EUROPEAN ATOMIC ENERGY COMMUNITY

EURATOM

THE COMMISSION

Second

GENERAL REPORT

on the

Activities of the Community

(September 1958 — March 1959)

MARCH 14, 1959

The President
and the Members of the Euratom Commission

to

The President
of the European Parliamentary Assembly

Mr. President,

In accordance with Article 125 of the Treaty establishing the European Atomic Energy Community, we have the honour to submit to you the Second General Report of the Commission on the activities of the Community.

We have the honour to be, Mr. President, your obedient servants.

Brussels, March 14, 1959.

E. HIRSCH
President

E. MEDI
Vice-President

P. DE GROOTE
European Commissioner

H. L. KREKELER
European Commissioner

E. M. J. A. SASSEN
European Commissioner

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INTRODUCTION

1. The first General Report submitted to the Assembly by the Commission of the European Atomic Energy Community was of an interim nature. This second Report is intended to supplement it.

2. It is, however, of particular importance as it marks the end of a phase of the Community's existence. Since January 8, 1958, quite apart from the task of building up its own departments, the Commission has had to set up various bodies such as the Supply Agency, lay down regulations governing safeguards and control, health protection and investments, collaborate with the other institutions, make a survey of the progress made in research and industry, organize the unrestricted movement of nuclear materials and equipment and obtain assistance from other countries in order to speed up the development of the nuclear industries in the Community. It has, moreover, begun to study the important question of insurance against atomic risks.

Much of the Report deals with the accomplishment of these tasks, which have been carried out with the minimum of delay and within the limited time allotted by the Treaty. They form the basis of the whole future programme of the Community.

This programme of work will not be completed in a day and it would be unreasonable to expect spectacular achievements in the coming year. The implementation of atomic energy programmes requires vigorous and determined action in a wide variety of fields involving the question of resources, scientific and technical knowledge,

investments and manpower, and practical results cannot be expected immediately.

It is, nevertheless, the Commission's view that sufficient progress has already been made to enable it to concentrate on some of the more important aspects of its work.

3. First and foremost, the Commission intends to establish the Joint Research Centre as soon as possible; the idea of building this Centre on a completely new site, however attractive it might seem, would mean that several years would pass before the first research teams could begin work and it would not be the best means of harnessing the experience built up by existing public and private institutions. The question has, therefore, been mooted as to whether existing research centres might not be placed partly or wholly at the disposal of the Commission. A number of possible solutions are currently being studied but it has not yet proved possible to take a final decision. Apart from existing installations, there is also the question to be considered of the Commission's own projects which will be implemented in the near future under the Research Programme. The choice of the site of the Joint Centre and the way in which it should be organized must be guided primarily by technical considerations, due allowance, of course, being made for all the other relevant factors. The Commission will consult the Scientific and Technical Committee and base its decision on the principle that speed and effective action are the primary necessity in carrying out the task entrusted to it by the Member States.

4. Now that it is able to make practical use of the procedure provided for in the Treaty in the field of investments, the Commission intends at the earliest possible

moment to define the objectives to be attained in the production of nuclear energy and to assess the various types of investment involved. It is fully aware that this can only be done with reference to the general economic development governing power requirements and taking into account the prospects which exist for the exploitation of conventional sources of energy. This means that the Commission must maintain close contact with the High Authority of the ECSC and the Commission of the European Economic Community, if it is to carry out its work successfully. The work of the Mixed Committee on energy policy will have to be continued and brought to a swift conclusion, since the Commission considers that its primary duty towards Member States and enterprises in the Community is to provide them with all the relevant information necessary to enable nuclear energy production programmes to be adjusted in good time to the requirements of the rapid expansion which is to be anticipated. In view of the minimum programmes which can be considered necessary for Member States in the course of the next twenty years, it is clear that the nuclear capacity installed over this period must be in a position to provide at the end of it as much electricity as is produced at the present time. The rate of this development will depend upon technical progress and the availability of equipment, capital and man-power; at all events, it is essential for producers of equipment, apparatus and fuel to be kept informed of probable trends in order to be able to adjust their production according to requirements.

5. The agreements concluded with Great Britain and the United States should help to promote and speed up this development. The Commission, therefore, attaches great importance to the rapid implementation of these agreements, which provide an opportunity for the construction of reactors of various types, *e. g.,* water reactors, gas-cooled reactors, etc. During the current year, projects will

be submitted and examined for the reactors to be constructed under the Euratom - United States Agreement. The drawing up and the study of these projects will mean a considerable amount of work both for the Commission and for the electricity producers concerned. The difficult task of selecting the projects and settling the practical details involved will fall to the Joint Euratom - AEC Committee set up for this purpose. The preliminary stages will be completed in the early months of 1960 and it will be possible to begin on construction immediately afterwards. The same year will see the launching of the joint research programme provided for under the Euratom - United States Agreement. The first draft contracts have already been received in Brussels and in Washington, so that a start can be made on the laboratories and installations later in the year. Finally, as from the middle of 1959, research teams from the Euratom countries will also be working together with teams from Great Britain and other OEEC countries on the project for a gas-cooled high-temperature reactor, known as the Dragon project.

6. The project for a European University, which has now been submitted to the Member States, continues to receive the closest attention of the Commission. It would be wrong to underestimate the practical difficulties of this undertaking, which, in the Commission's view, is a vital necessity, not only for the spread of scientific knowledge and for the study of the many new problems posed by the creation of the European Communities, but also as a means of developing a sense of common purpose and European solidarity. These difficulties must, nevertheless, be overcome and in the course of the year a body must be set up to study the problems involved and prepare the way for the creation of a university and other academic and cultural centres, where teachers and students will work together as Europeans to ensure the continuity of that

civilisation to which our countries have made such a vital contribution throughout the centuries.

7. The creation of the Joint Nuclear Research Centre, the preliminary assessment of the Community's main objectives, the implementation of international agreements and the Euratom - United States Agreement in particular and the planning of the European University — these are the sectors which will have first claim on the attention of the Commission. At the same time, however, this work must not be allowed to impair the fulfilment of the other tasks entrusted to the Commission by the Treaty in the field of specialist training, the dissemination of information, the protection of workers and the general public, insurance against nuclear risks, safeguards and control, and the development of exchanges within and beyond the Community.

The Commission takes this opportunity of emphasizing that it is fully alive to the importance of the responsibilities which it is called upon to bear. The technical work ahead can only be carried out in the spirit of Article 1 of the Treaty and by working in harmony with the other Institutions. As far as relations with these Institutions are concerned, the experience acquired over the past year has shown that the difficulties which are bound to emerge can best be overcome by collaboration based on mutual confidence and respect for the special prerogatives of each Institution.

PART ONE

THE INSTITUTIONS OF THE COMMUNITY

CHAPTER I

THE EUROPEAN PARLIAMENTARY ASSEMBLY

A spirit of mutual trust and collaboration has grown up between the European Parliamentary Assembly and the Commission. The Assembly concentrated its attention on the effects of the development of nuclear energy and the Community's long-term economic and energy policy.

8. The European Parliamentary Assembly held three ordinary sessions in the period under review.

It met from October 21 to 24, December 15 to 17, 1958, and from January 7 to 15, 1959.

The October session was devoted to the presentation of the First General Report of the Commission.

In December, the Assembly examined the draft working budget for 1958, the question of the application of the provisions of the Treaty to the provisional estimates for 1959, the draft research and investment budget for 1958 and 1959, various aspects of scientific and technical research and the basic standards for the protection of the health of workers and the general public.

At the January session, the Assembly opened the proceedings by appointing its officers for 1959; M. Robert Schuman was re-elected President. The discussions, as they affected the European Atomic Energy Community, bore mainly on the economic aspects of the development of nuclear energy production in Europe and its effects on

the Community's long-term economic policy, and on the problem of co-ordinating energy policy.

The Assembly also discussed the question of protection against the hazards of ionizing radiations.

9. These discussions were based upon reports drawn up by MM. Janssen, Ratzel, Bertrand, Posthumus, Van Campen and Santero and submitted on behalf of the following Committees:

— Administration of the Assembly and the Budget of the Communities,

— Scientific and Technical Research,

— Safety Regulations, Industrial Hygiene and Health Protection,

— Energy Policy,

— Long-term Economic Policy, Finance and Investments.

The exchange of views which took place between the Euratom Commission and the Parliamentary Committees proved most valuable. Altogether, the Commission took part in 18 Parliamentary Committee meetings.

CHAPTER II

THE COUNCIL

The Council of Ministers held five sessions. Its major decisions were taken on matters concerned with the Community's external relations and the establishment of basic standards for health protection. The Council also approved the draft research and investment budgets for 1958 and 1959 and the draft working budget for 1958 and drew up the draft working budget for 1959.

10. Since the end of September 1958, the Council has held five sessions: October 7 and 8, November 4, December 3 and 4, December 22, 1958 and February 2 and 3, 1959.

The majority of these were, as in the past, joint Common Market - Euratom sessions; during the second half of 1958, the chair was taken by a Minister of the Federal Republic of Germany(1) and from January 1, 1959, by a French minister.(2)

There follows a brief list in chronological order of the most important decisions taken by the Council:

(1) For Euratom Council meetings, Herr Balke, the Federal Minister for Atomic Energy, took the chair; for meetings of common interest to the EEC and Euratom, the chair was taken by Herr Erhard, Minister of Economic Affairs, Herr Etzel, Minister of Finance and Herr Müller-Armack, Secretary of State in the Ministry of Economic Affairs.

(2) The chairman at the session on February 2, 1959 was M. Couve de Murville, Minister for Foreign Affairs.

October 7 and 8:

Authorization for the Commission to sign the amended version of the Agreement for Co-operation with the Government of the United States.

November 4:

Approval of the Community's draft research and investment budgets for 1958 and 1959.

December 3 and 4:

Approval of the Community draft working budget for 1958.

Adoption of provisional measures for the implementation of the working budget.

Approval of rules of procedure for the Economic and Social Committee and the appointment of the Secretary General.

December 22:

Laying down of directives on basic standards for the protection against the action of ionizing radiations. Approval of the draft of the Agreement for Co-operation with the Government of Great Britain.

Amendment of list B of Annex IV of the Treaty on a proposal of the Commission.

Appointment of members to the Advisory Committee of the Euratom Supply Agency following the approval by written procedure of the Agency's statutes.

February 2 and 3:

Establishment of the draft working budget of the Community for 1959.

Approval of the rules of procedure of the Court of Justice.

In the course of this session, a communication was received from the Commission regarding the opening of negotiations with the Governments of Canada and Brazil.

Determination of the methods for co-ordinating the budgets of institutions common to the three Communities.

