

NUCLEAR
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European Nuclear Energy Agency

Organisation for Economic Co-operation and Development

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LEGISLATIVE AND REGULATORY ACTIVITIES

● *Argentina*

NUCLEAR LEGISLATION

As from 1956, the Argentine authorities adopted a series of regulatory measures which cover :

- The Statute of the National Atomic Energy Commission
 - . Decree-Law No. 22 498 of 19th December 1956.
 - . Decree-Law No. 7 006 of 10th July 1960.
- The general regime for nuclear materials
 - . Decree-Law No. 22 477 of 18th December 1956 concerning radioactive ores.
 - . Decree-Law No. 5 423 of 23rd May 1957 implementing the foregoing enactment.
 - . Decree No. 842 of 24th January 1958 laying down regulations for the use of radioisotopes and ionizing radiations.
- Protection against ionizing radiations
 - . Act No. 17 557 of 27th November 1967 concerning the provisions applying to the installation and use of equipment specifically intended for emitting X-rays.
 - . Decree No. 6 320 of 3rd October 1968 implementing Act No. 17 557.

Organisation and structure

The main task of the National Atomic Energy Commission, which was set up by Decree-Law No. 22 498 of 19th December 1956, is to handle the scientific, technical and financial aspects of the different nuclear activities and to organise public health protection. Its Governing Board is made up of a Chairman and five members elected for a period of four years by the public authorities.

Decree-Law No. 7 006 of 10th July 1960 lays down the important role to be played by this Commission, in particular in regard to the search for and exploitation of natural nuclear resources and to the training of scientific and technical staff. Administratively speaking, this organisation is directly responsible to the Head of State who determines the main lines of national policy in this field. The Atomic Energy Commission must also obtain approval from the executive authorities for any technical or economic links with foreign organisations having the same objectives, or with international bodies (for example, Decree No. 749 of 20th February 1968 authorised the Commission to accept the bid made by the German firm of "Siemens" for building a 313 MW nuclear power station on the basic conditions set out in this Decree).

In certain sectors, such as the use of radioisotopes, the Commission may be assisted by related bodies. For example, under Decree No. 842 of 24th January 1958, the Commission nominates the five members of the Council for the application of radioisotopes, one of whom must be a representative of the Ministry for Social Security and Public Health. This Council plays an important part in connection with the use of radioisotopes for medical purposes.

General regime for nuclear materials

According to Decree-Law No. 22 477 of 18th December 1956, supplemented by Decree-Law No. 5 423 of 23rd May 1967, the strata, mines and other deposits containing nuclear ores are according to their geographical situation, the property of the State or the Provinces (the latter must then transfer them or sell them to the State). Prospecting and exploration for nuclear ores have been declared to be matters of public interest. Exploration for nuclear ores may be freely carried out on private or public land, so long as this is not less than 5 kilometres from frontiers. However the mining authority must grant a prospecting licence which is valid only within a radius of 300 metres around each point of exploration.

During a maximum period of one month, any interested party may call upon the mining authority for police assistance to allow him to explore land the owner of which is refusing him access. The Commission also has the right of compulsory purchase.

The Atomic Energy Commission reserves the power to prospect mines the rights to which have been duly registered or granted. The mining authority must inform the Commission of every exploration licence the authority grants. When such a licence expires, it reverts to the Commission. Another task of this organisation is to fix the terms of contracts governing private prospecting and operation of mines and deposits, in accordance with the national interest. However, the Commission can allow such a contract only under the following conditions

- (1) its duration shall not exceed 20 years, renewable for periods of 10 years if not previously determined by notice given at least six months before normal expiry,
- (2) no contract may be transferred,
- (3) the contractor must pursue his operations according to the directives of the Commission and under its control,

- (4) finally, for any supplementary agreement between the contractors, prior approval must be obtained from the Commission.

The contractor must also prepare an annual report to inform the Commission of his activities, the extent of his output and his proposed programme. If these rules are disregarded, the contractor may be liable to a fine, or to suspension or even cancellation of the contract.

The use of radioisotopes and ionizing radiations was regulated by Decree No. 842 of 24th January 1958. Under this enactment, the acquisition, production, use or importing of radioactive substances of any kind must be authorised beforehand by the National Atomic Energy Commission. This authorisation involves granting a licence which can take two forms : it may either be in general terms covering to the different operations mentioned above, or in specific terms concerning a given activity not included in the general licence, e.g. the use of radioisotopes. For this purpose, the Commission requests the Council for the application of radioisotopes to make a study with a view to granting such a licence for a fixed period.

