NUCLEAR LAW
BULLETIN No. 48

Contents

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Nuclear Energy Agency
Organisation for Economic Co-operation and Development

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy,
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development, and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations

The original Member countries of the OECD are Austria, Belgium, Canada Denmark France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States The following countries became Members subsequently through accession at the dates indicated hereafter Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973) The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention) Yugoslavia takes part in some of the work of the OECD (agreement of 28th October 1961)

The OECD Nuclear Energy Agency (NEA) was established on 1st February 1958 under the name of the OEEC European Nuclear Energy Agency It received its present designation on 20th April 1972 when Japan became its first non-European full Member NEA membership today consists of all European Member countries of OECD as well as Australia Canada Japan and the United States The Commission of the European Communities takes part in the work of the Agency

The primary objective of NEA is to promote co-operation among the governments of its participating countries in furthering the development of nuclear power as a safe environmentally acceptable and economic energy source

This is achieved by

- *encouraging harmonisation of national regulatory policies and practices with particular reference to the safety of nuclear installations protection of man against ionising radiation and preservation of the environment radioactive waste management and nuclear third party liability and insurance*
- *assessing the contribution of nuclear power to the overall energy supply by keeping under review the technical and economic aspects of nuclear power growth and forecasting demand and supply for the different phases of the nuclear fuel cycle*
- *developing exchanges of scientific and technical information particularly through participation in common services*
- *setting up international research and development programmes and joint undertakings*

In these and related tasks NEA works in close collaboration with the International Atomic Energy Agency in Vienna with which it has concluded a Co-operation Agreement as well as with other international organisations in the nuclear field

LEGAL NOTICE

FOREWORD

Work in the regulatory field has been quite productive these past months as demonstrated by the numerous texts reported in this issue of the Bulletin In particular, national regulations on radiation protection have been updated in line with international rules (Germany, Ireland, Luxembourg)

Informing the public about the dangers of nuclear installations - and organising protection of the population in their neighbourhood is also on the agenda of international organisations and national law-makers. An article examines this topic in the context of new French regulations

Regarding international agreements, mention should be made of the entry into force of the Protocol to amend the Brussels Supplementary Convention which now raises substantially the level of financial protection of victims of a nuclear accident in Western Europe

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THE REGULATION OF MAJOR RISKS IN RELATION TO LARGE NUCLEAR INSTALLATIONS IN FRANCE

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Abstract

Recently, major risk prevention has generated legislative and regulatory texts in French law, particularly regarding nuclear installations. This article reviews the context and analyses the scope of the new regulations. They require the nuclear operator to take preventive measures, namely more stringent obligations from the safety viewpoint to inform the public. These include risk assessments and preparing emergency plans in case of accidents.

INTRODUCTION

One of the disadvantages of industrial development and new technologies is that our society is increasingly exposed to risks of a technological nature

Serious accidents such as those occurring in the chemicals industry at Seveso (1976), Bhopal (1984) or the pollution of the Rhine due to a fire at the Sandoz factories in Basel and especially the nuclear accident at Chernobyl (1986), have given rise to the concept of major risk

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* This article was prepared on the basis of a paper presented by the author to a meeting of the French Nuclear Energy Society (Société française d'energie nucleaire - SFEN) on 14 June 1991 Responsibility for the ideas expressed and the facts given rests solely with the author

In France, until 1987, the prevention of major technological risks had been addressed in a few texts only, depending on the category of installation concerned, which, moreover, were sometimes incomplete in nature and of widely varying levels of regulation

This situation was changed by the French Act of 22 July 1987 on the organisation of public safety measures, forestry protection and the prevention of major risks In particular, the Act clarifies the pre-existing system of assistance organisation plans (or ORSEC plans) and emergency plans, and introduces a new right to information about major risks In addition, it imposes two obligations on all potentially hazardous installations, the existence or operation of which must be considered as presenting major risks These are

- the obligation to draw up a specific plan of action (PPI) laying down the measures to be taken in the neighbourhood of such installations in the event of an accident (Section 4 of the Act),

- the obligation to undertake a risk assessment for all projects for constructing such installations (Section 46 of the Act)

The industrial installations concerned were defined by one of the Decrees implementing the Act of 22 July 1987, Decree No 88-622 of 6 May 1988 on emergency plans

The installations involved are

1) Sites including at least one large nuclear installation (INB - Installation Nucléaire de Base), namely

   a nuclear reactor of more than 10 MWe, or

   a spent fuel reprocessing plant, or

   an isotope separation unit, or

   a chemical conversion unit, or,

   a nuclear fuel fabrication unit

2) Certain installations classified for environmental protection purposes and places of transit or activity presenting hazards or serious drawbacks in relation to the interests protected by the legislation on classified installations

3) Underground storage facilities for toxic, compressed or liquified gas

4) Large water supply facilities which include a reservoir with a capacity of at least 15 million m^3 and a dam more than 20 metres in height

Adoption of the Act of 22 July 1987 on the prevention of major risks has meant that a change has had to be made to the regulations governing large nuclear installations, laid down by Decree No 63-1228 of 11 December 1963 This change was effected by Decree No 90-78 of 19 January 1990 (JORF - Journal Officiel de la Republique française of 21 January 1990).

First, with a view to preventing major risks, it increases the nuclear operator's obligations in relation to safety (see Part I below) Secondly, it implements in relation to large nuclear installations the general obligations applicable to major risks and concerning information and the preparation of emergency measures (see Part II below)

At the same time, the authorities showed their determination to prevent major risks by adopting complementary measures.

- the creation of a special Ministry, initially separate but then taken over by the Ministry for the Environment, and above all giving this Ministry powers in relation to the safety of nuclear installations,

- the creation, by a Decree of 8 February 1989, of a Council on Major Risk Prevention, made up of twelve members and placed under the authority of the Prime Minister The task of the Council is to contribute, through its opinions, recommendations or studies, to the assessment of the collective risks and prevention measures arising from industrial activities, in particular nuclear, chemical and oil activities,

- the setting up, in early 1990, of a standing information mission relating to the control of nuclear safety and security within the Parliamentary Office for evaluating scientific and technological policy, a body created within Parliament in 1983 and composed of both Members of Parliament (Deputés) and Senators

I. THE PREVENTION OF MAJOR RISKS BY INCREASING THE OPERATOR'S SAFETY OBLIGATIONS

Under a Decree of 13 March 1973, last amended in 1987, setting up a High Council for Nuclear Safety and Information, safety in respect of nuclear installations is defined in French law as "all the technical measures taken at the stages of design, construction and operation to ensure normal functioning, prevent accidents and limit their effects"

In France, safety regulations are based on the principle of the liability of the operator who, alone, is responsible for ensuring the safety of his installation by taking all technical measures required and supervising their application Moreover, the operator must demonstrate to the authorities the safety of his installation and the adequacy of the safety measures he has taken Through the Directorate for the Safety of Nuclear Installations (DSIN), a specialised service within the Ministry for Industry, the authorities are responsible for deciding whether or not the level of safety proposed is satisfactory

The creation of nuclear installations and the stages leading to their start-up are thus subject to licensing or approval which the administration does not grant without a prior detailed technical analysis and only if it is shown that there will be no unacceptable risk for workers or the public

However, procedures for technical instruction, of primary importance in nuclear safety, had not been included in the general regulations This situation changed with the 1990 amendment to the regulations, which also improves the monitoring of nuclear installation safety and lays down provisions relating to decommissioning

1 1 The regulatory status of the Safety Report

The regulations governing large nuclear installations now expressly include an obligation to draw up a safety report

Previously, the procedures for technical safety examinations were based exclusively on a Ministerial Instruction and a decision of 27 March 1973 These procedures were first, to constitute standing groups of experts for each type of nuclear installation and secondly, as far as nuclear reactors are concerned, a procedure involving the submission of three successive safety reports

- a preliminary report accompanying the application for a construction licence but separate from the application itself,
- a provisional report, to be submitted at least six months before the first loading of the reactor, accompanied by proposed general operating rules,
- lastly, a final report, including the definitive general operating rules which must be approved before the commissioning of the reactor

In the absence of any regulatory provision, this technical instruction was given added weight by every individual construction licence Decree, leading in practice to a procedure prior to the start-up of operations consisting of obtaining Ministerial "authorisation", i e approval of the safety measures taken by the operator, for each stage of start-up and commissioning (delivery of new fuel, loading, criticality, testing, etc)

Henceforth, the obligation to prepare a preliminary safety report is based on Section 3 1 of the Decree of 11 December 1963 as amended This report remains a separate document in the licensing application but must be supplied in support of the application Its content has been redefined in terms of, and geared towards the concept of the risks presented by the installation and the prevention of such risks For, it must include a description of the installation and the operations to be carried out therein, an inventory of the risks of all types which it presents, an analysis of the measures taken to prevent such risks and the particular steps taken to reduce the likelihood of accidents and their effects

1 2 Integration into the prior technical procedure regulations

Similarly, the new Section 4 of the Decree of 11 December 1963, as amended in 1990, confirms the procedure of technical stages prior to operation by maintaining the principle under which the successive terms and conditions required for safety must be laid down in each construction licence

The introduction of this prior procedure into the general regulations does not, however, seem to confer the character of a regulatory licence on the various Ministerial approvals and authorisations which conclude the steps of the procedure and which, moreover, are not referred to in the Decree of 19 January 1990 This procedure remains limited to the implementation of the construction licence and, as such, is defined solely in terms of the obligations imposed on the operator who must submit a succession of documents and justifications in preparing the start-up of the licenced nuclear installation

1 3 Improving safety monitoring

The amended regulations governing large nuclear installations have also improved safety monitoring

- first during normal functioning, thanks to two measures introduced by the new provisions of Sections 5-I and 5-II, namely

  the updating of safety reports, of general operating rules and of the internal emergency plan This updating must be undertaken by the operator when the circumstances of operation give rise to a need to make changes to the installation involving consequences for safety documents,

  the power given to the administration to require the operator at any time to review the safety of his installation This request must, however, be made jointly by the Ministers for Industry and for the Prevention of Major Technological Risks, which assumes a prior agreement between the two Ministerial departments

- Secondly, in the event of an incident or accident, by a notification obligation imposed on the operator This obligation was previously included in the individual Decrees granting construction licences It is now included directly in the Decree of 11 December 1963, as amended, with a new provision the notification must in future be made simultaneously to three Ministerial departments (Industry, Prevention of Major Risks, and Health)

1 4 The introduction of provisions relating to the decommissioning of the installation

The Decree of 11 December 1963 has now been completed by a new Section 6-ter laying down the procedure prior to final decommissioning, with the various documents to be prepared or updated

A Circular of 9 November 1990 helps interpret this text

Decommissioning is a separate technical phase which follows the final shutdown of operations and precedes dismantling properly so-called

Following the final cessation of production (which for a reactor corresponds to the final rod drop), the operations leading to the final shutdown of operations consist technically of

- removing new or spent fuel, fissile and nuclear materials, radioactive sources and waste, and inflammable materials,

- cleaning and rinsing equipment,

- replacing filters and resins

Before being carried out, these operations must be detailed in a file presented to the safety authorities and comply with the initial construction licence requirements

Once this stage has been reached, the operations leading up to the final decommissioning of the installation which in theory will make it possible to reach the Level 1 dismantling proposed by the International Atomic Energy Agency (IAEA), can be undertaken These are as follows

dismantling the equipment outside the nuclear island not required to monitor the latter's safety,

maintaining or establishing containment barriers,

establishing a radioactivity balance

These operations are outside the framework of the initial construction licence requirements, and it is this stage that the new Section 6-ter makes into a formal procedure by introducing a new intermediary administrative licence into the legal process leading to dismantling

In future, before the decommissioning of his installation, the operator must send the Directorate for the Safety of Nuclear Installations a series of documents setting out, in particular, the measures envisaged for the operation These measures may only be implemented after approval by Decree, following a procedure which does not include any public inquiry but does require the prior opinion of the Interministerial Committee for Large Nuclear Installations and the approval of the Minister for Health

Given the exhaustive nature of the list of documents and the use of the term "approval" rather than "authorisation", no impact study is required in relation to decommissioning

As for actual dismantling, no change has been made to the procedure applicable which remains that provided for in Sections 3 and 6 of the Decree of 11 December 1963 it is considered that dismantling leads to the creation of a new large nuclear installation, storage premises for its own elements and to changes of a type leading to non-compliance with the previously imposed

requirements A new authorisation is therefore necessary after a procedure requiring an impact study and a public inquiry, subject to the exceptions laid down in Section 3 of the Decree of 11 December 1963

Similarly, any change of status to an installation classified for environmental protection purposes requires the prior implementation of the administrative procedure applicable to the opening of such installations

II. IMPLEMENTATION OF THE OBLIGATIONS TO PROVIDE INFORMATION AND TO ENVISAGE MEASURES RELATED TO MAJOR RISKS

2 1 The obligation to prepare a risk assessment

The concept of a risk assessment was introduced into French legislation by Decree No 77-1133 of 21 September 1977 on installations classified for purposes of environmental protection and has been used in European regulations since the "Seveso" Directive of 24 June 1982

Section 46 of the Act of 22 July 1987 extends its application to all installations constituting major risks, among which are included large nuclear installations

In this respect, the Decree of 19 January 1990 amending the 1963 Decree makes it mandatory to complete the application for a nuclear installation licence by a risk assessment defined as a document "setting out, on the basis of the principles laid down in the preliminary safety report, the measures taken to deal with the risks presented by the installation and limit the consequences of any accident"

The assessment must also include the measures envisaged for the subsequent dismantling of the installation

While the safety report remains a document intended for the administration alone, constituting as it were the back-up to the technical safety examination and only available to the public in a specially edited version, the risk assessment is intended for public consumption and made available at the public inquiry

From the viewpoint of risk prevention, it constitutes, in a sense, a document which is parallel and complementary to the impact study This latter, since the Decree No 77-1141 of 12 October 1977 in implementation of the Act of 10 July 1976 on environmental protection, must be included in construction licence applications

2 2 The obligation to draw up emergency plans

The Act of 22 July 1987 and its implementing Decree of 6 May 1988 reorganised the rules governing emergency plans

The new regulations confirm that special plans for action as well as internal emergency plans must be drawn up in respect of large nuclear installations

2 2 1 The special plans of action constitute a category of emergency plans prepared to deal with the special risks related to the existence or functioning of facilities or installations located on a fixed site

These plans are drawn up under the responsibility of the State representative in the relevant département, after consultation with the mayors and the operator concerned, and define the measures to be taken in the area surrounding the installation

Some of these measures are to be taken by the operator either to give warning to the competent authorities or directly, in respect of the neighbouring populations in the event of immediate danger Examples of action required under the second heading are the stopping of traffic on transport infrastructures, moving persons away from the neighbourhood of the site, cutting off public networks and infrastructure pipes, and giving the public direct warning of the emergency

2 2 2 The purpose of internal emergency plans is to establish the measures to be implemented in the event of an incident or serious accident in the power plant, with a view in particular to protecting staff There was previously a twofold basis for these plans

- in the context of protecting workers agains ionizing radiation, under Sections 8 and 49 of Decree No 75-306 of 28 April 1975 amended by Decree No 88-662 of 6 May 1988, which require the head of the establishment to organise his installation and take all necessary steps to ensure that, in the event of an accident, the staff can be quickly evacuated and monitored and that irradiated or contaminated workers can be given the appropriate treatment as soon as possible,

- in the context of nuclear safety, on the basis of a letter from the Central Service for the Safety of Nuclear Installations, dated 29 March 1979 (This service has since been changed to the Directorate for the Safety of Nuclear Installations (DSIN))

This second, nuclear safety basis, was confirmed by the new Section 4 II of the Decree of 11 December 1963, as amended, which provides that the construction licence should henceforth require the operator to submit to the safety authorities, at least six months before the first loading (therefore within the same time-limit as the provisional safety report) an internal emergency plan specifying the organisation and resources to be brought into action on the site in the event of an accident situation in the installation

This plan must be updated in line with the safety report and general operating rules, each time this is required by a change to the installation

2 2 3 This sytem of emergency plans laid down in the French regulations corresponds in the main to the solutions adopted in most other industrialised countries with nuclear installations and more generally installations presenting major technological risks