The Commission laid all its proposals before the Council within the time-limits prescribed by the Treaty.

11. All questions submitted to the Council were subjected to a preliminary examination by the Committee of Permanent Representatives (1) at its weekly meetings, in which representatives of the Commission also took part. Particular attention was paid to the field of health protection, the Community's external relations, the nuclear common market and budgetary matters.

(1) This Committee, set up in accordance with Article 121 of the Treaty and the provisions of Article 16 of the rules of procedure of the Council, is responsible for preparing the work of the Council and carrying out specific tasks assigned to it by the latter. The Committee has set up a number of working parties to deal with work of a more specifically technical nature.

CHAPTER III

THE COMMISSION

The Commission continues to build up its various departments and to play an active part in setting up the joint departments shared by the three Communities. A major concern has been the recruiting of the qualified technical staff required to enable the Commission to carry out the tasks entrusted to it with the minimum of delay.

12. On January 14, 1959, the President M. Louis Armand tendered his resignation as President and Member of the Euratom Commission. Acting in accordance with the provisions of Articles 127 and 128 of the Treaty, the Governments of Member States in common agreement on February 2 appointed M. Etienne Hirsch, as Member of the Commission in place of M. Armand. After consulting the Commission, the Governments of the Member States, acting in accordance with Article 130 of the Treaty, then proceeded to appoint M. Hirsch as President of the Commission for the remainder of the current term of office.

13. From September 23 to 25, 1958, at the invitation of the Netherlands Government, the Commission paid an official visit to the Netherlands, in the course of which it had the honour of being received in audience by H. M. Queen Juliana. During its stay, the Commission also visited various nuclear installations.

On January 10, 1959, the Commission was received in audience at the Royal Palace in Brussels by H. M. King Baudouin.

In the course of an official visit to Italy from January 12 to 14, 1959, the Commission was received by the President of the Republic. Here again, nuclear installations were visited.

H. H. Pope John XXIII received the Commission at the Vatican on January 14.

On February 4, 5 and 6, the Commission paid an official visit to Great Britain and met the British Government. The Agreement for Co-operation in the peaceful uses of atomic energy concluded between the United Kingdom and Euratom was signed in London on February 4. The Commission visited several important nuclear installations in Great Britain.

§ 1 — Internal Organization

14. To ensure a more even distribution of work among its various departments, the Commission has felt it advisable to make a few minor adjustments. Division No. 9, "Administration and Budget", has been divided into two separate branches, which are now known as the "Administration and Personnel" and the "Finance and Budget" Divisions.

A new department known as the Security Bureau was set up by Council Regulation No. 3 of July 31, 1958 and is responsible for security measures to protect certain kinds of information acquired by the Community, the disclosure of which might be harmful to the defence interests of any of the Member States. It will also ensure that no other information held by the Commission is divulged, the disclosure of which would have serious consequences.

§ 2 — Recruitment of Staff

15. The number of nuclear technicians in the Member States of the Community at the present time is still insufficient. The number of those who are highly qualified and

fit to fill senior staff posts is even more limited. At the moment, however, Euratom is not always able to offer them a position on the terms and conditions to which their professional qualifications and the responsible nature of the work would entitle them; yet the urgency of the tasks entrusted to the Commission by the Treaty makes it imperative for it to have a competent and absolutely reliable staff of technicians and administrators who are able to take up their new duties with the maximum of efficiency and the minimum of delay. The scales of pay of the European Atomic Energy Community should be such as to offer advantages and guarantees which are at least comparable to those offered by other national and international institutions as well as private or public enterprises of the Community.

In this context, the establishment of a statute of service is a matter of primary importance. The temporary provisions which are in force at the moment are largely based on the statute of service of the European Coal and Steel Community and the regulations governing its application. In order to avoid discrimination between the personnel of the various European Communities and to prevent the growth of an undesirable competitive spirit, the Commission considers it essential that an identical statute should be drawn up for the recruiting, grading and net remuneration of the personnel of all three Communities.

§ 3 — Co-operation with the Other European Executives

16. While the Treaties of Rome do not provide for organic links between the High Authority and the European Commissions, the three Executives, fully conscious of the common political conception underlying the European Communities, decided, at a very early stage in the life of the EEC and the Euratom Commission, to establish regular contacts with one another with a view to discussing the

best means of working together to achieve unity of action and a common policy.

In the first place, regular meetings were arranged between the Presidents of the High Authority and the two European Commissions. Several such meetings took place in the months immediately following the setting up of the new Communities. Subsequently, however, when the need for an even closer co-ordination of policy and for the creation of joint services became apparent, it was decided to form working parties consisting of members of the three Executives.

Thus, at the present time, the following meet at least once every month:

I. The Presidents of the Executives,

II. An Inter-executive Co-ordinating Committee,

III. Working parties dealing with:

1) external relations,

2) economic and financial policy,

3) energy policy,

4) social problems,

5) transport,

6) press and information,

7) legal problems.

17. Officials of the Commission also work together with their counterparts in the other Executives by taking part in the work of the Mixed Committee and the Committee of Experts on Market Trends, which deal with energy policy and general economic problems respectively; the

heads of the Administration divisions also hold regular meetings to discuss administrative matters.

18. Furthermore, the Commission has made a number of proposals to the High Authority and the EEC Commission with a view to co-ordinating policy in patent matters. It has also decided to offer to make available to the High Authority and the EEC Commission the services of its department for the Dissemination of Information.

19. Another way in which the three Executives are able to co-operate is through their joint departments. With the creation of these three departments, which it was decided to set up for the three Communities at the beginning of 1958, unity of action is assured in legal matters, statistics, press and information.

The organization of the Legal Department in its final form was approved by the three Executives in January 1959. It is subdivided into three branches, one for each Community. The heads of these three branches are jointly responsible and, under their direction, the department studies all current legal problems arising from the implementation of the three Treaties and endeavours to ensure a uniform interpretation.

The legal experts of the joint department are appointed by the three Executives acting in agreement. If the work of the department should so require, members of the staff with particular qualifications are liable to be assigned to any branch and are expected, if necessary, to deal with problems affecting more than one Community at a time.

The Statistical Department, whose organization was approved in its final form when the three Executives met on February 9, is divided into three general sections (gene-

ral statistics; trade and transport; energy), and three special sections (industry and crafts; social statistics; agriculture, fishery and forestry). Of particular interest to Euratom is the energy section, within which provision has been made for an atomic energy sub-section.

The Statistical Department is now known as the "Statistical Office of the European Communities".

An agreement has been reached in principle on the organization and the activities of the Press and Information Service. The information offices of the High Authority in Bonn, Paris and Rome have been made joint offices and a new office has been set up in The Hague; it is intended to set up a liaison office in Berlin.

CHAPTER IV

THE COURT

The Court was duly set up and formulated its rules of procedure.

20. The Court of Justice of the three Communities was inaugurated at Luxembourg on October 7, 1958 by Herr H. von Brentano, Chairman of the Council of Ministers at that time. The Commission was represented by M. P. De Groote, European Commissioner.

21. Acting in accordance with Articles 160 and 212 of the Treaty, the Court drew up its rules of procedure and laid them before the Council of Ministers. Pending their unanimous approval by the Council and publication in the *Official Gazette of the European Communities,* the Court was able to deal only with matters affecting the European Coal and Steel Community.

22. On February 19, 1959, M. E. Hirsch, President of the Euratom Commission and MM. H. L. Krekeler and E. M. J. A. Sassen, European Commissioners, gave their solemn undertaking before the Court of Justice to respect their obligations in accordance with the requirements of Article 126 of the Treaty.

CHAPTER V

THE SCIENTIFIC AND TECHNICAL COMMITTEE

The Scientific and Technical Committee has an advisory function which the Commission considers vital to the proper fulfilment of the scientific and technical tasks assigned to it by the Treaty. The Commission has so far only established preliminary contact with the Committee, since its first year of activity has been devoted to the initial work involved in implementing the Treaty and launching a new organization. This has prevented the Commission from carrying out from the very outset the policy of regular and systematic collaboration with the Scientific and Technical Committee which it intends to pursue to an ever-increasing extent in the future.

23. Under the chairmanship of Professor H. Holthusen, the group of experts which the Scientific and Technical Committee appointed from among the specialists in this field and especially from among the public health experts in the Member States, formulated opinions on the basic standards to be adopted to protect the health of workers and the general public against the hazards of ionizing radiations. These opinions were very largely adopted by the Commission and embodied in the "Draft Directives Laying down the Basic Standards", which were submitted to the Economic and Social Committee, the Parliamentary Assembly and the Council of Ministers.

The Commission takes this opportunity of acknowledging its debt of gratitude to the scientific experts for the quality of the opinions formulated by them and the speed with which they were delivered. Views were exchanged on the "Draft Directives Laying down Basic Standards" between members of the Scientific and Technical Committee and representatives of the Commission.

24. A discussion took place between the Committee and the Executive Commission on the activities of the Community in the field of nuclear research. The Committee insisted on the necessity for setting up the Joint Research Centre with the minimum of delay and emphasized the importance of implementing the OEEC Dragon project put forward by the United Kingdom.

In support of the preliminary draft of its research and investment budget, the Commission transmitted to the Council of Ministers a memorandum containing the conclusions reached by the Scientific and Technical Committee after examining the Community's nuclear research programme.

CHAPTER VI

THE ECONOMIC AND SOCIAL COMMITTEE

Thanks to its specialized section for nuclear energy, the Economic and Social Committee made a substantial contribution to the work in progress in the Community and played a particularly important part in the task of establishing the basic health protection standards.

25. The Economic and Social Committee held its third session on October 15, and its fourth session on November 27 and 28, 1958, in Brussels.

26. During these sessions the Economic and Social Committee elected a chairman and 14 officers.

As a result of talks which took place on November 5, between Representatives of the Councils and the Commissions on the one hand and the officers of the Economic and Social Committee on the other, agreement was reached on the Committee's draft rules of procedure. These rules were approved by the Council of Ministers in accordance with the provisions of Article 168 of the Treaty.

The Commission also formed a specialized section for nuclear energy and a further six for transport, independent activities and services, overseas territories, agriculture, social problems and economic problems.

The specialized section for nuclear energy consists of 30 members:

Belgium:	MM. Cornez, Van Hoorick, Masoin.
Germany:	MM. Eckel, Falkenheim, Gefeller, Patat, Pohle, Russe, Umstaetter, Beermann, Brenner.
France:	MM. Aicardi, Bouladoux, Brousse, Canonge, Malterre, Meunier, Razafimbahiny, Veillon.
Italy:	MM. De Biasi, Giunti, Giustiniani, Purpura, Todisco, Zino.
Luxembourg:	M. Weber.
Netherlands:	MM. Alders, Van Spaendonck, Tinbergen.

