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ANNUAL REPORT OF THE DATA PROCESSING DEPARTMENTS

OF THE COMMISSION - 1980

(Report from the Commission to the Council)

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ANNUAL REPORT OF THE DATA PROCESSING DEPARTMENTS OF THE COMMISSION - 1980

O. INTRODUCTION

Technical developments and considerations of cost effectiveness will henceforth make data processing an essential factor in any new action which the Commission undertakes.

Thus, as the years pass, the activities of the data processing departments will depend more and more on the whole range of Community policies and actions.

In 1980 the work of these departments was broken down² as follows:

- 47 % on statistical and econometric projects;
- 19 % on direct applications for major Community policies (EAGGF, textiles, steel, fisheries, fissile materials accounting, energy);
- 11 % on scientific, technical and documentation projects;
- 3 % on miscellaneous projects (linguistic, EURONET, surveys etc.)

- 20 % on internal management (personnel, accounts, administration).

In all, over 150 applications are currently handled by the data processing departments.

This work is carried out under the direction of the Commission's Steering Committee for Data Processing with the following resources:

- a staff of 290⁴, including 211 permanent employees and 79 temporary members of staff (28 %);
- 2 central computers² (1 ICL 290 and 1 Siemens 7760)
- 1 network consisting of 258 terminals²
- a budget⁶ of 16 625 000 ECU (Bfrs 665 million).

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This report follows on from Annual Reports COM/78/347, COM/79/678 and COM/80/501 on the Data Processing Departments of the Commission for 1977, 1978 and 1979 drawn up in accordance with the European Parliament Resolution (Pêtre report).

- 2 The main data processing applications operational in 1980 are listed in Annex 1.
- 3 Annex 2 sets out the structure of the data processing committees and the departmental organization.
- 4 Annex 3 gives the detailed breakdown of staff in the data processing departments.
- 5 Annex 4 shows the configuration of these computers and the distribution of the terminals.
 - Annex 5 gives the breakdown of expenditure for the 1980 budget.

In a bid to meet the ever-increasing demand from the various user departments¹, and faced with the need to keep up with the breathtaking developments in techniques and materials which enormously broaden the scope of application of information technology, the Commission's data processing departments were compelled in 1980 to solve numerous difficulties in a transitional year characterized by:

- at the policy level, a change of direction in the Commission's data processing policy;
- at the human level, the persistent problem of lack of staff;
- at the level of equipment, the end of an intensive phase of renewal, and a lack of machine capacity;
- at the financial level, the continued lack of budgetary resources.

The interest which the Parliament and the Council's departments take in all aspects of the data processing sector is well known.

This report has been drawn up on the basis of the most complete and comprehensive information possible. In accordance with the wishes expressed by the European Parliament's Committee on Budgetary Control it illustrates the seriousness of the problems facing the data processing departments by presenting full details on such factors as:

- the resources required and granted;
- optimization of these resources;
- organization and planning of the work;
- administration and management of the departments;
- definition of the role of data processing within the Institutions.

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Machine time used increased by 65% per annum between 1975 and 1980 (Annex 6 gives the statistics for machine time used for the ICL 2980 computer for 1980).

1. THE MAIN EVENTS OF 1980

1.1 End of the intensive phase of equipment renewal

The important decision taken by the Commission in October 1976 to replace the data processing equipment then in use (IBM 370 computer and CII 10070) with a central ICL configuration and a network of European MITRA NIXDORF and OLIVETTI terminals was gradually implemented throughout 1977, 1978 and 1979:

- 1977: removal of the CII computer, delivery of the ICL 2980 computer and installation of the SIEMENS 7740 computer;
- 1978: introduction of the network of European terminals and start of the conversion of applications;
- 1979: end of the conversion of applications, removal of the IEM 370/158 computer, transfer to ICL of some of the operations carried out externally, increase in the capacity of the SIEMENS computer, continued introduction of the network of MITRA, NIXDORF and OLIVETTI terminals.

1980 marked the end of this period of renewal with the final acceptance of the 2980 computer, the installation of the 2976 computer and the signature of the CIRCE-Honeywell Bull contract.

1.1.1. Final acceptance of the ICL 2980 computer

The final acceptance tests for the system, which covered all applications, were carried out during December 1979. The results were subjected to a thorough analysis during the first six months of 1980, from which the following main conclusions may be drawn.

Operation of the system is on the whole satisfactory and after conversion five of the six major applications (COMEXT, CRONOS, SABINE, SAFIR, PAIE) have produced the hoped-for results.

The Commission consequently signed the protocol of final acceptance for the 2980 computer on 2 August 1980, backdated to 16 December 1979 and subject to the following conditions:

- the Commission accepted the ICL 2980 and the associated system with the exception of the CIRCE/STATUS application;
- the leasing contract for the 2980 would be valid for five years with effect from 1 January 1980;
- CIRCE would not be transferred to ICL and all payments in respect thereof were suspended.

- ICL undertook to provide free of charge:

seven man/years of technical assistance (systems engineers)

three additional megabytes for the central memory by 15 September 1980 at the latest (so that the total capacity of the 2980 computer would reach 11 megabytes including 5 megabytes provided free of charge by ICL);

the assistance during the weekends of a team of operators who would deal with the surplus work until the three additional memory megabytes were installed;

a service bureau (staff + equipment) for one year on an ICL 2976 system.

- Moreover, ICL would suspend all indexing of leasing charges for the 2980 and the associated programmes in 1980 and 1981.

The Commission consequently considered that the terms of acceptance for the 2980 computer were satisfactory,

Given the continuing increase in demand¹ and since it was clear from the beginning of the year that the 2980 computer would become saturated, suitable measures had to be taken urgently, viz.:

- for 1980 an increase in the memory capacity of the computer to 11 megabytes and four-shift working would provide sufficient machine capacity to deal with the priority applications;
- plans should be made immediately for the installation of a new computer which would provide the additional processing power required in future years, improve user service (response time, turn-around time, etc.) and increase programme productivity, while at the same time improving security since it would then be possible to transfer an application which was being processed from one machine to another as required.

1.1.2. Installation of the ICL 2976 computer²

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Having informed the various parts of the budgetary authority well in advance, the Commission signed a contract on 2 August 1980 with ICL for the installation of a 2976 computer. ICL is to provide the staff and manage the machine on a two-shift basis. The annual rent is approximately 3 380 000 EUA (Bfrs. 135 327 500). As mentioned previously, no rent will be charged for the first year to compensate for the non-conversion of CIRCE. The minimum leasing term is five years.

At the beginning of 1980 the computer was working 24 hours a day, 7 days a week.

Annex 7 includes a description of the configuration of the computer.

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The 2976 was installed in Luxembourg at the beginning of September. The end of 1980 will be devoted to start-up operations, and the computer is due to come into service on 2 February 1981.

1.1.3. The CIRCE-HONEYWELL BULL contract

Under the provisions of the contract concluded with ICL in 1977 the two main CIRCE documentation systems (ECDOC and CELEX), which are processed by the Honeywell Bull service bureau and on the IBM 370 computer at the computer centre respectively, were to be gradually converted and transferred to the 2980.

During the time needed to make the transfer the Service Bureau contract signed with Honeywell Bull was to be extended to enable the ECDOC application to function, CELEX already being operated on ICL.

The somewhat unconvincing results - as regards CIRCE - of the final acceptance test for the 2980 computer carried out in December 1979 led the Commission to decide on 30 April 1980 to renew the Honeywell Bull contract for processing of the ECDOC application and to extend it to cover the CELEX application.

This decision, which was taken to avoid jeopardizing the very important CIRCE operations pending the planned conversion, the results of which were uncertain, also had the advantage of avoiding an excessive additional workload for the 2980 computer, which was already saturated.

The contract signed on 2 August 1980 with Honeywell Bull is for a period of $4\frac{1}{2}$ years. Honeywell Bull will place its Brussels data processing centre which is equipped with an IRIS 80 computer, at the Commission's disposal. The charges for the service, initially approximately 100 000 EUA (BFrs 4 030 000) per month, will vary in relation to the disc capacity required by the Commission.

Honeywell Bull has undertaken to convert the CELEX data bases at its own expense so that they can be processed in the various official languages of the Commission of the European Community.

The company has, moreover, undertaken to provide advance financing for the services, hardware and software required to make CELEX available via EURONET.

