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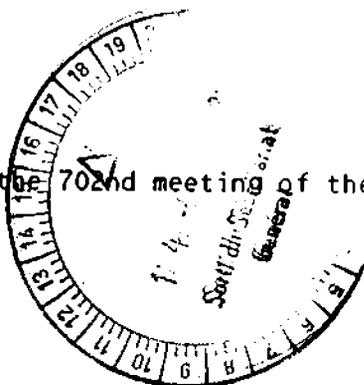
COMMISSION COMMUNICATION TO THE COUNCIL CONCERNING  
THE COMMUNITY'S ROLE AS REGARDS THE SAFETY OF NUCLEAR  
INSTALLATIONS AND THE PROTECTION OF PUBLIC HEALTH

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(Communication from Mr Narjès)

- This question is on the agenda for the 702nd meeting of the Commission,  
on Wednesday 20th July 1983.

To : Members of the Commission  
Mr Andreopoulos  
Mr Degimbe  
Mr Fasella  
Mr Audland  
Mr Ehlermann



PREPARATION DU DOCUMENT

Direction générale responsable : Environnement, protection des consommateurs  
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Services associés :

- pour accord,

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Direction générale de la science, de la recherche  
et du développement

Direction générale de l'énergie

- pour avis,

Service Juridique

)  
)  
)  
) Avis favorable

Annexe financière

La présente communication n'a aucune implication financière.

Historical Archives of the European Commission

## Annexe Calendrier

### Dates préconisées

- Avis du Parlement Européen et du Comité Economique et Social :  
octobre 1983
- Décision du Conseil : fin 1983

Historical Archives of the European Commission

Brussels, 1 July 1983

NOT TO BE PUBLISHED

Directorate-General  
for the Environment, Consumer Protection  
and Nuclear Safety

Communication from Mr Narjes to the Members of the Commission

At its 658th meeting on Thursday, 22 July 1982, the Commission took note of a report from the Interdepartmental Coordinating Committee on Nuclear Safety (CCSN) on the role of the Community in the field of nuclear safety (Doc. SEC(82)1253) and decided to conduct a political action to convince the authorities of the Member States of the need for Community activities within the proposed framework.

In this context, in order to acquire better understanding of the problems and concerns that arise in the Member States with regard to Community activities in the field of nuclear safety and to eliminate any misconceptions, the CCSN established direct contact with the national administrations responsible for health protection and for the licensing of nuclear installations (the report of the C.C.S.N. on these discussions is appended to this document).

The discussions chiefly concerned the topics referred to in document SEC(82)1253, which was placed before the Commission on 22 July 1982, namely:

- Community activities on the harmonization of the technological aspects of nuclear safety, based on the Council resolution of 22 July 1975;
- application of the provisions of Chapter III of the Euratom Treaty;
- trans-frontier problems (nuclear installations close to frontiers or discharging effluents into waterways or seas of Community interest).

The following points were brought out in the discussions:

- As regards Community activities on the harmonization of the technological aspects of nuclear safety, based on the Council resolution of 22 July 1975, it emerged that the Commission should assume the task of verifying equivalence of the levels of protection for the population of the Member States as a whole. Apart from bringing closer together the rules and practices which must be continued, and apart from the development of common methods and principles leading to the definition of overall safety objectives, it is thus important for emphasis to be placed on a general comparison from a safety standpoint of the most widespread types of power station in the Community, particularly those equipped with pressurized-water reactors. This type of comparison, which in some cases has been made on a bilateral basis, could have a very considerable impact on the development of nuclear energy if it were carried out at European level. The role of the Commission with respect to the safety of installations would also be greatly strengthened by the implementation of such a project. The Commission's attention, however, is drawn to the fact that such a project calls for very highly technical studies and can therefore be conducted only if the departments concerned possess adequate means\* and full cooperation on the part of the Member States is guaranteed.
  
- As regards application of the provisions of Chapter III of the Treaty, the Member States attach great importance to the correct application of the health protection provisions and, although difficulties do exist, they show real willingness to put into practice the Council Directive of 15 July 1980 amending the Directive laying down the basic safety standards for the health protection of the general public and workers against the dangers of ionizing radiation.

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\* Estimate: about 40 men x year (temporary contracts and outside consultants) stretching over two to three years.

The powers conferred by the Euratom Treaty upon the Commission in this field are sufficient for it to take the requisite steps and, in cooperation with the Member States, to provide for the harmonized implementation of the Community provisions.

However, the Commission must be aware of its responsibility to ensure that its services have the resources and the capacity to fulfil the tasks incumbent upon it. In this regard, attention should be called to the Commission's decision of 3 February 1982 to strengthen the Directorate-General for Employment, Social Affairs and Education (DG V), responsible for the application of Chapter III of the Euratom Treaty, which should immediately be put into effect in its entirety.\*

- As regards the problems associated with the siting of nuclear installations close to frontiers, it emerged that most of the authorities in the Member States are of the opinion that it is the Community's role to ensure that there is adequate protection for the population living on either side of a frontier. On the basis of the problems encountered in practice and bearing in mind the opinions expressed by various groups of experts, the Commission has already taken two initiatives concerning trans-frontier problems:

- . a Committee has been set up which is composed of delegates from the countries concerned and has the task of monitoring the evolution of the radiological impact of radioactive substances in the Meuse. The work of this Committee, known as the "Meuse Committee", is already under way;
- . The Member States have been requested to nominate representatives to a Committee which would be responsible for examining trans-frontier cooperation in the event of an accident in a nuclear installation situated close to a frontier.