Thus in Belgium*, each installation is required to prepare an internal emergency plan and an external organisation plan, the two to be co-ordinated The internal emergency plan is the responsibility of the operator and should include all the measures for protecting the installations and on-site workers The external organisation plan is the responsibility of the Government agency responsible for public safety and includes any measures required to protect the public in the general sense of the term This plan is completed by a national emergency plan

It should be noted that in 1964, Italian legislation had prescribed preparation of an external emergency plan for each nuclear installation under the responsibility of the Prefect of the Province concerned with the participation of representatives from the regions and local communities, such plans are in addition submitted to the Minister of the Interior for approval and must be reviewed and updated at regular intervals

Also, in the United States, Public Law No 96-295 of 30 June 1980 makes authorisation for the startup of nuclear installations conditional upon the existence of an emergency evacuation plan This plan is prepared by the municipality or State in which the power plant concerned is located, and is subject to the approval of the Nuclear Regulatory Commission**

2 3 Measures for informing the public

Information is first given to the public by publishing the risk assessment which forms part of the application for a construction licence subject to public inquiry for each proposal for the creation of a new large nuclear installation

As far as specific plans of action (PPIs) are concerned, when this plan has been drawn up, it is for the Prefect to publish an opinion indicating the list of the communities concerned and the public places in which the plan may be consulted In addition, brochures giving advice to the populations living in the area of implementation of the plan are prepared in consultation with the operator, and at his expense These may be consulted by the public, along with the specific plan of action, and are sent to individual members of the public upon request

Furthermore, Section 21 of the Act of 22 July 1987 recognises the right of the public to information about important risks, in the following terms "citizens shall be entitled to be informed about the major risks to which they

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* Proceedings of the Vth Congress of the International Nuclear Law Association (INLA) Nuclear Inter Jura '81 - p 154 and p. 163

** L'Energie Nucleaire et le Droit - Denis Bourque, p 263

are subject in certain areas of a country and about safety measures concerning them This right applies to technological risks and foreseeable natural risks"

Measures implementing this right to information about major risks were taken by Decree No 90-918 of 11 October 1990, and apply in particular to communes in which a specific action plan exists

The regulations provide that the information given to the public about major risks to which they are subject shall include a description of the risks and their foreseeable consequences for persons, property and the environment, and shall describe the safety measures foreseen to limit their effects

The local Prefect prepares a condensed file of this information and the local mayor prepares an information document concerning the safety measures planned for the locality. The public is informed of the existence of these documents and may consult them Provision is also made for a specific poster campaign giving safety advice

Lastly, independently of these legislative and regulatory measures, the Ministry for Industry in 1988 introduced a severity scale for nuclear incidents and accidents applicable to the operation of large nuclear installations, the principle of which was used as a basis for the drafting of an international severity scale under the auspices of the IAEA and NEA-OECD

Only time will tell whether these information measures are really effective The intention to provide full information can be seen from the measures adopted, allowing the public first to make comments on projects for the construction of nuclear installations in the light of sufficient information about the risks involved, then ensuring that the public is fully informed of the safety measures planned in the event of an accident following startup of the installation

CONCLUSION

In conclusion, following this analysis it appears that French regulations have, in respect of major technological risks involved in nuclear installations, provided for safety measures essentially by confirming or extending existing technical practice The situation is satisfactory from the viewpoints of the operators and the safety authorities, and should reassure the public

In the final analysis, it is perhaps rather at the level of information that genuinely new measures have been taken and where, therefore, there was a need for such measures In the nuclear field, this is not exactly a new phenomenon

CASE LAW AND ADMINISTRATIVE DECISIONS

CASE LAW

• *France*

DECISION OF THE CONSEIL D'ETAT RELATING TO THE CREYS-MALVILLE NUCLEAR POWER PLANT (1991)*

The "Superphenix" fast neutron breeder reactor at Creys-Malville (in the département of Isère) continues to be highly controversial, especially as far as the neighbouring foreign communities are concerned

Opposition to the project is based on the technical characteristics peculiar to this reactor system which uses plutonium as fuel and sodium as coolant Critics worry about the risks of these materials being used improperly, for instance an accidental combustion of sodium, or plutonium being diverted for military purposes

However, the essential characteristic of the fast breeder reactor is that it produces more fissile material than it consumes. Under this system, the fertile elements of uranium which are of hardly any use to conventional reactors can be transformed into fissile material and used as fuel, thereby providing a long-term solution to the problem of the non-renewability of energy sources such as oil or uranium, reserves of which are estimated at 20 or 30 years' consumption worldwide This system therefore enhances the energy independence of France

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* This Commentary was kindly provided by Herve Cardon, Attaché with the National Legal Service of Electricité de France Responsibility for the ideas expressed and facts given rests solely with the author

The Commentary has also been published in "Cahiers Juridiques de l'Electricite et du Gaz", No 470, October 1991.

The legal arrangements adopted at the outset were unusual in that under the Act of 23 December 1972 and the Decree of 13 May 1974[1], the construction and operation of this nuclear installation on French soil were entrusted not to Electricite de France (EDF - the French national electricity company) but to a European company, Nersa (European Fast Neutron Reactor) Set up in the form of a public limited liability company under French law, Nersa groups three European electricity producers. EDF for France, ENEL for Italy and SBK a company made up essentially of a German producer RWE, with Belgian, Netherlands and British companies holding smaller shares[2]

Subject to French law, the Creys-Malville power plant was granted a construction licence by a Decree of 12 May 1977[3]. The plant reached criticality for the first time on 7 September 1985 and nominal power on 9 December 1986

Operations were discontinued at the end of May 1987 following discovery of a crack in the main vessel of the fuel storage drum giving rise to sodium leakage into a safety vessel.

The drum, attached to the reactor, had two main functions

i) storage used, after shutdown of the reactor and pending sufficient cooling, to store irradiated fuel before transferring it to other installations for washing and reprocessing,

ii) a transfer function making it possible to carry out, in a sealed and sodium-filled environment, the handling operations required to load the reactor with fuel and remove spent fuel from it.

Following the incident, the operator decided to change the original arrangements for replacing fuel in the core of the reactor by removing the drum and installing a device, called a "fuel transfer post", filled with the inert gas argon.

New and spent fuel continue to be transferred in similar fashion, however, the function of storing fuel before disposal is now performed inside the core of the reactor after shutdown of the plant This will make it necessary to stop operations for some 6 to 8 months before the spent fuel can be taken out of the plant

The work described above was to have lasted three years, finishing at the end of 1991

Replacement of the drum by a fuel transfer post involving changes in certain of the requirements of the Decree of 12 May 1977 authorising construction of the plant meant that an amending Decree had to be adopted prior to any plant recommissioning

Nersa wished, however, to be able to operate the reactor during the construction phase of the post The company justified its request by the absence of the need for any fuel renewal operations during this period since the reactor core contained a reserve equivalent to some 300 days' full power After consulting the Conseil d'Etat about some of the required procedures, the Government adopted the Decree of 10 January 1989, Section 3 of which delegates power to the Ministers of Industry and the Environment to authorise, for the duration of the work, renewal of plant operation and its power escalation

Three licences were granted under this Decree

The first, dated 12 January 1989, allowed the reactor to remain operational until 1 September 1989 while the second, dated 22 March 1989, authorised reactor power buildup over the same period Lastly, the third licence dated 30 August 1989, alloved operations at the power plant to continue after 1 September 1989 until the fuel transfer post became operational

These were the decisions which were challenged before the Conseil d'Etat by certain communities in Switzerland and various associations for environmental protection The Conseil was asked to annul the decisions and order suspension of the application of each of them

Since the legality of the licences is determined by the legality of the Decree of 10 January 1989 under which they were granted, the following comments relate solely to the Decree

Thirteen arguments were brought against the Decree Most of these, calling into question the procedure followed in adopting the Decree and its contents, presented little difficulty

Particular criticism was levelled at the fact that the Decree was adopted before presentation of the final safety report and the risk assessment provided for in the case of installations classified for purposes of environmental protection These claims were unfounded in law

Under Section 5 of the Decree of 12 May 1977, the final safety report must be presented at least ten months before expiry of the time limit for commissioning the installation, fixed by Section 12 of the same Decree for 28 May 1994 As to the risk assessment, there was, at the time when the licensing Decree was amended, no obligation to include it in the licence application

It was claimed that certain prior and mandatory consultations had not been carried out. These were the consultation with the Interministerial Committee for Large Nuclear Installations and the consultation with the Commission of the European Communities since, under Article 34 of the Euratom Treaty, Member States are obliged to obtain the opinion of the Commission in respect of any particularly dangerous experiments which are to take place on their territory

The consultation with the Interministerial Committee for Large Nuclear Installations had in fact been organised, and two opinions referred to in the Decree had been delivered As to the failure to comply with Article 34 of the Euratom Treaty, this question had already been addressed by the Conseil d'Etat

during the first case brought against the initial Decree awarding a construction licence[4] Notwithstanding the alteration made to the installation, the court held that this provision did not apply to a nuclear reactor used "not for an experiment but for the industrial production of electricity"

As to the contents of the Decree, the claimants contested its Section 4 inasmuch as it extended the time limit for bringing the installation on-line There was no argument in law against this

Few of these arguments deserve further discussion since the answers were evident

Four other claims, on the other hand, appeared more serious

As regards the procedure followed, the main item of reproach was that the Government adopted the Decree without any prior inquiry and in the light of impact studies which were insufficient and not advertised in any way (see Parts I and II below) A sodium destruction unit announced in one of the impact studies and falling within the nomenclature of classified installations was not licensed by the amending Decree (Part III) Lastly, the claimants alleged that inasmuch as Section 3 of the Decree delegated to the Ministers concerned the power to authorise bringing the power plant back on-line during the period when the fuel transfer post was not available, it was illegal (Part IV)

I. One of the essential issues in this litigation was whether the amending Decree of 10 January 1989 should have been preceded by a public inquiry

The claimants alleged that it should They claimed that discontinuing the use of the drum for fuel storage and transfer in fact resulted in a substantial change to the installation and aggravated the risk involved in its operation since it would no longer be possible to unload the core of the reactor in an accident situation They founded their argument on the provisions of Section 3-II of Decree No 63-1228 of 11 December 1963 as amended by Decree No 85-449 of 23 April 1985, which provides that no public inquiry "is, however, mandatory for a large nuclear installation which has already been the subject of an inquiry prior to its being declared a public utility if the changes made do not substantially affect the size or purpose of the installation or increase the hazards presented by it"

The Conseil d'Etat accepted the invitation of Mr Legal, the Commissioner for the Government, not to allow these claims and fully supported the opinion on this point given by the Public Works Section[5] at the request of the Minister for Industry

In rejecting this plea, the Conseil d'Etat held that "while changes have been made to the initial design, they affect neither the capacity, which remains at 1 200 MWe, nor the dimensions or size of the installations which continue to be used for the production of electricity, the claimants have not established that the changes made to the arrangements for loading, unloading and storing nuclear fuel have given rise to an increase in the risks involved"

The first part of this plea was easy to refute since one piece of equipment only in the installation had been changed without affecting the circumference, layout or purpose of the installation itself It will be recalled that the only consequence of the drum's being dismantled and replaced was to alter the conditions of the storage of spent fuel which, pending cooling, was no longer stored in the drum but in the core of the reactor

Assessment of the risks might, on the other hand, appear less straightforward After all, the subject was highly technical and relied to a greater extent on expert opinion In this field, the Conseil d'Etat intends, as it has always so far done, to exercise a certain level of control[6]

This approach is unusual since verification of the existence of the conditions required to allow derogation from a rule of law - in this case, the dispensing with a public inquiry - is one of "standards", i e it relates not only to the accuracy of the facts, errors of law and, if raised, the abuse of power, but also to the legal classification of the facts

Faced, however, with a highly technical field, the Conseil d'Etat waives exercise of such control[7] It considers that it has neither the resources nor the knowledge to assess the nature and extent of the risks

In the present case, in the absence of gross negligence or serious omissions, the Conseil d'Etat rejected this claim on the grounds that the claimants had not established that the changes made to the installation were such as to increase the risks involved

In order to do this, it compared the arguments set forth by the claimants and those put forward by the Administration, and considered that those of the Administration were more convincing

It is true that the safety authorities had approved the changes made, and this argued in favour of a non-increase of the risks Mr Legal had drawn attention to this fact in his submissions

II **It is usual, when an impact study has been made on new arrangements or changes relating to installations, that the content of the study be criticised in any case brought against a decision authorising such arrangements or changes**

The claimants remained faithful to this tradition They criticised the form of the impact study, its content and the fact that it had not been made public

The reply to the first two of these criticisms was simple and it was easy for the Administration to refute these allegations

1) First, as to the form, the contracting authority was criticised for having divided the impact study into two separate documents, Nersa having decided, with a view to providing better information to the public and a clearer presentation of the arguments, to prepare two impact studies The first dealt with the period of the power plant's operation without a drum and without a fuel transfer post, while the second related to the operation of the installation after completion of the fuel transfer post The Conseil d'Etat sanctionned this practice, pointing out that the preparation of two impact studies corresponding to two successive phases of the plant's functioning, was not contrary to Section 2 of the Decree of 12 October 1977 providing that "the content of the impact study must be in relation to the importance of the work and alterations proposed and with their foreseeable consequences for the environment"

As to the content of the impact study, it was clear that this conformed in all respects with the presentation provided for by Section 2 of Decree No 77-1141 of 12 October 1977 in implementation of Section 2 of Act No 76-629 of 10 July 1976 on the protection of nature. The study described and analysed the initial situation, setting out the figures known before operation of the plant but also during the plant's operation using the drum (the period from 7 September 1985 to end of May 1987), followed by an analysis of the effects on the environment and a description of the different measures taken to offset or reduce the risks posed by the changes made to the installation

2) The Conseil d'Etat having rejected this submission, it only remained for it to decide on the alleged lack of publicity given to the impact study

This question was of special interest given that, as explained above, the changes to the installation had not been preceded by a public inquiry It is well known that since adoption of Act No 83-630 of 12 July 1983 relating to the democratisation of public inquiries and environmental protection (Section 2) and its implementing Decree of 23 April 1985 (Section 6)[8], impact studies are made public in the context of this procedure The impact study is, in this case, included in the file of the inquiry.

In the absence of a public inquiry, arrangements for publicising impact studies are governed by Section 6 of the above-mentioned Decree of 12 October 1977 *Under this Section, as soon as the administrative authority has decided* to license the work proposed, the impact study must be made available to the public Before any start is made to the work, the decision must be publicised together with the mention of the existence of an impact study [Section 6 (3)] This Section also provides that publicity must be given in accordance with the procedures laid down by the regulations governing the proposed work, failing which by means of an advertisement in two local newspapers

In the present case, the impact study was advertised by means of an express reference in the preamble to the Decree of 10 January 1989 published in the Official Gazette on 12 January 1989, with a note that this study could be consulted in accordance with the procedures provided for by the Prefet of Isere.

It should also be noted that the 20 January 1989 edition of two local newspapers[9] specified that the two impact studies had been deposited at the Prefecture of Isere and the sous-Prefecture of la Tour du Pin where they could be consulted by interested persons during usual office hours

The Conseil d'Etat held that the reference in the preamble to the contested Decree was in itself sufficient to satisfy the publicity obligation provided for under Section 6 of the Decree of 12 October 1977.

The additional publicity given in the local press was therefore, in this case, superfluous

This position complies with the letter of Act No 76-629 of 10 July 1976 on the protection of nature[10] which does not prescribe any specific moment at which the impact study must be made public (Section 2) It is also in line with the case law which has held that Section 6 of the Decree of 1977 allows certain works to be made public at the same time as the licensing decision[11] or at the time when the licence is granted

Thus, an impact study relating to a construction permit must be publicised by means of the permit itself[12] Similarily, the fact that the impact study was not made public before the work authorised was completed is not relevant to a licensing decision[13]

III. **Of the other claims, one was that construction of a sodium destruction unit listed in the nomenclature of installations classified for purposes of environmental protection[14] had been authorised without any public inquiry**

This claim had little chance of success inasmuch as the licence for construction of this unit did not form part of the contested Decree but was a separate licence The Conseil d'Etat rejected the claim unconditionally.