1.1.4. Work of the SIEMENS operations section

DG XIII originally rented the SIEMENS computer in order to offer EURONET users a general guidance service and to meet data processing requirements in the multilingual field.

In February 1980, when EURONET was opened, the 7760 was connected to the network.

During the summer of 1980 it became accessible to all users.

During 1980 the SYSTRAN automatic translation system and the EURODICAUTOM terminological data bank became operational.

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Thus the original aims were achieved. In more general terms, the extension of the configuration which was carried out in 1979 and which led to the upgrading of the 7740 to a 7760 made it possible in 1980 to process under suitable conditions all the applications already operational and to take over new applications, the most important of which is the steel survey operation; which at the end of 1980 was taking up 20% of the computer's total capacity. A total of approximately 25 applications are in operation on the 7760.

The work of rationalization, begun in 1979 with the introduction of temporary joint management of the computer and its network by DG IX and DG XIII¹, was continued in 1980. This work should be completed during 1981 when the SIEMENS unit comes under the direct management of DG IX, so that a single department will be responsible for all the Commission's internal data processing systems.

In any event, DG XIII, of course, pursuant to Council decisions and in fulfilment of the various missions and tasks assigned to it by the Commission, retain responsibility for innovatory data processing activities of external importance.

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¹ DG IX - Directorate General for Personnel and Administration

DG XIII - Directorate General for Information Market and Innovation.

1.2. The reports of the Court of Auditors and the Parliament's Committee on Budgetary Control

1.2.1 Report of the Parliament's Committee on Budgetary Control

On 23 June 1980 the European Parliament's Committee on Budgetary Control adopted an interim report on budgetary control aspects of the Computer Centre (rapporteur: Mr E. Kellett-Bowman).

After surveying the Commission's data processing history from the start (1953) to 1976, the report goes on to set out the various phases of equipment renewal (from CII to IBM, then from IBM to ICL) at the Computer Centre and ends with an analysis of the organisation and management of the Centre.

The rapporteur stresses the following aspects:

the complexity of the situation at the Computer Centre as a result of the difficulties following changes of equipment, the growth in demand and the wide range of users, the allocation of credits under several chapter headings, and staff and management problems caused by the fact that officials, temporary staff and staff engaged under contract belonging to various outside undertakings were working side by side;

the need to provide the Committee on Budgetary Control with regular and appropriate information to enable it to carry out its task under suitable conditions, in particular before important decisions or options such as changing or increasing the capacity of a large computer are taken (the report quotes the example of the SIEMENS 7760). The rapporteur expressed the wish that the annual report of the data processing departments would be made available to Parliamentary bodies as soon as possible;

the staff problems facing the Computer Centre.

On the basis of the above report, the Parliament adopted a resolution on 11 July 1980, the main points of which are as follows:

Parliament required to have at regular intervals and in good time the detailed and complete information required by the Committee on Budgetary Control in order to carry out its task properly;

it stated that clarity and transparency in presentation of the budget were essential to the work of the budgetary authority;

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expressed its concern with regard to the staff difficulties experienced by the data processing departments and stressed the need for strict control of expenditure in the field of external staffing costs;

considered that the resources of the Commission's Computer Centre should be made available to all the Institutions to avoid needless expenditure, and asked the Commission to produce an appropriate legal formula which would guarantee access by the other Institutions to the centre;

decided to examine a new report by its Committee on Budgetary Control as soon as the Court of Auditors' Report became available and the Commission had provided full information on the recent acquisition of installations, the organization of data processing work and the relevant long-term requirements of the Community;

urged that no Institution should take steps which would pre-empt the establishment of a Community-wide data processing service.

As regards coordination, cooperation and the pooling of data processing resources by the various Institutions, certain joint projects already exist:

inter-institutional access to the CELEX, CJUS (CIRCE) and CRONOS (statistics) bases, the Parliament staff salaries programme operated by the Commission's computer centre, joint use of programmes etc.

As it has already stated on several occasions, the Commission is perfectly willing to strengthen this cooperation and to place its data processing infrastructure at the disposal of the other Institutions.

Before any decision is taken, of course, the question of setting up an inter-institutional computer centre must be carefully studied in relation to the criteria of organization, cost effectiveness and available technology.

With this in mind the Commission proposed to the administrations of the various Institutions that an <u>ad hoc</u> committee for inter-institutional data processing be set up with the Commission's Director for Data Processing as chairman. This committee will meet for the first time at the beginning of 1981. It will have to draw up a list of data processing tasks and resources for all the Institutions, define the fields of activity which are already suitable for collaboration, and draw up a programme for closer cooperation, possibly incorporating several successive implementation stages. The Committee's proposals will be submitted during 1981 to the administration of the Institutions, and subsequently to the Parliament's Committee on Budgetary Control.

¹ Cf. the list of the principal contracts in force for aid to programming, Annex 8.

1.2.2 Report of the Court of Auditors

On 6 November 1980 the Court of Auditors published a report entitled 'Observations based on a preliminary examination of the financial accounts of the Computer Centre of the European Communities'.

The main conclusions of the report may be summed up under five heads:

the Commission had underestimated the resources required to replace the IBM computer;

the delays and deficiences encountered during the replacement operation involved additional expenditure;

the Commission had not allocated the resources required for the administration and management of the data processing departments;

it was essential for the budgetary authority and the Commission to establish the total number of staff required for the Commission's data processing work over the next few years;

the Commission must state clearly the future rôle of the Computer Centre.

The Commission's reply to the Court of Auditors is being prepared at present. We might, however, mention the following points:

while it is true that the resources required for replacement of the computer were underestimated and that delays and deficiencies encountered when the ICL computer was being installed involved additional expenditure, it should be remembered that:

- the initial estimates were made on the basis of a study carried out in 1975. Having regard to the uncertainties inherent in any medium or long-term forecast, it was inevitable that by the end of the operation in 1980, they would no longer reflect the actual situation, particularly since during the five years under consideration computer time used has increased by 65% per annum instead of the forecast 25% as a result of the enormous increase in demand from the departments, and the succession of technological breakthroughs;
- the lack of data processing posts, particulary in the management and planning field, has made it impossible to carry out the accurate verification which is the only means of identifying the measures required to remedy unsatisfactory situations;
- taken as a whole, however, the operation did end successfully and, as has already been explained, 1980 marked the end of the intensive phase of renewal of equipment;
- finally, the Commission obtained very substantial compensation from ICL, which is described in detail above;

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- it is certainly true that staff resources are insufficient for the requirements of administration and management of the data processing departments. At the end of 1980 the Commission recruited a Director for Data Processing (A2), but the number of heads of division (one) in a directorate with 211 officials and a total of almost 300 persons permanently employed is not sufficient, particularly bearing in mind that this workforce is due to increase soon to approximately 350 people. Nor has the Data Processing Planning and Administration department set up by the Commission in 1979 received the staff it requires. Two of its three sections exist on paper only or in an embryonic state. It is true that the Commission intends to strengthen this department as a matter of priority, but this presupposes that the budgetary authority will grant the Commission sufficient posts.
- the Commission has been asking the budgetary authority for years to agree to the staffing level required for data processing work. Moreover, in 1979 the Commission asked outside consultants to determine the staffing requirements of the data processing departments. The study concluded that the Commission's data processing departments should have 344 posts instead of the 200 they had at that time. The Commission asked the budgetary authority to grant the 144 additional posts over three years (50 in 1980, 45 in 1981 and 49 in 1982). From the total resources granted by the budgetary authority, the Commission was able to allocate only 11 posts in 1980 to the data processing departments.
- the Commission should state unequivocally the rôle which the Computer Centre is to play in the future. The decisions taken by the Commission during 1980, and in particular the change in policy direction towards distributed data processing, mean that the functions of the Computer Centre must be redefined. The study of the rôle of distributed data processing at the Commission should be completed during 1981 and should be followed up immediately by a second study on the architecture of the distributed network which will enable the Commission to complete its reassessment of the tasks of the Computer Centre and the users.

Finally, the Commission plans in the near future to clarify the rôle of the Computer Centre in an interinstitutional context, thereby meeting the wishes of both the Court of Auditors and the Committee on Budgetary Control. It has taken a certain number of steps in this direction which will be described later.

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1.3 Serious budgetary problems

1.3.1. Too little and too late

The Commission's data processing departments have for several years been allocated only limited financial resources and 1980 was no exception.