Most of the Member States have already replied in the affirmative to this request, but work has not yet begun.

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\*This decision concerned 4 A posts, 2 B posts and the corresponding C posts, but provision has so far been made only for a temporary A post.

Furthermore, the possible accumulation of radioactivity caused by several discharges of effluents into marine waters of Community interest is a problem that deserves to be studied by the Commission in cooperation with the Member States and consideration should be given to setting up a group of experts.

These measures clearly fit into the context of the Community's task of promoting the development of nuclear energy and guaranteeing that there is equivalent protection for the public in each country. It would, however, be useful for the Commission to request the Council's support for these projects in order to ensure the full cooperation of the Member States.

The draft communication from the Commission to the Council on the role of the Community with respect to the safety of nuclear installations and health protection gives for the sake of comprehensiveness an overall view of the activities and proposals in the field. This Communication proposes that the Council support the Community activities relating to trans-frontier radiological problems by adopting the appended draft resolution.

It is thus proposed that the Commission:

- approve the draft Communication from the Commission to the Council concerning the role of the Community with respect to the safety of nuclear installations and health protection;
- approve the draft Council resolution on trans-frontier radiological problems;
- decide to forward to the Council the Communication from the Commission to the Council and the draft Council Resolution.

**COMMISSION  
OF THE  
EUROPEAN COMMUNITIES**

Brussels, 1 July 1983

Directorate-general for the Environment,  
Consumer Protection and Nuclear Safety

Report from the CCSN to the Commission on the discussions with the national  
authorities responsible for the safety of installations and radiation protection.

Following the Commission decisions of 22 July 1982, a delegation from the departments concerned held informal discussions with representatives of the national authorities responsible for licensing nuclear installations and for health protection in all the Member States.

The principal facts that emerged from these discussions are set out below; it should be noted that such discussions were not held with the operators and constructors of nuclear power stations.

- As regards Community activities on the harmonization of the technological aspects of nuclear safety, based on the Council Resolution of 22 July 1975, the viewpoint of the authorities in any Member State is in large measure determined by the state of development of the nuclear industry in that country. The authorities in the Member States are unanimous in stressing the value of the exchange of information on the rules and practices in force in the respective countries for the purpose of promoting the bringing closer together of such rules and practices and of improving the knowledge needed for their application. However, account must be taken of the fact that, in Member States which currently have large-scale nuclear programmes, the industrial sectors that manufacture the equipment and the corresponding components have developed their own technological practices within the framework of national regulations. These practices do not always coincide from one country to another.

Moreover, there is no evidence that differences between construction practices and standards significantly affect the safety of the installations. The national authorities responsible for granting licences in countries that construct nuclear power stations therefore generally do not encourage the

formulation of true codes and the adoption of construction standards at European level.

From a more general standpoint, that of the formulation of safety goals, the national authorities consider it useful or even necessary for initiatives to be taken at Community level so that a European safety philosophy can be established. It should also be noted that, in contrast with the current American trend, the European position will have to take account of a more reserved attitude on the part of the Member States towards the introduction of quantitative safety objectives in regulations. The development of appropriate methods (for example probabilistic risk assessment) must be achieved by means of close European cooperation.

In short, in the present situation, it seems indisputable that the Commission should assume the task of verifying the equivalence of levels of protection for the entire European population. In this context, apart from bringing closer together the rules and practices, which must be continued, and apart from the common development of methods and principles leading to the definition of safety objectives, it is important that emphasis be placed on an overall comparison from a safety standpoint of the most widespread types of power station in the Member States.

This comparison would be based on a study of special design features, operating rules and measures to be taken in the event of abnormal situations which would be conducted so as to achieve an overall assessment of the safety of workers and the public and to place within a general perspective the various degrees of importance attributed in the different countries to the safety-related systems and rules. This type of comparison, which in a number of cases has been made on a bilateral basis, could have a very considerable impact on the development of nuclear energy if it were conducted at Community level, inter alia by making use of the results of the studies conducted in implementation of the Council Resolution of 1975. The role of the Commission with respect to the safety of installations would also be greatly strengthened by such a comparison.

The Commission's attention is drawn to the fact that this project, which calls for studies of a very highly technical nature, can be conducted only if a close cooperation on the part of the Member States is guaranteed and if the Commission departments concerned possess adequate resources (the requirements are estimated at present as 40 men x year as temporary contracts and outside consultants, stretching over two to three years).

- As regards application of the provisions of Chapter III of the Euratom Treaty, the Member States are showing real willingness to cooperate in the activities undertaken for the purpose of putting these provisions into practice.