While this decision is hardly surprising, it nevertheless provides an opportunity to describe the special nature of the system of classified installations with regard to that of large nuclear installations

The topic is complicated by the fact that certain "classified installations" are contained within the boundary of a large nuclear installation, for example units for storing hydrocarbons for use in auxiliary boilers, spent fuel pools, battery charging facilities, radioactive substances storage facilities or repositories, or waste processing facilities These installations are not all licensed under the same regulations or in accordance with the same procedures

Certain of them will be governed by the regulations on large nuclear installations, while others are covered by the Act on classified installations

In these circumstances, further explanation is necessary

1) In the first place, it is now established beyond doubt that the large nuclear installations defined by Section 2 of the Decree of 11 December 1963 are not subject to the licensing or notification procedure concerning classified installations

This can be seen by reading Section 1 together with Section 2 of the Act of 19 July 1976 relating to installations classified for purposes of environmental protection, which covers "installations included in the nomenclature of classified installations by Decree of the Conseil d'Etat"[15]

The Decree of 20 May 1953, as amended in particular by the Decree of 24 October 1967, expressly withdrew from this nomenclature all activities governed by the regulations on large nuclear installations[16]

This follows also from Section 8 of Act No 61-842 of 2 August 1961 relating to the control of atmospheric pollution and odours[17] which forms the basis for the legal system governing large nuclear installations introduced by the 1963 Decree

It was, moreover, with reference to these texts that the Conseil d'Etat, in this same case, held that the hazards study provided for under Section 3-5 of Decree No 77-1133 of 21 September 1977[18], did not, at the time[19], have to be included in the application for an amendment to the Decree licensing the construction of the Creys-Malville power plant

Furthermore, according to an opinion of the Conseil d'Etat of 4 October 1983[20], any facilities included in the nomenclature of classified installations are henceforth to be considered as large nuclear installations whenever they are situated within the boundary established in the construction licence in implementation of Section 3 of the Decree of 11 December 1963, and constitute an element of that installation required for its operation The list of such installations is drawn up and updated by the Minister responsible for Energy

All such installations are examined in the framework of the licensing procedure for the large nuclear installation and licensed by the Decree authorising construction following the procedure laid down by Section 3 of the Decree of 11 December 1963.

2) In the second place, non-nuclear installations covered by the Act of 19 July 1976[21] and located within the boundary of a large nuclear installation are subject to special rules exempting them from the regulatory provisions of the 1976 Act They are governed by Section 6 bis of the Decree of 11 December 1963[22]

The prior licence is granted after an inquiry and lays down the conditions with which the operator must comply to protect the neighbourhood against the risk of pollution Should this procedure coincide with that for a construction licence, the inquiry and licensing procedures are joined

The above-mentionned opinion of the Conseil d'Etat defined such installations as those having no link with the large nuclear installation

The sodium destruction unit referred to by the claimants was one of the constituent elements of the installation This unit was designed for the destruction of the inactive sodium deposited on the component equipment and also for the training of operating and sodium fire safety teams, familiarising staff with an environment filled with sodium aerosols

It followed that the creation of this unit was not subject to the rules laid down by the Act of 19 July 1976 and did not need to be preceded by a public inquiry A licence was required under the procedure laid down in the letter of 19 April 1984 from the Nuclear Installations Service, which set out all the consequences of the said opinion of the Conseil d'Etat[23]

Thus, to add new facilities to an already licensed installation, it is for the operator to request the approval, on the basis of a file, of the Central Service for the Safety of Nuclear Installations (now the Directorate for the Safety of Nuclear Installations) before undertaking the work. Approval is given by the head of this unit acting on behalf of the Minister of Industry if the addition does not amount to a substantial alteration to the installation[24] This is the procedure which was followed

When the work does amount to a substantial alteration, an application must be made to change the licensing Decree of the large nuclear installation concerned

IV. The last plea challenged the legality of Section 3 which empowered the Ministers for Industry and the Environment to delegate the power to licence, during the period when the drum was out of action and before completion of the fuel transfer post, the recommissioning of the installation, and to lay down the conditions to which the licence was subject. In other words, did the provisions of the Decree of 11 December 1963 authorise the Government to delegate its power to license recommissioning of the power plant?

This plea, submitted by two of the claimants only, the republic and the canton of Geneva, appeared, from the outset, the most relevant

It gave rise to two questions

Was such a delegation, not expressly provided for by the 1963 Decree, legal and if so, was it sufficiently precise?

1) The first of these questions had not till then been addressed, at least in relation to a non-regulatory decision for, it is clear, since the Sieurs Herr, Rettig and Boss case[25], that a decision to license construction does not constitute a regulatory decision

In theory, to be lawful, a delegation of power must have been provided for by an adequate text, that which made arrangements for the power[26] But since the 1963 Decree makes no provision for any such delegation, any decisions to grant construction licences or any changes made subsequently must be taken by Decree This applies also to any conditions to which the start-up of the changed installation is made subject

The wording of Sections 3, 4 and 6 of the 1963 Decree is formal on this point

If exceptions exist, they are defined in Section 3 bis and apply solely to certain types of installation[27] In such cases, a Ministerial Order may complete the licensing Decree

Following the conclusions of the Commissioner for the Government, the Conseil d'Etat decided that in the case of a non-regulatory act, the absence of provisions in the 1963 Decree authorising a delegation of power did not render such delegation impossible

It held that the Prime Minister was entitled to delegate some of his powers provided he specified with sufficient precision the framework within which Ministers are able to intervene Strong support is provided by the case law consisting, to our knowledge, of a single case[28]

2) With it being settled that delegation was allowable, the question arose whether it had in this case been carried out lawfully

First of all, to be lawful, a delegation of power must, as specified by the texts authorising it, be partial. No authority may divest itself of all its powers[29] In this case, there was no doubt as to the partial nature of the delegation since it was limited to the period during which the drum was out of action Secondly, a delegation of powers must be precise Its limits must be defined with sufficient strictness to enable the extent of the powers delegated to be measured[30]

If this condition is not fulfilled, the delegation is considered as irregular. This was precisely the ground on which the Conseil d'Etat censured and annulled Section 3 of the Decree of 10 January 1989

It considered that the delegation was unlawful because drafted in too imprecise a fashion Apart from its duration and the date of its beginning, it specified none of the conditions to which recommissioning was subject, nor "the *procedures in accordance with which these conditions should be implemented*"

Consequently, all subsequent decisions taken on the basis of Section 3 were annulled These were the Ministerial decisions of 12 January and 30 August 1989 authorising recommissioning of the reactor and continuation of its operation, and the decision of 29 March 1989 authorising the reactor's power escalation by successive steps up to 100 per cent At the date of the judgment, they were void of all effect

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Once again, to quote an expression used by a commentator following the first dispute[31], Superphenix "will not have to rise again from its ashes"

As to the substance of the case, all the claims made were rejected by the Conseil d'Etat This decision does not question continuation of the operation of the fast breeder reactor or the changes made to the installation arising from dismantling of the drum The procedure was in all respects held to be regular

Only one breach of external legality was in fact sanctioned Section 3, which delegated power to Ministers to license, during the intermediary period, the recommissioning of the power plant, was annulled

It resulted from the file that the installation could be brought back on-line only after the fuel transfer post had been definitely installed and after approval by the safety authorities of the measures relating thereto The Decree of 10 January 1989 did not prevent such an approach provided Sections 1 and 2 thereof were ratified by the court What is more, the Decree of 11 December 1963 did not make the start-up of an installation subject to any particular formality provided that the prior licences had been granted

It also remains possible for the plant to be recommissioned before installation of the fuel transfer post but on condition that the Government complies in full with the judgment of 27 May 1991

Thus, it would have to redraft Section 3 of the Decree along the lines proposed by the Commissioner for the Government at the hearing, since the legality of a delegation of powers to the Ministers concerned is now settled As specified by the judgment, the delegation of powers must at a minimum establish not only the date at which it takes effect and its duration but also the conditions set for plant recommissioning

Notes and References

1 Act No 72-1152 of 23 December 1972 authorising the creation of companies conducting activities of European interest as regards electricity on French territory [Journal Officiel (JO) - Official Gazette - of 27 December 1972]

Decree of 13 May 1974 authorising creation of the European fast neutron nuclear power company S A Nersa, approving the Articles of the company and subjecting it to State economic and financial control (JO of 14 May 1974, p 5135)

2. EDF for 51 per cent, ENEL for 33 per cent (Ente Nazionale per l'Energia Elettrica), SBK-RWE for 16 per cent (Rheinisch-Westfalisches Elektrizitatswerk)

3 Decree of 12 May 1977, JO of 28 May 1977

4 CE (Conseil d'Etat) 4 May 1979, Departement de la Savoie, Leb (Recueil Lebon) p 196, CJEG (Cahiers Juridiques de l'Electricite et du Gaz) 1979, J (Jurisprudence) p. 118, RJE (Revue Juridique de l'Environnement) 1979, p 188, note Colson, AJDA (Actualite Juridique - Droit Administratif), p. 38, A Bockel

5 Section TP (Travaux Publics) of 9 February 1988, No 343 380, EDCE (Etudes et Documents du Conseil d'Etat) 1988, p 303, set out in the annex thereto

6 See for example, CE 28 February 1975, Sieurs Herr, Rettig et Boss v EDF and the conclusions of Mr Denoix de Saint-Marc, CJEG 1975, J p 80, and the note Carron, RDP 1975, p 1424, note De Soto, CE 4 May 1979, Departement de la Savoie, supra

7 See for example, relating to the harmful effects of certain stabilisers in the manufacture of ice cream (CE 6 November 1963, Societe Iranex, p 523), to the hazards involved in selling to the public, without a medical prescription, medicines containing poisonous substances (CE, Sect 28 April 1967, Federation Nationale des Syndicats Pharmaceutiques de France, p 180, AJDA 1967, p 401, concl Galabert), to the absence of danger involved in marketing a contraceptive device [CE 30 March 1979, Assoc Laissez-les-vivre, case No 04 139 to 04 143, T (Recueil Lebon Tables) p. 888], to the composition of the list of so-called "comfort" medicines (CE 24 June 1987, Syndicat National de l'Industrie Pharmaceutique, T p 899), to the technical requirements accompanying a licence to mine a quarry (CE 9th November 1988, Minister for Industry and Societe Plâtres Lafarge, T p 977)

8 Decree No 85-453 of 23 April 1985 adopted in implementation of Act No 83-630 of 12 July 1983 relating to the democratisation of public inquiries and to environmental protection (JO 4 April 1985)

9 The newspapers concerned were "le Dauphine libere" and "les petites affiches de Grenoble"

10 JO 13 July 1976 and corrigendum of 28 November 1976

11 CE 30 January 1985, Assoc Les Amis de la Terre, Leb p 19, AJDA 1985, p 328, note JC, Droit Administratif 1985, No 169

12 T A Lyon, 25 October 1979, Groupement agricole foncier le Rocher de Metri, Leb T p 922, 927, Chron Colson, Rev Jur envir 1981, p 36

13 For a construction licence, CE 7 January 1983, Schaffhauser, Leb T p. 794.

14 Item No 377

15 Act No 76-663 of 19 July 1976 replaced the Act of 19 December 1917 JO of 20 July 1976

16 This analysis was confirmed by the Conseil d'Etat in a judgment of 20 June 1984, Association les Amis de la Terre, Leb p 232

17 JO of 3 August 1961, p 7195

18 Decree No 77-1133 of 21 September 1977 in implementation of the Act of 19 July 1976 relating to installations classified for purposes of environmental protection and of Part I of Act No 64-1245 of 16 December 1964 relating to rules governing water and its distribution and to the ontrol of water pollution JO of 8 October 1977 and 21 April 1987

19 The Decree of 11 December 1963 was amended by Decree No 90-78 of 19 January 1990 (JO of 21 January 1990). Henceforth, licensing applications must include a document setting out "the measures taken to deal with the hazards presented by the installation and limit the consequences of any accident This constitutes, for large nuclear installations, the risk assessment within the meaning of Section 46 of the above-mentioned Act of 22 July 1987" (Section 1-5)

20 Section Travaux Publics No 303-902, BO (Bulletin Officiel) of the Minister for Industry and Research, No 3-1984.

21 See in particular D Turpin, Installations Nucleaires de Base et Installations Classees pour la Protection de l'Environnement, Rev Jur Env 1982-1, p 4, Michel Prieur, Droit de l'Environnement No 736, Precis Dalloz, 1991 edition

22 Section 6 bis results from Section 7 of Decree No 73-405 of 27 March 1973

23 Letter from the Nuclear Installations Service of 19 April 1984 sent by the head of the Central Service for the Safety of Nuclear Installations to the operators of large nuclear installations concerning the procedures applicable to the equipment of such installations and to installations classified for purposes of environmental protection located within the boundary of a large nuclear installation (BO of the Minister for Industry and Research No 3-1984, p 21)

24 Letter from the Nuclear Installations Service, cited above, paragraph 2 2 1

25 CE 28 February 1975, p 162 and conclusions Denoix de Saint-Marc, CJEG 1975, p 80, note Carron, RDP 1975, p 1424, note De Soto

26 CE 25 February 1949, Roncin, p 92, 17 June 1955, Adjemian, p 334, Section 23 January 1959, Allote de la Fuye, p 57, 22 June 1962, Houilleres du bassin d'Aquitaine, p 413, 20 February 1981, Ass defense et promotion des langues etrangères, p 569, 19 December 1986, Chambre de métiers de Charente Maritime, Droit Administratif, 1987, No 60

27 Section 3 bis concerns the construction of large nuclear installations designed for series construction and whose activities are below certain thresholds, the construction of temporary large nuclear installations and the construction of mobile large nuclear installations

28 CE 21 October 1977, Association Française des producteurs de films et autres, p 398

29 CE 13 May 1949, Couvrat, p. 216, 8 February 1950, Chauvet, p 85

30 CE Section 28 February 1964, Fédération de l'éducation nationale, p 150, Assemblee 7 January 1966, Féderation generale des syndicats chretiens de fonctionnaires, p 16, Assemblee 13 July 1968, Moreau, p 441, 27 April 1987, Societe Mercure Paris-Etoile, p 147, AJDA 1987, p 56, concl O Van Ruymbeke

31 Note Alain Bockel on CE 4 May 1979, Departement de la Savoie et autres, AJDA 1979, No 12, J p 40

• *United States*

TMI LITIGATION CASES CONSOLIDATED II - CONSTITUTIONALITY OF PRICE-ANDERSON PROVISIONS FOR REMOVAL OF PUBLIC LIABILITY ACTIONS TO FEDERAL COURTS (1991)

On 26 July 1991, the United States Court of Appeals for the Third Circuit filed its decision in this matter, which arose out of the 1979 incident at the Three Mile Island nuclear facility and involved an assertion of federal jurisdiction by the defendants and a challenge to that jurisdiction by plaintiffs who wished to be in the State court system (see Nuclear Law Bulletin No. 45).

The focus was on the constitutionality of the Price-Anderson Amendments Act 1988, 42 USC §2100 et seq, in which Congress expressly gave to federal courts original jurisdiction over "public liability actions", which according to the definitions in the Act included any suit asserting legal liability arising out of or resulting from a nuclear incident

Article III §2, cl 1 of the United States Constitution provides that

> "The [federal] judicial Power shall extend to all Cases arising under the Laws of the United States "

For the grant of federal jurisdiction to be valid, therefore, the cause of action must "arise under" federal laws The Amendments Act deemed public liability actions to "arise under" the Price-Anderson Act, but provided that the substantive rules for decision in such an action were to be derived from the law of the State in which the nuclear incident occurred, except where those rules were incompatible with the Price-Anderson Act itself

Previous cases had established that a statute which merely confers federal jurisdiction cannot constitute the federal law under which an action arises However, where Congress has the authority to legislate in a given area and substantively does so, Article III authorises a grant of federal jurisdiction.