The amount granted in the final budget by the budgetary authority was 15 125 000 EUA under Chapter 21, plus 1 500 000 EUA under Chapter 100 as partial compensation (50 posts) for the chronic lack of 144 posts which is a constant problem for the data processing departments. Thus the total appropriations available were 16 625 000 EUA, taking account of the transfer during the year of the 1 500 000 EUA under Chapter 100.

Disregarding the additional 455 000 EUA allocated at the end of the year to meet specific costs involved in the 'steel survey' operation, the data processing departments thus had 16 625 000 EUA, i.e. approximately Bfrs 665 million, to cover all their expenses in 1980.

This amount was quite insufficient, and once allocations had been made to cover expenditure arising out of previous contracts or binding obligations (approximately 86%), there could be no question of satisfying new user demands for the development of applications in hand or <u>a fortiori</u> of taking on new applications.

For this reason the Commission decided from the beginning of the year to implement a crisis management system giving priority to machine processing and to the analysis and programming related to applications already under way and to a few very important new projects described in the next section.

These financial difficulties were further exacerbated by the delay in approving the budget. Management for half the year was carried out under the provisional twelfths system and only the understanding of suppliers made it possible to avoid disagreeable consequences which might have arisen for lack of funds, since the provisional twelfths scarcely covered the monthly expenditure arising from contracts.

1.3.2. Certain priorities set by the Commission

On 14 May 1980 the Commission decided to devote the rest of the credits available to it after deduction of compulsory expenditure known at that date - i.e. 1 500 000 ECU (Bfrs 60 million) to four priority areas:

- DG VI - Agriculture

150 000 EUA (approximately Bfrs 7 million) were earmarked to continue studies for the computerization of the EAGGF Guarantee and Guidance sections accounting. The Commission also gave the highest priority to the conversion of the RICA project by ICL.

¹ RICA (Reseau d'Informations Comptables Agricoles) is an application concerned with the production of statistical and accounting data on resources in the agricultural sector on the basis of information collected in the various Member States.

- DG XIV - Fisheries

700 000 EUA (approximately Bfrs 28 million) were allocated to the development of two urgently required applications: licence management and catch monitoring. The Norwegian Ministry for Fisheries has in recent years developed a system using Norsk Data hardware for monitoring the activities of individual ships and the quotas granted to third countries. This system was an ideal development base for the Commission's applications. It was therefore decided to purchase a Norsk Data mini-computer and to ask the company to develop the relevant application software on the basis of the software developed by the Norwegian Ministry for Fisheries, which would make no charge to us for right of use.

- DG XVIII - Credit and Investments

250 000 EUA (approximately Bfrs 10 million) had to be allocated to the first phase of the study for the computerization of the borrowings and loans system; the Commission's analysis and programming departments undertook development of the 'Liquid assets' application.

- Statistical Office (SOEC)

400 000 EUA (approximately Bfrs 15 000 000) had to be committed immediately to make up the considerable delay in the analysis and programming essential to the operation of the Statistical Office's applications (multilateral negotiations, agricultural structures study, CRONOS etc.).

The Commission did not have sufficient scope to select other sectors. It was therefore decided to postpone meeting other demands from user departments owing to lack of funds, staff resources and machine capacity.

1.4. The steel survey

The steel survey operation is a typical example of the relevance of the data processing departments to any new Commission activity or policy. On 31 October a state of manifest crisis was declared in the steel industry. The Commission was asked to implement a production quota system and to monitor its application. This important and urgent operation involved processing a considerable volume of urgent information within very short response times and the Commission therefore decided that it could only be carried out satisfactorily if data processing techniques were employed. The data processing departments had therefore to:

- take account of the production statistics of steel undertakings for the previous three years;
- derive from these statistics a reference basis for the allocation of quotas;
- calculate the monthly and quarterly quotas at the appropriate time;
- publish data which made it possible to check daily that the quotas granted were being respected.

The number of establishments concerned (over 500) and the strict deadlines set for the initial computerization of the monitoring system (12 November 1980 at the latest) give some idea of the difficulty of mounting such an additional operation for departments which were already overloaded.

It was, of course, necessary to release special credits so that the data processing departments could pay for the hardware, software and staff which the operation entailed. (An initial amount of 455 000 ECU was transferred to Chapter 21 at the end of 1980).

Since its resources were so limited, the data processing budget could not possibly bear the financial burden of the steel survey.

On 3 November 1980, nine days ahead of schedule, the simplified programming system developed by the Commission's data processing departments for carrying out monitoring operations was operational.

Complete application programs are being prepared with the help of an outside firm.

1.5. Change of direction in Commission policy

1.5.1. The introduction of distributed data processing

At its meeting on 7 May 1980 the Commission took a series of very important decisions which had the effect of completely changing the future direction of its data processing policy.

The Commission stated, firstly, that it intended to integrate data processing, office automation and telecommunications developments in its own departments. This will be achieved principally by the setting up of a distributed network within five or six years.

For this purpose the Commission requested its Steering Committee for Data Processing (CDIC):

- to draw up a detailed schedule for the computerization of applications already being processed for 1981 and 1982;

- to begin a study of the functions of distributed data processing at the Commission and the effects of introducing such data processing on the division of tasks between the Computer Centre and the users, the hardware and the software.
 - The conclusions drawn from this initial study would serve as a basis for further study on the architecture of the distributed network;
- to draw up sliding multiannual budgets which would make it possible to spread the financial burden required over several years;
- to make a study in collaboration with the Statistical Office and the Directorate-General for Personnel and Administration to see whether it would be worth putting a large computer on to statistical work;
- to study the possibility of setting up a number of pilot office automation units;
- to propose rules for the development, in collaboration with industry and specialized bodies, of technical specifications and standards which firms supplying the various departments would have to respect.

Secondly, the Commission requested the CDIC to ascertain the administrative structure most favourable to the progressive integration of data processing, office automation and telecommunications, and development of the districuted network while safeguarding day-to-day of the existing system.

1.5.2. Appointment of the Director for Data Processing

On 11 June 1980 the Commission decided to recruit in grade A 2 a director responsible for data processing. The recruitment procedure, which was carried out jointly within the Commission by the relevant departments and externally by a firm of international consultants, Egon Zehnder & Associates (International), was completed at the end of 1980. Over 80 applications were considered. On 17 December 1980 the Commission appointed Mr Walter De Backer, of Belgian nationality, Director for Data Processing with place of employment in Luxembourg.

1.5.3. Setting up of the Standards Implementation Committee and signature of standardization contracts

In accordance with the decisions of 7 May 1980, the Commission decided on 17 December 1980 to set up a committee to manage the agreements and protocols already in force with suppliers relating to conformity of hardware and software used by the Commission's departments, to lay down standards applicable to future contracts and to ensure that they were applied throughout the process of introduction of new hardware and software.

The first task of the Committee, which will meet for the first time in January 1981, will be to examine the standardization contracts and protocols already signed.

These are chiefly agreements made with ICL under the terms of a specific amendment to the main contract. This amendment, which takes precedence over all the agreements signed with ICL, provides for the application of international standards already ratified or in process of ratification, in particular within the field of the interchangeability of data, to all hardware, equipment and software supplied by ICL to the Commission.

Other specific contracts or clauses appended to the main contracts already in force have also been signed with respect to the Siemens 7760 computer at the Computer Centre in Luxembourg, the computer used within the context of the service bureau provided by the Honeywell Bull company for CIRCE and the mini-computers or remote batch terminals for which the Commission signed agreements in 1980.

There are plans to issue an invitation to tender in the first months of 1981 under the aegis of the Standards Implementation Committee for a study to prepare standard specifications applicable to all hardware and software acquired or leased in the future by the Commission.

Agreements already concluded and work already under way should ensure that in the next few years that there is a high degree of interchangeability of data within the various Commission departments. This is particularly essential since the Commission has decided to move towards the introduction of a distributed network made up of hardware and other equipment from different supplies.

Finally, the setting-up within its own departments of a system which demonstrates the great advantages in terms of efficiency and profitability of a network marked by a high degree of compatibility and conformity to international standards will inevitably strengthen the Commission's hand in its efforts to encourage interchangeability of data within European industry.

2. SITUATION IN 1980

2.1. Positive aspects

Having been 'bogged down' for several years in a difficult transfer of their central equipment, the data processing departments were glad to see the operation completed. This event was also accompanied by a series of important measures affecting the future work of the data processing departments.

