accordance with the recommendations of TF COMEDI, the CADDIA component of this project has been restructured as follows:

#### A. Promotion:

- Definition of a plan of action;
- Development of promotional instruments and backup tools at Community level;
- Involvement in the promotional campaigns conducted by the competent national departments;

#### B. Collection and distribution of data:

- Survey on the level of BTI computerization.
- INTRASTAT Data Entry Program (IDEP): development of software for the input of INTRASTAT electronic forms on a personal computer (MS-DOS) in respect of the BTI.
- Systems for the automatic reading of diskettes and the sending of facsimiles: installation in the competent national departments of such systems in order to automate the reading of the declarations drawn up with the help of the IDEP and the transmission of facsimile reminders.
- Pilot tests in the Member States.
- EDIFACT standardization of the INTRASTAT declaration through the definition of a standardized message subset of the customs declaration message (CUSDEC/INSTAT).
- System for the optical reading of INTRASTAT declarations.
- System for the inputting of declarations by means of videotex.
- System for managing the registration of INTRASTAT declarations for the competent national departments: integration of the INTRASTAT specifications in the STATEL and STADIUM projects with a view to managing the flow of declarations and associated data (errors, reminders, etc.).
- COMEXT CD-ROM: extension of the capacity of the COMEXT CD-ROM for adaptation to INTRASTAT and extra-Community trade after 1993.
- System for managing the distribution of the INTRASTAT aggregated data: integration of the INTRASTAT specifications in the STRINGS and PC-SIMPLE projects to manage publication and access to the INTRASTAT statistics.
- Project management.

# C. Adaptation of the national systems to INTRASTAT

Assistance to the competent national departments in adapting their computerized systems to the monthly production of INTRASTAT tapes for transmission to EUROSTAT.

#### D. Combined Nomenclature:

- Indexing and translation of the Combined Nomenclature (CN) texts.
- Software for accessing the Combined Nomenclature: development of PC (MS-DOS) software for the hierarchical indexed accessing of official and self-explanatory CN texts.
- Nomenclature server: integration of the INTRASTAT/NCS specifications in the nomenclature server project.

#### E. Guideline scheme

Definition of a plan of action for the introduction of a target system integrated in the Community programme on the setting-up of trans-European networks (TENs) for the collection, processing and dissemination of INTRASTAT data.

This guideline scheme will use the results of the feasibility study launched by the statistics sector with a view to defining a framework for the development of Distributed Statistical Information Services (DSIS).

# iii) Progress and medium-term prospects.

#### A. Promotion

A detailed plan of action ranging over the INTRASTAT promotional campaign measures has been drawn up. This plan of action was approved by TF COMEDI on 18 May 1992.

The plan of action determines the promotional instruments and back-up tools to be developed at Community level as well as the framework for Community support for the national promotional campaign being conducted by the competent national departments.

The production of promotional instruments and back-up tools at Community level is currently under way.

Work is going ahead on the preparation of contracts with the competent national departments with a view to organizing assistance for the national promotional campaigns.

# B. Collection and dissemination of data

The results of the surveys on the level of BTI computerization are available for the following Member States: United Kingdom, France, Spain, Greece, Luxembourg and Belgium. Surveys are still being carried out in the Netherlands, Germany, Denmark, Italy, Ireland and Portugal. A Community summary will be drawn up during the third quarter of 1992.

Prototypes of the IDEP software have been developed by Portugal and the Netherlands and are undergoing evaluation by all the Member States. A call for tenders for a Community version was issued in June 1992, with approval of the

product being envisaged in November 1992 for distribution in the Member States concerned.

Systems for reading and writing diskettes or dispatches and for receiving facsimiles from personal computers will be the subject of a call for tenders, to be published in the Official Journal in July 1992, with installation being envisaged during the first quarter of 1993. All the Member States, with the exception of Denmark and the Netherlands, have asked to be equipped.

Pilot tests involving the collection of INTRASTAT declarations in EDI mode (diskettes and telecommunications) are currently being conducted in Luxembourg, the Netherlands, France and Portugal. The results will be featured in a Community summary at the end of 1992.

The CUSDEC/INSTAT message conforming to the UN/EDIFACT standard has been adopted in Article 7 of the draft Commission Regulation on statistical information media in connection with trade statistics between the Member States. The Commission will be publishing a user guide during the third quarter of 1992. The CUSDEC/INSTAT message will be retained and supplemented by accompanying messages.

During the second half of 1992 and the first quarter of 1993, the Federal Statistical Office (Statistisches Bundesamt) will be carrying out a feasibility analysis, based on prototyping, of a system for the optical reading of INTRASTAT declarations. The conclusions of this study will determine whether such systems are eventually produced in other Member States.

The system for inputting declarations by videotex was one of the aspects considered when defining the problem. Further action to be taken in connection with this project is under discussion, notably with the French services responsible for external trade statistics (DGDDI).

Work on an analysis of the needs of the competent national departments regarding the actual management of the registration of declarations will begin during the third quarter of 1992. The conclusions will be incorporated in the development of the STATEL and STADIUM projects, extensively described elsewhere in this report.

The COMEXT CD-ROM is currently undergoing extensions both of a functional nature (version under MS-WINDOWS, multi CD-ROM, user manual, on-line help) and in terms of content (addition of the NACE and SITC nomenclatures). These developments will be included on the monthly COMEXT CD-ROM at the end of 1992. A feasibility analysis will also be carried out at the end of 1992 on the integration of the INTRASTAT and tariff data.