27. Pursuant to Article 31 of the Treaty, the Commission sought the opinion of the Committee on the "Draft Directives Establishing the Basic Standards Relating to the Protection of the Health of Workers and the General Public Against the Hazards of Ionizing Radiation". The Committee formed a working group to prepare this opinion. As soon as it was appointed, the specialized section for nuclear energy set about the task of examining the basic health protection standards. The Commission took a considerable part in this preparatory work.

The Social and Economic Committee with the unanimous approval of all members present issued a favourable opinion on the basic health protection standards.

Thanks to the Committee's valuable and effective collaboration in this particularly important field, the Council was able to lay down the basic standards at its session of December 22, within the time-limit prescribed by Article 218 and in accordance with the provisions of Article 31 of the Treaty.

The amendments made to the original proposals for basic standards as a result of the observations submitted by the Committee reflect the importance which the Commission attaches to the latter's opinions.

PART TWO

THE APPLICATION OF THE TREATY

CHAPTER VII

RESEARCH AND TRAINING

The Commission has been actively engaged in launching its research programme and is already studying the question of possible extensions to it. The setting up of the Joint Research Centre will be preceded by the conclusion of contracts to be negotiated with public and private bodies. Working parties concerned with heavy water reactor prototypes, materials testing reactors, plutonium and documentation have been active and this has involved collaboration between the Commission's experts and specialists from the various member countries. The question of how to build up and train the necessary technical staff is being studied. Collaboration with other countries has continued.

28. Under the provisions relating to the initial period, the Treaty, in Article 215 and Annex V, provides for an initial five-year programme at a cost of 215 million E.M.A. units of account. While the Commission did not propose any extensions to the programme in 1958, it seems likely, in view of the developments taking place in the structure of public and private nuclear organizations in various countries and the opportunities offered by recently signed international agreements, that some adaptation of this initial programme as well as a number of concrete additional projects will be contemplated in the future.

This chapter gives an account of the steps taken so far by the Commission to implement the initial five-year programme.

§ 1 — The Joint Research Centre

1. Laboratories — Equipment and Infrastructure

29. Before making a final decision on the site and structure of the Joint Research Centre, the Commission is anxious to be fully informed as to all the possible consequences of establishing it in any given place. The Commission has already visited or will soon be visiting the main European research centres; it will take into account the experience built up by member countries and others in this field and the profound changes that have taken place since the Treaty, and more especially Annex V, was drawn up.

The Scientific and Technical Committee will be consulted as soon as the Commission has made sufficient headway with its work in general.

30. The problems involved in engaging and suitably rewarding engineers and scientists who differ from each other in education, language and tradition are also being carefully studied.

The personnel already recruited by the Commission can be used for the following purposes:

a) The forming of teams to work under the association contracts which will be concluded with firms and bodies in member countries.

b) The setting up of similar teams to work under the Euratom - United States or other international agreements.

c) The building up of the first research units for the Joint Research Centre which will be transferred later to the final site.

31. In connection with this last point, the Commission has set up the Central Nuclear Measurements Bureau, as provided for by the Treaty, on premises that the Mol Research Centre in Belgium has been kind enough to place provisionally at the disposal of the Community. The Head of the Bureau took up his duties on November 1; since then, he has been engaged in collecting all the relevant information in the member countries, Great Britain and the United States to enable him to put forward to the Commission proposals for the purchase or the construction and installation of the modern apparatus necessary for the exact measurement of source standards, neutron fluxes and neutron spectra, and cross-sections, the dosage of stable and radioactive isotopes, X-rays and gamma-rays, and for alpha, beta and gamma spectrometry. The Central Nuclear Measurements Bureau plans to study the characteristics of a specially adapted very low-power experimental reactor.

32. Experts, who have been appointed by the Commission to compare the programmes of member countries in various fields, also deal with the problems of equipment and apparatus in the course of their meetings. It is hoped that they will be able to advise on the choice of the apparatus best suited to the needs of the six countries and especially of the Joint Centre. For certain types of equipment, particularly in the field of electronics, the possibility of introducing a certain degree of standardization might even be contemplated.

2. Documentation — Information and Training

33. A group of experts consisting of members proposed by the six Community countries has been set up by the Commission to study the many problems arising from the need for exchanging nuclear information on a large scale and the question of setting up a modern documentation centre. By holding its meetings in the main docu-

mentation centres of the Community, the group seeks to profit by the experience and advice of the leading specialists on this subject.

A delegation attended the International Conference on Scientific Information in Washington; this afforded an opportunity of making contact with American experts and paving the way for co-ordinated action with the Atomic Energy Commission, which in turn may lead to international co-operation on a very broad basis. International co-operation in this field is absolutely essential if a complete and up-to-date system of documentation is to be established with the minimum of expense.

34. An agreement was reached between Euratom and the French *Commissariat à l'Energie Atomique* on the organizing of special courses in the field of nuclear fusion starting on January 15, 1959. The Commission decided to award five scholarships.

Within the framework of the Euratom - United States Agreement, negotiations are currently being held with the U.S. Atomic Energy Commission on the subject of training specialist personnel in the United States.

The training of scientific and technical staff will be a primary concern of the Commission when the time comes for setting up the Joint Research Centre.

3. Prototype Reactors

35. The lines along which research work in the field of power reactor prototypes (1) may be expected to develop

(1) A prototype reactor is one, the nature, construction and dimensions of which are such as to enable an industrial reactor of the same type to be built and operated without danger.

depend largely on the opportunities offered by co-operation with countries outside the Community.

36. Apart from natural uranium graphite moderated reactors, which are already being constructed on an industrial scale in France and among which certain advanced types might possibly be studied within the framework of the OEEC, and apart from enriched uranium reactors with hydrogenous moderators (light water or an organic substance), which will certainly be the type generally constructed under the Euratom - United States Agreement, the prospects would appear to be most promising at the present time for the independent string of natural uranium primary reactors moderated by heavy water. The Commission has, therefore, decided to work along these lines and to have a heavy water reactor prototype built.

37. Fast reactors have not been neglected as a consequence; they will, however, be studied as part of the reactor experiments programme. (1)

38. A Euratom working party for power reactor prototypes has been set up in accordance with Annex V of the Treaty and its first task is to study the question of what research should be undertaken or continued in order to develop and construct the heavy water power reactor prototype or prototypes required by the Community.

The Commission is convinced that considerable research and development work is necessary before practical use can be made of the theoretical advantages (fuel utilization efficiency) inherent in this type of reactor

(1) Reactor experiments are reactors intended for the initial testing of a new technique or wide variants of a type already tested.

(which might conceivably be constructed under the Euratom - United States Agreement).

The Working Party, whose members have been chosen for their special qualifications in this sphere, is currently engaged in making a survey of the work done on heavy water reactors throughout the Community. Germany, France and Italy are the only countries in the Community which have made a substantial or appreciable material effort in this field.

In Germany, a number of firms have been working on preliminary projects; heavy water, pressurized gas and organic liquids are the coolants under consideration. They hope to find a solution by using a pressure shell.

In France, thanks to the research reactors already in existence, industry has been able to build up some experience of the problems involved in the field of both gas and heavy water cooling. At the present time, however, only the French Atomic Energy Commission is working on the general problem of choosing a particular type of heavy water power reactor. There is a general preference for using a gas coolant, in which case special cladding would enable fairly high temperatures to be attained.

In Italy, only one team, that of Professor Silvestri at the *Centro Informazioni Studi Esperienze* (CISE) is actively engaged on the study of an original preliminary project, which uses high-pressure wet steam as coolant. In Italy as in France, there is a certain preference for pressure tubes.

As regards the United States, plans for systematic collaboration are gradually taking shape. Two Euratom trainees are in the U.S.A. at the present time.

At its first meeting, the Working Party discussed the advantages and drawbacks of the solutions at present being studied and tested in the Community within the context of various national programmes.

It is intended that later meetings will be devoted to discussing the following two points:

1. Is it possible to classify heavy water reactors according to the relative merits of the various possible types, or, at least, to decide upon the type on which Euratom could concentrate its efforts to the greatest advantage?

2. Can a joint research programme for heavy water prototypes be drawn up in broad outline and how could such a programme best be carried out on an international basis? On which type of reactor, not provided for in the programmes of individual countries, should the Commission focus its attention?

4. Materials Testing Reactors

39. In this field, the necessary preliminary work has been carried out by the Commission in conjunction with a group of specialists from member countries. The first objective of the group is to make recommendations for:

a) Promoting the speedy completion of installations already under construction and ensuring, in particular, that the ancillary installations which are essential to their working are ready at the same time as the reactors themselves;

b) Enabling the best use to be made of these reactors, for example by concluding special contracts for this

purpose and by organizing a kind of clearing house to keep a record of requirements, irradiation facilities, the planning of tests, the construction and maintenance of auxiliary plant (loops and the necessary control instruments, pumps, valves, etc.);

c) Studying any additional reactors which might prove necessary; one such reactor is provided for in the Treaty (Annex V); some, at least, might be financed by the joint research and development fund provided for under the Euratom - United States Agreement.

At the first meeting of the Working Party, members were asked to report on the progress made in work on testing reactors in their respective countries and on the developments which could be anticipated; the question of the proper utilization of available irradiation facilities in the Community was also discussed. This is a field which clearly calls for collaboration. Greater efficiency could be achieved by the following measures:

1. Specialization of reactors to a certain extent, so as to enable well-staffed and effective teams of specialists to be formed, who would have the best possible equipment at their disposal and would be able to work much more efficiently than smaller teams scattered among the rest of the reactor personnel.

2. The realization of the vital importance of ancillary installations and equipment among the teams concerned.

3. To the extent that this is feasible, standardization of equipment.

4. A clear assessment of needs to enable equipment to be adapted exactly to the tasks which it is intended to perform.

The Working Party also engaged on defining the characteristics of the high flux reactor provided for in the Treaty, so that it will constitute a valuable addition to the Community's technical resources.

§ 2 — Research carried out under Contract outside the Centre

40. The Commission intends to make extensive use of the powers provided for in Article 10 of the Treaty to carry out a considerable part of the research programme by means of contracts. As far as possible, these will be association contracts.

Some research will be entrusted to bodies with considerable practical experience in this field. The object of these association contracts will be twofold:

— The implementation of the Community's own programme.

— The encouragement of research in individual countries in line with the provisions of Article 6 of the Treaty. (1)

This pooling of technicians and this joint financial effort should make for greater speed in attaining the general objectives of the Community and for maximum efficiency in the use of its resources. These association

(1) For example, a contract is being negotiated with KEMA (Arnhem) to intensify work on developing and constructing the homogeneous test reactor known as "SUSPOP".

contracts should, moreover, enable the Commission to gradually build up the research teams who will later be responsible for the efficient running of the Joint Centre.