2.1.1 Planning bases for future development

In 1980 the Commission stated clearly the objectives which the data processing departments should attain:

- a high degree of integration of data processing, telematics and office automation within the various user departments;
- a high degree of compatibility and exchange of data between the various sets of equipment in the networks;
- the implementation of selection tools (standard specifications) so that when new equipment is being selected the industrial policy objectives can be reconciled with the constraints imposed by the current state of hardware development;
- the launching of studies on the information systems required for the administrative and financial management of Community resources and of the Commission's departments.

The purpose of these measures was to increase the capacity and speed up the work of the Commission's various user departments and at the same time produce substantial savings in terms of money and of staff throughout the organization.

Their longer-term aim was to ensure user access to actual multi-service stations capable of carrying out numerous functions: calculation, access to computers, printing, copying, video- and tele-texts etc.

The decisions taken by the Commission in May 1980 therefore really constitute the groundwork for a new strategy.

Armed with specific objectives and headed by a director who is a specialist in information technology, the data processing departments will henceforth have a solid basis for harmonious development.

It is moreover, essential that this development of internal data processing activities should respect the aims of the general telematics policy set out in the report submitted by the Commission to the European Council at its Dublin meeting in November 1979. One of the main objectives outlined in that report is to promote the development of an integarted information exchange system between the Community institutions and the administrations of the Member States.

¹ 'European society faced with the challenge of new information technologies a Community response' - Doc. COM(79)650 final.

1980 saw the completion of an initial series of methodological and economic studies intended to supplement the preliminary design stage of this interinstitutional information system (INSIS).

The encouraging results of these initial studies prompted the Commission to set up an INSIS Steering Committee and to define its terms of reference.

All these developments make for increased convergence and coherence in the Commission's internal data processing activities and general telematics policy.

2.1.2 Working conditions

The staff of the data processing departments have lived through an eventful and difficult period. While performing the difficult tasks arising from the introduction of new equipment and the conversion of applications the staff also had to continue providing an uninterrupted high-quality service to the various users and to cope at the same time with the constant pressure of rapidly increasing demand.

The need to meet all these obligations at the same time, coupled with the fact that the means required to carry out this work were not always available, gave rise to understandable concern amongst these highly professional employees.

The intensive phase of equipment renewal is now over. The Commission has set the data processing departments specific goals, and appointed a director who can discuss problems directly with the staff.

Provided they are accompanied by the essential financial and staffing resources, these new circumstances should create a more stable situation marked by clear forward planning and should remove all feelings of uneasiness or uncertainty amongst the staff.

In this respect also 1980 marks a turning point.

² Documents COM(80) pv 585 and SEC(80)1929.

2.2 Negative aspects

The list of positive aspects given above does not, of course, mean that all the conditions necessary for the satisfactory development of the data processing departments are present. In fact, serious problems remain.

2.2.1 Shortage of staff

The minimum workforce which the data processing departments need to carry out their tasks satisfactorily was calculated some years ago by independent outside experts to be approximately 350.

As all parties concerned, including the Parliament and the Court of Auditors, are well aware, the current workforce, counting all categories of staff, of 290 is therefore still insufficient.

It is vital to make up this shortage in one way or another, since continuity from one year to the next, the efficiency of data processing at the Commission, profitability and the direct savings which this activity entails all depend upon this happening.

There are two possible solutions:

- the budgetary authority must either grant the data processing departments the additional permanent posts required;
- or it must grant the data processing departments sufficient financial means to recruit under contract external staff who are able to carry out the extra work under the direction of permanent staff.

The second alternative is perfectly feasible, but if it is adopted a certain ratio of outside staff to permanent staff will have to be respected to enable the Commission to remain in control of all its activities, particularly since there are confidential projects which cannot be entrusted to outside staff (e.g. the FMM Fissile Materials Monitoring or internal management projects).

This alternative would also require regularization of the situation of temporary staff (21 persons in all) as a matter of priority. It is abnormal and unjust that candidates who have passed open competitions should be doing permanent jobs without being given the permanent posts to which they are entitled. It would, moreover, be extremely damaging to the operation of the data processing departments if such a situation were allowed to continue.

Finally, this alternative would also mean that the cost of external staff, which is double that for permanent staff, would have to be taken into account and accepted when the budgetary resources were being fixed, since the data processing budget would then by definition comprise a high proportion of credits allocated for external staff. In any event, unless it is prepared to accept reduced efficiency or indeed to jeopardize the very existence of the data processing departments, the budgetary authority cannot go on year after year refusing to grant the necessary increase in appropriations and the permanent posts required. The attitude adopted so far by the budgetary authorities will inevitably bear bitter fruit sooner or later.

2.2.2 Inadequacy of hardware

The increase in capacity of the ICL 2980 computer and the operation of the ICL 2976 computer should make it easier to meet user needs.

On the other hand the lack of funds in 1980 meant that it was not possible to equip the networks fully (258 terminals at the end of 1980 as opposed to 213 at the end of 1979, whereas requirements totalled 307). The reduction which the budgetary authorities have made in the 1981 budget therefore represents a total 'freeze' in this area until 1982.

At a time when development should be receiving priority, in accordance with the Commission's decisions - particularly in the field of distributed data processing - the operational capacity of the networks is actually being cut back.

This is highly damaging to the Commission's departments which are also unable to take advantage of the rapid technological developments in this field.

2.2.3 Projects abandoned

The shortage of funds, staff and equipment in the data processing departments is not important in itself. But these departments produce the raw or processed materials for the various Commission services and it is by observing the effects on the activity of the other departments that the deleterious effect of these shortages may be seen.

Owing to the lack of funds, a very rigorous selection procedure was applied in 1980 to applications for processing. Only high priority applications were selected.

¹ Annex 9 gives the list of projects which could not be undertaken in 1980 owing to shortage of resources.

It is worth emphasizing the serious effects these measures will have on all the statistical and econometric projects, since these represent a high proportion of all applications, given that the nature of statistical work very often precludes manual processing. In addition to the considerable delay caused in the development of important projects such as the setting-up of new data bases, this shortage of resources delays analysis of numerous surveys for which material has nevertheless been collected at great expense, thus obliging the Commission to subcontract to outside firms work which must then be combined with the data processed by the computers at the Computer Centre. Finally, and again for the same reasons, CRONOS, the important application managed by the Statistical Office, has been made publicly available via EURONET by the intermediary of an outside computer.

The functional analysis and programming backlog at the present time is affecting over 90 applications which it had not been possible to deal with by the end of 1980. These applications relate both to the internal management of the Commission and the activities of the EDF, the Fisheries Directorate, the Statistical Office, Financial Instruments, etc.

It is impossible with the means available to make an accurate assessment of the overall budgetary effect of this backlog or to put a figure on the savings which could have been made by processing the 90 applications by computer. But, even in the absence of such means, also caused by this same shortage of financial resources and staff, it may safely be assumed that the extra burden borne by all departments and reflected in the overall budget is considerable.

Without even going into broader considerations such as the reduction in the amount of work completed and "einefficiency which such a hold-up inevitably entails for the user departments, principles of sound management suggest that the continuance of such a state of affairs from year to year is difficult to justify.

It is surely also ridiculous that the Commission, which is making every effort to create an efficient and competitive telematics industry in Europe, should be obliged to hold back the development of its own applications and its own data processing department because of budgetary restrictions.

CONCLUSION

3.

1930 was indeed another year fraught with difficulties for the Commission's data processing departments, and users will continue to feel the effects in 1931. It did, however, mark the end of an era for the departments - renewal of the central equipment was completed and a new chapter has been opened.

 1_{WO} important changes which will take effect from the first months of 1981 were prepared and planned throughout the second half of 1980, namely the rehousing of the Computer Centre in the Jean Monnet Building and the installation by ICL of a new more powerful version (5 x 6.10) of the operating system.

1980 was a year of transition which may prove to have provided the basis for an efficient and solid data processing structure. The architecture is ready, but quantitatively and qualitatively adequate equipment and staff are still required.

There are two alternatives:

either the Commission is given a structured and solid data processing system so that efficiency can be increased in all other departments and overall savings made, since many processes carried out manually can then be carried out by computer;

or

insufficient funds and staff will be granted for data processing, and the Commission will fail to achieve this efficiency and overall savings since its departments will continue to process many of their operations manually.