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The STRINGS and PC-SIMPLE projects, extensively described elsewhere in this report, will be adapted to take account of the specific features of the INTRASTAT statistics.

A back-up team to help with the management of the collection and dissemination of data will be operational in September 1992. In particular, it will be responsible for supervising the contracting parties, approval tests, monitoring the installation in the Member States of the various systems developed (e.g., diskette readers, facsimile software).

# C. Adaptation of the national systems to INTRASTAT

During the third quarter of 1992, contracts will be concluded with all the competent national departments with a view to adapting their production systems to the requirements of INTRASTAT and, in particular, so as to enable them to produce the EUROSTAT data on time.

#### D. Combined Nomenclature

An alphabetical hierarchical index is currently being drawn up to facilitate access to the Combined Nomenclature from an index of the US Bureau of Census, provided for the purpose of accessing the Harmonized System (HS). This index, together with the self-explanatory texts, will be translated into the nine Community languages by the end of 1992.

The Combined Nomenclature (CN) will be disseminated mainly on diskette, accompanied by access software which will also be incorporated in the IDEP software. This facility will be available at the end of 1992 along with the IDEP.

The nomenclature requirements (exchange, availability, dissemination) of the INTRASTAT system will be incorporated in the Nomenclature Server project described in detail elsewhere in this document (cf. EDINOMEN).

#### E. Guideline scheme

A guideline scheme will be implemented during the second half of 1992 and the first half of 1993 with the object of defining, in the context of the Trans-European Networks (TENs), the target architecture for a system for the collection, processing and dissemination of INTRASTAT data. The work will be supervised in its entirety by TF COMEDI and will need to be geared to the statistical, organizational and operational aspirations and objectives of the Member States and EUROSTAT.

# 3.8. Expert system for analysing and estimating world trade data

#### 3.8.1. Description and objectives

The expert system for analysing and estimating world trade data has the following objectives:

- automate the ongoing estimation of world trade data,
- harmonize the estimates.
- investigate and report disharmonies in the data.

The WORLD TRADE SYSTEM (WTS) was previously known as the "Système expert pour les données manquantes". The WTS is made up of three sub-systems: the extraction, the knowledge system and the estimation system.

The extraction system retrieves world trade data from four major data bases, translates it into one common format and transfers it to the knowledge system.

The knowledge system examines the available data and looks for redundancies, inconsistencies and for gaps. It selects the best from the redundant data. For the gaps it activates the estimation system. It reports the inconsistencies and resolves them when possible.

The estimation system uses statistical algorithms on the available data to estimate the data that is not yet available. The three algorithms are: counterpart, univariate (exponential smoothing), multivariate (linear regression).

The chief beneficiaries of the WTS will be trade analysts. Analysts cannot wait for production data bases to be completed before they begin to analyse the current developments in world trade. They need a certain level of harmony in their data and estimates. This harmony is equally necessary in estimates and in data.

Today estimates of world trade data are published by UNSTAT<sup>24</sup>, IMF<sup>25</sup>, OECD<sup>26</sup> ... These estimates are done in different nomenclatures, different levels of aggregation, for different regions, different product categories etc.. They cannot be compared in an efficient way. The methods used for estimating have been published only by the IMF. For the other institutions, the user must have faith. Some of this estimation is manual.

The WTS will improve this situation. The sources of data and the methods of estimation will be known to the users. The WTS lacks the insight and intuition of human beings. But it is more objective; given the same data, it will produce the same estimates. It will even adapt to its changing environment: once an old estimate has been replaced by new data, it will correct the other old estimates. Because the estimates and data depend on each other in complex ways, a certain amount of "automated deduction" is needed to manage WTS.

The target users in the Member States of WTS are:

- National Statistical Institutes,
- research institutes,
- data hosts that receive Eurostat information and publications.

This WTS project will make it possible to improve the quality and reliability of the external trade statistics supplied to users.

#### 3.8.2. Progress

A new version of the Prolog environment has been acquired, installed and put into service. A detailed design for the production version of the WTS was produced.

The COMEXT database and the UN Statistical Year-book (which is available on tape) will be used as additional sources of input. Estimates will be presented in NACE as well as in SITC.

The production version of the extraction system has been implemented for the IMF data.

More evidence for discrepancies in world trade data has been published in the 1990s than ever before. Additional filters against data of uncertain quality are being designed and will be implemented.

<sup>&</sup>lt;sup>24</sup> UNSTAT: United Nations Statistical Office.

<sup>25</sup> IMF: International Monetary Fund.

OECD: Organization for Economic Cooperation and Development.

The following documentation is now available:

- Documents describing the various components of the expert system and the algorithms used,
- Report on the study of existing correlations between a group of countries.
- Description of programs for updating local databases in the expert system with data from other sources (COMTRADE, IMF, CEPII).
- Design document for the production version of the WTS

The first estimates of total trade flows should be available in November 1992.

# 3.8.3. Prospects

# i) Short-term:

- world coverage for total trade flow,
- trial consultation of the expert system by the EUROSTAT internal users,
- use of the expert system by the Member States via STATEL
- preparation of a user guide.

# ii) Medium-term:

- world coverage for the SITC<sup>27</sup> 1 digit flows,
- insertion of geo-economic classification codes,
- use of the expert system to supply a 'World' value,

# iii) Long-term:

- world coverage for NACE classification in 26 categories,
- augmenting the knowledge system with facts from the field of economics,
- augmenting the estimation system with such methods as Kallman filters, non-parametric regression, etc.