Applying these rules, the district court had earlier concluded that Congress exceeded the scope of Article III in enacting the 1988 Amendments Act because that Act was purely jurisdictional A critical factor in this decision was that the rules to be applied were to be derived from State law

The Court of Appeals disagreed It pointed out that the Price-Anderson Act contained a considerable number of provisions governing actions arising out of nuclear incidents, including limitation period, venue, choice of law, limitations on the availability of punitive damages, channelled liability to licensees, a rule of industry-share liability, waiver of defences in the case of an extraordinary nuclear occurrence, and an upper limit of aggregate liability Given that important federal questions must therefore be resolved as indispensable ingredients of any public liability action, the Court of Appeals found that Congress had not exceeded its constitutional authority in conferring federal jurisdiction over such actions, even though it had relied upon State rules of decision as a foundation for the relevant statutory scheme

The Court of Appeals accordingly upheld the constitutionality of the grant of federal jurisdiction in the Price-Anderson Amendments Act It follows, in the words of the Court, that following the Amendments Act "there can be no action for injuries caused by the release of radiation from federally licensed nuclear power plants separate and apart from the federal public liability action created by the Amendments Act"

Shortly before this decision, on 10 July 1991, the United States District Court for the Central District of Illinois also held, on similar grounds, that the Price-Anderson Amendments Act was constitutionally valid The case was O'Conner v Commonwealth Edison Company and London Nuclear Service Inc , and involved allegations by a worker that his employers negligently exposed him to radiation

• European Communities

JUDGMENT OF THE COURT OF JUSTICE OF THE EUROPEAN COMMUNITIES IN THE CASE OF THE RADIOACTIVE CONTAMINATION OF FOODSTUFFS (1991)*

This note which summarises the judgment relating to the case European Parliament v the Council of the European Communities provides an analysis of the legal basis of the Community regulatory instruments in the radiation protection field

The European Parliament submitted an application under Article 146 of the Treaty establishing the European Atomic Energy Community (EURATOM) and Article 173 of the Treaty establishing the European Economic Community (EAEC) for the annulment of Regulation 3954/87 of 22 December 1987 of the Council of Ministers of the European Communities, laying down maximum permitted levels of radioactive contamination of foodstuffs and feedingstuffs following a nuclear accident or any other case of radiological emergency (the text of the Regulation is reproduced in Nuclear Law Bulletin No 41) Under this Regulation, based on Article 31 of the EURATOM Treaty, foodstuffs and feedingstuffs the contamination of which exceeds the maximum levels fixed by a measure taken in accordance with that Regulation, must not be placed on the market

According to the European Parliament, this latter aspect of the Regulation warranted the choice of a legal basis other than Article 31 of the EURATOM Treaty, namely, Article 100 A of the EEC Treaty Subsidiarily, it argued that both above-mentioned Articles should apply simultaneously

The Parliament pointed out that in its view, choice of the correct Article was important because Article 31 of the EURATOM Treaty requires that it simply be consulted by the Council of Ministers whereas Article 100 A provides for the co-operation procedure introduced by the Single Act which gives the Parliament much greater weight In this context, the European Parliament was of the opinion that selection of Article 31 adversely affected its prerogatives The Court of Justice declared that the present action for annulment was admissible in its judgment of 22 May 1990 (C-70/88, Comp I), although the European Parliament was not included in the Community institutions listed in Article 146 of the EURATOM Treaty

In this way, the Court could render judgment on the substance of the case, that is to say, the correct legal basis of Council Regulation 39954/87 In its judgment, the Court followed the conclusions of the Advocate General, W Van Gerven

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* Note kindly provided by the Nuclear Law Bulletin Correspondent in the Radiation Protection Division of the General-Directorate Environment, Nuclear Safety and Civil Protection of the Commission of the European Communities

Jurisprudence has been consistent to the effect that in the context of the powers of the Community, the choice of the legal basis for a measure may not depend simply on an institution's conviction as to the aim pursued but must be based on objective factors which are amenable to judicial review. These features include in particular the purpose and content of the measure (see the judgment of 11 June 1991, Commission v. Council, Case 300/89, item 10, to be published)

Following analysis of the Regulation, the Court considered that the Regulation, according to its purpose and content as it appeared from its actual wording, aims to protect the population against the dangers arising from foodstuffs and feedingstuffs which have been subjected to radioactive contamination.

As opposed to the European Parliament's argument that Articles 30 et seq of the EURATOM Treaty do not concern radiation from contaminated products but only protection of persons directly involved in the nuclear industry, the Court held that the Articles cited tend to ensure coherent and efficient health protection of the population against the dangers of ionizing radiation, irrespective of the source or the category of persons exposed to such radiation

In respect of the European Parliament's subsidiary argument that the contested Regulation should also have been based on Article 100 A of the EEC Treaty, on the ground that it would cover, in addition to protection of the population against the dangers of ionizing radiation, the establishment and operation of the internal market within the meaning of Article 8 A of the EEC Treaty, the Court held that the prohibition "to place on the market" provided for by the Regulation was simply a requirement to ensure the efficient implementation of the maximum permitted levels and that, therefore, it was only subsidiarily that the Regulation would result in harmonizing the conditions for the free movement of goods within the Community

For these reasons, the Court dismissed the European Parliament's petition

NATIONAL LEGISLATIVE AND REGULATORY ACTIVITIES

• Australia

RADIATION PROTECTION

Radiation Control Act, 1990 (New South Wales)

This Act (No 13) was assented to on 7 June 1990 and repeals the Radioactive Substances Act 1957 No. 5 and the Radioactive Substances Regulations 1959 The object of the Act is to ensure the protection of persons and the environment against exposure to ionizing radiation and harmful non-ionizing radiation, taking into account social and economic factors and recognising that radiation is needed for therapeutic purposes

The Act regulates and controls the sale, use, keeping and disposal of radioactive substances and radiation apparatus, but does not apply to radioactive ores as defined by the Mines Inspection Act 1901 It provides for a licensing system for such substances and apparatus, the licensing authority being the Director-General of the Department of Health, under the overall authority of the Minister for Health. No person may sell or use the substances or apparatus without a licence granted by the Director-General A licence is granted only following the recommendation of the Radiation Advisory Council set up under this Act.

The Council is made up of fourteen members appointed by the Minister for Health They include an officer of the Department of Health, who chairs the Council, and specialists in the different fields concerned (e g radiation and nuclear medicine, medical and industrial radiography, occupational health and safety, etc.) The Council's functions are, in particular, to advise the Minister for Health on making Regulations under the Act or amending it, administering the Act and Regulations, measures to prevent or minimise the dangers arising from radiation, and on licences

The Minister for Health, in the administration of the Act, consults and co-operates with the Ministers responsible for occupational health and safety, mining and pollution respectively, regarding radiation protection matters

TRANSPORT OF RADIOACTIVE MATERIALS

Code of Practice for the Safe Transport of Radioactive Substances 1990

This Federal Code revises an earlier Code on the same subject issued in 1982 and was formulated under the Environment Protection (Nuclear Codes) Act 1978 (see Nuclear Law Bulletin No. 23) The purpose of the Code is to establish uniform safety standards, applicable throughout the Commonwealth of Australia, to provide for the protection of persons and the environment, against any dangers associated with the transport of radioactive substances

The Code uses as a basis the International Atomic Energy Agency's (IAEA) Regulations for the Safe transport of Radioactive Materials This new edition takes into account the 1985 Edition of the Regulations incorporating the 1988 Supplement and provides, furthermore, that radiation protection standards will also be subject to recommendations of the Australian National Health and Medical Research Council.

• *Brazil*

ORGANISATION AND STRUCTURE

Decree concerning the Nuclear Energy Commission (1991)

Decree No 150 of 15 June 1991 amends the administrative structure and specifies the competence of the National Nuclear Energy Commission (CNEN). It was published in the Official Gazette (Diario Oficial) of 17 June 1991 and entered into force on the date of its publication

The Nuclear Energy Commission was set up by Act No. 4 118 of 27 August 1962, and its task is, in particular, to promote and develop the use of nuclear energy for peaceful purposes and to regulate and control such use (see Nuclear Law Bulletin No 26 and 38), as provided by Acts No 6 189 and 7 781 of 16 December 1974 and 27 June 1989 respectively

The Decree sets out the organisation chart of the Commission and defines its responsibilities as follows

- the **Board** is made up of five members appointed by the President of the Republic, one member being its Chairman The Board's duties include, inter alia, assisting with the orientation of the natioanl nuclear energy programme, approving regulations in its field of competence, dealing with international treaties and relations in the nuclear field, managing the national nuclear energy fund .

- the **Cabinet, Technical Consultants and Co-ordinators** advise and assist the Chairman with respect to social, policy and technical aspects of his work and institutional and industrial relations respectively,

- the **Directorate for R&D in the nuclear field,** is in charge of work relating to reactors, the fuel cycle, nuclear technology, instrumentation control, radioisotope production, radioactive waste, spent fuel

- the **Directorate for Radiation Protection and Nuclear Safety,** is in charge of work relating to licensing, nuclear safety and radiation protection, radiological emergencies, safeguards and physical protection

Other Directorates deal with financial and budgetary questions, administration, and legal matters

REGULATIONS ON NUCLEAR TRADE

Order relating to procedures for imports (1991)

Order No 08 of 13 May 1991 (published in the Official Gazette of 14 May 1991) lays down the administrative procedures to be followed for importing products and articles into Brazil.

Nuclear materials are included in the list of products whose import is required to be notified in advance to the government organisations concerned

• Canada

TRANSPORT OF RADIOACTIVE MATERIALS

Amendment of Transport Packaging of Radioactive Materials Regulations (1991)

The above Regulations of 1983, amended in 1989 (see Nuclear Law Bulletin No 44), were again amended on 9 May 1991 (SOR/91-304, Canada Gazette, Part II, Vol. 125, No. 11, 22 May 1991)

The Regulations incorporate the safety standards of the International Atomic Energy Agency's Regulations on the Safe Transport of Radioactive Materials issued in 1985, the latter were amended in 1990 to make the standards more effective The Canadian Regulations have been amended for a transitional

period, to allow transport of radioactive materials to be effected according to both versions of the IAEA Regulations, until all the modifications have been introduced in the national text

• Czechoslovakia

RADIOACTIVE WASTE MANAGEMENT

Waste Act (1991)

The Waste Act of 22 May 1991 (No 238/1991 Coll) provides for the handling, disposal and management of waste and lays down the duties of legal and natural persons in this connection.

The Act, which entered into force on 1 August 1991, also applies to radioactive waste unless otherwise provided by special regulations

• Finland

ORGANISATION AND STRUCTURE

Ordinance on the Finnish Centre for Radiation and Nuclear Safety (1990)

This Ordinance was adopted on 28 September 1990 in implementation of the 1983 Act setting up the above Centre and the 1987 Nuclear Energy Act (see Nuclear Law Bulletin Nos 35 and 41 respectively) and entered into force on 1 November 1990

The Ordinance specifies the tasks of the Centre, as provided under both Acts, and gives it several supplementary responsibilities In addition to its overall competence in respect of radiation safety, the Centre will carry out research into and supervise the health effects of radiation and maintain a laboratory for national measurements in that field.

The Ordinance also sets out the Centre's organisation chart and the staff duties The Centre is headed by a Director General and is organised into departments and units The Director General is responsible for the allocation and use of funds for the Centre's activities while the Board of Directors (appointed by the Council of State - the Government) is responsible for orienting its work

RADIATION PROTECTION

Decision on exposure limits for non-ionizing radiation (1990)

The Ministry of Social Affairs and Health issued this Decision on 20 February 1990 on the basis of the Decree of 4 December 1987 on the regulatory control of non-ionizing radiation The Decision became effective on 1 March 1990

The Decision establishes exposure limits for laser and ultraviolet radiation and for radiofrequency energy at frequencies exceeding 100 kHz The limits are specified in annexes

• France

ORGANISATION AND STRUCTURE

Competence of the Ministry for Industry in the nuclear field (1991)

Decree No 91-431 of 13 May 1991 on the organisation of the Central Administration of the Ministry for Industry and Land Planning defines the duties and responsibilities of the Ministry and, in particular, those of its different Directorates (published in the Official Gazette of the French Republic of 14 May 1991 - JORF)

The Ministry's responsibilities for nuclear activities are discharged mainly by the General Directorate for Energy and Raw Materials, the Senior Officer for Defence within the Ministry is responsible for security matters regarding protection and transport of nuclear materials

The Decree specifies that the General Directorate for Energy and Raw Materials is responsible for preparing and implementing Government policy in its own area of competence The General Directorate is the supervisory authority of the Atomic Energy Commission (CEA) and its subsidiary bodies as regards generation of energy and supply of basic nuclear materials It is also the supervisory authority of the COGEMA (company dealing with nuclear raw materials), the National Raw Materials Fund, and the Environment and Energy Agency which was set up by an Act of 19 December 1990 (published in JORF of 22 December 1990) On behalf of the Minister, and in its own field, the General Directorate is responsible for relations with other countries and with international organisations It contributes to orienting the Government's position and takes part in the negotiation of international agreements

Also, it should be noted that the Central Service for the Safety of Nuclear Installations (SCSIN) has been replaced by the Directorate for the Safety of Nuclear Installations (DSIN).

ENVIRONMENTAL PROTECTION

Decrees of 1988 and 1990 implementing the 1987 Act on organising public safety measures, forestry protection against fires and the prevention of major risks

The above-mentioned Act (No 87-565) of 22 July 1987 applies to major technological risks, including nuclear risks (see Nuclear Law Bulletin No. 40) In accordance with the Act, implementing Decrees were adopted and their provisions with a bearing on nuclear activities are briefly described below

- **Decree No. 88-622 of 6 May 1988 on emergency plans**

This Decree was published in the JORF of 8 May 1988. It contains provisions concerning special action plans (plans particuliers d'intervention - PPI) which are a type of emergency plan dealing in particular with sites which have at least one large nuclear installation in the following categories

a nuclear reactor with a thermal power greater than ten megawatts,

plants for the processing of irradiated nuclear fuels, isotopic separation, chemical conversion of nuclear fuels and their fabrication

The PPI includes the description of the installation concerned, the list of communes on whose territory the emergency plan applies, the measures for protecting and informing the population, the diagrams for its evacuation, as well as information on shelters Also listed are the emergency measures for neighbouring populations to be taken by the operator before the police authorities intervene or on their behalf

When the préfet has finalised the PPI, it is brought to the attention of the mayors concerned and the operator, and a notice is placed in local newspapers indicating the territory on which it applies and where it can be consulted

- **Decree No. 90-918 of 11 October 1990 on rights to information on major risks**

This Decree was published in the JORF of 13 October 1990 It specifies the content and type of information to which persons likely to be exposed to major risks must have access, in accordance with the 1987 Act These provisions apply in the communes for which a PPI has been prepared

The information includes a description of the risks and their foreseeable consequences for persons, property and the environment, and a statement on the preventive measures to limit their effects A summary record of this information is drawn up

The mayor establishes an information report containing a list of the preventive measures he has taken, corresponding to the risk on the territory of the commune concerned The public is informed of the existence of this documentation by posters put up in the town hall specifying that it may be freely consulted on the spot

The "Articles" Chapter of this issue of the Bulletin contains an analysis of the regulations applicable to major risks in the nuclear sector

THIRD PARTY LIABILITY

Decree defining the characteristics of installations presenting a lower risk and Opinion of the Interministerial Commission for Large Nuclear Installations (1991)

Decree No 91-355 of 12 April 1991 (published in the JORF of 14 April 1991) was made in implementation of the 1968 Act on third party liability in the field of nuclear energy, as amended by the Act of 16 June 1990 (see Nuclear Law Bulletin No 46)

The 1990 Act sets the nuclear operator's maximum amount of liability at FF 600 million for one and the same nuclear incident, this amount is reduced to FF 150 million when only low risk installations are operated on a given site The Act specifies that such installations are to be defined by Decree, following the Opinion of the Interministerial Commission for Large Nuclear Installations

The Commission gave its Opinion on defining the characteristics of low risk installations on 28 March 1991 (also published in the JORF of 14 April 1991) This Opinion takes into account the nature of large nuclear installations as defined by the Decree of 11 December 1963, as amended, as well as their production capacity (see Nuclear Law Bulletin No 45)

Accordingly, the 1991 Decree specifies that the following installations will be considered low risk installations

- nuclear reactors with an installed thermal capacity below thirty megawatts,
- installations for the preparation, fabrication or conversion of uranium which process less than 100 tons/year of uranium enriched to less than ten per cent U 235,
- installations for storing or decontaminating nuclear materials whose total activity does not exceed the thresholds classifying them as large nuclear installations in implementation of the 1963 Decree

These thresholds have been fixed by Orders of 6 December 1966 and 25 January 1967 defining nuclear installations (see Nuclear Law Bulletin No 1 for texts of Orders)

FOOD IRRADIATION

Orders on treatment by ionizing radiation of casein and dried fruits (1991)

Two Orders, adopted on 17 July 1991, respectively authorise and fix the conditions for the sale and marketing of casein (one of the chief constituents of milk which forms the basis of cheese) for human consumption, and certain dried fruits (figs, apricots, dates, grapes) treated by ionizing radiation The Orders were published in the JORF of 21 and 25 July 1991 respectively

Both Orders lay down the same conditions of authorisation, in particular, microbic decontamination must be obtained through exposure to cobalt 60 or caesium 137 gamma radiation or to electron beams with an energy below or equal to 10 Mev The absorbed dose must not exceed 6 kilograys (kGy).