The use of radioisotopes for medical purposes is subject to rigorous control in hospitals and social security centres under an internal Radioisotope Committee, set up within each establishment.

According to Decree No. 22 477, prior authorisation by the National Atomic Energy Commission is required before nuclear materials and equipment may be imported. They may be exported only by the Commission, with Government authority.

Protection against ionizing radiations

Safety standards for work by undertakings using X-rays were established by Act No. 17 557 of 27th November 1967, implemented by Decree No. 6 320 of 30th October 1968. Such establishments must be designed so as to guarantee the safety of workers and the population according to standards fixed by the public health authorities. Prior inspection by this authority is therefore necessary before these undertakings may be established or modified. The persons responsible, i.e. the directors of the establishments in question, are required to submit a report describing their activities including in particular the technical characteristics, the location of equipment which will involve radioactivity and the conditions under which it is used. In giving its approval, the public health authority will first carry out inspections, within 30 days, to confirm that the information supplied by the undertaking is in accordance with the relevant safety standards. Before having the approval of the said body, if granted, entered in its records, the applicant must obtain a second authorisation from the National Atomic Energy Commission.

• *Austria*

RADIATION PROTECTION

Radiation Protection Ordinance of 12th January 1972 /Bundesgesetzblatt
No. 47/1972/

1. This Ordinance (Strahlenschutzverordnung), which was issued under the Radiation Protection Act of 1969, supplements and completes the Act by giving a great number of detailed provisions on the protection against ionizing radiation.

2. Part I of the Ordinance deals with a number of different subjects. After the definitions, which in general follow those of the Radiation Protection Act, it describes a number of nuclear activities which are exempted from an authorisation or a notification required by the Radiation Protection Act, if certain limits of radioactivity laid down in the text or in one of the Annexes to the Ordinance are not exceeded.

After this the Ordinance formulates, in order to give practical application to the general safety prescriptions of the Radiation Protection Act, maximum permissible doses of radiation to which persons professionally involved in nuclear activities may be exposed. The maxima differ according to which parts of the body are exposed to radiation. Persons professionally involved in nuclear activities are subject to an annual medical examination and they must carry dosimeters to measure the radiation doses they receive. The medical examinations and radiation measurements can only be carried out by persons who are suitably qualified in the different aspects of radiation protection. One of the Annexes describes in detail the qualifications required.

3. Part II is concerned with radiation-emitting equipment including X-ray apparatus and electron accelerators.

X-ray apparatus must have the prescribed shielding, so that during operation the maximum radiation dose indicated in the Ordinance is not exceeded. For this purpose X-ray apparatus must be fitted with a number of accessories, switch-off must be possible in all circumstances and the control-panel must be protected against any possible radiation. In addition, the X-ray apparatus may only be used in suitable rooms. The persons who operate the X-ray apparatus must wear special clothing which covers the whole body.

Electron accelerators are defined as apparatus, which emit X-rays of a very high energy and are used for medical purposes. They must indicate the name and the mark of the manufacturer and the maximum radiation dose they emit. The control panel must be separate from the accelerator itself and must indicate whether radiation is emitted and its amount.

4. Part III covers radioactive substances. In order to enable an identification at any time, radioactive substances have to be marked with the radiation warning sign and with the word "radioactive" or "fissionable material". They can only be kept in a special storage accommodation marked with the radiation warning sign and the word "radioactive".

The Ordinance divides radioactive substances into sealed and unsealed sources. Sealed sources must have as stable a chemical form as possible, and must be tested periodically on their contamination. If they are used for medical purposes, special measures have to be taken to prevent other persons than the patient from being exposed to radiation. The control panel must ensure that operation is only possible by the competent persons.

Unsealed sources can only be handled in special working areas. These areas are divided into three categories according to how much activity is released by the unsealed sources, they must be marked with the word "radioactive" and only the competent persons may have access.