# 3.9. Agricultural structures database: EUROFARM project

### 3.9.1. Context and objectives

The aim of the Community survey on agricultural holdings is to provide the most comprehensive information possible on the structure of Community agriculture. This project seeks to place at EUROSTAT's disposal the individual data on agricultural holdings so as to permit *ad hoc* analyses and monitoring of the Common Agricultural Policy (CAP).

The main problem is that of providing the necessary guarantees to the Member States regarding the non-distribution outside EUROSTAT of the individual data, which are covered by statistical secrecy. From the Commission's point of view, this represents a

<sup>&</sup>lt;sup>27</sup> SITC: Standard International Trade Classification.

major investment the results of which will ensure the avoidance both of gaps and delays (frequently serious) for the Commission departments as well as of the high costs incurred through requests to the Member States for specific statistical compilations.

Initially, a direct link will be established with the Federal Republic of Germany's Statistical Office in Wiesbaden, where a database similar to that developed at EUROSTAT is due to be set up.

# 3.9.2. Progress

- The individual data validation programs have been sent to the Member States, not all of which have been able to install and operate them on their computers.
- The standard tables and *ad hoc* tables can be drawn up with the help of the SAS software. The processing procedures to guarantee confidentiality and evaluate reliability have been defined in greater detail following the meeting of the working group on agricultural statistics held in December 1991.
- The procedure for the approval of the tabular results is currently being drawn up. A proposal will be made at the meeting of the working group on agricultural statistics in June 1992.
- Consultation of the base for the dissemination of EUROFARM tabular data is now operational.
- Work is in progress on the creation of the environment necessary for connecting the national statistics institutes, the agriculture ministries of the Member States and the Commission departments. A number of Member States have already been connected.
- Procedures to ensure the protection of sensitive data are operational.
- The background data (surveys 1975 to 1987) are currently being transferred to the EUROFARM Tabular Data Bank (BDT).

# 3.9.3. Medium-term prospects

- During the second development phase, it is planned to set up a facility for transferring data to local sites in the Member States, where authorized users will be able to carry out their own processing. Using software developed at EUROSTAT (STATEL, PC-SIMPLE and CUB.X), it will be possible to transfer, consult and prepare data at the local site.
- Representative samples of the census data from Spain, Portugal and Italy will be prepared as soon as the census data are received.
- A publication containing the main results of the 1989/90 survey is planned.
- A CD-ROM for the dissemination of the results of the 1975, 1979/80, 1984, 1985 and 1987 surveys is currently being prepared.
  - A complete copy of the results of the 1975 to 1987 surveys is necessary in order to ensure the preservation of all the information contained in the FSSRS (Farm Structure Survey Retrieval System) base.
- In view of the fact that certain parts of the EUROFARM software are undergoing tests by users, the possibility of modifications designed to provide an improved service to those users cannot be ruled out.

# ANNEXII

# COMMISSION OF THE EUROPEAN COMMUNITIES

06 XIII

Telecommunications, Information Industries

and Innovation

C A D D I A

WORKPLAN

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This document provides an overview of the initial workplan that was agreed by the CSC in February 1986 in order to achieve the objectives of the CADDIA long-term development programme. This initial plan is subject to continuous review and updating as necessary on the basis of technical progress reports and recommendations prepared by the Sectoral Groups of the CADDIA Steering Committee.

b. 63	p. 4	<b>9</b> 6 . d	p. <b>83</b>
1 - Agricultural Projects	2 - Customs Projects	3 - Statistical Projects	4 - Joint Projects

WORK PLAN SECTOR	: AGRICULTURE			
ject t	Project No	1986		-8861
AMIS (Agricultural Market Intelligence System)	A	Completion and consolidation. Implementation of new processing required by the accession of Spain and Portugal to the Community (e.g. management of STM).	Adaptation of the AMIS database to the Harmo- nized System nomenclature and maintenance of what already exists	Continuation of the work depending on changes in agricultural regulation
FBF (EAGGF Budget Forecasting)	. A.	Start of development of Continuation and com- The new requirements wi applications concerning pletion of the imple- te taken into account budget forecasts with mentation of applica- under the AMIS system gradual implementation tions. Final entry into	Continuation and completion of the implementation of applications. Final entry into service	The new requirements will the new requirements will te taken into account under the AMIS system
nn			Starting of tests and entry into service. The Member State Administrations will be invited to take part in start-up. munications, protocols, et.	Expansion of the facilities offered by FIS dependenced by FIS dependenced by FIS dependenced by FIS dependence of the facilities of the fa
APACO (Actes Periodiques Agricoles et Cüntès de gestion)	A.4. The rational parts of final control		system is also ope— Direct connection of onal for Spanish and the new office automation uguese and is being equipment to the AGREC emented for Greek. telex service allation of new Connection of the office at a facilities for automation equipment cata acts via the public data containing numeric data acts via the Office of (AMIS) Communication to the Member States of numeric data published in the Official Journal through the FIS application (See ref A.3.)	Transmission of periodic acts via the public data network to the Office of Publications. Communication to the Member States of numeric data published in the Official Journal through the FIS application (see ref A.3.)