Establishments responsible for such irradiation must keep records of the doses delivered to the products, the names and addresses of the consignees, the quantity of goods treated, the date of treatment and despatch.

This work is subject to controls by the competent authorities, in accordance with the Decree of 8 May 1970 on repression of fraudulent practices in the trade of irradiated products (see Nuclear Law Bulletin No 6).

• Germany

ORGANISATION AND STRUCTURE

Second Ordinance implementing the Preventive Radiation Protection Act (1991)

A Second Ordinance of 31 July 1991 was adopted to assign competence for measurements and evaluations in accordance with the Preventive Radiation Protection Act of 1986 (see Nuclear Law Bulletin No 39) The Ordinance was published in Bundesgesetzblatt - BGBl 1991, I, p 1768)

The Federal Research Institute for Fishing is responsible for investigating the radioactivity of sea fauna and flora in the North Sea and Baltic Sea including coastal waters The Federal Office for Radiation Protection is responsible for investigations by air of the local gamma dose rates in case of events possibly having considerable radiological effects.

TRANSPORT OF RADIOACTIVE MATERIALS

Ordinances on the Transportation of Dangerous Goods (1990-1991)

The main Ordinances regulating the transport of dangerous goods by road, sea, and rail, including the transport of radioactive substances, have, after various amendments in the past years, been published as follows

- Ordinance on the internal and transborder transport of dangerous goods by road - so-called "Gefahrgutverordnung Strasse" - of 22 July 1985 as amended, the consolidated text was published on 19 November 1990 (BGBl 1990, I, p. 1454),

- Ordinance on the internal and transborder transport of dangerous goods by rail - so-called "Gefahrgutverordnung Eisenbahn" - of 22 July 1985 as amended; the consolidated text was published on 10 June 1991 (BGBl 1991, I, p. 1224),

- Ordinance on the transport of dangerous goods by sea-going ships - so-called "Gefahrgutverordnung See" - of 24 July 1991 (BGBl 1991, I, p 1714)

The legal basis of the three Ordinances is the Act on the Transport of Dangerous Goods of 6 August 1975 (BGBl 1975, I, p 2121) (see Nuclear Law Bulletin No 16) The technical provisions concerning radioactive substances in the Ordinances are in line with international recommendations, in particular, those of the IAEA in Safety Series No 6 "Regulations for the Safe Transport of Radioactive Materials", and the relevant international agreements

THIRD PARTY LIABILITY

Notification of a nuclear energy clause in transport insurance (1991)

The German Transport Insurance Group (DTV) on 31 December 1990, in accordance with the law prohibiting restriction of competition, gave notice of a new clause to be added to the DTV multirisk clause The new clause generally excludes coverage of risks arising from nuclear energy or radioactive materials, but with exceptions for damage to a ship transporting the radioactive material or to another ship with which it is in collision This clause became effective on 1 April 1991

• Ireland

ORGANISATION AND STRUCTURE

Radiological Protection Act, 1991

The Radiological Protection Act was passed on 6 May 1991 Its purpose is

- to establish the Radiological Protection Institute of Ireland, dissolving An Bord Fuinnimh Nucleigh (the Board) and transferring its functions to the Institute;

- to enable radiation protection measures to be taken in the event of a radiological emergency, and

- to give effect to the provisions of the Conventions on Assistance in the Case of a Nuclear Accident, Early Notification of a Nuclear Accident and Physical Protection of Nuclear Material

The Act sets out the functions of the Institute which include, in particular, advising the Government on radiation safety matters, assisting in emergency planning and responses, controlling the use of radioactive substances, preparing and issuing codes of practice and safety guidelines relating to the use of such substances, nuclear devices or irradiating apparatus, and will be the licensing authority in their respect

The Institute will also make recommendations regarding proposals for legislation on radiation matters and exchange information and co-operate with other countries and international organisations on nuclear accidents, radiological emergencies and the physical protection of nuclear material. These tasks relate to Ireland's obligations under the above-mentioned Conventions

Other tasks of the Institute will cover functions in relation to directives or regulations of the European Communities, non-ionizing radiation, supply of radioactive substances or devices, supervising compliance with safety codes or regulations The composition of the Institute and its operations are set out in Schedule I

The texts of the Assistance, Early Notification and Physical Protection Conventions are reproduced in Schedules II, III and IV respectively

The Act repeals the Nuclear Energy (An Bord Fuinnimh Nucleigh) Act 1971

• Italy

ORAGANISATION AND STRUCTURE

Act reorganising ENEA (1991)

Act No 282 of 25 August 1991 reorganises the National Agency for Research and Development of Nuclear and Alternative Energies - ENEA - and reorients its responsibilities (published in the Official Gazette of 30 August 1991) Previously designated as a Committee in the Nuclear Law Bulletin, it is now called the National Agency for New Technologies, Energy and the Environment and retains its acronym (Ente per le nuove tecnologie, l'energia e l'ambiente - ENEA) It will also deal with environmental questions and new technologies, in particular, carrying out studies and research on the latter and evaluating their economic, social and environmental consequences

It is recalled that already in 1982, the National Nuclear Energy Committee (CNEN) had been entrusted with wider tasks and renamed ENEA (see the Supplement to Nuclear Law Bulletin No 30 for text of the Act) The present ENEA retains its competence regarding nuclear activities, notabl n the field of nuclear safety and radiation protection The new Act cc firms the tasks already conferred on the Nuclear Safety and Health Protection Directorate (DISP), as well as its operational independence while remaining within ENEA

• Luxembourg

RADIATION PROTECTION

Regulations on protection of the population against the hazards of ionizing radiation (1990)

The above Regulations of 29 October 1990 were published in the Official Gazette (Memorial) of 24 December 1990, Part A, No 74 They were made in implementation of the Council of the European Communities' Directive 80/836/Euratom of 15 July 1980 on revised basic safety standards for the health protection of workers and the population against the hazards of ionizing radiation, as amended by Council Directive 84/467/Euratom of 3 September 1984 (see Nuclear Law Bulletin No 34)

The Regulations apply to the import, sale, production, manufacture, transport, trade in and to the industrial, medical, scientific uses, etc of apparatus and substances capable of emitting ionizing radiation, to processing, handling and storage of radioactive substances or waste, and to any other activity implying a danger from ionizing radiation

They lay down a licensing system for the different classes of establishment (according to the radiotoxicity involved), and for the import, production and transport of radioactive substances

The establishments are divided into the four following classes

- Class I establishments holding fissile substances in quantities greater than half the minimum critical mass,

- Class II establishments holding quantities of radionuclides the total activity of which is equal to or greater than the values in the table in the Annex providing for a classification by radiotoxicity; establishments collecting, processing, conditioning and storing radioactive waste, establishments with X-ray generating equipment which can operate at a peak tension greater than 200 kV, establishments holding fissile substances in whatever quantities, not included in Class I, etc ,

- Class III establishments holding quantities of radionuclides the values of which are given in the above-mentioned table, not included in Classes I and II, establishments with X-ray generating equipment which can operate at a peak tension equal to or lower than 200 kV,

- Class IV establishments holding quantities of radionuclides the values of which are given in the above-mentioned table, not included in Classes I, II or III, establishments with cathode tubes the dose rate of which does not exceed 5 micro Sv/h at any point situated 0 05 m from the surface, etc

The Regulations prescribe special licensing requirements for each class of establishment, particularly regarding technical information to be given and information and involvement of the public in the licensing procedure, however a prior authorisation from the competent authorities is required for all classes The licensing authority is the Health Minister, except for Class I establishments which must be licenced by the Government in Council, the administrative procedures are then carried out under authority of the Health Minister, like those for Classes II to IV Licences are granted either for limited or for unlimited periods

The Health Minister is also the licensing authority for transport and transit of radioactive substances Such licences may be restricted to only one transport operation or may cover several consecutive ones All licence applications must be accompanied by an insurance certicate covering nuclear risks

Also, the Regulations deal with dose limits for the public and exposed workers and their protection against radiation

The overall dose limit for members of the public is set at 1 mSv (100 mrem) per year That for occupationally exposed workers must not exceed 10 mSv (1 rem) per year The Regulations also fix dose limits for certain categories of persons, notably, adolescents and pregnant women It specifies furthermore that the provisions of Community directives on radiation protection apply for dose assessment methods and annual ingestion limits

The 1991 Regulations repeal the Regulations of 8 February 1967 on the same subject (see Nuclear Law Bulletin No. 1)

• Netherlands

THIRD PARTY LIABILITY

Act to amend the 1979 Act on Nuclear Third Party Liability (1991)

On 26 June 1991, the Netherlands Parliament authorised the ratification of

- the 1982 Protocols to amend respectively the Paris Convention of 1960 on Third Party Liability in the Field of Nuclear Energy and the Brussels Supplementary Convention of 1963 (Government Gazette 1991, 368); and

- the 1988 Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention (Government Gazette 1991, 372)

All three Protocols were ratified on 1 August 1991 (see Chapter on "Multilateral Agreements" in this issue of the Bulletin)

Together with the ratification of the 1982 Protocols to amend the Paris and Brussels Conventions, an Act amending the Act of 17 March 1979 on Nuclear Third Party Liability came into effect on 1 August 1991 (Government Gazette 1991, 370) The main features of the new legislation are described below

Operator's liability

The maximum amount of the operator's liability has been raised from 400 to 500 million Dutch guilders (approximately 190 million Special Drawing Rights - SDRs) [Section 5(1)] The Act authorises the Minister of Finance, in consultation with the Minister of Justice, to set a lower amount for low risk installations [Section 5(3)] The lower amounts may vary, depending on the actual risks involved

Public funds

If the damage caused by a nuclear incident, suffered in Netherlands territory, exceeds 300 million SDRs as laid down by the Brussels Supplementary Convention [Section 18(1)], the Government will make available supplementary funds, to the effect that the total sum available is raised from 1 billion to 5 billion guilders (approximately 1.9 billion SDRs) Section 18(4) provides

that these public funds will also be made available in case of damage suffered in the territory of a Party to the Brussels Supplementary Convention, if that Party's legislation has reciprocal provisions

Time-limit

The time-limit for personal injury claims has been extended from ten to thirty years after the date of the incident [Section 7(2)(a)] The ten year time-limit for other claims is maintained

Award of compensation

Claims filed within ten years after the date of the incident will have priority over claims filed thereafter [Section 7(4)]. However, in so far as the State provides supplementary funds over and above the 300 million SDRs laid down by the Brussels Convention, at least ten per cent of these funds will be reserved for personal injury claims, filed after ten years [Section 27(2)]

If there are both personal injury claims and other claims, the tiers of supplementary funding will generally be used up in the following way two-thirds of each tier will be awarded for personal injury claims and one-third for other claims

Court procedure

If the damage caused by a nuclear incident is likely to exceed the maximum amount of the operator's liability laid down in the new Act, claims will have to be brought before the District Court at The Hague, which has exclusive jurisidction as a court of the first instance The Court will appoint a committee to settle the claims [Section 22(1) and (2)]

Further amendments

As soon as the Joint Protocol Relating to the Vienna and Paris Conventions comes into effect, the geographical scope of the Act will be extended considerably

The text of the 1979 Act on Nuclear Third Party Liability, as amended by the 1991 Act will be published in the Supplement to the forthcoming issue of the Nuclear Law Bulletin

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On 26 June 1991, the Netherlands Parliament also authorised the ratification of the Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material of 1971 (Government Gazette, 1991, 371) The Convention was ratified on 1 August 1991 (see Chapter on "Multilateral Agreements" in this issue of the Bulletin)

• Portugal

RADIATION PROTECTION

Decree-Law on medical products and apparatus for human use (1991)

Decree-Law No. 72/91 was adopted on 14 January 1991 and has been effective retroactively since 1 January 1991 (published in Diario da Republica No 33 of 8 February 1991) It lays down regulations for the marketing, quality control and fabrication of medical products and apparatus for human use. The regulations take into account a series of Directives in this respect issued by the Council of the European Communities and establish a licensing system for medicines and apparatus, including those containing radioisotopes

The fabrication of radioactive medical products and irradiating apparatus is subject to a prior licensing system. Another licence is necessary for the marketing of such apparatus. In addition to information to be provided in applications for licences for all types of medicines (e g information on applicant, composition of medicine, intended use), applications for licences to market irradiating apparatus must also provide a general description of the system and its components, and the qualitative and quantitative characteristics of the radioactivity released

Also, it is specified that the levels of radioactivity must be indicated on the labels for radioactive medical products and irradiating apparatus and their packaging must be effected in accordance with the requirements set out in the International Atomic Energy Agency's Regulations on the Safe Transport of Radioactive Materials

• USSR

GENERAL LEGISLATION

Act on social protection of citizens suffering damage due to the Chernobyl disaster (1991)

The Act, signed by President Gorbachev in Moscow on 12 May 1991, is stated to be for the protection of the rights and interests of the citizens of the USSR who were injured by the Chernobyl disaster, who took part in counteracting the Chernobyl accident or its consequences, who were in the area in which harmful factors occurred arising out of the accident, or who were evacuated or resettled from areas suffering radioactive contamination

It provides that USSR citizens are entitled to compensation for damage caused to their health and property by the Chernobyl disaster, as well as to special medical care, compensation and advantageous living and working conditions in the affected areas Foreign citizens and stateless persons who participated in counteracting the effects of the Chernobyl accident are also entitled to compensation for damage to their health and property caused in the USSR

Habitation of contaminated areas - basic aims

The Act is based on conditions worked out by the USSR Academy of Science, together with the Academies of Science of the Republics, for long-term habitation of contaminated areas The principal criterion for deciding the necessity for protective measures as well as for compensation is the radiation dose received by the population as a result of the accident

An increase in radiation of the population which in 1991 and following years does not exceed an average annual dose equivalent of 1 mSv (0 1 rem), is permissible and does not require any intervention In cases of a greater increase than this, protective measures are called for, which must aim at a constant reduction in the radiation dose (and in the contamination of food) while at the same time attempting to avoid restrictions which disturb the way of life of the population The aim is not to exceed an average dose of 5 mSv (0 5 rem) in 1991 and to reduce this limit to 1 mSv per year under conditions which are economically and socially acceptable

Classification of zones

The Act applies to territory in the RSFSR (Russia), the Ukraine and Byelorussia which suffered radioactive contamination following the Chernobyl disaster It provides for the governments of the three Republics, in agreement with the competent authorities of the USSR, to divide this territory into the following zones

1 **Prohibited zone** - the zone from which the population was evacuated in accordance with the radiation protection laws of 1986 Permanent habitation is prohibited, and economic activity and the use of natural resources are subject to restrictions to be fixed by the three Republics in agreement with the USSR government

2 **Resettlement zone** - includes areas outside the prohibited zone with specified ground contamination levels Within this zone, the population of areas where contamination exceeds the following levels is to be compulsorily resettled

- Caesium 137 above 40 Ci/km^2,
- Caesium between 15 and 40 Ci/km^2, where the average annual equivalent radiation dose may be above 5 mSv,
- Strontium 90 above 3 Ci/km^2, or
- Plutonium 239, 240 above 0 1 Ci/km^2

Areas with a ground contamination level of caesium 137 between 15 and 40 Ci/km², where the average annual equivalent radiation dose is not above 5 mSv, also form part of this zone Resettlement from these areas is not compulsory, but the inhabitants are entitled to compensation, whether they have remained in the areas or have left voluntarily

3 **Zone of long-term habitation with right of resettlement** - includes territories outside the prohibited and re-settlement zones with ground contamination levels of caesium 137 between 5 and 15 Ci/km² Inhabitants of places where the average annual effective equivalent radiation dose of the population exceeds 1 mSv, who have decided to move from the zone to live elsewhere are entitled to compensation

In zones 2 and 3 compulsory regular medical inspection of the health of the population is to be provided and protective measures must be undertaken to reduce the radiation dose The inhabitants are to be informed of these measures through the mass media