Difficulties have arisen in various Member States with regard to the implementation of the Council Directive of 15 July 1980 amending the Directives laying down the basic safety standards for the health protection of the general public and workers against the dangers of ionizing radiation. These difficulties, which originate in the legal systems or administrative structures of the States concerned, are reflected in the delays with respect to the time limits for application laid down in the Directive.

In view of the efforts made by most of the Member States, the delays referred to are not such as to require any action on the part of the Commission for the time being other than a reminder of the obligations involved.

It emerged during the discussions that the application of the "Basic Standards" Directive of 15 July 1980 gives rise to two special problems in respect of which the Commission will have to take action. These problems are:

- . application of the principle of justification of exposure to radiation laid down in the Basic Standards;
- . use of the concept of the committed dose and the associated dosimetry with regard to the incorporation of radionuclides.

Both of these problems, which fall within the context of optimization of radiation protection, call for thorough exchanges of views between experts from the Member States which should result in the development of a common attitude and a harmonized practice.

Further problems that arise concern a proposal from the Commission at present being discussed by the Council<sup>1</sup> and Commission measures aimed at achieving better application of the health protection provisions of the Euratom Treaty, for which solutions must be found by continuing the discussions with the relevant authorities in the Member States.

On the whole, the discussions with the authorities responsible for radiation protection stress the importance of correct application of the health protection provisions of the Euratom Treaty and of activities intended to promote the harmonized application of these provisions.

The powers conferred upon the Commission in this field by the Euratom Treaty are sufficient for the Commission to take the necessary steps and to guarantee the proper implementation of the Community provisions with the cooperation of the Member States.

The CCSN points out that the Commission must, however, bear in mind its responsibility for ensuring that its departments have the resources and the capacity to allow it to fulfil the tasks incumbent upon it and, in this regard, calls attention to the Commission decision of 3 February 1982 to strengthen the units responsible for the application of Chapter III of the Euratom Treaty (DG V-E). This decision concerned the allocation of four A posts, two B posts and the corresponding C posts. So far, provision has been made for a temporary A post.

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<sup>1</sup> The proposal for a Council Directive establishing basic measures for the radiological protection of persons undergoing medical examinations and treatment.

- As regards the problems associated with the siting of nuclear installations close to frontiers, it emerged that the authorities in most of the Member States are of the opinion that it is the role of the Community to ensure that there is adequate protection for the population living on either side of the frontier. The French authorities, on the other hand, put forward the viewpoint that the problems associated with installations in the vicinity of frontiers must be solved by the States concerned on a bilateral basis. In this connection, France and the Federal Republic of Germany have in recent years concluded bilateral agreements with each other and with neighbouring States concerning the problems associated with accident situations in installations close to frontiers and covering, in particular, emergency plans and the implementation thereof. The two Member States have also established contacts with non-Community countries with a view to concluding further bilateral agreements.

The opinions expressed by the Commission pursuant to Article 37 of the Euratom Treaty include, in certain cases involving power stations situated close to frontiers, recommendations to the Member States concerned which relate to trans-frontier effects that these installations may have. On the basis of problems encountered in practice and bearing in mind the opinions expressed by various groups of experts, the Commission recently took two initiatives with respect to trans-frontier problems :

- . the Meuse, a typical Community river in view of the fact that it flows only through the territories of Member States, is the source of drinking water for over five million inhabitants of the Community. Special attention must therefore be paid to problems arising from the pollution of this river. The Belgian nuclear power station at Tihange and the Franco-Belgian power station at Chooz in France on the bank of the Meuse discharge certain radioactive effluents into it. The French decision to construct a new large-capacity power station at Chooz will eventually result in an increase of the discharges into the Meuse.

The Commission has set up a committee of experts from the countries concerned which is responsible for monitoring the evolution of the radiological impact of radioactive substances in the river. The work of this committee, which is called the "Meuse Committee", is under way.

Furthermore, discharges of radioactive effluents into certain seas and the accumulation thereof is causing concern among the public in certain Member States with regard to the effects of such discharges on fishery products. It has been suggested that the Commission should consider examining at Community level the impact of all discharges into marine waters of Community interest.

- The Commission has requested the Member States to nominate representatives to a Committee that would be responsible for studying trans-frontier cooperation in the event of an accident in a nuclear installation sited close to a frontier. Most of the Member States have already replied in the affirmative to this request, but the Committee's work has not yet begun.

These Commission initiatives clearly fit into the context of the Community's task of promoting the development of nuclear energy and guaranteeing equivalent protection for the public in each Member State. They also correspond to the concern voiced by various participants in the discussions.

On the whole, those who took part stressed the value of such discussions and proposed that they be continued in future.

### Conclusions

In the light of the results of the discussions with representatives of the authorities in the Member States and in view of the Community's responsibility in the field of nuclear safety, the CCSN concludes that:

- As regards the implementation of the Council Resolution of 1975 on the technological aspects of nuclear safety:

- . the current work on the bringing closer together of rules and practices must be continued at working party level;
- . the development of methods and principles leading to the definition of common safety objectives is acknowledged as being a necessary activity at Community level and must therefore be continued;
- . as a supplement to the work on the technological aspects of nuclear safety, it is desirable to conduct an overall comparison of the most widely spread types of power station in the Community in cooperation with the authorities concerned in the Member States.