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oject title	i u z	1986	1987	1988-93
SHIFT (System for anima) Health Inspection at Frontier Fosts)	را ح	Political negotiation at Commission level	The launching of a feasibility study will depend on the results of the negociations	
IDES (Interactive Data Entry System)	A	A.6. Putting the system into Extension of the group operation with a group of participants and of correspondants in the field of application Member States System) Proposed areas :animal diseases and market	Extension of the group of participants and field of application	Adaptation of data exchange according to technological develop- ments and agricultural regulations
Presentation of numeric and textual data on various media (nicrofiches, spread-sheet, film-setting,etc)		trario Costantina Costrario Costrario	Preparation of tables for the annual report on the situation of agriculture in the Community.  Preparation of weekly reports on the situation of agricultural markets  Adaptation of the procedures affected by the introduction of the Harmonized System (Seeref, A.1.)	Continuation of worldepending on technological developments
AGREZ AGREZ (Agricultural Expen- ditures)	#	C   C   C   C   C   C   C   C   C   C	pletion of application Operational system in the (See réf. A.6.) gramming Commission of applications Study of the interface with the the Member States	(See ref. A.6.)

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WORK PLAN SECTOR

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	Project No.	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	1987	1988-9
FAUDIT Of Co (EAGGF Auditing System) de	A	mpletion of the analysis information flows unching of applications velopment	Continuation of implemen- tation and gradual entry into operation	Operational system Adaptation of processing in the light of changes in agricultural requiations
FEOPAY (EAGGF orientation Payment)	A.10.		ssible launching of stems analysis and pro- amming depending on the nclusions of the organi onal study carried out 8ó under A.15. (FEOORG)	i de e
FEOR: A.11. A.11. (EAGSF guidance - exami-nation of project proposals)		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Fossible launching of systems analysis and programming depending on the conclusions of the organizational study carried out in 1986 under ref. A.15 (FEOORG)	
HARD (II infrastructure)	4.12. H. 13. t	easing of terminals for he development of the pplications mentioned in his document	Extension of leasing or purchase	Extension of leasing or- purchase
FADN (Farm Accountancy Data	# W #	FADN  RATH  A.13. Operational system.  Extension of the system  (Farm Accountancy Data subject to approval of the thork)  Committee	inplementation of valida— Updating and consultation programmes in the of FADN data from the the Member States	Updating and consultation of FADM data from the Member States

Project title	Project No	1986	1987	1988-93
AGEFT	A.14.	A feasibility study will be launched as soon as	Possible implementation of the applications	
(Agricultural Electronic Fund Transfer)	_	the EAGGF Committee has approved the usefulness of the project. This project will be a development of the AX application (see ref. A.8)	defined	
raka a a a a a a a a a a a a a a a a a a	n	Organizational study on data flows involved in		
(EAGGF Guidance -		the examination and follow-	ı	-
Organizational Study)		up of project proposals		

WORK PLAN SECTOR	CUSTOMS UNION	ON SERVICE		
Fraject titl	Project No.	1986	!	1988-92
COORDINATION CD	D . 0	Horizontal activities in the CD project as a whole	Horizontal activities in the CD project as a whole	Horizontal activities in the CD project as a whole
INTRA COMMUNITY tradesub-system	D. 1	Intra-Community trade- specification of requi- rements for intermediate and long-term intra- Community trade sub- systems, in view of the need to establish the internal market by 31 December 1992	Extension of the field of intra-Community proper to the problems raised by the application of VAT, to intra-Com-Community statistics and to the verification of goods subject to excise duties or not enjoying free movement.	Definition of the user requirements Feasibility study of the various systems envisaged. Start of implementation in accodance with the selected options
	16 16 18 18 18 18 18 18 18 18 18			
INPORT SUB-SYSTEM EXPORT SUB-SYSTEM	0.3 0.3	•	Start of preparatory work on user requirement statements for the func- tions and services to be included in the import and export sub-systems. This work must be undertaken in accordance with a list of priorities to be esta- blished by the CD Committee	Continuation of this work

RK PLAN SECTOR	: CUSTOMS UNION	SERVICE		
Titre des projets	No de projet	1986	1987	26-8861
ILOT FROJECTS	# # # # # # # # # # # # # # # # # # #	Filot projects - agrand implementation or number of data exchagain experience with cepts to be used in longer term. These scover projects involdata exchange betwee Commission and the M States, between two States and between tand customs within a State.	O H	Continuation of Sals on the esta of definitive sy
RADER INTERFACES	ດ	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	Irader interfaces  1. Prepare user requirements statements for trader interfaces.  2. Define standards for agreed interfaces.  3. Agree on the technica specification of interfaces faces.	Start of implementation

ORK	ഗ	UNION SERVICE		
- Project title	Project No.		1987	€6-8851
OMMISSION SYSTEMARIC MANAGEMENT.	- D.6.6.1. TARI TARI TARI TARI TARI TARI TARI TARI		C - completion of Amendments and updating Monitoring of the loading of the following the study and of TARIC C data base in the implementation of the unity Languages other TARIC interface. Spanish and Portugese. atch of magnetic tapes he MS for the setting-f their own systems.— Possibly loading of Spanish and Portugese data bases.	Monitoring of the working of TARIC
STEM ACE	D.6.6.2		Study of the organization and methods required for for managing TARIC and providing the update service.	Start of implementation
	# # # # # # # # # # # # # # # # # # #	44 44 55 55 55 56 56 57 57 57 57 57 57 57 57 57 57 57 57 57	12 KK	#
CHEMICAL REFERTOIRE	D.6.7.	-Extension of denomina- tions covered by the data base to 30.000. -Extension of the system to Greek (all Community languages are covered).	Start on transfers and integration with the EINECS data base. (list of chemical products existing in 1981).	Continuation and comple- tion of the work.
	61 61 61 61 61 61 61 61 61 61 61 61 61	61 61 81 81 82 83 81 81		44 14 14 14 14 14 14 14 14 14 14 14 14 1
CUSTONS INFORMATION SYSTEM - phase 1 -	D6.8.1.	Feasibility study of the new management system for inward processing and system development	Completion of the system development.	On-line access from the Member States