¹ Part of the Jean Monnet Building in Luxembourg has been prepared to receive the new Computer Centre.

Annex 1

LIST OF THE MAIN DATA PROCESSING APPLICATIONS OPERATIONAL IN 1980

- 24 -

1. <u>Subject fields</u>

1.A. Administrative management

1.B. Accounting and fund management

- 1.C. Statistical applications
- 1.D. Documentation applications

1.A. Administrative management applications

1. RENSPERS

This is the staff information file.

Uses: individual data, various extracts and summaries, statistics, updating. This application is also operated for the European Parliament. Operated on ICL 2980 - terminal 2903/4.

2. <u>CAREERS FILE</u> (DG IX)

File containing staff career history. Use: individual forms containing career records. Operated on ICL 2980 - OLINIX terminal (the application is only partly operational.)

3. STAFF REPORTS FILE (DG IX)

Use: publication every two years of lists and statistics on staff reports. Operated on Philips P 7000 equipment - input via optical scanner.

4. <u>RENSEMPLOI (DG IX)</u>

File of Commission posts.

Use: publication of statistical lists and tables and printout of a quarterly organigramme. Operated on ICL 2980.

5. PRONOM (DG IX)

File on the promotion and appointment of officials. Uses: monthly (bulletin) and quarterly lists, statistics. Operated on ICL 2980.

6. <u>ABSENCES AND LEAVE</u>

Calculation of leave entitlement, recording of leave taken and absences due to sickness. Uses: individual forms, lists and statistics. Operated on ICL 2980 - input by optical scanner.

7. <u>COMPETITIONS</u> (DG IX)

Management of open recruitment competitions. Uses: correction, preparation and analysis of tests and notification of the results. Operated on Philips P 7000.

8. OFFICIALS' PAY (DG IX)

Monthly calculation of remuneration. Multiple uses. Operated on ICL 2980.

9. PAY FOR LOCAL STAFF IN LUXEMBOURG (IX)

Monthly calculation of the emoluments of local staff at the Commission in Luxembourg. Operated on ICL 2980.

10. OVERTIME (DG IX)

Management of a file setting out the non-flat-rate overtime worked. Operated on ICL 2980.

11. <u>CLEANERS' PAY (DG IX)</u>

Calculation of the wages of the Commission's cleaners in Luxembourg. Operated on ICL 2980.

12. PAY ANNEX (DG IX)

Matters related to pay such as salary scales, models (simulation), distance tables.

13. RESEARCH BUDGET ACCOUNTING (DG IX)

Analysis of the amounts to be paid and deductions to be made from the salaries of officials paid from the research budget by centre and programme. Operated on ICL 2980.

14. SICKNESS INSURANCE REPAYMENTS (DG IX)

Calculation of the amount due in respect of medical expenses incurred by staff at the various institutions (partly operational). Operated on ICL 2980.

15. STATISTICS, LUXEMBOURG (DG IX)

Production of statistical statements for calculation of the average cost of various services to allow reassessment of the sickness insurance repayment ceilings. Operated on ICL 2980.

16. STAGIAIRES (DG IX)

Management of the file containing personal data and the training period ('stage') spent by former administrative trainees with the Commission. Operated on ICL 2980.

17. PAUL FINET FOUNDATION GRANTS (DG V)

Management of the files of recipients of Paul Finet Foundation grants (the children of workers in the coal and steel industry whose fathers have died as the result of an accident or occupational disease). Operated on ICL 2980.

18. EDF GRANTS (DG VIII)

Management of the EDF grants file (previous training, studies, training periods etc.). Operated on ICL 2980 (only partially operational).

19. EUROPEAN SCHOOL

Management of pupils' files. Operated on ICL 2980 (only partly operational).

20. RESTAURANT CARDS (DG IX)

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Printing of passes and lists. Operated on ICL 2980.

21. COOPERATIVE CARDS (DG IX)

Printing of lists and purchasing cards. Operated on ICL 2980.

22. INVENTORY (LUXMBOURG DG IX)

Calculation of the purchasing and selling prices of goods in stock at the Luxembourg shop. Operated on ICL 2980.

23. ANNUAL DUTY-FREE ALLOWANCE (COLIS) (DG IX)

Printout of lists for checking deductions and orders. Operated on ICL 2980.

24. STOCKS (LUXEMBOURG DG IX)

Management of the consumption of office materials in Luxembourg. Stock flow. Operated on ICL 2980.

25. INVENTORIES (DG IX)

Records, forms and statistics for the management, checking and accounting in respect of the Commission's inventoriable property. Operated on ICL 2980.

26. LIST OF SUBSCRIPTIONS (DG IX)

Printout of lists drawn up by the Commission library of periodicals, journals, brochures and books. Operated on ICL 2980.

27. LIBRARY CATALOGUES (BRUSSELS DG IX)

Operated on Siemens.

28. TRANSLATION STATISTICS (DG IX)

Recording of the number of pages translated per month by the Brussels translation departments. Statistics broken down by language and by requesting department. Operated on ICL 2980.

29. ALLOCATION OF INTERPRETERS (DG IX) (SAFIR)

Management system for the allocation of interpreters and meeting rooms. Operated on ICL 2980. This application is partly operational; other stages are being developed.

1.B. Accounting and fund management

30. SICOMU (DG XIX)

Integrated unified accounting system. Partly operational. Operated on NIXDORF.

31. RESEARCH ACCOUNTING (DG XIX)

Recording of the movements (appropriations, payments, commitments) concerning the use of appropriations from the Commission's research and investment budget by object of research. Operated on ICL 2980.

32. FINANCIAL MANAGEMENT (DG XIX)

Annual printout of tables on the use of appropriations from the resarch and investment budget and the operating budget by item and by project. Operated on ICL 2980.

33. PPBS (DG XIX)

Recording of forecasts and results and analysis of these data by means of the PPBS analysis method. Operated on ICL 2980.

34. SICKNESS INSURANCE ACCOUNTING (DG XIX)

Recording of reimbursed medical expenses. Printout of statements of account by payment office and by institution. Operated on ICL 2980.

35. RESTAURANT ACCOUNTING (DG XIX)

Operated on ICL 2980.

36. PAY ACCOUNTING (DG XIX)

Analysis of expenditure (amounts to be paid) and income (deductions) on the renumeration of staff paid from the research budget by centre and by programme.

37. EAGGF - GUARANTEE (DG VI)

Budgetary and accounting management of the EAGGF - Guarantee advance payments system. Operated on ICL 2980.

38. EAGGF - GUIDANCE (ADMINISTRATION DG VI)

Recording of requests for aid (aid for restructuring agriculture infrastructure). Project follow-up and fund management. Operated on ICL 2980.

39. ECSC - FORMER SYSTEM (ACCOUNTING, DG XVIII LEVIES)

Management of the bonds issued by the ECSC. Statistical statements on tasks. Operated on ICL 2980.

40. ECSC LEVIES (DG XVIII)

Recording of Community levies in the coal and steel industries in the countries of the EEC pursuant to Articles 49 and 50 of the ECSC Treaty. Operated on ICL 2980.

41. ECSC LOANS ACCOUNTING (DG XVIII)

Theoretical calculation of the gross profit, depreciation and recoverable charges per annum on ECSC loans. Operated on ICL 2980.

42. KNOWN ECSC INTEREST ACCOUNTING (DG XVIII)

Calculation of the interest on ECSC borrowings and loans. Operated on ICL 2980.

43. STATE OF THE ECSC PROTFOLIO (DG XVIII)

Accounts of purchases and sales of bonds from the ECSC portfolio. Operated on ICL 2980.

44. ECSC LIQUID ASSETS (DG XVIII)

Acounts of ECSC assets (bonds and bank deposits). Statements of assets by country, bank and currency. Operated on ICL 2980.

45. ECSC FINANCIAL ACCOUNTS (DG XVIII)

Recording of all ECSC financial transactions. Printout of the main book, the journal and statistical list. Operated on ICL 2980. 46. SOCIAL FUND (DG V)

Management of applications for aid from the Social Fund. Operated on ICL 2980.

47. ERDF STATISTICS (DG XVI)

Statistics on ERDF intervention. Operated on ICL 2980.