Finally, by forming groups of research workers drawn from all the member countries, the Commission will contribute to the interchange of ideas and methods within the Community and at the same time it will help to prevent the duplication of effort which the requirements of programmes conceived along purely national lines often entail.

41. It is anticipated that the first contracts will provide for work on radiobiology, plutonium and controlled nuclear fusion.

42. In connection with this latter subject, the Commission, which is represented on the Working Party which was set up in Geneva by the CERN in agreement with the Commission, has entered into negotiations with the French Atomic Energy Commission with a view to drawing up a joint programme along the following general lines.

It has been generally agreed that the construction of a large-scale installation would be premature in view of the present state of knowledge and a comprehensive, two-pronged research programme is suggested instead, which will be centred on the study of pinch phenomena and magnetic mirrors.

The pinch phenomena programme will be initially concerned with utilizing and developing existing machines, particularly the 2 m. diameter torus with thin metal walls.

The study of magnetic mirrors will begin with the operating of the first machine to be brought into service. A start will be made on the construction of a second ma-

chine in the course of this year as soon as an injection system has been developed.

The implementation of this programme requires the simultaneous development of a number of techniques, which are being studied as separate projects: the problem of obtaining a high vacuum, the development of intense ion sources (for injection into a magnetic bottle) and the programming of magnetic and electrical fields.

All these experiments will require very precise diagnostic methods, *e.g.*, the measurement of temperature, density, neutron fluxes, etc. These measurements will in turn bring into play various techniques such as spectroscopy, very high frequencies, X-ray measurement, neutron detection, etc., all of which it is planned to apply and develop.

Lastly, the study of plasma guns for the production of plasmoids and the study of their stability is also envisaged.

The negotiation of this first contract, which is all the more important since it establishes a precedent, raises numerous problems and it was not possible to agree on the final text before December 31, 1958.

43. Another major contract covering further aspects of research on fusion has been offered to the Max Planck Institute in Munich.

44. The prospects for the awarding of research contracts in the field of plutonium became apparent at the very first meeting of the Plutonium and Transuranic Elements Working Party set up by the Commission along the same lines as those mentioned earlier.

At present, an initial research programme is being launched. In its first phase, during which it will rely on installations already in existence or under construction, the programme will mainly be concerned with the study of the properties of plutonium, its alloys, oxides or oxide mixtures such as uranium oxide (UO_2) — plutonium oxide (PuO_2). This research is part of a long-term programme covering fast reactors and the recycling of plutonium in thermal reactors. This second aspect of the programme is expected to lead to fruitful collaboration with the United States within the framework of the Euratom - U.S. Agreement through the exchange of personnel and information. The supplying of plutonium by the United States will enable the programme to get off to a flying start.

In the course of preliminary discussions, the experts of the Working Party welcomed the idea of exchanges of personnel both within the Community and with the United States.

The question of how the plutonium and transuranic elements research programme might best be extended is already being discussed, and particular attention is being paid to the advisability of enlarging existing research establishments first and of building new centres one at a time.

§ 3 — Other Activities

45. The Commission does not intend to confine its research activities to implementing the initial programme provided for in Article 215 of the Treaty. The links that it has already established with other countries give some indication of the lines along which the Commission hopes to see international co-operation develop in this field.

46. The Commission closely followed the proceedings of the Second International Conference on the Peaceful Uses

of Atomic Energy, the results of which are of great assistance to it in planning its own work.

47. Since July 1, 1958, the Commission has been taking part in the Halden reactor project within the framework of the OEEC. The work of developing and starting up the reactor and of constructing a second core provides the Commission with an opportunity of giving technicians first-hand experience of boiling heavy water reactor techniques and of benefiting from the knowledge obtained by an international team of specialists drawn from the six member countries, Euratom's own staff, other OEEC countries and the United States. The Commission is represented on the executive committee and the technical group responsible for the supervision of scientific and technical work.

48. More recently, Euratom and six other European countries decided to combine in a joint programme of research on the building of gas-cooled high-temperature reactors. The Dragon project will be based mainly on the construction of an experimental reactor with a capacity of several MW at the U.K.A.E.A. research establishment at Winfrith Heath, Dorset.

The Community will contribute 43·4% of the money needed to meet the net expenditure, which is estimated at approximately £ 10 million. The research teams will be made up of representatives from the various signatory countries. Research and supply contracts will be awarded on an international basis, thus allowing for free competition between the industries of countries participating in the project. This joint five-year programme, which will be carried out under the auspices of the OEEC, will forge the first links between Great Britain and the Commission; these links will be strengthened as a result of the bilateral agreement recently concluded between the United Kingdom and Euratom.

49. Co-operation with the United States is following the course mapped out by the recently signed agreement. The Euratom - U.S.A. Agreement provides specifically for a joint five-year research programme to cost 100 million EMA units of account. In order to carry out this additional programme, which largely falls outside the scope of the initial programme outlined in Annex V, the Commission intends to enlist the collaboration of industry and research establishments throughout the six member countries. Preliminary contacts have already enabled an assessment to be made of the possibilities which exist in Europe for research work centred on the construction of enriched uranium reactors. It is not unreasonable to hope that in this way European industry will be in a better position to construct itself the type of reactors which can be built under the Euratom - U.S.A. Agreement with American assistance, and that in the meantime it will be able to make a substantial contribution to the erection of the reactors specifically provided for under the Agreement.

§ 4 — Conclusion

50. At the end of its first year of activity, the Commission has not only commenced the implementation of its initial programme, but has already investigated new avenues of research; this will shortly enable it to lay before the Council, after consulting the Scientific and Technical Committee, a number of additional research programmes.

It is, however, obvious that if this work is to be carried out successfully along the lines indicated by the Treaty, the Commission must solve a variety of problems:

1. It is imperative that a decision be reached without delay as to what form the Joint Research Centre should take and where it should be situated; no effort must be spared thereafter in getting it under way.

2. The Commission must persuade member countries to make available a sufficient number of men with outstanding qualifications and considerable experience in the nuclear field. This is a logical consequence of creating the Community and there is no way of side-stepping it. The practical difficulties involved, however, for public and private organizations in member countries are by no means under-estimated and suitable transitional measures will have to be adopted.

   While there is no shortage of applications from younger men and from experienced personnel anxious to work in a new field, it will not be possible to make use of their services or to carry through the programme already started, unless there is properly qualified senior staff available.

THE INSTITUTION AT UNIVERSITY LEVEL

Acting in accordance with the terms of the Treaty, the Commission laid proposals for a European University before the Council of Ministers at the end of December.

51. Article 9, para 2, of the Treaty establishing Euratom states: "An institution at University level shall be set up; the particulars of its operation shall be settled by the Council acting by means of a qualified majority vote on a proposal of the Commission".

By virtue of these provisions, a working party was formed of representatives of the three executive bodies of the European Communities and delegates appointed by the Governments of the six countries. This working party under its chairman, the Vice-President of the Commission, held several meetings between June 13, 1958 and the end of the year. In discussions on the European University, various opinions were voiced dealing with the technical and human aspects of the problem. Some members held that a comprehensive, administratively independent university should be established forthwith, covering the whole range of university subjects and not limited to the nuclear field; conceived along these lines as "a great school dedicated to a great idea", it would be of symbolic significance and give a powerful impulse to the work of integrating Europe. Other members were in favour of setting up an institution devoted entirely to nuclear subjects and of creating specialized institutes at suitable universities, a solution based on the desire to imbue national

universities with a European spirit. A third intermediate plan was put forward for setting up as soon as possible an institution having as its main object scientific and technical training but making some limited provision for general subjects.

The proposals of the Commission were laid before the Council of Ministers on December 20, 1958 within the one-year limit imposed by Article 216 of the Euratom Treaty. They suggest the creation of an institution having legal personality and called the "European University", and the setting up of specialized European institutes open to all students eligible for admission to higher educational establishments in any of the member countries.

Although the Council of Ministers has not yet given a decision on the Commission's proposals, one thing is clear: the problem of a European University can only be solved gradually and in close collaboration with existing institutions.

CHAPTER VIII

DISSEMINATION OF INFORMATION

As part of its work of promoting the speedy establishment and growth of nuclear industries in the Community, the Commission is responsible for collecting all the information needed to attain the objectives of the Community. In view of the rapid advances being made in nuclear technology, it is vital to build up a comprehensive and up-to-date documentation service in order to provide technicians with as complete a record as possible of technical progress and to prevent unnecessary expense and duplication of work.

52. The dissemination of information is first and foremost a problem of documentation, *i.e.*, of compiling as complete a record as possible of the information available in the nuclear field.

This will partly consist of documentation on nuclear patents, including the following:

1. Applications for patents and utility models reported to the Commission by Member States in accordance with Article 16 of the Treaty. By December 31, 1958, the contents of 221 applications for patents had been reported to the Commission.

2. Nuclear patents already granted in Community countries.

In this connection, the Commission has already made contact with patent offices in the member countries.

3. Patents published in countries that have made important contributions to nuclear technology.

These communications, which in the case of unpublished applications are confidential, will enable the Commission to contact applicants, should their inventions seem promising economically or of potential value to the research programme. The Commission is at present engaged in classifying these documents and is consulting patent offices in the member countries with a view to introducing a uniform procedure for transmitting communications.

53. As regards the distribution of this information, the work of the Commission is still in the planning stage.

54. During its first year of activity, the Commission has already had to deal with problems concerning industrial property and inventors' rights. These questions arose during negotiations with other countries — Great Britain and the United States — or in the course of work on OEEC projects such as the Halden or Dragon projects. In the two last-mentioned cases, the problems range from the legal and economic aspects of patent ownership, and the question as to whether such patents should be used free of charge or should be paid for by participants or third parties in the Community to the question of the rights of employee inventors. A thorough study of the problems involved is essential, as the solutions to them, once worked out, will serve as precedents for similar cases in the future. The Commission is also endeavouring to work out a patents and licences policy which will enable it, whilst

safeguarding the rights of inventors, to satisfy the requirements of the Treaty and encourage the growth of a nuclear common market by ensuring the free movement of information.

In applying this policy to the contracts that will be signed with enterprises or research establishments under the research programme, the major concern of the Commission must be to ensure that the market is not split up into a series of watertight compartments, which would be contrary to the spirit and the letter of the Treaty.