WORK PLAN SECTOR	: CUSTOMS	SERVICE		
	Project No	1986	1987	
USTOMS INF YSTEM - PH	D.6.8.2.	Feasibility study on new computerized sys for tariff classific tion decisions.	System development	On-line access from the Nember States
S INFORMA - MESSAG NG	D.6.8.3.	Monitoring of the progress of the work on the various types of message handling services for communications with the Memb State administrations, including electronic mail (part of the facilities to provided by the Commissiounder the INSIS programme	Connected with the INSIS	
	12 91 14 96 18 88 88 88 18 98 18			
CUSTONS INFORMATION System - Miscellaneous	D.6.8.4.	Study of standarized access to customs data bases (chemical repertoire, list of customs offices, etc.). Study of other areas that could possibly be covered by computerized infor- mation systems.	s Development and establishment of the interface.	Continuation of the worl
# # # # # # # # # # # # # # # # # # #		# # # # # # # # # # # # # # # # # # #	H H H H H H H H H H H H H H H H H H H	

WORK PLAN SECTOR	: CUSTOMS UNION	NION SERVICE		
Project title	Project No.	1986	1987	1988-93
INFORMATION SYSTEM FOR FRAUD CONTROL	EM FOR D.6.9. Co	ا لتا لتا	tinuation of contacts  h the Member States and studies on the pos- analyse data required sible establishment of anti-fraud operations data bases having consul- order to strengthening tation facilities for the ual assistance, assistance and infrin- gements).	
DATA INTERCHANGE Standards	b.7.	Standards - finalization of syntax rules and data elements directory, based on United Nations standards.	Fublication of standards in a measure adopted by the Commission. Finalization of codes and preparation of message formats for the intra-Community trade subsystem (work to be carried out in close cooperation with the SAD team, CADDIA Central Team, the ECE in Geneva, the CCC and and ODETTE).	Application of the stan- dards adopted in the various systems. ts be e-
LEGAL PROBLEMS AND RECUIREMENTS	#	Promotion of studies on legal problems. Continuation of studies already carried out by CELIM (Symposium on 17-18 March 1986).	on Possible introduction Continuation of the worl- into Community cus- toms legislation of legal rules covering the various areas of electronic data exchange.	Continuation of the worl

Establishment of the re- sion extended to other structure in a limited subset of member countries Use of remote transmis- sion for the collection of certain categories of data.  Analysis of existing software packages and standards and comparison with the planned objec- with the planned objec- with the planned objec- tives for the project graphics environment. System feasibility study for the limpact of the wisting freceipt, storage and at ENROSIAI  Fresibility study for the Impact of the UNIDI application of the UNIDI standard in STADIUM standard	DIA WORK PLAN :	STATISTICAL SECTOR			
AND DIS-  S.1.1. Establishment of the re- sion extended to other stucture in a limited subset of member countries  Use of remote transmis- sion for the collection of certain categories of data.  TISTICAL  S.1.2. Froject feasibility study Start of the design phase standards and comparison with the planned object tives for the project standards and comparison with the planned object of the main core (receipt, storage and standards and comparison structure and moderni- mith the planned object of the main core (receipt, storage and standards and comparison structure and moderni- mith the planned object of the main core (receipt, storage and standard in STADIUM sapplication of the UNIDI standard in STADIUM standard in STADIUM	Projects	Project No	1986	1987	£6-8861
Use of remote transmission for the collection of certain categories of data.  ND DIS- ISTICAL  S.1.2. Froject feasibility study Start of the design phase software packages and for the STRINGS infrastandards and comparison structure and modernimith the planned objectation of the existing tives for the project graphics environment.  S.1.4. System feasibility study for the Impact of the UNIDI application of the UNIDI standard in STADIUM standard.	REMOTE TRANSMISSION OF STATISTICAL DATA	5.1.1.		Use of remote transmis sion extended to other categories of data	
Analysis of existing Establishment of the design phase software packages and for the STRINGS infrastandards and comparison structure and moderniwith the planned object graphics environment.  S.1.4. System feasibility study Design and implementation of the main core (receipt, storage and at EUROSTAI standard in STADIUM			Use of remote transmis- sion for the collection of certain categories of data.		
Analysis of existing Establishment of the core software packages and for the STRINGS infrastandards and comparison structure and moderniwith the planned object ation of the existing tives for the project graphics environment.  S.1.4. System feasibility study Design and implementation of the main core (receipt, storage and at EUROSTAI  Feasibility study for the Impact of the UNIDI application of the UNIDI standard in STADIUM standard	STANDARDIZATION AND DIS- TRIBUTION OF STATISTICAL REFORTS	5.1.2.	Froject feasibility study	Start of the design phase	Complete development of the functions of STFINGS and extension of its use
S.1.4. System feasibility study Design and implementation of the main core (receipt, storage and at EUROSIAI Baplication of the UNTDI standard in STADIUM standard			Analysis of existing software packages and standards and comparison with the planned objectives for the project	of the S infra moderniexistin	to the whole of EUKUSIAI Introduction of new technologies in the dis- tribution of information (optical discs, etc.)
study for the Impact of the UNID! Design of the of the UNID! standard in STADIUM of the in the USE of Standard countri	COLLECTION CENTRE (STADIUM)	5.1.4.	System feasibility study	Design and implementation of the main core (receipt, storage and at EUROSIAI	Development and implementation of the full system at EUROSTAT
				Impact of the UNTDI standard in STADIUM	Design and installation of the parts operating in the member countries Use of the UNDII standard by the member countries