- As regards health protection:

- . the provisions of Chapter III of the Euratom Treaty and, in particular, the "Basic Standards" are, as in the past, of the greatest importance to the Community's nuclear safety policy, and the Commission must thus ensure that the existing provisions are applied correctly and in a harmonized manner. In this connection, the CCSN calls to mind the Commission's decision of 3 February 1982 to reinforce the units of DG V-E with four A posts, two B posts and the corresponding C posts, of which provision has so far been made for one temporary A post;
- . certain problems associated with the siting of nuclear installations close to frontiers or with discharges of radioactive effluents into an aquatic environment common to several States must be considered at Community level. The measures already taken by the Commission with a view to examining trans-frontier cooperation in the event of an accident in an installation and to studying the radiological consequences of radioactive discharges into a waterway common to several Member States deserve to be supported by the Council in order to ensure that they are as effective as possible.

The radiological consequences of discharges of radioactive effluents into marine waters of Community interest should also be studied. It is proposed that the support of the Council for these activities be sought in the form of a Resolution.

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COMMISSION  
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Brussels, 1 July 1983

Directorate-General  
for Environment,  
Consumer Protection  
and Nuclear Safety

Commission Communication to the Council concerning the Community's role as regards the safety of nuclear installations and the protection of public health

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Since the end of the 1950s, the European Community's activities and general role in the field of atomic energy have developed considerably in several areas. This is hardly surprising in view of the fact that they have centred around new technology - important both from the economic point of view and as regards energy supply - on the eve of its industrial application. It is understandable, therefore, that the priorities adopted in joint projects have changed considerably over the years, i.e. over a quarter of a century.

As regards Research and Development (Chapter 1 of the Treaty), the emphasis has thus shifted gradually from the development of various types of nuclear reactors towards problems relating to the safety of installations. At the same time, the relative importance of a number of problems linked with the fuel cycle, especially those concerning processing and storage of radioactive waste, has increased considerably. This development should also be viewed in relation to economic factors and the sudden upheaval caused by the substantial increase in the price of fossil fuels.

Considerable thought has been given to the whole of the vast field embracing the procedures and techniques involved in accident prevention and control of the consequences of accidents, and far-reaching developments have taken place in this field in all the industrialized countries. Nuclear energy has, therefore, had an important pioneering role in this field, a role now largely

acknowledged. The Community has always been highly aware of these problems and has promoted and stimulated technical collaboration between the Member States.

Although current electricity requirements reflect the long period of recession, installation of new nuclear power stations, delayed in some countries for internal political reasons, should continue over the years and speed up considerably at the first concrete signs of a generalized economic revival. The Commission has already made this clear in its Communication "An Energy Strategy for the Community - the Nuclear Aspects" (COM(82)36 final). Community activities in the field of Health Protection (Chapter 3 of the Treaty), which have so far developed gradually against the continuum of unchanging basic objectives, must accordingly be directed increasingly towards examination of the problems arising from the increasing number of installations.

These considerations have prompted the Commission not only to re-examine its role and obligations, but also to try and optimize its actions through a better definition of their objectives and a clear formulation of the limits of the Commission's responsibilities. It has also been encouraged to do so by numerous statements and resolutions passed by the Community institutions, above all the European Parliament, all of which proves, if any such proof is necessary, that the public is highly aware of these problems (Annex 1).

The Commission is conscious of the exclusive responsibilities of the governments of the Member States, particularly as regards site selection and the issuing of authorizations to build and operate nuclear installations. It would emphasize therefore, that it is extremely careful to observe such responsibilities to the full in all its activities.

This Communication contains what amounts to a summary of the conclusions of the examination of the Community's role in the following three major areas: Research and Development, the Technical/Regulatory Aspects of the safety of installations and Health Protection.

## 1. RESEARCH AND DEVELOPMENT

Community research in the nuclear field is clearly geared towards the safety of installations and the protection of people and the environment. This general orientation is expressed in specific projects concerning the technological problems of nuclear safety posed by reactors, the disposal of radioactive waste, the decommissioning of nuclear installations and the problems of radiation protection. These specific activities have been under way for a considerable time, both in the context of the JRC activities and under the heading of shared-cost projects.

In order to meet the priority objectives defined in the "European Scientific and Technical Strategy Framework Programme" (COM(82)865), the Commission proposed action programmes to the Council, including the Research Action Programme on the Development of Nuclear Fission Energy (COM(83)300) and the Research Action Programme on Health and Safety (COM(83)301).

In addition to research projects as such, the Commission has an active policy of information exchange and coordination of national research programmes which is producing satisfactory results.

### 1.1 Nuclear Safety

The action programme on nuclear fission energy comprises a number of subdivisions, including the nuclear sections of the JRC programme (COM(83)327) and a shared-cost research programme (COM(83)299).