CHAPTER IX

NUCLEAR INDUSTRY, ENERGY AND ECONOMY

Over the last few months, the Commission has continued its work of creating the general industrial and economic conditions necessary for the development of the nuclear industries. This has involved settling the preliminaries for the implementation of the Euratom - United States Agreement as well as questions of investment, the Nuclear Common Market, insurance and the power-production industry.

Once this first stage has been completed, the Commission will be able to devote itself to the task of rapidly stimulating initiative in more specific fields and of assisting enterprises on concrete projects.

§ 1 — Euratom - United States Agreement

55. In the economic and technical field, the implementation of the Agreement for Co-operation, which came into force on February 18, 1959, raises two main problems: the criteria to be adopted and the general conditions governing the selection of projects for nuclear power plants and the settlement of the financial questions involved.

The major object of the Euratom - United States joint nuclear energy programme is, it will be remembered, the construction of 6 to 8 nuclear power plants with a

total capacity of approximately 1 million kW(1). Participating enterprises will be entitled to guarantees on the cost and integrity of the necessary fuel and to long-term loans to cover a part of the investment. The supply of fuel is assured and chemical processing services at prices comparable to those charged to industry in the United States will also be made available to them.

56. Under the Agreement, the above-mentioned reactors must be completed by December 31, 1963 (provision is, however, made for this date to be postponed to December 31, 1965, in the case of two reactors). Enterprises are, therefore, required to submit their projects for power plants by September 1, 1959, to enable the Commission and the United States Atomic Energy Commission to select participants not later than December 31, 1959.

To enable enterprises to work out their projects for power plants in time, the necessary information had to be published with the minimum of delay outlining the conditions governing participation in the programme and the criteria to be adopted in making the final selection. Discussions were held accordingly between the Commission and the United States Atomic Energy Commission in order to draft the joint text of the invitation to be addressed to industry. A provisional document drawn up as a result of these negotiations sets forth the aims of the joint programme, the criteria to be adopted in selecting projects and the various benefits offered to enterprises. It was not possible to work out a final document before the entry into force of the Agreement.

(1) The Euratom - United States Agreement also comprises a joint research and development programme centred on these reactors (see chapter on "Research and Training").

In view of the limited time at their disposal, however, those enterprises which have approached the Commission for information have been kept informed of the progress of this preliminary work and are, therefore, already in a position to consider the possibility of taking part in the construction and operation of nuclear power plants under the United States - Euratom Agreement.

The Commission also intends to provide enterprises with the necessary information on the guarantees offered by the United States Atomic Energy Commission to limit fuel cycle risks and also on patents and the details of finance contracts.

57. On the financial side, negotiations are being held with the Export - Import Bank on the loan to be granted by the United States.

Once this work is completed, the Euratom Commission and the Atomic Energy Commission will have to set about the task of selecting the projects for power plants submitted to them and of concluding contracts with the enterprises concerned.

§ 2 — Euratom - United Kingdom Agreement

58. The Agreement which has been concluded with the United Kingdom will contribute to the development of nuclear industry in the Community by making available, particularly through the exchange of personnel and technical information, the experience built up in this field by the United Kingdom Atomic Energy Authority. The Agreement will give manufacturers in the Community an opportunity for selecting reactors of types developed in the United Kingdom and thus to broaden the scope of their experience.

§ 3 — Investment

59. Under Article 41 of the Treaty, persons and enterprises are required to communicate to the Commission any investment project relating to such new facilities, replacements or conversions as correspond in respect of type or scope to the criteria laid down by the Council acting on a proposal of the Commission. The regulations issued pursuant to the provisions of this article were published in the *Official Gazette of the European Communities* on October 6; they lay down among other things the minimum amounts above which the various types of investment project must be reported.

60. Articles 42 and 43 of the Treaty state that the Commission shall discuss with the persons and enterprises involved all aspects of any investment projects related to the aims of the Treaty and that it shall communicate its views thereon to the Member State concerned. These projects must be communicated to the Commission not later than three months before the conclusion of the first contract with suppliers or three months before work is due to begin.

In order to be properly prepared for these discussions with enterprises within the short period allotted by the Treaty, the Commission must be in possession of the necessary economic and technical information at an early stage of the procedure. A questionnaire has, therefore, been compiled to obtain the necessary data. Regulation No. 1 of the Commission, which was published in the *Official Gazette of the European Communities* on November 27, 1958, makes the reporting of investment projects by means of this questionnaire compulsory.

The reporting of investment projects is not designed to infringe on the freedom of action of industry. On the contrary, the intention is to create a basis for profitable discussion with industry inasmuch as, quite apart

from providing information on the various aspects of investment projects, these reports will enable the Commission to promote the plans of the enterprises concerned and to give them the benefit of its advice and assistance in the interests of the whole Community.

§ 4 — The Nuclear Common Market

61. One of the major tasks facing the Commission was the creation of a common market for nuclear products one year after the entry into force of the Treaty. Negotiations on this subject, presided over by the Commission, were opened between the Member States, as a result of which the nuclear common market provided for by Articles 93 *a)* and 94 of the Treaty came into force on January 1, 1959. This involves the complete liberalization of commercial exchanges as between the Member States as well as the adoption of uniform and considerably reduced customs duties on goods imported from non-Community countries. The fact that this important stage was reached within the time-limit prescribed by the Treaty is particularly gratifying to the Commission.

Under Article 93 *a)* of the Treaty, all customs duties or charges with equivalent effect and all quantitative restrictions in respect of products with specific nuclear uses (products appearing in lists A1 and A2 annexed to the Treaty) are to be abolished as between Member States. To facilitate the administrative work involved in implementing the provisions of this Article, the Commission has recommended the introduction of a uniform customs certificate to be used by the Member States for goods freed from or not subject to customs control.

62. In accordance with Article 94 of the Treaty, a common customs tariff has been established by the Member States for imports from third countries.

For list A1 products, *i.e.*, for products which are the responsibility of the Supply Agency, the level of the common customs tariff has been laid down as that of the lowest tariff applied on January 1, 1957, in any Member State; with the exception of a duty of 2 % on certain forms of wrought natural uranium and thorium, this measure is practically equivalent to a complete abolition of customs duties.

Customs duties on A2 list products have been jointly laid down following negotiations between the Member States. They vary from 0 to 12 % and, for certain products, have been partially or totally waived for a period of 3 to 5 years. For reactors and reactor parts and spare parts, for example, a duty of 10 % has been laid down, which, however, will be waived for a period of 3 years in order to bring about an immediate liberalization of trade for these products. For the future, the possibility of changing this policy is left open and the Commission intends, when the time comes, to submit a report to the Member States containing any new factors which are relevant to enable them to decide whether and to what extent this waiver should be maintained.

63. In the course of the negotiations, it proved to be necessary to bring reactor parts and spare parts into the common nuclear market without delay; since complete reactors will only be imported in rare cases, it is to be expected that such parts will be one of the main items of trade between countries. As these parts and spare parts were included among the goods and products of list B of the Treaty, the Commission proposed that the provisions of Article 92 of the Treaty be applied in order to transfer them to list A2; this measure was adopted by the Council at its session of December 22, 1958.

The question of duties payable on reactors and reactor parts and spare parts is particularly important in

the case of the Euratom - United States Agreement, under which, in Article 10, the Commission undertakes to reduce to a minimum customs duties on goods and products imported under the joint programme, *i.e.*, in particular, reactors and reactor parts and spare parts.

As far as the nuclear common market is concerned, therefore, the necessary conditions for ensuring the unrestricted movement of nuclear products within the Community can already be said to exist.

64. The questions arising from the possible creation of a European economic association and its effect on products of immediate concern to Euratom are at present being examined. The measures adopted by the Six to lower their national tariffs by 10% as from January 1, 1959, on goods imported from third countries, insofar as these tariffs were higher than the future common customs tariff, do not apply to the products included in lists A1 and A2 of the Euratom Treaty, for which a common customs tariff has already been introduced for the whole of the Community. In this connection, the Commission considers it relevant to point out that for the common external tariff, which came into force on January 1, 1959, very moderate rates have been adopted. The six-country nuclear common market is, therefore, to a very considerable extent open to imports from third countries; in fact, the creation of a free trade area would not bring about any appreciable improvement of the situation with regard to consignments from third countries.

65. The Commission is also examining the problems arising from Article 96 of the Treaty, which provides for free access to specialized employment in the nuclear field; it is intended to set up a group of experts, whose main task will be to work out the exact scope of this Article.

§ 5 — Insurance

66. Work has been going on for some time within the framework of the OEEC with a view to drawing up a convention governing third party liability in the field of nuclear energy. The text of a draft convention has now been prepared and there are good prospects of its being accepted by the OEEC countries. This draft convention establishes the principle that legal liability for injuries sustained by individuals and damage to property incurred in or in connection with a nuclear installation shall be borne by the operator of that installation; it also settles the major questions involved in this liability.

67. Since, however, the possibility of a major nuclear accident cannot be completely ruled out, the operator cannot be expected to bear sole financial responsibility. In the first place, it would be wrong to make the compensation of the injured parties dependent on the ability of the operator to pay and, secondly, to make the operator responsible for all damages incurred might compromise the immediate and long-term development of the nuclear industry as a whole. There is, therefore, a need for governmental action when an operator becomes liable for more than a certain amount.

Since this question was not solved by the OEEC Convention, it became necessary to find some solution to the problem of governmental liability within the framework of Euratom. The Commission has, therefore, set about the task of drafting a supplementary convention on this subject, the text of which will be submitted to Member States for examination by the Council.

68. The OEEC Convention and the Euratom Convention will together provide a solution to the question of nuclear insurance and liability along the following lines:

a) Compensation for damage incurred by third parties will in the first instance be the responsibility of the operator of a nuclear installation, either in the form of an insurance contract or of another type of financial guarantee.

b) If such compensation should exceed the liability of the operator, the State will be liable.

c) If the liability of a single State should be insufficient, the contracting parties would consider the possibility of sharing risks jointly.

§ 6 — Nuclear Industries — Energy

69. In order to be able to carry out effectively its task of promoting industrial development, the Commission must be fully informed on progress now taking place in the nuclear field. It is, therefore, actively engaged in collecting all the necessary information on the various aspects of industrial and economic life in the Community connected with the peaceful applications of nuclear energy.

As regards energy policy, the Commission is taking an active part in the work of the Mixed Committee set up by the High Authority and the Council of Ministers of the ECSC to achieve co-ordination in this field. The results of the work of this Committee will shortly be drawn up in the form of a report which, subject to the approval of the national delegations and the Executives of the three Communities, will be transmitted to the Council of Ministers.

The Commission also collaborates with the Commission of the European Economic Community in its task

of studying economic trends and with the High Authority in studying the prospects for economic development. This work has resulted in the issue of a quarterly report on the economic situation in the Community and in the publication of a first set of facts and figures on the general economic development of the six member countries.