Projects	Project No	1986	1987	26-8861
LECTION OF STATIS SYSTEN FOR THE TION OF STATISTIC ECJAL INTRA-AND-E TRADE UP TO 1992 PORTS FRON NON-MEI UNTRIES (SPECIAL ON 1993	5.2.1.	Analysis of relations with returners of statistics (customs service and traders). Specification of statistical functions and analysis of the impact of remote transmission planned for the SUD/CD project and others	Continuat and imple statistic -	Gradual integration of new technologies. NE. from 1993 application of a new system for collecting statistics independent of the customs service for trade between the Nember States and possibly for exports.
PROCESSING AND USE OF STATISTICS (a) IN DATA BANKS (b) CONFIDENTIALITY (c) CROSS CHECKING (c) CROSS CHECKING NS : SYSTEMS FOR PROCES- 51NG AND COMPILING 51AG AND COMPILING - SPECIAL TRADE - SGP	5.2.1.	Study of possibilities of converting existing processing with harmonization of methods for retro-active correction confidentiality concordance with monitoring systems, especially SGP.	Analysis of studies and preparation of implemen- tation proposals.	Gradual integration of new technologies  N.B. from 1993 application of a new system for collecting statistics independent of the ent of the customs service for trade between the Nember States and possibly for exports.
INTRODUCTION OF THE HAR- MONIZED SYSTEM (HS) STANDARDIZATION NS : FOREIGN TRADE STATISTICS, TARIFFS, SOEC : - BAUK : SABINE, BPT, COMEXT, CRONOS - ALL EXTERNAL TRADE PROCESSING - GATTLUX BANK	s.2.1.( s.2.3.)	Analysis of functions affected by the introduction of the HS. Analysis and programming of an interface with TARIC (for the Member States - customs see SUD projects) Extension of the GATILUX bank for consultation of HS-MIMEXE relations from 1986 to 1988.	Implementation of inter- interfaces.  Development of tariff statistics on the basis of the HS nomenclature (TARIC COMEXT interfaces).	Developments allowing for the impact of the white paper on the nomenclature used in internal trade and possibly for emports.

CADDIA WORK PLAN : STATISTICAL SECTOR

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Projects	Project No	9861	1987	26-8861
IMPROVEMENT AND UPDATING OF STATISTICAL DATA BASES -STATISTICAL SUPPORT FOR THE EASSF FRAUD INVES-	S.2.1.\ S.2.4.\	Feasibility study	Filot project	Production system
-STATISTICAL MONITORING OF DATA QUALITY : COMEXT, BPI		Feasibility study	Filot project	Froduction system
-SUITABILITY OF NOMENCLA- TURES IN REY SECTORS : COMEXT, 9PT		High technology sector	Other key sectors	other ley sectors
-STATISTICAL WARNING SYSTEMS COMEXT, BPT		Feasibility study	Pilot project	Operational system
-OPTICAL DISC AND DIS- SEMINATION COMEXT, BPT			īgchnical tests	Pilot projects

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CADDIA MORK PLAN : STATISTICAL SECTOR	1 1 1

- Projects Project	Project No	9861	. 1987	26~88 <b>6</b> 1
KEYWORD INTERROGATION SYSTEM SOEC 1 DISTRIBUTION BANKS COMEXT, CRONOS, SABINE NEMBER STATES 1 HANAGE- KENT OF EXTERNAL TRADE HOMENCLATURES	8, 2, 2,	Implementation of a staple prototype, systems analysis and software tests, Installation of the selected software, Implementation programming, brafting of legal and summary texts	-Effort to automate the system of self- explanatory texts -Connection to outside systems	-Naintenance of the system
INTEGRATED ACCESS TO DATA BASES SOEC : PREPROCESSING BANKS CEE, COHEXT-EUROSTAT, CRONDS, SABINE	5.2.3.	Installation of peripheral systems (NCR-TOWER, PC-M24 and word processing), Analysis of functions and their allocation to different access levels, Implementation programming.	-Continuation of programming. Bystems implementation	-Progressive Integration of new technology
EXPERT SYSTEM IMPROVENENT AND UPGRADING OF STATIS-TICAL DATA BASES COMEXT, CRONOS, BPT	5,2,4,	-Pilot project (blue print/feasibility)	-Tuning - protatype	-Production system