48. ERDF MANAGEMENT (DG XVI)

Recording of the requests for aid approved, project follow-up and fund management. (Only partially operational). Operated on ICL 2904.

49. EDF STATISTICS (DG VIII)

Recording of invitations to tender for works and supplies relating to contracts awarded within the context of the ACP development fund. Operated on ICL 2980.

50. EDF ACCOUNTING (DG VIII)

Administrative accounting (statement of development fund management, commitments, scheduling) and financial accounting (EDF balance sheet, accounts journal, monthly balances). Operated on ICL 2980.

51. FISSILE MATERIALS MONITORING (DG XVII)

Verification of data and updating of the file of inventories and variations in fissile materials stocks. Only partly operational. Operated on ICL 2980.

- 1.C. Statistical applications (operated on ICL unless otherwise stated)
 - 1.C.1. Economic Analysis
 - 52. VARIOUS APPLICATIONS FOR THE ANALYSIS OF STATISTICAL DATA AND THE PREPARATION OF ECONOMIC MODELS (DG II)

Only partly operational. Operated on IBM DIEGEM, Mitra 225, and ICL 2980.

53. RICA MANAGEMENT, MODELS (DG VI)

Management of the data and models associated with the agricultural accountancy data network (RICA). Only partly operational. Operated on ICL 2980.

54. RICA STUDIES (DG VI)

Analysis of RICA data. Material : Analysed at the Ministry for Economic Affairs (in APL).

55. PRICES AND LEVIES (DG VI)

Management of day-to-day data on prices and levies associated with the common agricultural policy. Operated on ICL 2980.

56. CURRENT RATES (DG VI)

Calculation of financial tables for the evaluation of the cost of interest payments and credits at reduced rates. Operated on ICL 2980.

1.C.2. Foreign trade

57. FOREIGN TRADE, GENERAL PROGRAMME, REGULATION 1736/75:

This program is of interest to several directorates-general, including DG I, DG III and DG VI, and generates the input for other systems.

58. COAL AND STEEL

Specialized statistics of particular interest to DG III.

59. ALERT SYSTEMS, INCLUDING "TEXTILES"

Special statistics for monitoring the level of inputs of sensitive products : textiles, oil, footwear etc.

60. MONTHLY BULLETIN

Outside production plus development on ICL of a new model which includes Greece and incorporates various improvements.

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61. SPG

Control of import levels under GATT.

62. RAPID STATISTICAL INFORMATION FOR TRADE NEGOTIATIONS

To meet ad hoc demands during negotiations (e.g. GATT).

63. UNIT VALUE INDICES

Analyses of foreign trade indices.

64. TRADE MACRO-ANALYSES

In addition to the <u>ad hoc</u> analyses intended for trade negotiations based on the NIMEXE classifications there are more general studies of development trends in commercial relations between various groups of countries (partly carried out externally).

65. <u>ACP STATISTICS</u>

Production and processing of data.

66. DECENTRALIZED FOREIGN TRADE PROJECTS

Ad hoc analyses, formatting for input into CRONOS etc.

67. MISCELLANEOUS FOREIGN TRADE STATISTICS

These are concerned with work on product nomenclatures, raw materials, certain ACP projects, etc.

68. TEXTILES DATA

Concerned with the extraction of statistical data suitable for the requirements of DG III for the preparation of ad hoc analyses.

1.C.3 CHONOS

69. CHHONOLOGICAL SERIES

CHONOS manages a statistical data base in the form of chronological series. The current base contains over 900 000 data series. It is directly accessible via the terminals network and is a major tool in the work of the SOEC and other directorates-general.

70. PUBLICATIONS" (CRONOS)

These are statistical bulletins using OSIRIS.

71. CRONOS FORMATTING ETC.

Prepares data in a form suitable for storage in CRONOS.

1.C.4 Surveys

72. STRUCTURE OF THE 'SALARIES' SURVEY

This survey concerns 4 million individuals and involves the preparation of 130 tables per geographical unit.

73. LABOUR COSTS SURVEY 1978

Application of Council Regulation 494/78. Processed on ICL in APL for lack of traditional programming means.

74. LABOUR COSTS SURVEY 1979

Application of Council Regulation 327/79. Processed on IBM at Diegem.

75. STRUCTURE OF AGRICULTURAL HOLDINGS (75)

Following a basic publication programme and analyses using the first classification of agricultural holdings, further analyses proved necessary.

76. STRUCTURE OF AGRICULTURAL HOLDINGS, TYPOLOGY

Continued implementation of Council Directive 75/108/EEC and Commission Decision 78/463/EEC.

77. STRUCTURE OF AGRICULTURAL HOLDINGS (77)

Implementation of Regulation 3288/76. This concerned in particular the preparation of tables setting out the individual data submitted by the Member States.

- 78. STURCTURE OF AGRICULTURAL HOLDINGS (77) TYPOLOGY
- 79. STRUCTURE OF AGRICULTURAL HOLDINGS (79)

Implementation of Council Regulation 218/78.

80. VINES SURVEY (79)

Implementation of Council Regulation 1972/80.

81. FARM INCOMES SURVEY (80)

82. INDUSTRIAL SURVEYS

Implementation of Council Directives 64/475/EEC and 72/221/EEC. Annual surveys on industrial structure, activity and investments of undertakings employing 20 or more persons.

83. ACCIDENTS SURVEY (COAL AND STEEL)

1.C.5 Miscellaneous

84. TRANSPORT STATISTICS

Statistics by type of transport.

85. PASCAL (DG IX)

This is a PASCAL programming language compiler. This application, which operates on ICL 2980, will be developed in the future on the computer Siemens.

86. SABINE (DG VI and SOEC)

This is a specialist data base management software for statistical nomenclatures.

87. REGIONAL STATISTICS

Data base managed in APL on Siemens.

88. INPUT-OUTPUT TABLES (national accounting)

Data base managed in APL externally.

89. <u>INPUT-OUTPUT TABLES</u> (energy) See previous item.

90. STRUCTURAL DATA BASE

Managed in APL on MITRA. Estimates on industrial structure.

91. FINANCIAL ASSISTANCE TO REGIONAL INVESTMENTS

Data base managed on MITRA.

92. DECENTRALIZED STATISTICAL PROJECTS

Use of specialist programming languages such as OSIRIS in the generation of tables, APL or others.

93. STEEL QUOTAS

Related to the Commission Decision of 31 October 1980.

94. STEEL SURVEY

Implementation of the steel production monitoring system related to the Decision mentioned above.

95. STEEL INVESTMENTS SURVEY

96. INDICES OF INDUSTRIAL CONCENTRATION

DG IV application processed externally.

97. OIL CRISIS

DG XVII application using CRONOS to follow up information on oil products.

1.D. Documentation applications

98. EURODICAUTOM

Terminological and abbreviations data bank in six languages. Processed on Siemens.

99. NOMENCLATURE OF CHEMICAL PRODUCTS

Multilingual data base giving nomenclature of chemical products on the market. Processed on ICL 2980.

100. ECLAS CENTRAL LIBRARY CATALOGUE

Bibliographical file containing 10 000 titles. May be used for the publication of indexes. Processed on Siemens.

101. EUROPEAN FILE OF COLLECTIVE AGREEMENTS

File analysing collective agreements in 13 industrial sectors. Processed on Siemens.

102. DOME

Computerized documentation system contain micro-economic information. Processed on Siemens.

103. <u>SGAP: COMPUTERIZED SYSTEM FOR THE MANAGEMENT OF ADDRESSES AND</u> <u>PUBLICATIONS</u>

Multilingual list of publications and addresses used by the Publications Office, address management part only. Processed on ICL 2980.

104. (SID) SCRAPBOOK

This is a project and information documentation system, a Scrapbook application within the context of the work of the INSIS. Processed on Siemens.

105. EURONET-DIANE SERVICE

Information service set up especially for users. Processed on Siemens.

106. EURO-ABSTRACT

Bibliographical file of the Commission's scientific and technical publications. Processed on Siemens.

CIRCE:

107. CELEX

Data base on Community law. Interinstitutional system which covers the following main sectors: Treaties, agreements, secondary legislation (regulations, directives.

decisions), preparatory studies by the European Parliament and the Economic and Social Committee, case law of the European Court of Justice, questions put by members of the European Parliament.