4 **Zone of long-term habitation with privileges in social and economic status** - includes areas other than the three zones described, with a ground contamination level of caesium of between 1 and 5 Ci/km², and average annual effective equivalent radiation dose of the population not exceeding 1 mSv

In this zone periodic radiation checks and medical supervision of the health of the population are to be provided

Decontamination

The Act provides that measures are to be taken to clean up areas contaminated by radiation due to the Chernobyl disaster These are to be organised through consultation between the three Republics and the central Government

The decision to allow permanent habitation to be resumed in the prohibited zone and the resettlement zone is to be taken by the Governments of the three Republics

Compensation

The Act sets out ten categories of citizens who have suffered damage due to the Chernobyl accident and to whom the Act applies These categories cover citizens of the USSR who suffered personal injury as a result of the Chernobyl disaster, who took part in counteracting the accident or its consequences, who were in areas affected by the accident, or who were evacuated or resettled from areas suffering radioactive contamination

In relation to each of these categories, the Act sets out entitlements such as free medicines, costs of transport for the purpose of medical examinations, payment of invalid pensions, accommodation entitlements, rental subsidies, priority in the allocation of employment and income support during unemployment due to re-settlement The Act also lays down the basic forms and amounts of monetary compensation payments

Administration

The Act also contains provisions concerning administration in the affected zones - notably in relation to the army and medical assistance for victims

• *United States*

RADIATION PROTECTION

Standards for protection against radiation (1991)

On 21 May 1991, the Nuclear Regulatory Commission published in the Federal Register (56 FR 23360) a revision of its Regulation 10 CFR Part 20, Standards for Protection Against Radiation. That regulation applies to all NRC licensees. The revision reflects developments in the principles and scientific knowledge underlying radiation protection that have occurred since Part 20 was originally issued, including updated scientific information on radionuclide uptake and metabolism They also reflect changes in the basic philosophy of radiation protection In addition, the revision implements the 1987 Presidential Radiation Protection Guidance to Federal Agencies on Occupational Radiation Exposure, which was based on ICRP Publication 26 (International Commission on Radiological Protection)

Certification of industrial radiographers (1991)

On 19 March 1991, the NRC published in the Federal Register (56 FR 11504), amendments to its regulations in 10 CFR 34, to provide licence applicants and licensees the option of affirming that individuals acting as radiographers will be certified in radiation safety by the American Society for Nondestructive Testing (ASNT) prior to commencing work as radiographers Licence applicants may now use ASNT certification in lieu of the current requirement for descriptions of planned initial radiation safety training and qualification procedures

Notification of incidents (1991)

On 10 August 1991, the NRC published in the Federal Register (56 FR 40757) amendments to its regulations in Title 10, Code of Federal Register to revise reporting requirements regarding incidents related to radiation safety applicable to persons licensed to possess by-product, source and special nuclear material

The amendments added new sections to 10 CFR Parts 30, 40 and 70 that require persons licensed under those parts to notify the NRC as soon as possible, but not later than 4 hours after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits, or releases of licensed material that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc)

The licensees are also required to notify the NRC within 24 hours after the discovery of any of the following events involving licensed material·

1 An unplanned contamination event that

- requires access to the contamination area, by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area,
- involves a quantity of material greater than five times the lowest annual limit on intake for the material, and
- results in access to the area being restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination

2 An event in which equipment is disabled or fails to function as designed when

- the equipment is required by regulation or licence condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident,
- the equipment is required to be available and operable when it is disabled or fails to function, and
- no redundant equipment is available and operable to perform the required safety function

3 An event that requires unplanned medical treatment, at a medical facility, of an individual with spreadable radioactive contamination on the individual's clothing or body

4 An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when

- the quantity of material involved is greater than five times the lowest annual limit on intake for the material, and
- the damage affects the integrity of the licensed material or its container

Licensees are also required to submit a written follow-up report within 30 days of event

Emergency response data system (1991)

On 13 August 1991, the NRC published in the Federal Register (56 FR 40178), a notice of rule making that requires persons holding licences to operate nuclear power reactors to participate in the Emergency Response Data System (ERDS) programme Such licensees must submit to the NRC timely and accurate data on a limited set of parameters whose values indicate the condition of the plant during a declaration of an alert or higher emergency classification This action will ensure that all licensees establish a definite schedule for implementation of the ERDS programme

The regulation, which amends 10 CFR Part 50, Domestic Licensing Production and Utilisation Facilities, applies to all licensed nuclear power reactor facilities, except Big Rock Point and those that are permanently or indefinitely shut down However, units shut down for maintenance, or authorised for fuel loading only, or low power operations, are required to report

REGIME OF NUCLEAR INSTALLATIONS

Access authorisation for nuclear power plants (1991)

On 25 April 1991, the NRC published in the Federal Register (56 FR 18997) amendments to its regulations in 10 CFR Part 73, Physical Protection of Plants and Materials The amendments require nuclear power plant licensees to establish and maintain an access authorisation programme for individuals requiring unescorted access to protected and vital areas at nuclear power plants The programme must include background investigation, psychological assessment, and behavioural observation

Enrichment facilities (1991)

On 16 September 1991, the NRC published in the Federal Register (56 FR 46739) a notice of proposed rule-making, proposing amendment of its regulations concerning the licensing of uranium enrichment facilities to reflect changes made to the Atomic Energy Act of 1954, as amended by the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 The principal effect of the proposed amendments would be that uranium enrichment facilities would be licensed under the provisions of the Act pertaining to source material and special nuclear material, rather than those pertaining to production facilities

REGULATIONS ON NUCLEAR TRADE

Revision to the Commodity Control List. changes in nuclear non-proliferation controls (1991)

On 27 August 1991, the Bureau of Export Administration of the Department of Commerce published in the Federal Register (56 FR 42652) an interim rule to amend the Commodity Control List, by revising the items subject to export controls for reasons of nuclear non-proliferation, known as the Nuclear Referral List The changes reflect technological developments as well as US nuclear non-proliferation policy

INTERNATIONAL REGULATORY ACTIVITIES

• International Atomic Energy Agency

RESOLUTION ON THE NON-COMPLIANCE OF IRAQ WITH THE IAEA SAFEGUARDS AGREEMENT (1991)

It is recalled that the Security Council of the United Nations adopted a resolution on 23 April 1991 (Resolution No 687) stating the conditions for a formal cease-fire to end the Gulf conflict which followed Iraq's invasion of Kowait This resolution required Iraq, inter alia, to declare all its nuclear material to the IAEA, and to unconditionally agree not to acquire or develop nuclear weapons, material that could be used in such weapons, etc (extracts from this text have been reproduced in Nuclear Law Bulletin No 47)

On 18 July 1991, the IAEA Board of Governors declared that Iraq had violated its Safeguards Agreement with the IAEA by not submitting nuclear material and relevant facilities in its uranium enrichment programme to the Agency's inspection, and decided to transmit its conclusions to the Security Council The Board furthermore adopted a resolution condemning Iraq for its non-compliance with its safeguards obligations This resolution is reproduced in the "Texts" Chapter of this issue of the Bulletin

IAEA GENERAL CONFERENCE (1991)

The IAEA General Conference concluded its 35th session, held from 16 to 20 September 1991, by adopting a set of resolutions concerning in particular, nuclear safety and radiological protection, application of IAEA safeguards in the Middle East and Iraq's non-compliance with its obligations, Israeli and South African nuclear capabilities, and strengthening of IAEA activities to maintain and strengthen the effectiveness and efficiency of the Safeguards System

The resolutions on nuclear safety and radiological protection include a resolution inviting the IAEA Director General to prepare an outline of the possible elements of a nuclear safety convention, to initiate a process for developing a common basis for judging the acceptable level of safety of all operating nuclear power plants built to earlier standards, to set up an expert group to develop safety principles for the design of future reactors, and to make proposals for specific actions to address the problems identified in the report of the International Chernobyl Project The resolution also stresses the need to consider a harmonized international approach to all aspects of nuclear safety, including safety objectives for nuclear waste and further reiterates the priority attached to consideration of all aspects of the question of liability for damage arising from a nuclear accident

As regards the application of safeguards in the Middle East and Iraq's non-compliance with its obligations, the resolution relating to the first point requests the IAEA Director General to take the necessary measures to facilitate early application of full-scope safeguards in that area, while the second strongly condemns Iraq and requests the Director General to report the views of the General Conference to the Secretary-General of the United Nations and to report to the Board of Governors and the next General Conference on efforts to implement the Security Council Resolutions

The resolution on Israel calls once again for that country to submit its nuclear installations to IAEA safeguards, and the resolution on South Africa notes that it has concluded a safeguards agreement with the IAEA and committed itself to its early and full implementation

• European Communities

COMMISSION COMMUNICATION ON IMPLEMENTING COUNCIL DIRECTIVE ON INFORMING THE GENERAL PUBLIC ABOUT HEALTH PROTECTION IN THE EVENT OF A RADIOLOGICAL EMERGENCY (1991)

On 27 November 1989, the Council of the European Communities adopted Directive 89/618 Euratom on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency (the text of the Directive is reproduced in Nuclear Law Bulletin No 45)

The Commission of the European Communities decided to issue a Communication to help the Member States to transpose this Directive into their national laws (No C 103/03, published in the Official Journal of the European Communities of 19 April 1991) The Communication provides guidance relating to Articles 5 and 6 of the Directive and its Annexes which concern prior information to be given in a normal situation and information in the event of a radiological emergency

The Communication is to be regarded simply as a reference document and advises on organising the dissemination of information and determining its content The text of the Communication is reproduced in the "Texts" Chapter of this issue of the Bulletin

• IAEA-NEA-WHO-ILO

REVISION OF THE BASIC SAFETY STANDARDS FOR RADIATION PROTECTION (1991)

The last few years have seen significant developments and achievements in the field of radiation protection, the major event being a revision of the 1977 recommendations on radiological protection of the International Commission on Radiological Protection (ICRP) in November 1990 (see Nuclear Law Bulletin No 47) The ICRP recommendations are taken into account by the competent international organisations below which publish jointly basic safety standards for radiation protection (BSS)

The International Atomic Energy Agency (IAEA), the OECD Nuclear Energy Agency (NEA), the World Health Organization (WHO) and the International Labour Organization (ILO) are presently undertaking a revision of the previous BSS (see Nuclear Law Bulletin Nos 28, 30) Work on revising the BSS began early in 1991 and the four organisations were joined by the Food and Agriculture Organisation (FAO) and the Pan American Health Organization (PAHO)

The new ICRP recommendations have introduced some important developments, they have been deliberately drafted in general and scientific terms to leave sufficient scope for interpretation and application to their users, in particular, the national authorities The ICRP guidance is to be converted into terms which will facilitate its transfer into regulatory and operational practices at national level A Drafting Group has been set up to prepare a text to be submitted in 1992 to international review and approval

It was agreed that the BSS should be given the character of "standards" that national authorities could use as a regulatory basis for the protection of workers and members of the public

AGREEMENTS

BILATERAL AGREEMENTS

• *Argentina-Brazil*

AGREEMENT ON THE USE OF NUCLEAR ENERGY SOLELY FOR PEACEFUL PURPOSES (1991)

Over the years, Argentina and Brazil concluded several agreements for co-operating in the peaceful uses of nuclear energy The latest was a declaration on their joint nuclear policy issued by the Presidents of Argentina and Brazil at Foz do Iguaçu, Brazil, on 28 November 1990 (see Nuclear Law Bulletin No. 47) The declaration sets out their agreement to establish of a joint system of accounting and control of nuclear materials in both countries.

Further to this declaration, both countries concluded an Agreement on 18 July 1991 in Guadalajara, Mexico, specifying that they would use nuclear energy solely for peaceful purposes, reaffirming the principles of the Treaty for the Prohibition of Nuclear Weapons in Latin America (Tlatelolco Treaty) and providing for the establishment of the joint sytem of accounting and control (SCCC)

The purpose of the SCCC is to enable the Parties to verify and ensure that the nuclear materials for their respective activities are used in accordance with the conditions set out in the Annex to the Agreement The Agreement provides for the setting up of an Argentine/Brazilian Agency for accounting and control of nuclear materials (ABACC), responsible for adminiinistering and implementing the system The duties of the ABACC, which will have legal personality, will include, inter alia, appointing inspectors to carry out inspections in accordance with the provisions of the Agreement and evaluating their results The ABACC will be run by a Commission made up of four members, each Party designating two The Commission is to be established within sixty days of the entry into force of the Agreement

• Australia-Japan

AGREEMENT TO AMEND THE IMPLEMENTING ARRANGEMENT PURSUANT TO THE 1982 AGREEMENT FOR CO-OPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY (1990)

This Agreement was concluded by an exchange of notes on 27 July 1990 and entered into force on the same date It amends the Implementing Arrangement relating to the Agreement of 5 March 1982 between Australia and Japan for co-operation in the peaceful uses of nuclear energy (see Nuclear Law Bulletin No 30).

The 1982 Agreement applies to nuclear materials and equipment transferred between both countries, directly and through a third country; the Implementing Arrangement has been amended to take into account changes in Japan's nuclear fuel cycle programme as compared to the originally planned programme set out therein.

• Canada-Germany

MEMORANDUM OF UNDERSTANDING ON NUCLEAR SAFETY AND RADIATION PROTECTION (1991)

On 23 May 1991, the President of the Atomic Energy Control Board of Canada (AECL) and the German Federal Minister for the Environment, Nature Conservation and Nuclear Safety signed the above Memorandum of Understanding on co-operation and exchange of information respecting nuclear safety and radiation protection It covers the period 23 May 1991 to 1 June 1996, unless extended

The Parties may exchange information on any matter concerning the civil uses of nuclear energy within the other Party's jurisdiction and, in particular information on

- nuclear installations, their siting, construction, operation and decommissioning,
- uranium mining and milling,
- nuclear fuel production,
- radioactive waste treatment, storage and disposal,
- transport of nuclear fuel and radioactive waste,

- radiation protection;

- legislation, regulations, standards,

- licensing, technical reports, safety assessments, safety-related research in connection with licensing of nuclear installations,

- incident reports and press and public reactions to any event of major radiological significance, and the remedial response action

The Parties undertake to ensure that all information received and the results of activities carried out under this Memorandum of Understanding will be used exclusively for peaceful purposes.

• Canada-United Kingdom

ARRANGEMENT FOR CO-OPERATION AND EXCHANGE OF INFORMATION IN THE NUCLEAR FIELD (1991)

The Atomic Energy Control Board (AECB) and the United Kingdom Health and Safety Executive have extended the Arrangement for exchange of information that has been in effect since 1976 The new Arrangement covers the period from 31 May 1991 to 1 June 1996 It recalls the principles of information exchange set out in the previous Arrangement, and adds a clause relating to exchange of personnel

Under the Arrangement, the Parties may exchange information on administrative, regulatory and technical questions as well as on press and public reactions to incidents The information could concern the nuclear installation itself (siting, decommissioning), or safety (assessments, research and development work) or treatment of radioactive wastes The Arrangement also covers information concerning any event that has a major radiological significance and the remedial actions undertaken in response In addition, the Arrangement lists "excepted information", for example for national security or commercial reasons

Each Party undertakes to implement and administer the Arrangement through a designated Administrator The information exchanged will be used solely for peaceful purposes

• Czechoslovakia - United States

AGREEMENT ON CO-OPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY (1991)

The Government of the Czech and Slovak Federal Republic and the Government of the United States signed the above Agreement on 13 June 1991 The Agreement covers a period of thirty years and may be extended The Agreement provides for the transfer of information, material, equipment and technology Information transfers may cover

- development, siting, design, construction, operation and use, decommissioning of reactors,
- use of material in physical and biological research,
- fuel cycle studies of ways to meet future world-wide nuclear needs, nuclear fuel supply, nuclear waste management,
- safeguards and physical protection,
- health, safety and environmental considerations

Material and equipment transfers may include

- low enriched uranium for use in fuel in reactor experiments and in reactors, for conversion or fabrication;
- small quantities of special nuclear material for use in reactor experiments or in reactor loading, for use as samples, standards, etc

Sensitive nuclear technology and sensitive nuclear facilities (information not in the public domain ; facilities for uranium enrichment, reprocessing) may not be transferred unless provided for under an amendment to the Agreement Restricted data (i e. nuclear weapon technology) may not be transferred

It is specified that IAEA safeguards, in accordance with the Parties' respective Safeguards Agreements with the IAEA will apply to all nuclear activities within the scope of the Agreement, physical protection measures will be maintained in accordance with the levels specified in the Annex thereto

It is stipulated that co-operation under the Agreement will be carried out for peaceful purposes only and specified items transferred under the Agreement or material produced through their use will not be used for any nuclear explosive device, for research on or development of such devices or for any military purposes.