5. Part IV deals with nuclear installations which are defined as installations in which fissionable materials are to be handled, in such a way that a chain reaction may take place or cannot be excluded. The request for an authorisation to operate a nuclear installation must include, besides a description of the installation and the operations to be engaged in, a statement of the radiation protection measures envisaged. Safety and radiation protection measures and measures in case of technical trouble or accidents must be posted up in each installation. The installation must be equipped with the necessary measuring apparatus and an alarm system, which must be tested regularly. In order to enable a reconstruction of possible accidents, records have to be kept concerning the safety and the radiation protection in the installation.

• *Belgium*

RADIATION PROTECTION

Order of 11th May 1971 (Moniteur Belge of 9th February 1972)

The general military regulations governing protection against the hazards of ionizing radiations, which were mentioned in the previous issue of the Nuclear Law Bulletin, were published by Royal Decree on 9th February 1972.

• *Brazil*

ORGANISATION AND STRUCTURE

Act No. 5 740 of 1st December 1971 (Official Gazette of 2nd December 1971)

The Act authorises the National Nuclear Energy Commission (CNEN) to set up, under the auspices of the Ministry of Power and Mines, a Brazilian Company for nuclear technology (CBTN). This is a company under private law, financed by the Government, and run by an executive directorate consisting of a chairman, who is the Chairman of the National Nuclear Energy Commission, and six directors.

The Company's mandate includes prospecting and exploiting radioactive ore deposits, developing technology in the field of nuclear materials processing and fuel element fabrication, building and operating plants for processing radioactive ores, enriching uranium and fabricating and reprocessing fuel elements. The Company will also co-operate with the Commission on technical and administrative matters. It is also intended that a Centre for the development of nuclear technology shall be set up within the Company.

• *Denmark*

RADIATION PROTECTION

General provisions

Danish legislation concerning radiation protection, centres upon four fields, each being covered by one or more Acts as well as regulations issued in pursuance of these Acts.

These are

- (a) Act No. 147 of 15th April 1930, on the utilisation of X-rays.
 - Order by the Minister of the Interior of 27th March 1956 (amended 16th October 1964) concerning the Installation and Operation of X-ray Apparatus.
- (b) Nuclear Substances Act No. 94 of 31st March 1953.
 - Order by the Minister of the Interior of 31st March 1953, concerning exceptions from the Nuclear Substances Act.

- Order by the Minister of the Interior of 15th June 1955, on safety measures relating to the use of radioactive substances.
 - Regulations by the Minister of the Interior of 27th June 1963 on protective measures against accidents in nuclear plants.
- (c) Acts No. 112, 113 and 114 of 30th March 1962, amending the Acts on general protection of workers.
- (d) Nuclear Installations Act No. 170 of 16th May 1962.

Before going into detail about the legislation mentioned above it is necessary to point out the peculiar position, held by the National Health Service of Denmark as part of the administrative system

As there is no proper Ministry of Health, the various fields connected with public health aspects coming under the authority of various Ministries, the law provides for a National Health Service the main objective of which is to function as the chief health authority. It supervises the public health and nursing services and acts as the chief adviser to public authorities on all matters requiring medical or pharmaceutical knowledge. In this capacity the National Health Service has to be consulted by the various departments of the central Administration on all matters considered by the Ministry concerned to require such knowledge.

Thus it rests upon the National Health Service to provide for co-ordination in the field of radiation protection (as in other fields) between the various authorities responsible. For instance, the administration of the legislation concerning the use of X-rays comes under the Minister of the Interior, the radioactive substances legislation under the Minister of Environmental Protection (this Ministry was established in 1971), the legislation concerning protection of workers under the Minister of Labour and the atomic installations legislation under the Minister of Education.

The National Health Service which in these and other matters is being assisted by a number of expert consultants not only functions as an adviser to the various departments responsible for the administration of the legislation concerning fields which involve questions of radiation protection, but it also takes care of the administration of the licensing system provided for by Acts No. 147 and 94 mentioned above (1, 2).

Most of this administrative work is dealt with by two laboratories under the National Health Service - The State Institute for Radiation Hygiene and the Pharmaceutical Laboratory for the Control of Radioactive Isotopes (The Isotope Pharmacy).

2. The X-rays legislation

The X-rays Act authorized the Minister of the Interior to issue provisions concerning the construction and operation of machines intended to produce X-rays and concerning the use of high frequency currents for medical purposes.

Such provisions might relate to a duty to notify the National Health Service of X-ray machines, to the safety measures to be taken, and to the inspection of the installations. The National Health Service was made responsible for the compliance with the provisions of the Act and the regulations laid down in pursuance thereof.