WORK PLAN :	STATISTICAL SECTOR			
Projects	Project No	9861	1997	1988-93
FORESTRY DATA BANK	8,3,1,	Selection of necessary forestry data and harmo- nization (DB VI and 90EC)	Multiplication of the selected tool and centralization of data	Continuation of the acti- vity. Setting-up of remote
, .		Study of a suitable tool for: mapping and inventory at regional level.	Establishment of a forestry data bank	tor quantified monitoring -the health of forests -the development of disease or damage as a result of pollution,
	·		Analysis and development of data transmission methods.	storms or fires -changes in structures
			Access by the public.	
			Analysis with a view to inventory and mapping	
EUROFARM	5.3.2.	EUROFARN Start on the design of study.	Start on the design of The system.	Start-up of the system; test on the 1987 survey,
		Analysis of the situation in the three test Member States (Germany, Italy, UK) as regards harmonization, checking and transfer of Individual data,	Analysis of the "wine" and "fruit" surveys to integrate them in the tabular data base.	The system will be fully operational for the 1989/90 survey.
	-	Analysis of the existing data base with a view to integrating it in the project	Analysis of connection possibilities between EUROSIAT and the Member States	

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ects	Project No			26-8861
SPEL (SECTURIAL PRODUCTION AND INCOME MODEL FOR COMMUNITY AGRICULTURE)	: :: :: ::	Implementation of the present version of the model	Further development of the model taking account of the Mediterranean agricultural products. Implementation of this version of the model	
		Adaptation of the user inter-face (user-friendly software for the data flows, transparency of data and the dialogue system)	ታ ነ መር	
		Application of the model:  - Updating of the database.  - short term forecasts  - validation of the forecasting method	. In	
		<ul> <li>simulation of the income effects of policy measures</li> </ul>	9 8 a c	
		Establishment of data con- sistency between the various original time series.	\$ <b>7</b> 0	
		Adaptation of data transfer procedure in the event of methodological or technical changes	اج. م]	
			Complete integration of Spain in the model	Complete integration of Portugal in the model

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AGRONEI CROP FORECASIS ; ARCAS, TIELDS,PRODUCTION,	ο  4 .	Harmonization of data. Protocol EUROSTAT/large cropgrowing regions Choice of regions Adaptation of the Eurostat model.	Equipment, transfers. Integration in the Commission's remote transmission system. Access, Analysis of the follow-up of information.	Maintenance, management, consolidation. AGROMET/RESEAU relations. New product(s). Comments from outside the
FESERU EUROPEAN NETWORK FOR THE MONITORING OF THE ENVIRON- MENT, HORICULTURE AND URBAN DEVELOPHENT	ω  	Examination, selection and harmonization of data with the CORINE programme. General concept of data media and processing for inventory and mapping. Feasibility study.	Equipment for data centralization. Public access. Systems analysis for inventory and mapping.	Follow-up of the develop- ment of RESEAU with CORINE, Monitoring indi- indicators, Agriculture and environment (Remote sensing).

CAUDIG MORE PLAN : STATISTICAL SECTOR

WORL PLAN SECTOR	: CADDIA CO			
- Project title	1	1986	! ! !	   
STANDARD12AT1ON REGUIRENENTS		brafting of a set of information manuals on UNIDI to explain, publicize and implement it.	1 DEM	IDEM
		Translation of these manuals and reference works into all the Community languages. Relations with the UN ECE, 150, CEN-CENELEC on standardization problems.	1 DEN	IDEM

IDEM

Dissemination of this information to interested bodies.

ORK PLAN SECT	D D I A	COORDINATION (Joint projects)	1	
Project title	Froje No.	1986	1987	£5-8861
COORDINATION OF STANDARDIZATION	. 2	Setting up of a UNID! coordination group representing the Commission departments.	Definition of procedures for the adoption and publication of standards for syntax, data elements, messages and segments	Fublicat Change s Support tation o applicat
		This group will be responsible for coordinating all the work on implementing UNIDI for the Commission's applications,	δu	
		For each application, definition of messages, segments and data elements	IDEM	IDEM
		Storage of information used by CADDIA projects and projects of other organizations in a data base (CANDY)	d I DEM	IDEM
		Farticipation in working parties of organizations	I DEM	IDEM
		outside the Commission dealing with message standardization (UDEITE, COMPRO'S)	ling on IDEN	IDEM

WORK PLAM SECTOR	: CADDIA CO	101	1	
- Project title	Project No.	1986	1987	! 
VALIDATION OF INFRA- STRUCTURE	; ; ; ; ; ; ; ; ; ; ; ;		1	1
VALIDATION TESTS	9. 5. 1	Tests on infrastructure components and their interconnection on Comission hardware.  The validation tests are intended to select certain products to be used on operational sites.	Continuation of work depending on technological developments and the adoption of telecommunications and data interchange standards.	1 D E M
		Specification of inegrated tools for data exchange.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

Project title No. VALIDATION OF THE P.3. INFRASTRUCTURE SUPPORT FOR PILOT PROJECTS chang			
P. 3.2 Nego ing ing chan	1986	1987	1988-93
P.3.2 Nego ing ing chan		; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
	Negotiation and launch- ing of pilot data ex- change projects with the sectors concerned.	Specification of a conformance testing service for software validation in the light of international standards.	Use of conformance test- ing services to validate the IT infrastructure
The Tinvit invite these these changes	The Member States are invited to take part in these pilot data exchange projects.	Continuation of pilot projects and gradual extension of the use of computerized data exchange.	
The (will cess) response proje	The CADDIA central team will provide all the ne- cessary support for those responsible for sectorial projects.	Evaluation of pilot project results and impact on IT infras- tructure scenarios (see P.S.)	IDEM

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METHODOLOGY	٠ ٠	Monitoring of all the projects subsidized by the CADDIA programme. A suitable methodology for the interconnection of computer systems will be defined and proposed to the departments concerned in the Commission.	Application of medthods to Methodological moniall the CADDIA projects toring. in accordance with CSC decisions	Methodological moni- toring.