• France-Germany

JOINT DECLARATION ON CO-OPERATION IN THE FIELD OF NUCLEAR SAFETY (1991)

With this new Declaration, issued on 30 May 1991, France and Germany specified the scope and conditions of their co-operation for the benefit of Central and Eastern European countries, stated in the previous Joint Declaration by both countries on 6 June 1989 concerning the peaceful use of nuclear energy (see Nuclear Law Bulletin No 44) The two countries wished to pool their experience in the nuclear safety sector to help those other countries They reaffirmed however that each country would remain responsible for installations situated in its own territory

Co-operation proposed by the Declaration covers

- assistance in training operators of nuclear installations,
- assistance to the safety authorities in Eastern European countries, to be provided by the French and German safety authorities and their technical support services, the latter will make safety assessments jointly, with participation by experts from the countries concerned,
- assistance with the necessary backfittings, and also by extensive co-operation in the energy field with a view to replacing existing units which will be decommissioned for safety or environmental reasons in Eastern Europe It will also cover the modernisation of their electricity grids.

The Declaration also mentions plans for a joint initiative to associate the International Atomic Energy Agency (IAEA) and the Organisation for Economic Co-operation and Development (OECD) in an international action, to be placed on the agenda of the next meeting of the market economy countries

It is recalled that the Declaration of 6 June 1989 was supplemented by a Joint Declaration with Belgium and the United Kingdom, issued on 25 March 1991 (the text of this latter Declaration is reproduced in Nuclear Law Bulletin No 47)

AGREEMENT ON THE BACK-END OF THE FUEL CYCLE (1991)

On 5 May 1991, the French Atomic Energy Commission (CEA) and the German Federal Ministry for Research and Technology (BMFT) concluded an outline Agreement on R&D covering radioactive waste processing and its final storage as well as decommissioning The technical aspects of this co-operation are numerous and will be implemented by specific agreements

This Agreement illustrates both countries' research departments resolve to extend the scope of their co-operation to the back-end of the fuel cycle, it falls within the framework of the Joint Declaration on co-operation in the peaceful uses of nuclear energy mentioned in the preceding note

• France - Hungary

AGREEMENT FOR CO-OPERATION IN THE PEACEFUL USES OF ATOMIC ENERGY (1991)

The French Atomic Commission (CEA) and the Hungarian Atomic Energy Commission signed the above co-operative Agreement on 28 May 1991 The fields of co-operation are the following

- nuclear safety,
- fundamental physics research,
- radiation protection and environmental protection,
- fundamental biology research,
- R&D in radioactive waste management,
- regulations and strategy in nuclear electricity generation

A co-ordinating committee has been set up to organise this co-operation which will be carried out through possible specialist visits, arrangement of conferences, exchange of documentation, joint studies It may also be extended to cover industrial and commercial co-operation

• France - Japan

AGREEMENT FOR CO-OPERATION ON ADVANCED NUCLEAR TECHNOLOGIES (1991)

On 14 June 1991, the French Atomic Energy Commission (CEA) and the Power Reactor and Nuclear Fuel Development Corporation of Japan (PNC) signed an Agreement on R&D in the field of advanced nuclear technologies.

The purpose of the Agreement is to determine the conditions of co-operation between the Parties Co-operation will cover reactor technology and the fuel cycle

To this effect, the Parties will exchange information, visit their respective installations, undertake joint R&D studies and projects, and exchange personnel

• Romania - EC

AGREEMENT ON COMMERCIAL AND ECONOMIC CO-OPERATION (1991)

By Act No 23 of 4 March 1991, the Romanian Government authorised ratification of an Agreement concluded with the European Communities on co-operation in the economic and commercial fields

The Agreement provides for extensive co-operation, also in the nuclear sector, in particular, on questions of nuclear safety and radiation protection

MULTILATERAL AGREEMENTS

ENTRY INTO FORCE OF THE 1982 PROTOCOL TO AMEND THE BRUSSELS SUPPLEMENTARY CONVENTION - RATIFICATION OF THE 1982 PROTOCOL TO AMEND THE PARIS CONVENTION

On 1 August 1991, the Netherlands ratified the Protocol of 16 November 1982 to amend the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy, as well as the Protocol of the same date to amend the 1963 Brussels Convention, supplementary to the Paris Convention (Brussels Supplementary Convention)

With the deposit of these instruments of ratification, the Protocol concerning the Brussels Supplementary Convention has entered into force, thus raising to 300 million Special Drawing Rights the financial security available in case of a nuclear incident It is recalled that the Protocol to amend the Paris Convention has been in force since 7 October 1988

More detailed information on the Protocols is provided in Nuclear Law Bulletin No 30

The tables below give the status of both Conventions, as ratified by their respective Protocols

PARIS CONVENTION

Signatories	Date of ratification or accession		
	Convention	1964 Additional Protocol	1982 Protocol
Austria			
Belgium	3 August 1966	3 August 1966	19 September 1985
Denmark	4 September 1974	4 September 1974	16 May 1989
Finland (acc)	16 June 1972	16 June 1972	22 December 1989
France	9 March 1966	9 March 1966	6 July 1990
Germany	30 September 1975	30 September 1975	25 September 1985
Greece	12 May 1970	12 May 1970	30 May 1988
Italy	17 September 1975	17 September 1975	28 June 1985
Luxembourg			
Norway	2 July 1973	2 July 1973	3 June 1986
Netherlands	28 December 1979	28 December 1979	1 August 1991
Portugal	29 September 1977	29 September 1977	28 May 1984
Spain	31 October 1961	30 April 1965	7 October 1988
Sweden	1 April 1968	1 April 1968	8 March 1983
Switzerland	.		
Turkey	10 October 1961	5 April 1968	21 January 1986
United Kingdom	23 February 1966	23 February 1966	19 August 1985

BRUSSELS SUPPLEMENTARY CONVENTION

Signatories	Date of ratification or accession	
	Convention and 1964 Additional Protocol	1982 Protocol
Austria		.
Belgium	20 August 1985	20 August 1985
Denmark	4 September 1974	10 May 1989
Finland (acc)	14 January 1977	15 January 1990
France	30 March 1966	11 July 1990
Germany	1 October 1975	25 September 1985
Italy	3 February 1976	14 June 1985
Luxembourg		..
Norway	7 July 1973	13 May 1986
Netherlands	28 September 1979	1 August 1991
Spain	27 July 1966	29 September 1988
Sweden	3 April 1968	22 March 1983
Switzerland		...
United Kingdom	24 March 1966	8 August 1985

JOINT PROTOCOL RELATING TO THE APPLICATION OF THE VIENNA CONVENTION AND THE PARIS CONVENTION

This Joint Protocol was adopted and opened for signature on 21 September 1988 Norway and Italy deposited their instruments of ratification of the Protocol on 11 March 1991 and 31 July 1991 respectively, and the Netherlands deposited its instrument of acceptance on 1 August 1991 More detailed information on this Protocol, which is not yet in force, is given in Nuclear Law Bulletin Nos 42 and 43

The following table gives the status of the Joint Protocol

JOINT PROTOCOL

Signatories	Date of ratification, accession, acceptance or approval
Argentina (VC)	
Belgium (PC)	
Cameroon (VC)	
Chile (VC)	23 November 1989
Denmark (PC)	26 May 1989
Egypt (VC)	10 August 1989
Finland (PC)	
France (PC)	
Germany (PC)	
Greece (PC)	
Hungary (VC)	26 March 1990
Italy (PC)	31 July 1991
Morocco (VC)*	
Netherlands (PC)	1 August 1991
Norway (PC)	11 March 1991
Philippines (VC)	
Poland (VC)(acc)	23 January 1990
Portugal (PC)	
Spain (PC)	
Sweden (PC)	
Switzerland (PC)*	
Turkey (PC)	
United Kingdom (PC)	

(PC) Paris Convention
(VC) Vienna Convention
* Signatory only of the basic Convention

1971 CONVENTION RELATING TO CIVIL LIABILITY IN THE FIELD OF MARITIME CARRIAGE OF NUCLEAR MATERIAL (1991)

The above Convention was adopted on 17 December 1971 and entered into force on 15 July 1975 (see Nuclear Law Bulletin Nos 16 and 23) Its purpose is to eliminate the practical difficulties which could impede insurance of the maritime carriage of nuclear substances Under maritime law, shipowners carrying nuclear substances may be held liable without a limitation for damage caused by such substances if they can be shown to have been at fault This Convention lays down that maritime carriers of nuclear substances are exonerated from any liability for damage caused by a nuclear incident, if the operator of a nuclear installation is liable for such damage under the Paris or Vienna Conventions or under national law, provided that such law is in all respects as favourable to persons who may suffer damage as the Paris and Vienna Conventions In addition, shipowners are excluded from liability for damage to the nuclear installation or the means of transport. The table below gives the status of ratifications/accessions to the Convention

Contracting Parties	Date of ratification/ accession	Date of entry into force
Argentina(acc)	18 May 1981	16 August 1981
Belgium (ratif)	15 June 1989	13 September 1989
Denmark (ratif)	4 September 1974	15 July 1975
Finland (ratif.)	6 June 1991	4 September 1991
France (ratif)	2 February 1973	15 July 1975
Gabon (acc)	21 January 1982	21 April 1982
Germany (ratif)	1 October 1975	30 December 1975
Italy (ratif)	21 July 1980	19 October 1980
Liberia (acc.)	17 February 1981	18 May 1981
Netherlands (ratif)	1 August 1991	30 October 1991
Norway (ratif)	16 April 1975	15 July 1975
Spain (acc)	21 May 1974	15 July 1975
Sweden (ratif)	22 November 1974	15 July 1975
Yemen (acc)	6 March 1979	4 June 1979

CONVENTION ON ENVIRONMENTAL IMPACT ASSESSMENT IN A TRANSBOUNDARY CONTEXT (1991)

On 26 February 1991, the Convention on Environmental Impact Assessment in a Transboundary Context was opened for signature under the aegis of the United Nations Economic and Social Council

The purpose of this worldwide Convention is to establish a system of effective measures to prevent, reduce and control significant adverse transboundary environmental impact To this effect, it organises the exchange

of information between the State on whose territory the activity concerned will take place and those States likely to be adversely affected by that activity The measures include the prior notification of the planned activity with its description and a proposal to participate in the environmental impact assessment procedure, to be undertaken at the project level

It should be noted that this Convention specifically includes in environmental law, nuclear activities among the industrial dangerous activities likely to have a transboundary impact These activities include nuclear power stations and other nuclear reactors, as well as installations solely designed for the production or enrichment of nuclear fuels, for the reprocessing of irradiated nuclear fuels or for the storage, disposal and processing of radioactive waste Other activities may be added by consent between the Parties

When the Convention enters into force it will provide its States Parties with an international legal framework for the systematic exchange of information on planned nuclear or other installations likely to have transboundary consequences according to a standardised procedure, prior to the actual establishment of the installation concerned, thus initiating a mechanism of advance consultation regarding all such activities

• IAEA

RESOLUTION OF THE IAEA BOARD OF GOVERNORS ON THE NON-COMPLIANCE OF IRAQ WITH THE IAEA SAFEGUARDS AGREEMENT

(18 July 1991)

Resolution submitted jointly by China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America Co-sponsored by Australia, Austria, Belgium, Canada, Czechoslovakia, Germany, Italy, Japan, Poland, Portugal, Sweden and Ukranian SSR

The Board of Governors,

(a) Stressing the importance of non-proliferation of nuclear weapons to international and regional peace and security,

(b) Expressing grave concern about the conclusion of the report of the Director General (GOV/2530) that the Government of Iraq has failed to comply with its obligations under its safeguards agreement with the IAEA (INFCIRC/172),

(c) Recalling United Nations Security Council resolution 687 which, inter alia, called upon Iraq to declare all its nuclear activities to the International Atomic Energy Agency,

(d) Noting with appreciation the efforts of the Director General and his staff to implement the tasks assigned to the Agency by that resolution, and the diligent and effective conduct of the Agency's inspections of Iraqi nuclear activities, and

(e) Expressing grave concern about the evident deception and obstruction of IAEA inspectors in their efforts to carry out the Security Council's mandate in resolution 687, in violation of that resolution and the undertakings by Iraq governing the status, privileges and immunities of the IAEA and the inspection teams mandated under Security Council resolution 687,

1 Finds, on the basis of the report of the Director General in GOV/2530, that the Government of Iraq has not complied with its obligations under its safeguards agreement with the Agency (INFCIRC/172),

2 Condemns this non-compliance by the Government of Iraq with its safeguards agreement,

3 Calls upon the Government of Iraq to remedy this non-compliance forthwith, including placing any and all additional source and special fissionable material within Iraq's territory, under its jurisdiction or its control, regardless of quantity or location under Agency safeguards in accordance with the relevant provisions of INFCIRC/172 and in accordance with relevant technical determinations of the Agency,

4 Decides, in accordance with Article XII C of the Statute, to report this non-compliance to all members of the Agency and to the Security Council and General Assembly of the United Nations;

5 Calls upon Iraq to cease all obstruction or interference with the IAEA inspection teams in their efforts to implement Security Council resolution 687,

6 Requests the Director General to keep the Board and the General Conference informed of progress in the implementation of this resolution so that they may consider appropriate action in accordance with Article XII C and XIX B of the Statute in the event of the Government of Iraq's failing to take fully corrective action; and

7 Decides to inscribe an item entitled "Iraq's non-compliance with its safeguards obligations" on the agenda of September Board of Governors and requests the Director General to include such an item in the provisional agenda for the thirty-fifth regular session of the General Conference

• European Communities

COMMISSION COMMUNICATION ON THE IMPLEMENTATION OF COUNCIL DIRECTIVE 89/618/EURATOM OF 27 NOVEMBER 1989 ON INFORMING THE GENERAL PUBLIC ABOUT HEALTH PROTECTION MEASURES TO BE APPLIED AND STEPS TO BE TAKEN IN THE EVENT OF A RADIOLOCIAL EMERGENCY*

(91/C 103/03)

I. GENERAL REMARKS

1 The purpose of this communication is to help the Member States in transposing the Directive into national law

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* The full text of the Directive is reproduced in Nuclear Law Bulletin No 45

It should be regarded as a reference document since Member States are bound only by the provisions of the Directive.

In order to be as helpful as possible some examples are quoted as to ways in which the objectives are achieved in some Member States

2 The aim of the Council in adopting this Directive on 27 November 1989 was to supplement Council Directive 80/836/Euratom 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, especially Article 45 which requires Member States to stipulate intervention levels and the necessary resources to safeguard the health of the population in the event of an accident.