The regulations now in force are applicable to all X-ray installations whether used for medical, industrial, scientific or other purposes.

An X-ray installation cannot be set up without notification of and approval by the National Health Service on the basis of detailed plans including measures for protection against radiation. The operation of the installation is subject to a license being granted for a period of five years at a time. Furthermore the person responsible for the operation has to show that he has the necessary qualifications unless he is holding a degree in medicine, engineering or physics. The regulations lay down the technical requirements according to the use made of installation and the voltage at which it is operated. They also deal with the responsibility of the staff and the protection of staff, patients and other persons.

The regulations are being revised, the National Health Service intends to submit to the Minister of the Interior a suggestion concerning the technical up-dating of the regulations and a change in the legal system, the idea being that the Minister, by Decree, lays down only the main lines of the licensing system, the general rules on responsibility and protection etc. and at the same time authorizes the National Health Service to issue regulations about technical details etc. making future changes according to technical and scientific development easier.

3. The Radioactive Substances Legislation

The Nuclear Substances Act of 1953 provides - like the X-rays Act - for a licensing system operated by the National Health Service, which is responsible for granting permits necessary to manufacture, import or hold radioactive substances and for supervising observance of the provisions. The Minister concerned is authorized to lay down further provisions.

Coming into force at the same time as the Act, the Order of the 31st March 1953, provides for a number of exceptions from the Act. A licence is not necessary to import and hold :

- uranium, material containing uranium or material containing no more than 10 per cent by weight of thorium provided that the material has not been processed to a certain degree,
- all natural radioactive elements and their chemical compounds (not belonging to the uranium - radium family, the uranium-actinium family or the thorium family) provided that their content of radioactive isotopes is not greater than in their natural state ,
- natural waters containing radioactive elements.

Scientific institutions may be granted permits for an indefinite period to import, hold or manufacture radioactive substances for research and teaching purposes within the institution.

Hospitals may possess radioactive preparations used for treatment by recognized specialists without a licence.

Watches, clocks and pocket-compasses containing radioactive material may be imported and owned without a licence provided that the radioactive material is not removed.

Importers and manufacturers of instruments containing radioactive material may be granted a licence to sell these if their construction provides the necessary protection.

In pursuance of Section 2, subsection 1, of the Act provisions concerning safety measures to be taken during the use of radioactive substances are laid down by the Decree of 15th June 1955. Besides a chapter on general provisions, it contains rules on importation, storage, production, preparation and use, transportation (including packing, shielding, labelling and handling), waste disposal and inspection etc

According to the general provisions the protection - unless otherwise specified - must be in accordance with the general recommendations issued by the International Commission on Radiological Protection (ICRP). Further, the maximum permissible doses stipulated by the ICRP must not be exceeded - from a legal point of view a rather remarkable provision considering the informal status of the ICRP, but one which pays tribute to its scientific standing and integrity.

Radiation must be kept below the said maximum doses and the number of persons exposed should be as low as possible. A provision concerning the dose rate for gamma-rays in premises in which persons may be staying for extended periods is no longer in accordance with the ICRP recommendations.

Besides the detailed provisions concerning the above-mentioned matters the Order also authorizes the National Health Service to make further regulations to suit each particular case.

The details of the Order are not going to be dealt with here as the National Health Service has submitted to the Minister concerned a suggestion comprising revised provisions as part of a new legal system.

The idea of this system is that the Minister in pursuance of the Nuclear Substances Act lays down by a new Order the fundamental provisions and further authorizes the National Health Service to issue regulations covering the various technical fields, it thus makes it possible in a less formal way to follow up the technical and scientific development and to refer to such Regulations when licences are granted instead of stipulating conditions in each particular licence

Two sets of Regulations have been drafted necessary to the commencement of this new system, the one concerning rules of transportation and the other concerning signs of warning.

The draft Regulations on transportation are based upon the International Atomic Energy Agency's Regulations for the Safe Transport of Radioactive Materials, which in fact are incorporated as an Annex to the Regulations. These are intended as a guide to importers, shippers etc. as to the procedure with emphasis on the majority of transports of small quantities of radioactive material and on the cases in which permission regarding the transportation is not required.