Finally, the Commission is endeavouring to achieve closer and more effective collaboration with the various organizations active in the nuclear field. It maintains contact with new and existing groups and bodies representing different interests in the nuclear field and welcomes the creation of associations which, by providing an opportunity to meet, discuss and work together on common problems, contribute to the development of the production and use of nuclear energy.

§ 7 — Power Reactors — Present Prospects

70. The *Report on the Position of Nuclear Industries in the Community,* published on June 30, 1958, gave a list of the power reactors which were planned or under construction at the time. Since then, a number of electricity companies in the various Community countries have shown interest in the Euratom - United States joint power reactor programme. It is, however, still too early to make any definite statement on the power plant projects which might be proposed under this programme.

At Kahl am Main in the Federal Republic of Germany, work has begun on the construction of a 15 MWe boiling water reactor.

On the basis of the information at its disposal, it is the Commissions's view that, with the first generation of

power reactors, the Community will have an installed capacity of 4,000 MWe. This figure is derived from the data available on current plans and projects, but it could quite well be higher, if allowance were made for technical advances and the potentialities of the agreements concluded between Euratom and third countries.

71. In the course of the year, the Commission will draw up, in accordance with Article 40 of the Treaty, a programme indicating the production targets for nuclear energy and the various types of investment required for their attainment.

CHAPTER X

SUPPLY

In the field of supply, the Commission's work has ranged from the setting up of the Supply Agency to an examination of the position with regard to ores and nuclear source materials on the home market and a study of the prospecting work being done in the Community.

72. Since the publication of the First General Report on the Community's activities, in which the structure, statutes and work of the Supply Agency were outlined, the Commission has done everything to enable the Agency to be set up and start work with the minimum of delay. The Member States gave their formal approval to the Agency's statutes on November 6, 1958. The statutes were published in the *Official Gazette of the European Communities* on December 6, 1958 and the Member States concerned have all paid the first instalment of their statutory contribution to the Agency's capital. The Agency's Director General and the 24 members of the Advisory Committee have been appointed by the Commission and the Council respectively in accordance with the provisions of Article X of the Statutes.

In administration and personnel matters, the Commission has since given the Director General every assistance in all the preparatory work involved in getting the

Agency off to a rapid start. It is also helping the Agency to solve the various legal problems which beset the initial period of its activities.

The first meeting of the Advisory Committee was held on February 23, 1959.

73. The Agency begins to operate at a time when the supply of ores and nuclear source materials is fairly plentiful. Supply trends in the free world continue to justify the supply policy outlined in the First General Report.

The liberalization of the market for uranium concentrates, uranium oxide and uranium metal following the concerted decisions taken by the main producer countries — the United States, Canada and the Union of South Africa — has stimulated competition between producers, not without its effect on prices. Moreover, the United States Atomic Energy Commission, in a decision published in the Federal Register on November 25, 1958, decided as a preventive measure to impose considerable restrictions on the guarantees of sale granted for the period 1962-66 to cope with any further increase in over-production. Under these circumstances, the Commission feels that the Agency's role should be limited to that of a "trusted broker" by helping both producers and users in the Community to turn the possibilities of the market to their best advantage.

As soon as the Agency begins to operate, therefore, the Commission will take the necessary steps to ensure that a suitable information service is set up.

74. If the Agency is to be able to carry out its work in the fields of supply and of safeguards and control, it is

essential that the legal obligations contracted by Member States under bilateral agreements with other States be assumed by the Community as soon as possible.

As soon as it has received the reports required under Article 70 of the Treaty, the Commission will have an overall view of the development of prospecting and production, probable reserves and mining investment effected or proposed in the Community. It will then be able to frame its policy on the question of prospecting.

CHAPTER XI

SAFEGUARDS AND CONTROL

The Commission is setting up the system of safeguards and control provided for by the Treaty. Apart from the declaration of the characteristics of certain types of installation, this will also involve the organization of the procedure for accounting for materials and a system of inspection. It will also cover imports made under agreements concluded between the Community and third countries.

75. Article 77 of the Treaty states that the Euratom Commission shall satisfy itself that in the territories of the six Member States:

a) ores, source materials and special fissile materials are not diverted from their intended uses as stated by the users; and

b) the provisions are observed concerning supplies and any special undertaking concerning measures of control entered into by the Community in an agreement concluded with a third country or an international organization.

If the system of safeguards and control is to achieve this purpose, the Commission must be kept regularly informed on the quantities, movements and transformations of the materials subject to control, *viz.*:

a) Materials owned by the Community, *i.e.*, special fissile materials: enriched uranium, plutonium, uranium 233;

b) Materials owned by Member States or industry or which might become the property of the Joint Research Centre or joint enterprises at some future date: uranium and thorium in the form of ores, concentrates, oxides, metal or fuel elements.

Inside the Community, these materials are subject to control by Euratom, irrespective of whether they have been produced in the Community or imported.

Euratom is still without experience in this field and the experience of the Member States is limited.

76. To prepare the way for its own system of safeguards and control, the Commission approached the American authorities, the International Atomic Energy Agency and United Kingdom experts in the autumn of 1958 with a view to discussing the problems involved.

As a result, the Commission has been able to draw on the experience built up in this field by the United States and Great Britain, and has made considerable use of it in working out the methods for implementing the provisions of Chapter VII of the Treaty.

The system of safeguards and control, as it is now envisaged, has three main aspects to it: information on installations subject to control, accounting for materials and inspection.

§ 1 — Information on Installations Subject to Control

77. The Commission has drawn up a set of regulations defining the conditions of the procedure to be followed

by enterprises having to declare to the Commission the basic technical characteristics of their installations for the production, separation or use of source materials or special fissile materials, or for the processing of irradiated nuclear fuels. The obligation to submit these reports applies both to existing and to future installations.

The information received will provide a basis for assessing what sort of amounts and losses of materials might be expected to appear in the records. It will also be a help in devising the system of inspection, since it will give some indication of what methods should be adopted for carrying out on-the-spot checks.

§ 2 — Accounting for Materials

78. The setting up of a system of safeguards and control requires the organization of methods of accounting for ores, source materials and special fissile materials used or produced and for source materials and special fissile materials transported.

This system of accounting will provide information on existing quantities of materials, their movements and any transformations which have been effected. The obligations to which enterprises are subject in this field are designed to give a complete picture of the true position, to ensure that materials subject to control are being properly used by the enterprises concerned and, as far as possible, to provide methods for checking against the records of the enterprises.

The Commission has drawn up a set of regulations defining the nature and scope of the obligations incumbent on enterprises pursuant to the provisions of Article 79 of the Treaty. The text of these regulations has been submitted to the Council of Ministers for approval.

§ 3 — Inspection

79. The value of Euratom control hinges on the degree of certainty which can be achieved, *i.e.*, on the reliability of the figures reported by enterprises and the efficiency of the inspection procedure.

Inspection will be carried out by special teams of Commission inspectors. The first steps have already been taken to provide the necessary training.

To ensure compliance with the provisions of Article 77 of the Treaty and to exercise supervision over ores, source materials and special fissile materials, these inspectors will at all times have access to all places and data and to any person who by reason of his occupation deals with nuclear materials, equipment or installations subject to control.

The Euratom system of safeguards and control will also ensure that the Community fulfils its obligations towards the United States. These obligations can be met within the framework of a single system of safeguards and control and it is not necessary to organize a special system for United States consignments.

Euratom's system of safeguards and control will also ensure that the Community carries out the relevant provisions of the Euratom - United Kingdom Agreement.

CHAPTER XII

HEALTH PROTECTION

An important start has been made in the field of health protection with the establishment of basic standards valid for the six countries. These standards constitute a compulsory basis for national legislation, the approximation of which will be ensured by the Commission.

The Commission, in collaboration with the relevant authorities of the six countries, is working for the creation of a co-ordinated system for the permanent control of the level of background radioactivity.

§ 1 — Basic Standards

80. The procedure laid down in Article 31 of the Treaty for the establishment of basic standards by the Council of Ministers was put into practice in the last quarter of 1958. This involved obtaining the opinion of the Economic and Social Committee and consulting the European Parliamentary Assembly.

These two bodies showed great interest in the Commission's draft directives and submitted them to very close scrutiny.

Numerous comments and requests for further information were made at the meetings held in Brussels and Strasbourg. Wherever the Commission felt that it

was necessary to be clearer or more precise, it took full account of the remarks and suggestions made, and modified the first draft directives of September 1958 accordingly.

Although the procedure laid down in the Treaty for the adoption of the basic standards seems at first sight to be somewhat complicated, the Commission is happy to be able to state that this series of compulsory consultations was in fact highly instructive and that the exchanges of views between the Commission and the various institutions and bodies concerned took place in an atmosphere which must be described as extremely favourable.

81. The Council approved the Commission's proposal on December 22, so that the basic standards were established by the end of 1958 in accordance with the requirements of the Treaty.

This event has scientific and technical, as well as political and social implications. The member countries of the Community now have a common basis on which to work out the legislative and administrative provisions required to ensure compliance with the basic standards within the Community.

The Commission draws particular attention to the fact that for the first time — thanks to the clearly defined powers vested in it under the Treaty — it has been possible to work out a set norms and principles for the protection of the health of workers and the general public having force of law and providing the safeguards necessary for the expansion of nuclear energy. In this field, Euratom has been able to act as a pilot organization and its directives relating to health protection can be considered as a substantial contribution to a wider international agreement which may be concluded at a future date on the programmes for ensuring protection against the hazards of radiation.

82. While the procedure laid down by the Treaty for the fixing of the basic standards was being carried out, Euratom representatives established contacts with other international organizations engaged on similar work and took part in the meetings which have been held within the framework of the European Nuclear Energy Agency. The Euratom standards are currently being used as a basis to work out the draft decisions or recommendations which the Agency is seeking to have adopted.

As for the International Agency in Vienna, the contacts established last year on the technical plane have been maintained. The Commission's proposals on the question of basic health protection standards have been duly sent on to the relevant department of the Agency.

As regards relations with the International Labour Organization (I L O), the Commission has made contact with the International Labour Office (ILO) to study how collaboration can best be organized.

§ 2 — The Approximation of National Legislation

83. The establishment of the basic standards by the Council of Ministers constitutes the first stage in the Commission's work of implementing the provisions of the various articles of Chapter III of the Treaty.

The next stage will be to harmonize the relevant legislative provisions of the individual Community countries. The importance of this task has been brought out many times at the various stages of the procedure followed in laying down the basic standards; the Commission has

already completed the preliminary work of surveying the laws in force in the Member States and of comparing the laws and the draft legislative and administrative provisions of which it has knowledge.