108. <u>ECO 1</u>

General system for the Commission's internal documentation containing in particular Commission decisions and documents sent to the Council, minutes of Commission proceedings and minutes of Coreper, the Council, the Parliamentary committees, the Parliament, the Economic and Social Committee, the ECSC Consultative Committee, written and oral question and answers, external surveys requested by the Commission and a list of Council decisions.

109. PRC

System aimed at retracing the history and the progress of all Commission proposals or communications. This system is able at any given moment to give the previous stages, the present stage and the stages which the proposal or communication is to follow within the institutions.

110. <u>ACTU</u>

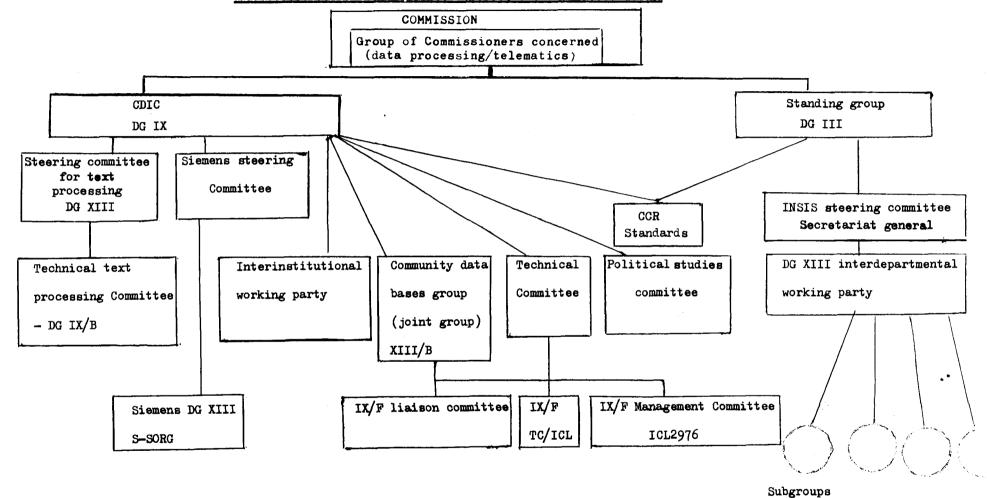
Rapid information system (updated daily). Management of written procedures and authorizations, documents distributed by the Registry.

111. ASMODEE

System for monitoring the implementation of Council directives in the various Member States and for producing the relevant documents (files, statements, reports).

DIAGRAM OF THE EXISTING DATA PROCESSING/TELEMATICS COMMITTEES

Annex 2.1



NB: the directorate-general of the chairman is indicated for each committee.

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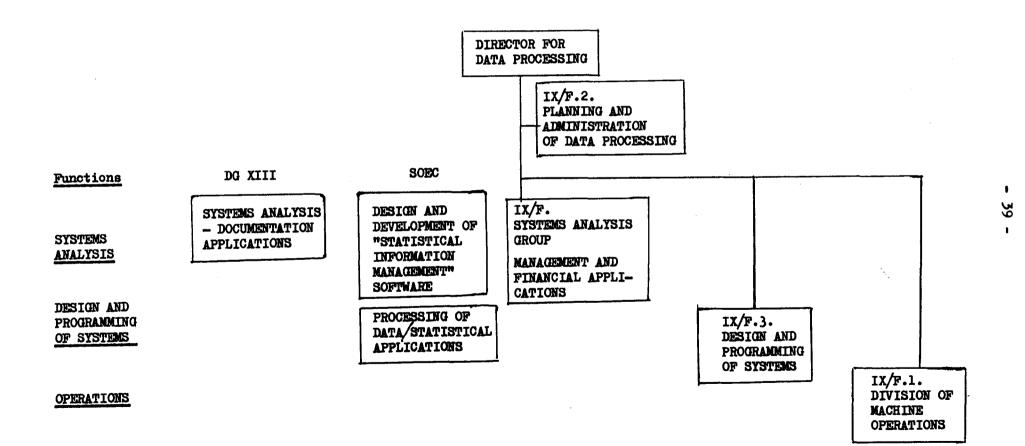
Anner 2.2.

CURRENT ORGANIZATION OF THE DATA PROCESSING DEPARTMENTS

WITHIN THE COMMISSION

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CDIC - MANAGEMENT CONDITTEE FOR DATA PROCESSING AT THE COMMISSION



NUMBER OF EMPLOYEES IN 1980 (Permanent and temporary posts)					
	A	в	C	D	TOTAL
Statistical Office	10 (1)	3 (-)	_	<u></u>	13 (1)
DG IX (Personnel and Administration)					
Functional analysis group (IGAF)	9 (1)	- (-)	2 (-)	- (-)	11 (1)
Specialist analysis and programming department (SSAP)	20 (4)	44 (5)	3 (-)	- (-)	67 (9)
Computer operations division (DEI)	12 (2)	34 (2)	60 (1)	3 (-)	109 (5)
Data-processing planning and administration (IPA) CIRCE	5 (3)	2 (1) _	4 (-) 8 (-)	- (-) -	11 (4) 8 (-)
DG XIII - Special documen- tation data processing department	9 (1)	4 (-)	-	- (-)	13 (1)
Total permanent posts plus temporary posts	65 (12)	87 (8)	77 (1)	3 (-)	(≆) 232 (21)

Total number of staff (**) employed under contract at the end of 1980 : 58 Total number of staff in the data processing departments at the end of 1980 : 290

(*) The figures include both permanent and temporary posts. Temporary posts are shown in brackets.

(##) At the end of 1980,58 persons belonging to outside firms were working under contract in the data processing departments. This figure varies considerably from one month to the next depending on the rhythm, duration and starting date of contracts. It is therefore merely a guide and applies to one given moment.

STAFF TRENDS IN THE COMMISSION'S DATA PROCESSING SERVICES FROM 1975 TO 1980

Year	A	В	CD	TOTAL
1975	43	68	60	171
1976	45	70	60	175
1977	57	81	76	214
1978	64	79	· 87	230
1979	69	90	80	239
1980	65	87	80	232

DATA PROCESSING EQUIPMENT IN USE AT THE COMMISSION IN 1980

- 42 -

CONFIGURATIONS AND ASSOCIATED NETWORKS

1. ICL 2980

11. Central configuration

- One 11-megabyte main memory
- 42 detachable discs with 5 controllers
- 4 drums with 2 controllers
- 12 tape cabinets with 3 controllers
- 4 printers
- 2 card readers
- 2 operator consoles
- 1 card punch
- 2 transmission network processors (CNP)

12. Network

- 32 Olivetti TC800 synchronous terminals with printer
- 36 Nixdorf 8820 synchronous terminals with printer
- 41 ICL 7561 (screen) synchronous terminals
- 11 Mitra 115 remote job entry terminals entry
- 3 ICL remote job/terminals (2903/4)
- 2 Diablo 1620 synchronous terminals
- 2 Tektronix asynchronous terminals

127 in all

2. Siemens 7760

II 1 Central configuration

- One 3-megabyte main memory
- 4 420 megabyte + 4 300 megabyte discs with 2 controllers
- 5 type cabinets with 1 controller
- 3 selector channels
- 1 printer
- 1 card reader
- 1 leader (Duet)

II 2 Network

- 12 Siemens 8160 synchronous terminals
- 3 Siemens 8161 synchronous terminals
- 1 APL Siemens 8152 synchronous terminal
- 15 Newbury asynchronous terminals (7002, 7009)
- 6 Diablo 1620 asynchronous printer terminals
- 12 TTY Olivetti TCV 450 + HC terminals
- 1 Braille TEM 8 terminal

50 in all

3. Honeywell Bull Service Bureau

III 1 Central configuration

- IRIS 80 computer
- One 1.3 megabyte main memory
- 12 detachable discs with 2 controllers
- 4 tape cabinets with 1 controller
- 1 printer
- 2 operator consoles
- 1 card reader
- 1 leader calculator

III 2 Network

50 TTY Olivetti TCV450 + hard copy

1 Matra input unit

Annex 4.4

OTHER TERMINALS AND MINI-COMPUTERS IN SERVICE AT THE COMMISSION IN 1980

- 4 Nixdorf 8820 + printer (DG III, Publications Office, DG VI, SOEC)
- 5 terminals including 1 ICL 2903/4 remote job entry station with 4 terminals connected to DIRECT ENTRY ICL (DG IX)
- 5 terminals including 1 Mitra 115 APL terminal connected to 4 Diablo 1620 terminals available to DG II
- 5 terminals including 1 Mitra 115 APL terminal connected to 4 Diablo 1620 terminals available to the SOEC
- 3 Nixdorf 8820 terminals plus printer connected to 2903 in DG V
- 1 TTY IBM 5100 asynchronous terminal available to SOEC

23 in all

+ 8 IBM service bureau terminals including 5 IBM 3278, 1 IBM 3776, 1 IBM 3276 and 1 IBM 3767 APL.