The Regulations have been drafted after consultation with the authorities competent as to the rules of transportation of goods, i e. the Minister of Commerce (transportation by sea) and the Minister for Transport and Communications (transportation by rail, air and road). The provisions proposed by the various other authorities are also based on the IAEA Regulations. The National Health Service is appointed "competent authority".

The draft Regulations on warning signs are in accordance with a new Danish Standard for such signs, also having regard to the International Standards.

The Regulations by the Minister of the Interior of 27th June 1963, on protective measures against accidents in nuclear plants are rather general, covering the normal operation of stationary installations or nuclear ships as well as nuclear accidents in such installations and such ships. For this reason they include provisions on the procedure to be used when a licence to operate a nuclear installation or a permit for a nuclear ship to navigate in Danish waters or call at a Danish port is applied for, and provisions concerning the preparation of emergency plans and the measures to be taken in the event of the population being exposed to ionizing radiation or to any other nuclear risk arising from any nuclear plant.

Covering a field as wide as this the Regulations had to be laid down in pursuance of a number of Acts, some of which have no other direct bearing on radiation protection.

The Acts in question are the Radioactive Substances Act, the Nuclear Installations Act, the Civil Defence Act and the Foodstuffs Act.

According to the Regulations the National Health Service shall determine - with regard to the safety of the population - the maximum permissible radiation doses arising from radioactive substances in consequence of the normal operation of any nuclear plant and the dose limits to be observed - as far as possible - in the event of an accident.

Any person who applies to the Minister of Education (who has laid down the provisions in this part of the Regulations) for a licence to construct a nuclear installation shall submit to the National Health Service and to the Atomic Energy Commission a preliminary safety report, and when permission to start the operation is applied for, a (definitive) safety report.

Applications for permission for nuclear ships to navigate in Danish waters and to call at Danish ports have to be submitted to the Minister of Education who grants permissions on the recommendation of the National Health Service and the Atomic Energy Commission.

For each nuclear installation and each port at which a nuclear ship is permitted to call, an emergency plan has to be prepared at the instance of the National Health Service. The plan has to be approved by the Minister of Environmental Protection and the Minister of Education.

If the population should be exposed to ionizing radiation or any other nuclear risk arising from nuclear plants or nuclear ships in Danish waters, the National Health Service is authorized - after

consultation with an expert committee (the members of which are nominated by the Minister concerned), with the police and the civil defence authority concerned - to take the necessary measures, for instance measuring of radioactivity, warning, evacuation and billeting, ordering the public to remain indoors etc., traffic regulations and restrictions as to the consumption of foodstuffs and use of water etc.

If in peacetime the population should be exposed to ionizing radiation arising from other sources the responsible Minister may authorize the National Health Service to take measures as mentioned above.

4. General Protection of Workers Legislation

The 1962 Acts were introduced to make it possible for Denmark to ratify Convention No. 115 concerning the protection of workers against ionizing radiations as adopted by the General Conference of the International Labour Organisation on the 8th August 1960.

In accordance with the Convention these Acts provide that workers exposed to ionizing radiation must be effectively protected against accidents and dangers to their health and that no worker shall be employed in radiation work contrary to qualified medical advice. The Minister of Labour is authorized to issue detailed regulations for such work, i.e. to fix maximum permissible doses and to prohibit that certain categories of workers are engaged in work involving ionizing radiation.

The Acts have not yet been implemented by Decree of the Minister of Labour.

5. The Nuclear Installations Legislation

The 1962 Nuclear Installations Act deals in two main chapters with the licensing/control system and the questions of liability and insurance.

As mentioned above nuclear installations may only be constructed and operated subject to a licence granted by the Minister of Education. The licence may be granted for a limited period of time and on such conditions found necessary for reasons of security or other reasons of public policy. It may be revoked if the attached conditions are not conformed with and for reasons of security or public policy. The installation is under inspection by the Atomic Energy Commission (under the authority of the Ministry of Education) and the National Health Service during its construction and operation.

The Minister concerned is also authorized by this Act to issue provisions concerning the presence and operation of nuclear-propelled means of transportation in Danish territory, including navigation in Danish waters and admission to Danish ports, cf. the above-mentioned Regulations of 27th June 1963, on protective measures against accidents in nuclear plants and the provisions therein regarding the tasks of the Atomic Energy Commission and the National Health Service concerning applications for licences to construct and operate nuclear installations.