In recent years and, above all, as a result of the TMI accident, the emphasis in reactor safety research has shifted towards accident prevention. Aspects studied include the role of operators, integrity of the components and structures of the primary circuits of reactors and probabilistic risk assessment; at the same time, studies concerning serious accident scenarios and their conditions have continued. The proposal for the JRC programme adopted by the Commission takes account of these developments.

This programme should have a considerable impact, despite the abandonment of the Super-Sara project, which is offset at JRC level and through shared-cost activities by special emphasis on the analysis and interpretation of experience in the same field, conducted either in Member States or outside the Community.

In parallel with the Community-level projects, over the past decade large-scale safety research programmes have been initiated by those Member States opting for nuclear energy. In order to make the most of existing installations and of the knowledge and skills available in the Member States, the Commission has decided to propose a shared-cost research programme to be carried out in the laboratories of the Member States as an effective extension of JRC activities. The research envisaged both for the JRC and the shared-cost action programme concerns:

- in the field of light-water-reactor safety:
  - . assessment of risk and reliability
  - . human factors and man/machine interaction
  - . the integrity of components and systems
  - . study of the behaviour of reactor core and cooling system, under conditions deviating slightly from the norm (core temperature below 1 200°C)
  - . study of the behaviour of reactor core and cooling system under the conditions of a serious accident (core temperature exceeding 1 200°C)
  - . phenomena affecting the external containment of the reactor
  - . the dispersal of fission products in the atmosphere;
- in the field of fast-breeder reactors:
  - . instrumentation, inspection and protection
  - . the integrity of components and structures
  - . reactor core and cooling systems under conditions deviating slightly from the norm
  - . analysis of a serious accident

- . integrity of structures under dynamic loads
- . external containment in accident conditions.

## 1.2 Radiation protection

As part of the "Health and Safety" Research Action Programme, the Commission approved a proposal for a research programme in the field of radiation protection for the period 1985-89 (COM(83)301).

The radiation protection programme is part of the Commission's strategy as defined in the Framework Programme, answering the objective described as "improvement of safety and protection of health", and two others "development of nuclear fission energy" and "protection of the environment and prevention of hazards".

The radiation protection programme is specifically concerned with problems relating to exposure to natural and artificial radiation, the aim being to evaluate as accurately as possible the effects and risks associated with such exposure. The priority topics are as follows:

- the possible effects of exposure to low doses
- the transfer of radionuclides to the environment and their behaviour in the human body
- radiation-induced cancers and genetic damage
- the prevention and treatment of irradiation accidents
- assessment of the consequences of nuclear accidents for human beings and the environment
- probabilistic and comparative analysis of the risks of ionizing radiation as compared with conventional risks.

Amongst other things, the priorities selected are in line with the need to refine the scientific basis of the "Basic Safety Standards for the Health Protection of the General Public and Workers Against the Dangers of Ionizing Radiation".

The Commission is confident that the Council will approve the proposed programmes as soon as possible.

## 2. TECHNICAL/REGULATORY ASPECTS

The technical/regulatory aspects of nuclear safety have undergone far-reaching developments over the last ten years. The Commission has been following the evolution of regulations and methods of analysis and evaluation in the Member States and has endeavoured both to promote an exchange of information at Community level and to prevent the divergence of concepts in the safety field.

This Community activity was endorsed by the Council Resolution of 22 July 1975 on the technological problems of nuclear safety (OJ No C 185/75).

Implementation of this Resolution has demonstrated the importance and value attached by the Member States to exchanges of information concerning methods of analysis and evaluation as well as detailed technical subjects; it has also brought to light a number of difficulties related to the process of aligning or harmonizing safety requirements and criteria. The Commission has already communicated to the Council three progress reports (COM(77)168, COM(79)173 and COM(81)213) and a fourth is in preparation.

In numerous industrialized countries, including Member States, efforts are under way to define "global safety objectives"; the Commission is endeavouring to promote the development of a joint European methodology for the assessment and definition of such objectives.

A report has been written and comments drafted on a joint basis with regard to the proposals for quantitative safety objectives for regulations in the USA.

Activities in the field of fast-breeder reactors are carried out under the aegis of the Fast Reactor Coordinating Committee (set up by the Council in 1970) and more specifically by its "Safety" and "Codes and Standards" Working Parties; satisfactory progress has been made in this field.

With regard to activities concerning reactors produced on an industrial scale (mainly light-water reactors), the work has proceeded with the support of the Working Group on safety of light-water reactors "Methodology, criteria, codes and standards". Having studied a number of specific topics with a view to demonstrating and analysing convergences and divergences, the Working Group drew up a set of "Safety Principles for Light-Water-Reactor Nuclear Power Plants", the subject of a Commission communication to the Council (COM(81)519).

In this case, industrial practices tend to vary, which makes it extremely complicated and difficult to harmonize detailed construction standards. It is necessary therefore to verify the equivalence of existing safety criteria and practices by means of a comprehensive approach. This project is important and must be given priority.

As a result of the way in which techniques have developed in the field of nuclear power reactors, most of the Member States now restrict their choice to a limited range of models of the pressurized-water type. For this reason, in addition to its current activities, the Commission proposes to initiate a new project which will consist in a comprehensive evaluation of the safety of the most representative models of reactors built in the Member States (study of the safety related aspects of the design and the operating rules as well as the measures foreseen for abnormal situations).