3 Directive 89/618/Euratom lays down two types of action

- prior information to be given in a normal situation to the population likely to be affected (Article 5 of the Directive),

- information to be given in the event of a radiological emergency to the population actually affected (Article 6 of the Directive)

These two types of information are complementary and should therefore both be given whenever it is possible to do so, this should always be the case for fixed plant or facilities covered by Article 2. For transport or nuclear powered satellite accidents it will often not be possible to give "prior information", but in many situations it may be possible to give "early information" during a pre-alarm phase, e g as when a satellite begins a descent which will last several days or even weeks, or when a ship is beached but the containers of the radioactive material it is carrying are not breached In such a pre-alarm phase "early information" could be given as preparation for any necessary further information if the event does proceed to a significant release of radioactivity

4 The two types of information laid down by the Directive cover not only the protection measures and behaviour to be adopted in the event of an emergency but also the basic facts about radioactivity and its effects

5 Experience in implementing Article 8 of Council Directive 82/501/EEC of 24 June 1982 on the major accident hazards of certain industrial activities, which is known as the "Seveso" Directive and concerns information to be supplied to the persons liable to be affected on the hazards of major accidents other than nuclear accidents, has shown that in order to be effective any policy for providing information to the general public on technological hazards must ensure that

- there is a high degree of co-operation between the parties involved (national, regional and local authorities and plant operators)

  Agreements can be concluded with the parties concerned regarding the division of responsibilities, methods and timetable for communicating information and the content of the information,

- the provision of information to the general public forms an integral part of emergency planning

6 Where similar advice is given about emergency plans for other serious industrial accidents, it may be beneficial to include all the advice in one document, to avoid confusing and annoying the general public

II. PRIOR INFORMATION

A. Organisation of the dissemination of information (Article 5)

1 A clear distinction must be made between regional or local populations, for which there are regional or local intervention plans relating to fixed installations, and the population as a whole, for which a national intervention plan may be drawn up to deal also with accidents outside national borders or resulting from activities not related to fixed installations (e g accidents during the transport of radioactive materials)

The prior information which must be given to these two categories of population under Article 5 is of two different types The information given to the persons in the vicinity of fixed installations could be more detailed than that given to the population as a whole, since the latter is less likely to be affected by a radiological emergency

One of the functions of the information provided at regional or local level should be to "prepare the ground" by giving specific information in advance to those playing a key role in the dissemination of information, e g plant personnel, local politicians and journalists, as well as to those with direct responsibilities for carrying out the intervention plan

2 The creation of local committees including, for example, representatives of local authorities, competent national authorities and relevant organisations could play a decisive role in providing adequate and detailed information to the local population concerned

3 The basic intervention plan is, perhaps, one of the most effective information tools It could be published in an appropriate form and made widely available for the general public

Also the public could be allowed to consult their regional or local intervention plans under conditions determined by the competent authorities taking into account confidentiality and national security needs

4 Information could also be provided as part of the curricula adopted in schools at all levels

5 The Member States must provide information to the general public on their own initiative, without receiving a request to do so [Article 5(3) of the Directive]

6 The competent authorities in the Member States should decide how individuals are to receive the information - for example by means of a letter or information leaflet addressed to them - and set out in detail how to inform the local population, as a community - for example by displaying public notices within a certain radius, placing notices in local newspapers, radio or television, organising exhibitions providing plans, literature, illustrations and models, arranging visits to installations and holding public meetings

In a public announcement or in the information disseminated by letter or information leaflet the authorities could specify the places and bodies where additional information may be consulted or obtained

The Member States may also wish to consider incorporating prior information in other publications that are more likely to remain available in case of need, e g in telephone directories

7 The Member States are responsible for laying down the intervals at which information is to be distributed. The intervals must be sufficiently close to ensure that up to date information is available at all times, e g every two or three years

8 Whatever the normal frequency of re-issue, the information distributed should also be updated whenever major changes made to intervention plans have a practical impact on the population For example, these would include changes affecting the system of alert, the protection measures and the area covered by the intervention plan.

B. Determining the content of the information (Annex I to the Directive)

TRANSPARENCY CREATS CONFIDENCE

1 In normal circumstances, the information provided should be primarily instructive and aimed at reassuring the general public that emergency plans exist, both at national level for hazards associated also with non-fixed installations or originating outside national borders, and at regional or local level for fixed installations

In order to ensure that the general public takes the message seriously without exaggerating the scale of the hazard, the information should be credible and allow the general public to see that the emergency plans drawn up would be implemented in the event of a real emergency

2 The four points set out in Annex I must be covered by the prior information, even in the case of the information given to the entire population in a national information plan

The information disseminated by the Member States may include other items not laid down in Annex I This principle is set out in Article 11 of the Directive.

It is also important to provide information on radiation protection, not just in relation to the hazards of nuclear energy but covering all radiation sources that may give rise to a radiological emergency

3 Basic facts about radioactivity and its effects

The following aspects could be covered in the prior information communication

The basic facts on radioactivity

Paying particular attention to the terminology used, scientific concepts should cover the physical and dosimetric aspects of radiation·

- explanations of "activity" and "dose",
- the scientific units connected with these quantities concepts (mention only Becquerels and Sieverts),
- a comparison between natural radioactivity and artificial radioactivity.

Effects on human beings and on the environment

- Explain the difference between irradiation and contamination
- Explain the distinction between immediate effects and delayed effects
- Pathways to man including transfer through the food chain

It would also be advisable to include the general principles of radiation protection with this general information

4 The various types of radiological emergency and their consequences for the population and the environment

The information for the population living near an installation should cover:

- a simple explanation of the work carried out at the installation,
- the unlikely possibility of an accident having any impact on the population,
- the types of emissions (gas, dust, liquid) which would be released from the installation in the event of an accident, and how far and how quickly they would spread.

  The International Nuclear Event Scale (INES) could be very useful for explaining the consequences of the various situations

5 Emergency measures envisaged to alert, protect and assist the population in the event of a radiological emergency

- Specify the means used to give the alert (sirens, radio, television, police).

- For local intervention plans, give a general description of how they are organised and of the protection measures

6 Appropriate information on action to be taken by the population in the event of a radiological emergency

The information on action in the short-term (from the first hours to the first days following the accident) could include listening for the alert, sheltering, listening to the radio and awaiting instructions

The information on action in the longer term could cover self-protection measures and observance of the decontamination instructions and, for example, conditions for consumption of foodstuffs and drinking water

III. INFORMATION IN THE EVENT OF A RADIOLOGICAL EMERGENCY

A. Organisation of the dissemination of information (Article 6 of the Directive)

1 In the event of a real radiological emergency, information must be provided systematically, rapidly and openly in order to encourage the population actually affected to adopt the appropriate behaviour This cannot be achieved without obtaining the confidence of the population

The credibility of the information depends very much on the time taken to provide it and how dissemination is organised

As laid down in Article 6(1), the information must be provided without delay, since lack of information and ignorance of the facts may produce anxiety and unforeseeable reactions on the part of the general public The Member States can therefore, if appropriate, begin informing the population at the pre-alarm phase [see Annex II(2)].

The most direct sources of information should be used (national, regional and local press and radio, television, direct answers by telephone and, if appropriate, computerised magazines such as teletexts)

Every step should be taken to ensure that sources of information are not giving contradictory information, e g by creating or appointing a national information dissemination agency with a co-ordinating function

2 The requirement for the Member States to provide information in a real radiological emergency applies to any situation likely to result in the general public receiving a dose during a period of one year following the accident in excess of the annual dose limit specified by the Directive laying down the Community's basic safety standards on radiation protection [see Article 12 of Directive 80/836/Euratom)

B. Determining the content of the information (Annex II to the Directive)

1 The information must be appropriate to the situation in question and need not necessarily cover all the points set out in Annex II There are various types of situation which might arise

- pre-alarm situation [Annex II(2)],
- situations where the type of accident is known [Annex II(1)(a)],
- situations where protective measures and action are required [Annex II(1)(b) and (c) list of options depending on the circumstances]

2 The Directive defines common objectives with regard to information aspects of the emergency plans

- the broad outlines of intervention plans should be made known to the general public in advance,
- they should also include arrangements for providing information in an accident situation in accordance with Annex II to the Directive

3 Depending on the type of radiological emergency, the information provided should cover the following:

Information on the radiological emergency

- the location, date and time of the accident,
- the type of radiological emergency,
- the main characteristics of the radioactive substances released,
- the area under threat,
- the probable development of the situation and the influence of climatic and meteorological factors

Advice on protection

- moving around outside and staying indoors,
- conditions for consuming food and drinking water (dilution, cleaning),
- restrictions and warnings on consumption,
- if appropriate, arrangements for supplying uncontaminated food and water,

- use of clothing and footwear,

- personal hygiene,

- distribution of iodine tablets,

- evacuation arrangements

  public transport (stops and timetable),

  routes for private vehicles and road traffic restrictions,

  shelters and their capacities,

  medical centres and arrangements for providing medical care

4 Special instructions for certain population groups

If appropriate, additional information may be disseminated for children and pregnant women (advice on food consumption, information on exposure of the embryo and foetus) and farmers (advice on harvesting conditions and protecting livestock)

Where doctors, teachers and journalists are channels of information they should therefore receive fuller details, right from the pre-alarm phase if such a phase is announced

The heads of educational establishments, social institutions (e g. homes for the aged), health institutions and industrial establishments should also receive information and advice at the pre-alarm phase on the action to be taken by the groups for which they are responsible

5 Advice to the population to follow the instructions given

The population should be encouraged to follow the instructions of competent authorities in the event of a radiological emergency (e g staying indoors or being evacuated)

6 Basic facts about radioactivity and its effects

In practice it may provide difficult, during the first days following an accident, to distribute relevant supplementary information on radioactivity and its effects Such information should therefore be provided subsequently

IV. FINAL REMARKS

1 The Commission suggests that the Member States take due account of this communication when introducing or adapting the regulations and administrative practices that are suitable for transposing the Directive into national law

2 The Commission points out that Article 33 of the Euratom Treaty requires Member States to communicate to the Commission any draft provisions to be laid down, whether by legislation, regulation or administrative action, to ensure compliance with the basic standards so as to enable the Commission to make appropriate recommendations The main consequence of this is that any draft regulations on the right of the population to receive information on radiation hazards or on the intervention plan must be subject to the aforementioned procedure to ensure their compliance with the Directive in question

BIBLIOGRAPHY AND CURRENT EVENTS

BIBLIOGRAPHY

• *Australia*

Australia's Nuclear Safeguards Agreements, Department of Foreign Affairs and Trade, Canberra, 1990, 205 pages

This is a compilation of the bilateral agreements concluded by Australia concerning co-operation in the peaceful uses of nuclear energy The publication also includes the agreement with the International Atomic Energy Agency (IAEA) for the application of safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the agreement with EURATOM on transfers of nuclear materials from Australia to the European Atomic Energy Community

The other agreements were concluded with the following countries: Canada, Egypt, Finland, France, Japan, Republic of Korea, Philippines, Singapore, Sweden, Switzerland, USSR, United Kingdom and United States They concern transfers of nuclear materials and equipment, research and development, exchange of information, etc All contain provisions on safeguards, physical protection and restrictions on exports to third countries

• *Czechoslovakia*

Vybrane pravni predpisy z oblasti miroveho vyuzivani jaderne energie v CSFR, Czechoslovak Atomic Energy Commission, Institute of Nuclear Information, Prague, 1990, 159 pages

This publication issued by the Czechoslovak Atomic Energy Commission contains all the legislative and regulatory texts in the Czech and Slovak Federal Republic dealing with the peaceful uses of nuclear energy It includes regulations covering the institutional background of nuclear activities,

nuclear safety inspections, nuclear safety standards, accountancy and control of nuclear materials, nuclear waste management, physical protection, qualification of selected workers in nuclear facilities, radiological protection, etc

• Germany

Reformüberlegungen zum atomrecht, edited by Rudolf Lukes, Carl Heymanns Publishing Co , Cologne, 1991 (Series Recht - Technik - Wirtschaft, Vol 61) 568 pages

The Federal Government is planning a comprehensive revision of the Atomic Energy Act The Federal Minister of the Environment, Nature Conservation and Reactor Safety entrusted a group of six nuclear law experts from German universities with the task of preparing the scientific basis for the exercise and working out detailed proposals

This book contains the studies prepared by the experts After an introduction by Rudolf Lukes (Münster), Fritz Ossenbühl (Bonn) deals with the constitutional and practical problems in connection with the so-called "Bundesauftragsverwaltung" Hans-Jürgen Papier (Bielefeld) covers the wide field of licensing, supervising, and backfitting nuclear installations as well as nuclear activities The subject treated by Hans-Werner Rengeling (Osnabrück) is nuclear waste disposal, while Hans D Jarass (Bochum) scrutinizes the law ranking below the Atomic Energy Act, i e the Ordinances, administrative regulations and guidelines Finally, Norbert Pelzer (Gottingen) examines the nuclear liability law with a view to improving the system at national level, taking into account current international activities The studies are supplemented by a bibliography

• Morocco

Un droit nucleaire en devenir (vision ethique et prospective au Maroc et au Maghreb), by Abdallah Boudahrein, published by Etablissement Benchara d'impression et d'edition "BENIMED", Casablanca, 1991, 140 pages

The author introduces his work by noting first that given their energy needs, the Member States of UMA (Union du Maghreb Arabe - Algeria, Morocco, Tunisia) cannot avoid the use of nuclear energy, and secondly, that those States have fallen behind in regulating the civil use of such energy Therefore, adopting a preventive approach he

- sets out the general principles for national legislation, with an emphasis on protection of the public and the environment, as well as on information,

- envisions this on a regional scale to harmonize and co-ordinate national rules and practices, calling this presentation the "Maghreb alternative"

The author first identifies the main elements of the international "nuclear security system" (safety, security, information and assistance) In so doing he draws up a picture of international nuclear relations in terms of "nuclear" States and States in the process of becoming "nuclear" To implement international commitments the author recommends as regards safety that - lacking a system of regional co-operation - the IAEA Code of Practice should be applied (Safety Series No 50, 1989) A chart is established of the control and decision-making structures (e g the Ministry for Energy) as well as of the consultative and research bodies in Morocco (e g the National Centre for Science and Technology) As regards security, the author suggests that supervision of the application of the Non-Proliferation Treaty be entrusted to a National Accounting and Control Bureau, in consultation with the International Atomic Energy Agency (IAEA)

The regulatory structure for the "nuclear generation programme" is referred to by comparison with the statutory basis provided by the IAEA The author describes licensing systems and problems raised by international nuclear trade He explains the radiation protection organisations (RAPAT in Morocco), too neglected in the Maghreb, in view of the fatal accidents in 1978 (Algeria) and 1984 (Morocco) In a detailed chapter on liability for nuclear accidents and insurance, the author analyses both principles and drawbacks and refers to a proposal for a general system of nuclear liability made by the International Law Commission and the IAEA In so doing, he draws the attention of the Maghreb authorities to financial cover for nuclear risks State liability, he says, should be taken seriously into account, and considered in addition to adoption of national third party liability legislation and a system of insurance or financial security

• OECD Nuclear Energy Agency

Licensing Systems and Inspection of Nuclear Installations, Paris, 1991, 144 pages

The first study analysing the regulations governing the licensing and inspection of nuclear installations in OECD countries was published by OECD/NEA in 1980, and revised in 1986 Since then there have been amendments to national regulations on the subject, which have warranted updating of this publication

This new study provides a description of the licensing regulations and practices applied in the twenty OECD countries with provisions in that field The national systems have been described according to a standard format to make comparisons and research easier. In most cases, the descriptions are supplemented by flow charts illustrating the procedures and specifying the different authorities involved in the licensing procedures.

This publication, issued in both English and French, may be purchased from national sales agents or from the OECD Publications Service The addresses are set out on the last page of the Bulletin

CURRENT EVENTS

• INLA

Nuclear Inter Jura '91

The International Nuclear Law Association (INLA) held its Biennial Congress from 23 to 26 September 1991 in Bath (United Kingdom) The theme of the Congress was "Nuclear Law and Nuclear Energy for the Future" It is recalled that INLA is a private association of lawyers which brings together specialists in nuclear law from all over the world. The Association's President was Mr Donald Grazebrook.

More than 200 participants attended this Congress The four main topics discussed at the meeting were the licensing and decommissioning of nuclear installations, the nuclear operator's insurance and liability, international trade in nuclear materials and equipment, radiological protection and radioactive waste management. The reports by the Association's Standing Groups were supplemented by many papers presented by specialists, thus demonstrating the vitality of the studies on the different aspects of the regulation of nuclear activities. The Proceedings of the Congress, containing the text of all the papers presented, will soon be published by the Association

At the close of the Congress, INLA's General Assembly renewed the mandate of the Board, which elected as President, Mrs Ninon Machado de Faria, Legal Adviser to the Brazilian Nuclear Energy Commission

• NEA

Helsinki Symposium 1992

The OECD Nuclear Energy Agency, with expected co-sponsorship by the International Atomic Energy Agency, is organising a Symposium to be held in Helsinki from 31 August to 3 September 1992, with the proposed title: "Nuclear Accidents - Liabilities and Guarantees". This title is intended to reflect the emphasis placed, during current negotiations for revision of the Vienna Convention, on a multiplicity of liabilities in this field - in private law and public international law - and on the various types of financial guarantees being considered

The Helsinki Symposium will examine in a less formal context the different questions raised by the on-going modernisation of the nuclear third party liability Conventions It will provide an opportunity to take stock of the present liability régime, including its shortcomings, and to assess the lessons to be learned from the Chernobyl accident

The Symposium is intended for those responsible for regulating nuclear activities in national administrations and authorities, for practitioners of nuclear law in the industry and insurance, as well as for academics

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