WORK PLAN SECTOR	: CADDIA	NATION		
- Project title	Project No.	1986	1987	26-8861
ESTABLISHNENT OF THE IT - P.S.	υ <sup>7</sup> α.	Analysis of data flows Evaluation of infrasand quantification of tructure requirements frequencies, volumes and their application and hourly peaks in Member States.  Indentification and eva— Relations with nation luation of protocols and PTT administrations fservices proposed or the use of available planned by manufacturers services.  Establishment of a list Definition of scenarion of computers and protocols for the establishment used or planned in the of the infrastructure Member States.	Evaluation of infrastructure requirements and their application in in Member States.  Relations with national PTT administrations for the use of available IT services.  Definition of scenarios for the establishment of the infrastructure.	Gradual installation of the irastructure suited to the requirements of the different sectors in accordance with an implementation schedule to be adopted by the CSC.
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# ANNEX III

#### **ACRONYMES**

CADDIA Coopération dans l'Automatisation des Données et de la

Documentation dans les Importations/exportations et l'Agriculture / Cooperation in Automation of Data and Documentation for Imports/exports and Agriculture

DG XIII Direction Générale pour les Télécommunications, Industries

de l'information et Innovation / Directorate-General for Telecommunications, Information Industries and Innovation

DG XXI Direction Générale pour l'Union douanière et la Fiscalité

Indirecte / Directorate-General for Customs Union and Indirect

**Taxation** 

DG VI Direction Générale pour l'Agriculture / Directorate-General for

Agriculture

OSCE/SOEC Office Statistique des Communautés européennes / Statistical

EUROSTAT Office of the European Communities

DG IX-I Direction Informatique (pour la Commission) / Directorate for

Informatics (in the Commission)

PTF Preliminary Task Force (for CADDIA) / Task Force Préliminaire

pour CADDIA)

CDC/CSC Comité Directeur CADDIA / CADDIA Steering Committee

GPIC Groupe Politique Inter-service CADDIA / CADDIA Policy

Interservice Group

### Messages standardisation / Standardisation des messages

EDIFACT Electronic Data Interchange for Administration, Commerce

and Transport (DIS 9735) (new syntax rules)

(UN)TDED (United Nations) Trade Data Elements Directory (ISO 7372)

UN-ECE/WP4 United Nations - Economic Commission for Europe Working

Party 4

GTDI Guidelines for Trade Data Interchange (old syntax rules)

AELE/EFTA Association Européenne de Libre Echange / European Free

Trade Association

ISO International Standards Organisation

UNTDI United Nations Trade Data Interchange

UNCITRAL United Nations Council for International TRAde Legislation

ANSI American National Standards Institute

COMPROS Community Trade Facilitation Organisations / Organisations

communautaires pour la facilitation du commerce

SITPRO UK Trade facilitation organisation

TEDIS Trade Electronic Data Interchange Systems

ODETTE Organisation for Data Exchange by TeleTransmission in

Europe

CEFIC Conseil Européen des Fédérations de l'Industrie Chimique

EDIFICE Electronic Data Interchange Forum for companies with Interest

in Computing and Electronics

COST Cooperation in the fields of Scientific and Technical research

DEDIST Data Elements DIStribution in Trade (Nordic countries project)

DISH Data Interchange for SHipping (UK project)

RESEAU Réseau Européen de Surveillance de l'Environnement, de

l'Agriculture et de l'Urbanisation

CORINE Projet expérimental pour la collecte, la coordination et la mise

en cohérence des informations sur l'état de l'environnement et des

ressources naturelles

SGML Standard Generalised Mark-up Language

PAO/OAP Publication Assistée par Ordinateur / Computer Assisted

**Publication** 

### Agricultural sector / Secteur agricole

PAP Prices of Agricultural Products

AMIS Agricultural Market Intelligence System

FEOGA/EAGGF Fonds Européen d'Orientation et de Garantie Agricole /

European Agricultural Guidance and Guarantee Fund

OCM Organisations Communes de Marché

IDES Interactive Data Entry System

PAC/CAP Politique Agricole Commune / Common Agricultural Policy

MCE/MCA Mécanisme Complémentaire aux Echanges / Complementary

Trade Mecanism

MCM/MCA Montants Compensatoires Monétaires / Monetary

**Complementary Amounts** 

FIS Fast Information System

APACO Actes Périodiques Agricoles et COmités de gestion

ARPS Agricultural Report Production System

FBF Feoga Budget Forecasting

AGREX AGricultural guarantee fund EXpenditures

SHIFT Systems for animal Health Inspection at Frontier posts

DOCED DOCumentation EDition

FAUDIT Feoga AUDITing System

RICA Réseau d'Informations Comptables Agricoles

AGEFT AGricultural Electronic Fund Transfer

FEOPAY FEga Orientation PAYment

FEORI FEOga ORIentation Instructions de dossiers

SICAMOR-ED Système d'information et coordination des actions en

faveur du Monde rural - Exchange Data

AIN-ED Aides nationales - Echanges de données

CACTI Common Agriculture - Customs Transmission of Information

ANA Agricultural Numerical Annexes

<u>Telecom</u>

OSI Open Systems Interconnection

FTAM File Transfer Access and Management (DIS 8571)

TTX Teletex transmission

TLX Telex transmission

MFTS Multilateral File Transfer System (C.E.C)

PAD Packet Assembly and Disassembly (X28)

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