Comparative examinations of this type have already been carried out but they were limited to a bilateral context; in these cases the comparison relates, for each country, to one power station close to the considered border.

The Commission will consult the appropriate officials in the Member States to work out on a joint basis the procedures to be followed in carrying out the project and to ensure that it has their active support.

Ad hoc resources will be required to bring such a project to a successful conclusion and to give it the necessary depth and quality; when the time comes, the Commission will put forward appropriate budget proposals.

### 3. HEALTH PROTECTION

Article 2(b) of the Euratom Treaty states that the Community shall "establish uniform safety standards to protect the health of workers and of the general public and ensure that they are applied".

In Chapter III (Articles 30-39), the Treaty lays down specific provisions for the accomplishment of this task. These were, however, drawn up at a time when there was considerable research, but still very few industrial applications existed. It is obvious that they must now be seen in the light of the current development of nuclear energy and the growing use of ionizing radiation and radioactive substances.

3.1 These provisions, the Directive establishing the basic standards, promulgated for the first time in 1959, and its subsequent amendments form the basis of the Community policy for protection against ionizing radiation. Implementation has on the whole been satisfactory, a number of difficulties having been ironed out as a result of collaboration between the Member States and the Commission.

At present, certain Member States are experiencing difficulty in assimilating into their legislation and practices a number of provisions of the "Basic Standards" Directive, as last amended on 15 July 1980, concerning the optimization of radiation protection, justification of all exposures to radiation and internal dosimetry relating to body intake of radionuclides.

In 1982 the Commission asked the Member States to see that all the necessary measures were taken to ensure correct implementation of the Directive within the time limits, and according to the conditions, laid down. Previous to that, a seminar dealing with implementation of the Directive had been held for representatives of the authorities responsible for transposing these provisions into national law.

In its Resolution of 8 March 1982 on European nuclear safety policy, Parliament asked the Commission to back the EAEC Directive of 15 July 1980 on basic safety standards with specific Community instruments covering workers occasionally employed in power stations, occupational illnesses resulting from irradiation, methods of monitoring doses received by the general public and the principle of optimization.

Together with the experts referred to in Article 31 of the Euratom Treaty, the Commission examines the specific practical problems posed by the health protection of those occasionally employed on repair and maintenance work in nuclear power plants. Given the growing number of such workers and their cross-frontier mobility, the Commission thinks that in 1984 it will be possible to make proposals with a view to achieving greater compatibility between existing systems of recording received doses and a link-up between them at Community-level.

The prevention of occupational diseases likely to be caused by exposure to ionizing radiation can be achieved in practice through observation of the principles defined in the Euratom Basic Standards. Given the difficulty in establishing a causal link between exposure to radiation and the existence of an occupational disease (an inherent problem with low exposure rates), the Commission has initiated a study with a view to establishing new, more reliable criteria for identifying illnesses likely to be caused at work by exposure to ionizing radiation.

A proposal for a Directive transmitted to the Council on 8 December 1980 deals with the radiation protection of persons undergoing medical examinations and treatment. Since medical irradiation is by far the greatest artificial source of exposure to ionizing radiation, the Commission attaches the utmost importance to the adoption of this Directive by the Council as soon as possible.

Pursuant to Article 35 of the Euratom Treaty, there exists a network of measuring facilities to monitor the rates of radioactivity in the environment in the Member States and to ensure compliance with the Basic Standards. The rapid evolution of both the nuclear industry and the other applications of ionizing radiation has made it necessary to check that the network is sufficient to cope with present requirements. This verification in collaboration with the Member States has already shown that the existing network fulfils the requirements of the actual situation.

In the same context and in collaboration with national experts, the Commission examines changes to the annual publication "Results of environmental radioactivity measurements in the Member States of the European Community for air - deposition - water - milk". This document is based on information from the measurements network, notified by the competent national authorities pursuant to Article 36 of the Euratom Treaty.

In 1982 the Commission published a new Recommendation concerning the implementation of Article 37 of the Euratom Treaty, which deals with the trans-frontier radiological aspects of plans for the disposal of waste from nuclear power plants. In addition to the submission of waste disposal plans before the entry into operation of an installation, the Recommendation provides for preliminary notification of the waste disposal plans of nuclear power stations and reprocessing plants before a building authorization is issued.

It is too soon to draw conclusions as to the practical application of this Recommendation.

3.2. With the development of the nuclear industry, however, a number of radiological problems having trans-frontier implications should be examined at Community level.

Plans for trans-frontier intervention in case of accident in a nuclear power plant situated near the border of another Member State

There are at present about 20 existing or planned nuclear power plants in Community countries, situated close to the borders of other Member States. In cases where an accident in one of these plants may have radiological consequences for a neighbouring Member State, problems arise with regard to drawing up contingency plans. Such problems must be recognized in good time and dealt with on the basis of agreements between the neighbouring countries concerned.