Total number of terminals: 258

Annex 5.1

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EXPENDITURE ON DATA PROCESSING IN 1980

	Item 2100	000 EUA ¹	Million Bfrs
1.	ICL rental and maintenance	3 901	158
2.	Software	165	6.7
3.	Network:		
	- terminals	2 123	86
	- telephone lines	333	13.5
	- modems/racks/switches	425	17.2
4.	Alternators	10	0.4
5.	Coding (equipment and service bureau)	348	14.1
6.	Technical assistance (operation)	2 178	88.2
7•	Supplies (discs, tapes, paper, ribbons of and purchase of sundry equipment	etc.) 840	34 .
8.	<u>Share in costs of Simens 7760</u> internal network (DG XIII)	185	7•5
9.	Miscellaneous	23	0.9
		10 531	426.50
	Less re-use and adjustments	431	17.50
	TOTAL FOR ITEM 2100	10 100	409
	Steel	239	9•7

¹ Based on an average value of 1 EUA = Bfrs 40.5.

	<u>Item 2100</u>	000 EUA ¹	Million Bfrs
1.	External service bureaux (chiefly CIRCE and DG II)	2 560	103.7
(telephone search, si accounting centre, fi	Decentralized equipment (telephone search, single accounting centre, fisheries, textiles monitoring etc.)	1 326	53•7
		3 886	157.4
	Less adjustments	22	0.9
	TOTAL FOR ITEM 2110	3 864	156.5
	Steel	12	0.5

<u>Item 2120</u>

1.	SOEC - Technical assistance for CRONOS, GATT, BACKLOG and various applications	620	25.1
2.	DG XVIII - Technical assistance for development of the ECSC borrowings and loans system and IDMS	376	15.2
3•	DG IX - Technical assistance for telephone transport, SIPA, TAMIS, optical scanning	314	12.7
4.	CIRCE - File transfer and technical assistance	262	10.6
5.	SAFIR - Allocation of interpreters	413	16.7

¹ Based on an average value of 1 EUA = Bfrs 40.5.

Annex 5.3.

		000 EUA ¹	<u>Million Bfrs</u>
6.	DG XVII - Technical assistance FMM	62	2.5
7.	DG VI - RICA, EAGGF	47	1.9
8.	DG II - Technical assistance, OECD	44	1.8
9•	DG V - Technical assistance ESF	54	2.2
10.	Miscellaneous	148	6
		2 540	194.7
	Less re-use and adjustments	429	17.3
	TOTAL FOR ITEM 2120	1 911	77.4
	Steel	204	8.2
			•
	<u>Item 2130</u>		
1.	Document analysis	750	30
TOT	AL FOR ARTICLE 21	16 625	672.9
• 1	Steel	455	18.4
	GRAND TOTAL:	17 080	691.3

¹ On the basis of an average value of 1 EUA = Bfrs 40.5.

Annex 6.1

STATISTICS FOR MACHINE TIME USED IN 1980 - ICL 2980 COMPUTER

Average OCP time used in MINUTES/DAY PER PERIOD OF 4 WEEKS

1. STATISTICAL APPLICATIONS

TOTAL:

496.9

made up as follows:

COMEXT ECSC statistics TEXTILES GATT Tariff preferences CRONOS OSIRIS - CRONOS Bulletins Decentralized statistics Agricultural surveys Other statistics Various developments for statistics IMPORT/EXPORT licences Air pollution Energy research STEEL investment Oil crisis CRONOS development	71.2 25.8 17 6.5 2.8 103.5 64.2 99.3 8.2 11.2 8.2 8.7 3.9 3.0 16.8 2.0 0.4
Miscellaneous	29.7

2. DOCUMENTATION AND CIRCE

TOTAL:	83+6
made up as follows:	
CIRCE SAGAP	57•4 20•9
DG XIII	5.3

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3. ADMINISTRATION AND FINANCIAL INSTRUMENTS

TOTAL

214.2

made up as follows:

Staff files	12.1
Posts and allocation of posts	5•7
Absences and leave	21.8
Pay	24.7
Allowances and deductions	1.9
Sickness insurance	6.6
Former stagiaires	0.4
EDF grants	8.5
FINET Foundation	1.5
European School	1.5
Building loans	0.2
Supply of equipment	3.0
Library	0.1
Translation planning	0.2
SAFIR conferences	48.0
Budgets	7•7
Sickness insurance accounting	0.2
Other DG XIX applications	0.2
ECSC accounting	1.5
EAGGF guidance	15.1
ECSC funds	3.7
EDF	2.3
ERIF	1.2
DG XVII	19.7
DG II	8.7
DG VI - LP models	0.7
DG VI - agricultural accounting data network	4.2
DG VI - SABINE production	0.1
Budgets and accounting (IPA)	0.9
Other applications	11.5

4. EURATOM ETC.

5. MACHINE MANAGEMENT

GRAND TOTAL

1.6

157.7

964.8 min/d

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Annex 7.

Central configuration of the 2976 computer

(Service bureau)

IV ICL 2976 - Service Bureau

IV1 Central configuration

- 16 megabyte-memory
- 12 tape units
- 20 discs
- 2 printers
- 1 card reader unit
- 2 control units.

Annex 8

MAIN CONTRACTS IN FORCE FOR AID TO PROGRAMMING

Firm Project DG IX CIRCE: Technical assistance (engineer/ HB - CII analyst) + file transfer DG XVII: Fissile materials monitoring (FMM) Aronworth Correlative systems DG V: MARCOL All projects for the European Social Fund DATASOLVE OGIP SOEC: ICL 2980 CRONOS system INTERSOFT PASCAL and OSIRIS maintenance IREP DELPI Programming for GATT MARCOL-DELPI BACKLOG DG IX: CAP SOGETI SAFIR: Allocation of interpreters, Stage III DG II: ICL OECD application COMPUTER RESOURCES Various projects DG VI: CORRELATIVE SYSTEMS EAGCF advance payments DG IX: COPERNICUS IGAF optical scanning MATRA CAP SOGETI TAMIS PANDATA SIPA SIEMENS TELTRANS DG XVIII: SIEMENS ECSC - borrowings and loans DATASKIL IDMS STERIABEL Steel survey

LIST OF JOBS WHICH COULD NOT BE TAKEN ON IN 1980 OWING TO LACK OF RESOURCES

- DG II Data bank project
 - Management of MITRA data
- DG V ESF history project Fishing accidents project
- DG VI EAGGF project : irregularities and fraud System of rates project
 - Market management project
 - Other systems project
 - Collection and processing of statistics project
 - Agricultural forecasting project
 - National aids project
- DG VIII EDF management project Register of EDF consultants project
- DG IX Staff system project (SYSPER)

Projects concerning pay

Projects concerning staff reports, the directory, leave and absences

Projects concerning competitions and recruitment

Projects concerning statistics and sickness insurance repayments

Projects for the allocation and distribution of translators and interpreters

Miscellaneous projects

- DG XIV Community fishing licences project EAGGF fisheries guidance project Imports service project Community shipping/non-Community waters project TACS management project
- DG XVII REP FMM conversion project ECSC new transfer of liquid assets project ECSC levies project

ECSC investment adjustment project

- DG XVIII Steel industry model project (APL)
- DG XIX SICOMU management account project

C1	
S)EC

- SIGISE project

Detailed monthly COMEXT project CRONOS 'flags' project CRONOS 'various technical improvements' project CRONOS APL interface project CRONOS software package interface project File transfer project Tariff information file APL analyses project 78/79 salaries survey project (in part) Agricultural structures survey 77 project (in part) Trade negotiations project (in part) Detailed foreign trade data base project Agricultural structures data base project Rank statistics project DOME extension project SAGAP project phases II and III

DOC

On-line library catalogue project

EUSIDIC project

On-line FECC project

SID project (in part)

Consultancy bureaux addresses project