It was mentioned in the preceding report of the Community's activities that several draft legislative proposals had already been received and examined by the Commission. The Commission has in particular examined and signified its approval of the German Atomic Energy bill within the prescribed period of three months laid down in the Treaty.

Under Article 33 of the Treaty, the Commission has the right to make recommendations in order to achieve legislative uniformity. The Commission fully intends to exercise this right, if necessary, and will thus be able to satisfy the wishes expressed by the European Parliamentary Assembly on various points appearing in the basic standards. These particular recommendations would be based on the opinions obtained in the course of the year from the group of 12 experts who made a study of the problem of the basic standards in 1958.

84. Another problem which is often brought up is the possible need for revising and supplementing the basic standards if this should appear necessary in the light of fresh scientific data. It is essential for the Commission to continue to follow regularly — as it has already done for the past few months — the progress of the investigations and research work being carried out throughout the world in the field of health protection and to examine the possible implications of this work on the values adopted for the maximum permissible doses and concentrations appearing in the basic standards. While these basic standards are by no means to be considered as a set of hard

and fast rules, the Commission will nevertheless apply the provisions of Article 32 relating to amendments and addenda only if new factors of sufficient importance should emerge. The Commission is in any case arranging for a further meeting in April of the group of 12 experts which submitted its considered opinion in September 1958. The purpose of this consultation is to maintain contact with the experts and to examine the latest scientific information on the problems under review.

85. Moreover, the application of certain articles of the basic standards raises practical problems of considerable complexity which will require clarification and further study. This is true in particular of the lower limits set for their application, the concentrations of radioactive nuclides in drinking water, the air which is inhaled, and sewage water, and protection against the action of neutrons. The Commission is currently drawing up a plan and a programme to enable these various questions to be studied. The problem of transporting irradiated nuclear fuels is a matter of some interest at the present time, not only for the Community countries, but also for the members of the Organization for European Economic Co-operation and it will shortly be studied by a special working party.

§ 3 — Facilities for the Permanent Control of the Level of Radioactivity in the Atmosphere, Water and Soil

86. As was emphasized in the previous report, the Commission attaches great importance to the application of Articles 35 and 36 of the Treaty, which require regular reports to be submitted by the relevant authorities on the measures adopted for the permanent control of the level

of radioactivity present in the atmosphere, the water and the soil and for ensuring compliance with the basic standards.

The list of control posts has now been completed and another survey is under way which will comprise as far as possible all existing installations used for the purpose of manufacturing, transforming, research or power production in the nuclear field.

The necessary contacts have been established to ensure that the most suitable methods are adopted for reporting the necessary information.

If these problems are being dealt with by a number of organizations in a Member State, the work of measuring the level of radioactivity should be co-ordinated nationally to a certain extent. This would make for more effective collaboration from Euratom's point of view, provided that the reports which have to be submitted under Article 36 give the Commission the most complete and detailed information possible on the level of radioactivity.

The Commission is also interested in ensuring that reports are submitted by the various national installations concerned in such a way as to permit easy comparison of the results obtained. For this purpose, a working party will shortly be set up to achieve uniformity in the rate and frequency at which radioactivity is measured and the methods of reading and presenting results, so that full use may be made of the technical data obtained.

As soon as this is done, it will be possible to draw up the comprehensive tables, diagrams and graphs required for the publication of the radioactivity reports requested by the Parliamentary Assembly. The Commis-

sion feels that it should be possible to complete this task in the course of the year.

Once this is done, the Commission will be able to tackle the next stage of its work, *i.e.*, the study of the more general problem of the variations in the level of background radioactivity in time and space.

§ 4 — Technical Questions

87. In the technical field, the Commission's work includes a number of clearly-defined tasks relating both to the prevention of irradiation and other accidents in the nuclear industry and to the protection of workers and the population at large.

88. As the nuclear industry comes into existence, there will be the growing problem of protecting the health of workers, the surrounding area and the local population. Article 37 relating to plans for the disposal of radioactive waste and Articles 41 and 43 relating to investment projects give the Commission the right to intervene whilst these projects are still under study and to take the necessary preventive action, on which the work of ensuring protection against radiation hazards is based.

The first projects will be submitted to the Commission in the course of 1959. A special technical department, which will be responsible for these questions, has been created and is made up of experts with specialist knowledge of the problems involved in providing physical protection against the hazards of radiation. They will work in conjunction with the national experts dealing with the problem of radioactive waste and it is clear that this work is bound to assume considerable proportions as more and

more projects are submitted to the Commission. The Commission hopes that in exercising the authority vested in it for the accomplishment of the highly responsible tasks entrusted to it in this field, it will be able to work together with the various branches of the nuclear industry in a spirit of collaboration and mutual trust.

89. The basic standards also define the fundamental principles to be observed in ensuring the protection of the health of workers and the general public. The Member States are now responsible for taking the necessary steps to apply these principles. Euratom for its part will have to supervise the application of these measures, which have supra-national implications for each of the Member States concerned since the protection of the population of any one country depends not only on its own precautionary measures but also on the value and effectiveness of the measures adopted by neighbouring States.

The Commission continues to be fully alive to its duty of promoting and co-ordinating the efforts being made in this field, in accordance with the provisions of the Treaty. It is considering setting up fairly soon, if it should be necessary, a number of study groups made up of specialists from the relevant authorities of member countries in order to prepare the way for uniform legislation in this field.

In dealing with the various aspects of protecting the health of the general population, the Commission is directing some of its activities to the field of radio-biology and qualified specialists are working on the problems involved. The study of the action of radiation on the human organism is essential to any realistic assessment of the hazards to which workers are exposed as a result of the peaceful development of nuclear energy.

90. At a later stage, in connection with its work in the field of genetics, the Commission might well have to deal with the more general problem of making a survey of the total irradiation absorbed by the population. This problem will certainly become very acute in the near future and it is essential to build up as complete a body of information as possible now, if it is to be studied adequately later on.

The Commission, therefore, in conjunction with the institutions which are interested in manpower problems generally, is making a statistical inquiry to ascertain the number of workers affected by the basic standards and the population density in controlled and supervised areas.

§ 5 — The Medical and Social Aspects of Health Protection — Information and Documentation

91. The application of the basic standards raises numerous medical and social problems.

92. A first group of problems centres on education, vocational training and special courses of instruction. It is clear that the training and education of persons whose work brings them into contact with ionizing radiations are major factors in the preventing of accidents and imparting the necessary technical knowledge. The Commission is currently studying the arrangements and provisions existing in this field, a particularly complicated task in view of the multiplicity of the problems involved and the number of organizations which are, or may later be concerned with them. It is still too early to make any definite statement on the contributions which the various Community countries might make in this important sphere.

Various nuclear research centres in the Community countries have already organized courses of instruction and practical training which are of particular interest to the Commission. One member of the Health Protection Division is at present undergoing a period of further training at the Mol Centre on radioactivity measurement. The Commission also intends to send trainees to other national research centres, for example Saclay or Karlsruhe, as soon as the need for special training in particular fields becomes apparent.

93. The second group of problems is concerned with the medical and social implications of the basic standards. These include the following points at present being considered by the Commission: compensation for physical injury caused by the action of radiation either as a result of an accident or in the form of an occupational disease; the granting of special leave for doses absorbed on the basis of the maximum permissible dose laid down for a given period; the debarring of expectant and nursing mothers from certain types of employment involving a high radiation hazard; retraining and re-employment in other branches of industry of persons engaged in the nuclear field.

These problems are being studied along general lines in conjunction with the other two Communities but it is clear that their solution is primarily a concern of the nuclear field and therefore of Euratom.

94. As regards documentation and information, the Commission is carrying out a twofold task in the sphere of health protection.

As part of its public relations activities, the Commission is preparing a number of publications designed to explain what principles have been adopted to ensure the

protection of workers and the population at large against the hazards of ionizing radiation and what practical steps have been taken in this direction. This information is intended for professional and other limited circles rather than for the general public. The Commission has, for example, decided to prepare a booklet for the benefit of the medical profession explaining the present state of knowledge in the field of ionizing radiations and their somatic and genetic effects and the principles and rules of practice for ensuring protection.

Should the need arise, or should any special problems require clarification, the Commission will consider the publication of further brochures for the benefit of professional or other circles with a special interest in the nuclear field.

Finally, the Commission is building up a specialized technical documentation service and is engaged on analyzing the considerable volume of scientific and technical literature published on the subject of protection against radiation in all parts of the world. This work has laid the foundation, as regards fundamental research on the biological effects of radiation as well as the practical applications of this research, for the scientific documentation provided for in the Treaty.

CHAPTER XIII

THE EXTERNAL RELATIONS OF THE COMMUNITY

Since last September, the major events in the Community's external relations have been the final elaboration and the signing of the Agreement for Co-operation between Euratom and the Government of the United States of America, and the conclusion of an Agreement for Co-operation with the Government of Great Britain.

The Commission has been pleased to note the increasing interest being taken in its work by third countries. At the same time, contacts made earlier with international organizations working in the nuclear field have been maintained or broadened.

§ 1 — Relations with Third Countries

A. UNITED STATES

95. The Euratom - U.S.A. Agreement for Co-operation was signed in Brussels on November 8, 1958 and came into force on February 18, 1959. A number of last-minute modifications were made shortly before the Agreement was signed. In particular, this final version provides that two of the nuclear power plants scheduled to be built under the Agreement may be selected to come into operation by December 31, 1965, and not 1963, as was originally intended. This modification is in line with a desire

expressed several times by Euratom, because it will give greater flexibility to the programme. It should enable the Euratom countries after 1963 to profit from the experience built up during the construction of the first reactors. It will also make it possible to extend, if necessary, the scope of the Agreement to include new types of reactors, on which advanced research and development work has been carried out in the meantime in the United States.

Intensive work has been done to prepare the way for the implementation of the Agreement, both by the United States Administration and by the Commission *(cf.* the chapters on Nuclear Industry, Energy and Economy — Research and Training — Safeguards and Control).

B. UNITED KINGDOM

96. Negotiations which began in July of last year with the British Government have led to the framing of the Agreement for Co-operation in the peaceful uses of atomic energy, which was signed by the Commission and the British Government on February 4, 1959 in London.

The main object of this Agreement is to provide the general framework for the establishment and development of commercial exchanges in the nuclear field between British enterprises and those of the Community for peaceful purposes. It is designed in particular to enable persons and enterprises in the Community that are interested in buying British reactors, to do so under the most favourable conditions; obviously, negotiations of a strictly commercial or technical nature relating to the purchase of reactors will be carried out on the sole responsibility of the persons and enterprises concerned. Under the Agreement, however, the United Kingdom

Atomic Energy Authority and the Euratom Commission will endeavour to facilitate these transactions. The provisions of the Agreement relating to supply and dissemination of information should moreover lead to the intensification of exchanges between the Commission and the United Kingdom.