These agreements may concern aspects such as:

- . alarm systems,
- . means of transmitting information,
- . definition of incidents to be reported to neighbouring countries,
- . crossing of borders by personnel and equipment,
- . emergency drills,
- . language problems.

In its Resolution of 20 November 1980 on the siting of nuclear power stations in frontier regions, Parliament drew the attention of the Commission and the Council to the specific problem posed by trans-frontier contingency plans, inviting them (in paragraph 13) "... to ensure that emergency plans concerning abnormal incidents at installations are prepared in advance, arranged and possibly, implemented with the participation of the Member State concerned ...".

At present, a number of bilateral agreements exist between Member States, whilst others are in preparation. However, the Commission considers it necessary to ensure that certain basic aspects are taken into consideration in all these agreements in order to avoid there being too much inconsistency within the Community.

The Commission has therefore set up a working party whose terms of reference are as follows:

- . to collect information concerning existing bilateral contacts and agreements between Member States with regard to trans-frontier emergency plans and on experience gained therefrom.
- . to draw up a report on the basis of this information, indicating what should be the main points of the emergency plans covered by bilateral agreements between Member States.

Depending upon the outcome of this activity, the Commission will decide whether or not further projects should be undertaken at Community level.

It will be necessary to have the full support of the Member States if the task is to be accomplished successfully. The Commission therefore requests the Council to back this initiative.

#### Examination of the overall radiological impact of the discharge of radioactive effluents in watercourses and marine waters

In view of the increase in the number of installations discharging radioactive effluents, it is advisable to ensure that discharges in the same aquatic environment do not, in the long term, result in a build-up of radioactivity and of radiological effects.

The national authorities responsible for monitoring and assessing radiation in the environment follow the build-up of radioactivity in the watercourses falling within their authority and ensure that the disposal limits authorized for each installation are sufficiently low to avoid radiological problems. However, where a watercourse passes through a number of States, there is a need for agreements between the States concerned.

Of the rivers flowing through the European Community, the Meuse is a special case in that it receives radioactive effluents from three countries and provides drinking water for several million inhabitants in Belgium and the Netherlands. Not only is the river also used for irrigation and fishing,

dredging sludge from it is used as fertilizer. The radiological effect of the radioactive substances discharges in this river merits special attention.

The Commission has accordingly constituted a group of experts comprising representatives of the Member States concerned. The group has been instructed to report periodically to the Commission on :

- . the catalogue of radioactive effluents discharged in the Meuse,
- . the activity-levels measured in the water and products of the Meuse,
- . use of the water and products of the Meuse,
- . doses resulting from the discharge of radioactive effluents in the Meuse, as effected at present and as planned.

The first report is expected in 1984.

A similar problem could arise as regards marine waters receiving radioactive effluents. The accumulation of such effluents calls for an evaluation of its overall radiological impact, taking account, in particular, of the consumption of fishery products. The Commission therefore intends to set up a group of experts from all the Member States concerned, to examine the radiological aspects of the discharge of radioactive effluents in the marine waters of interest to the Community.

The Commission activities described above form part of the Community's task concerning the establishment of uniform protection of the public throughout the Member States and, consequently, promotion of the development of nuclear energy.

To ensure the utmost efficacy of its activities, the Commission requests the Council to support them by adopting the attached draft Resolution.

Resolutions of the European Parliament on aspects of nuclear safety

Resolution of 8 March 1982 on European nuclear safety policy (OJ No C 87 of 5 April 1982)

Resolution of 22 January 1982 on the transport of radioactive substances and radioactive waste (OJ No C 40 of 15 February 1982)

Resolution of 20 November 1980 on the siting of nuclear power stations in frontier regions (OJ No C 327 of 15 December 1980)

Resolution of 10 May 1979 on the proposal from the Commission of the European Communities to the Council for a multiannual programme of the Joint Research Centre 1980-83 (OJ No C 140 of 5 June 1979)

Resolution of 12 December 1978 on the proposal from the Commission of the European Communities to the Council for a decision adopting a research programme for the European Atomic Energy Community on codes and standards for fast breeder reactors (OJ No C 6 of 8 January 1979)

Resolution of 12 December 1978 on the proposal from the Commission of the European Communities to the Council for a decision adopting a programme concerning the decommissioning of nuclear power plant (OJ No C 6 of 8 January 1979)

Resolution of 17 March 1978 on measures to be taken in connection with the removal of radioactive waste as part of the Community energy policy, and embodying the opinion of the European Parliament on the proposals from the Commission of the European Communities to the Council for:

- a draft Council resolution on the implementation of a Community plan of action in the field of radioactive waste,
- a draft Council Decision on the setting up of a high level committee of experts responsible for assisting the Commission in the implementation of the plan of action in the field of radioactive waste,
- a draft Council Decision on the setting up of an ad hoc committee on the reprocessing of irradiated nuclear fuels (OJ No C 85, 10.4.1978).

Resolution of 7 July 1977 on the proposal from the Commission of the European Communities on the Council Resolution concerning consultation at Community level on the siting of power stations and, embodying the opinion of the European Parliament, on the proposal from the Commission of the European Communities to the Council for a regulation concerning the introduction of a Community consultation procedure in respect of power stations likely to affect the territory of another Member State (OJ No C 183 of 1 August 1977)

Resolution of 13 January 1976 on the conditions for a Community policy on the siting of nuclear power stations taking account of their acceptability for the population (OJ No C 28 of 9 February 1976)

Historical Archives of the European Commission

Brussels, 1 July 1983

Directorate-General for the Environment,  
Consumer Protection and Nuclear Safety

DRAFT  
Council Resolution  
of .....  
on trans-frontier radiological problems

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THE COUNCIL OF THE EUROPEAN COMMUNITIES;

Having regard to the Treaty establishing the European Atomic Energy Community,

Having regard to the Opinion of the European Parliament,

Having regard to the Opinion of the Economic and Social Committee,

Whereas the Commission has forwarded to the Council a communication concerning the role of the Community with respect to the safety of nuclear installations and health protection which deals, in particular, with trans-frontier radiological problems;

Whereas the number of nuclear installations is increasing, some of them being sited close to the frontiers of other Member States;

Whereas, in the case of installations in the vicinity of frontiers, it is essential that trans-frontier cooperation be established in respect of plans for countermeasures to be taken in the event of an accidental release of radioactive substances and that such plans be kept operational as long as is necessary;

Whereas the European Parliament, in its Resolution of 20 November 1980 on the siting of nuclear power stations in frontier regions, drew the attention of the Commission and the Council to the special problem presented by trans-frontier emergency plans by calling upon them to "ensure that emergency plans concerning abnormal incidents at installations are prepared in advance, arranged and, possibly, implemented with the participation of the Member States concerned";

Whereas the increasing number of sources of discharges of radioactive effluents into the aquatic environment justifies, in the case of certain waterways and certain marine waters of Community interest, a forward assessment of the overall radiological impact of such discharges at Community level;

Whereas the Commission has already taken the step of setting up groups of experts to examine the aforementioned problems;

HAS ADOPTED THIS RESOLUTION:

THE COUNCIL

- 1 (a) Takes note of and supports the Commission's initiative of
  - compiling information on the contacts and bilateral agreements that exist between Member States in respect of trans-frontier plans for countermeasures in the event of an emergency and on the experience acquired in this regard;
  - preparing, on the basis of such information, a report setting out the main aspects of the emergency plans that would have to be the subject of bilateral agreements between the Member States;
- 1 (b) Requests the Commission to report to it on the results obtained when the work has been completed and, in any case, within a period not to exceed two years. The report will be accompanied, where necessary, by proposals for action at Community level.

- 2 (a) Takes note of and supports the Commission's initiative of examining at Community level the overall radiological impact of all discharges of radioactive effluents into waterways and marine waters of Community interest which have been carried out or are planned;
- 2 (b) Requests the Commission to report to it periodically on the results of the work accomplished and, where it seems likely that a situation of concern will develop, to inform the Council thereof and propose whatever measures are considered to be necessary.
3. Requests the Member States to cooperate actively in the activities mentioned above.

Historical Archives of the European Commission

COM(83)472/2

Bruxelles, le 15 juillet 1983

DOCUMENT INTERNE

OJ 702 - 20.7.83

**COMMISSION  
DES  
COMMUNAUTÉS EUROPÉENNES**

Secrétariat général

NOTE A L'ATTENTION DE MM. LES MEMBRES DE LA COMMISSION

Objet : Rôle de la Communauté en matière de sécurité des installations nucléaires et de la protection sanitaire des populations.

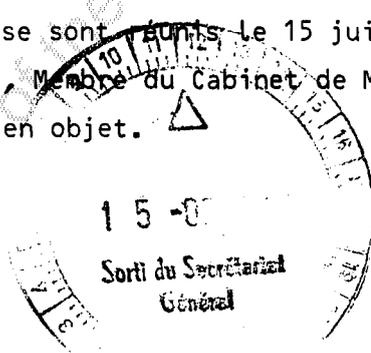
- Réunion spéciale des Chefs de Cabinet (doc. COM(83)472)

Les Chefs de Cabinet se sont réunis le 15 juillet 1983 sous la présidence de M. PIRZIO-BIROLI, Membre du Cabinet de M. le Président, pour examiner le dossier cité en objet.

Etaient présents :

MM. TRAN THIET, EBERMANN, Mme MANFREDI, MM. DANIS, REICHENBACH, ZANNI, RYAN, MOUSSIS, BEELITZ, VERSTRYNGE, Mlle RHIND et M. FLUGER;

MM. LASNET (S.J.), LUYKX (DG V), VAN CANEGHEM (DG XI) FINZI et PÉLE (DG XII), VAN DER LOOS (SG).



.../...

Les Chefs de Cabinet suggèrent à La Commission :

- d'approuver le projet de communication de la Commission au Conseil concernant le rôle de la Communauté en matière de sécurité des installations nucléaires et de la protection sanitaire;
- d'approuver le projet de résolution du Conseil relatif aux problèmes radiologiques transfrontaliers;
- de décider la transmission au Conseil de la Communication de la Commission au Conseil et du projet de Résolution du Conseil.

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