As regards the sale and the reprocessing of nuclear fuels, the Agreement does not contain the rather severe restrictive clauses which were included in the agreements previously concluded by the United Kingdom, in which provision was made for the British Government to have a right of option on the plutonium produced in the reactors using fuels supplied by the United Kingdom. In the same field, the most favoured nation clause which has been incorporated in the Agreement gives the persons and enterprises concerned in the Community the guarantee that they will enjoy commercial terms and conditions which are at least as favourable as those offered to other buyers by the British Government. The contracting parties will facilitate exchanges of unclassified information between persons in the United Kingdom on the one hand and those within the Community on the other. Another clause provides for the exchange of patents on commercial terms, either in the form of licences on all patents owned by the British Atomic Energy Authority or the Community, or in the form of sub-licences granted by persons holding licences pertaining to patents owned by the Atomic Energy Authority or the Community, which undertake to encourage and to facilitate the granting of these sub-licences. In the field of safeguards and control, the provisions of the Agreement fully recognize Euratom sovereignty.

The British Government has also stated its readiness to enter into the necessary negotiations with Member States and the Euratom Commission to enable the Com-

munity to assume the rights and obligations arising out of agreements for co-operation in the nuclear field concluded between the United Kingdom and Member States before the entry into force of the Treaty setting up Euratom.

The intention of the contracting parties in signing the Agreement for Co-operation was not only to strengthen relations between each other but also to contribute towards the development of the peaceful uses of atomic energy on European and international levels; Euratom and the United Kingdom, therefore, have explicitly re-affirmed their common interest in fostering these uses through the International Atomic Energy Agency and the European Nuclear Energy Agency and record the view that these Agencies and their members should derive benefit from the results of their co-operation. This is a further manifestation of Euratom's resolve to take an active interest in the parallel efforts which are being made to develop the peaceful uses of nuclear energy.

It is also planned that representatives of the contracting parties shall meet periodically to confer on questions arising from the application of the Agreement, to supervise its implementation and to discuss further possibilities of co-operation.

C. CANADA

97. Following the example of the Governments of the United States and the United Kingdom, the Canadian Government has now suggested to the Commission that negotiations be started with a view to concluding an agreement for co-operation. Preliminary exchanges of

views have taken place. While it is still too early to say exactly what an agreement of this sort would involve, it would seem not unlikely, in view of Canada's long experience of natural uranium and heavy water reactors, that the projected agreement might make provision for Euratom - Canadian co-operation in this field.

D. BRAZIL

98. The Brazilian Government has recently informed the Commission of its readiness to examine jointly the possibility of concluding a general Euratom - Brazilian agreement for co-operation. This proposal has been welcomed by the Commission.

§ 2 — Relations with International Organizations

A. ORGANIZATION FOR EUROPEAN ECONOMIC CO-OPERATION (OEEC)

99. Commission representatives continue to take part in the meetings of the Steering Committee and the various technical committees of the European Nuclear Energy Agency (ENEA).

100. Last year, it will be remembered, a proposal was made by the United Kingdom for the construction on an international basis of an experimental high-temperature gas-cooled reactor (Dragon project) in Great Britain. The Commission has decided in principle to subscribe to the agreement relating to this project; the U.K.A.E.A., the

Governments of Austria, Denmark, Norway and Switzerland, and the Swedish Aktiebolaget Atomenergi also intend to sign.

A draft agreement lays down the ways in which a five-year joint programme — beginning on April 1, 1959 — is to be carried out; this programme will largely consist of research and development work in the field of high-temperature gas-cooled reactors and the study, construction and operation of the reactor to test experimentally the results of this work.

The whole project will involve expenditure in the region of £ 13.6 million (38 million E.M.A. units of account), of which a sum of £ 10 million (28 million E.M.A. units of account) will be borne by all the participants and the remainder by the U.K.A.E.A., which will retain ownership of the installations at the end of this five-year period. The cost will be divided out in such a way that Euratom and the United Kingdom will each provide 43·4 % of the contribution (*i.e.*, £ 4.34 million or 12.5 million E.M.A. units of account), while the remainder will come from the other countries.

The size of the Community's contribution to this new joint OEEC project provides further evidence, if it were needed, of Euratom's firm resolve to play a constructive part in the work of the European Nuclear Energy Agency; moreover, the Dragon project is a first tangible sign of the burgeoning co-operation between Euratom and the United Kingdom.

101. On another joint project, the Commission continues to take part in the work of the "Halden Committee" and the "Halden Technical Group", which are responsible for deciding on and implementing the research and develop-

ment programme which will be carried out, once the Halden reactor begins to operate.

102. Commission representatives have also made a vital contribution to the work being carried out by the OEEC in the field of health protection. The number of experts from the six member countries who helped to frame the basic standards established for the Community have been representing Euratom on the Group of Experts which the European Nuclear Energy Agency has entrusted with the task of drawing up basic standards for the whole of the OEEC countries. Since this group has very largely taken into account the Community's work in this field, it has been possible to bring the basic standards drawn up by the OEEC into line with those approved by the Euratom Council of Ministers. This can be considered as an important step towards internationally valid basic standards.

103. Finally, the Commission is following with interest the OEEC's efforts to bring about the conclusion of a European convention on third party liability in the field of nuclear energy. In attaches great importance to this problem for, unless a solution is found quickly, there is a danger that the development of the nuclear industries in the Community might well be slowed down.

B. COUNCIL OF EUROPE

104. Relations with the Council of Europe have become closer in recent months. The first General Report on the Community's activities was forwarded to the Consultative Assembly by the Commission. This report was discussed by the Members of the Consultative Assembly of the Council of Europe and of the European Parliamentary Assembly at the first joint meeting of these two Assem-

blies, on January 16, and 17, 1959, in which the Commission took part.

C. INTERNATIONAL ATOMIC ENERGY AGENCY

105. Following an invitation from the Agency's Board of Governors, a Euratom observer attended the second session of the General Conference held in Vienna from September 22 to October 4, 1958.

D. INTERNATIONAL LABOUR ORGANIZATION

106. Finally, the Commission has worked out a draft protocol with the aim of establishing and developing useful contacts between Euratom and the International Labour Organization.

CHAPTER XIV

ADMINISTRATION AND PERSONNEL

The provision of a statute of service for its personnel and the organization of the various administrative and technical services continue to be major concerns of the Commission.

107. According to Article 186 of the Treaty, "the Council, acting by means of a unanimous vote, shall in collaboration with the Commission and after consulting the other institutions concerned, lay down the statute of service for officials and the conditions of employment for other employees of the Community".

During the past year, preparatory work on the drafting of a statute of service for personnel was begun by a working party set up by the Committee of Permanent Representatives under the aegis of the Councils of the Communities. Experts from the Community countries and representatives of the EEC and the Euratom Commission are together drawing up a preliminary report on the adoption of a wages and salaries scale. A special inquiry is being made into the question of employees with special technical qualifications.

Representatives of the Court of Justice, the European Assembly and the Committee of the Presidents of the European Coal and Steel Community have also been invited to join in this work. At these meetings, the Com-

mission's representatives, who share the point of view adopted by the Parliamentary Assembly in a resolution of December 16, 1958, have persistently pressed for the adoption of a single statute of service for all the institutions of the Communities.

108. The Commission has submitted a preliminary proposal to the Council on the European tax, provided for by Article 12 of the Protocol on Privileges and Immunities.

109. The Commission has endeavoured to work towards the adoption of a solution common to the three Communities of the problems involved in the Health Insurance Fund, the Provident Fund, and the pensions scheme. Joint working parties made up of representatives from each of the executive bodies concerned have been set up for this purpose.

In the field of health insurance, pending an agreement between the three Communities on the methods of administering a fund common to the three executive bodies, the Euratom Commission, feeling that this step could no longer be reasonably postponed, began to reimburse medical expenses as from September 8, 1958.

In addition to the individual contributions made by the employees, the Health Insurance Fund receives a sum of 3,000 Belgian francs per year and per employee from the administration. The financial position on December 31 was satisfactory.

Pending the introduction of a statutory pensions scheme a Provident Fund has been established for all employees, subject to the approval of the regulations. The capital of the fund is made up of contributions from the employees and the Community, the latter contribution being double the former.

Finally, it should be noted that an additional clause has been added to the ECSC insurance policy covering the staff against the risk of accidents.

Euratom has a medical officer who carries out the medical examination which employees are required to undergo prior to permanent appointment and who is responsible for the medical supervision of the staff generally.

110. In view of the technical nature of translation work, a terminology section has been attached to the Translation Service.

111. In the initial stages of their activity the various departments of the Commission have been given valuable assistance by the ECSC in obtaining and purchasing the necessary fittings and equipment. The Commission wishes to take this opportunity of expressing its appreciation to the High Authority for the assistance provided during this initial period. This has marked the beginning of a policy of growing co-operation between the administrative services of the three Executives to increase efficiency and achieve greater economy.

112. The Commission welcomes the creation of a staff association, with which it intends to have regular meetings on a basis of mutual confidence.

CHAPTER XV

FINANCE AND BUDGET

The draft research and investment budget and the draft working budget have been drawn up in accordance with the procedure set out in the Treaty. A further task of the Commission is to deal with the financial aspects of the Euratom - United States Agreement.

113. As stated earlier, financial and budgetary matters are now dealt with by a self-contained division of the Commission, known as Division IX — B or the Finance and Budget Division.

114. During 1958, there was a particularly large volume of budgetary work to be dealt with. The budget for 1958 had to be worked out, quite apart from the problem of organizing internal procedure. Furthermore, the budgetary procedure laid down in the Treaty for the various Community institutions had to be introduced and applied.

The two research and investment budgets for 1958 and 1959 and the working budget for 1958, drawn up by the Council in accordance with the procedure laid down in the Treaty, were approved by the Assembly on December 17, 1958.

The working budget for 1959 has been submitted to the Assembly for examination.

115. The Commission is also responsible for the implementation of the Euratom - United States Agreement from the financial point of view.

This involves on the one hand an agreement with the Eximbank on the opening of a 135 million dollar line of credit which is being made available to Euratom to be re-loaned to the enterprises which will construct nuclear power plants under the one million kW programme.

Another task will be to draw up contracts with the European Investment Bank (EIB), which will administer as Euratom's agent the original loan itself and the sums re-loaned; it will also act as trustee for the administration of the guarantees given by the borrowers.

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