The Act further states that the provisions of the health legislation, including the Radioactive Substances Act are not affected by the Nuclear Installations Act. Thus it is necessary for the operator

of a nuclear installation that the National Health Service grants a licence to import and to hold the nuclear material for the installation and to conform to the Regulations issued in pursuance of the Radioactive Substances Act.

So far there is only one nuclear installation in Denmark . The Atomic Energy Commission's Research Establishment at Risø. Only once, when the American N/S Savannah visited Copenhagen in 1965, permission for a nuclear ship to call at a Danish port has been granted.

• Germany

GENERAL REGIME

Penal Law

At present there is before the Bundestag a "Bill for a revised version of the Penal Code" [Entwurf eines Einführungsgesetz zum Strafgesetzbuch] (Bundesrats-Drucksache 1/72). This Bill is intended to clarify and consolidate all those penal provisions which are not yet included in the general penal code. It provides for a partial deletion of the penal provisions of the Atomic Energy Act (Sections 40 et seq. Atomic Energy Act) and includes them, instead, in the general penal code.

ORGANISATION AND STRUCTURE

Reactor Safety Commission

The re-organisation of the advisory commissions of the Federal Ministry for Education and Science included a revision of the organisation of the Reactor Safety Commission [Reaktor-Sicherheitskommission, RSK]. On 25th November 1971 a "Notification on the setting up of a Reactor Safety Commission" was published [Bundesanzeiger 1971 No. 228 p. 27]. Pursuant to Section 2 of this notification this safety commission has the task of advising the Federal Minister for Education and Science on all questions regarding the safety of nuclear installations, especially in connection with licensing procedures. As a rule the RSK should comprise 18 members. The Commission members are to represent the following fields . reactor operation, mechanical engineering, thermodynamics, chemical engineering, materials technology, construction, metrology and technology of automatic control, reactor physics, electrical power engineering, reactor chemistry, radiation protection, environmental protection, radiobiology and nuclear medicine. In order to make the advisory work more effective a permanent office was set up at the Institute for Reactor Safety of the Technische Überwachungs-Vereine (TUV) [Technical Inspection Association]. This will also help to increase the independence of the commission members from the Federal Ministry for Education and Science. To strengthen also their independence from the operators of nuclear installations a tightening-up of

regulations was introduced in regard to the exclusion of members due to bias, if e.g. the respective member himself is a party in any licensing procedure to be discussed or if direct advantages or disadvantages could be derived, etc. In the new Statutes of the RSK the principle of unanimity for questions of basic importance was suppressed.

REGIME OF NUCLEAR INSTALLATIONS

Federal Act concerning the protection against emissions

Bundestag is at present discussing a "Bill concerning the protection against harmful influences on environment through air pollution, noises, vibrations and similar events (Federal Act concerning the protection against emissions)" [Bundestags-Drucksache VI-2968]. In Section 54 of this draft, amendments concerning the Atomic Energy Act are also included. The most important amendment is in regard to Section 8 of the Atomic Energy Act; it states that from now on all non-nuclear dangers caused by nuclear installations have to be subjected to separate proceedings in line with the Federal Act concerning the protection against emissions.

RADIATION PROTECTION

Accident protection of workmen

Work is now under way in the Federal Ministry for Labour and Social Affairs to prepare a Bill to improve the medical and technical health protection in concerns and factories. The Bill includes provisions concerning medical and technical safety services to be established in each factory. According to the present stage of discussions, concerns and factories whose work involves radiation will thus fall under this Bill. The present provisions of the Radiation Protection Ordinances will, however, not be affected by the new Act.

TRANSPORT OF RADIOACTIVE MATERIALS

Transport of dangerous goods on the Rhine and other federal waterways

The "Verordnung über die Beförderung Gefährlicher Güter auf dem Rhine (ADNR)" [Ordinance concerning the transportation of dangerous goods on the Rhine River], as decided by the Central Commission for Rhine Shipping came into force by an Ordinance of 23rd November 1971 [Bundesgesetzblatt 1971 I, p. 1851]. This Ordinance applies to the Rhine river as well as all Federal waterways with the exception of the Danube and Moselle and regulates in particular the transportation of radioactive materials.

• *Finland*

THIRD PARTY LIABILITY

Parliamentary consideration of the Finnish Bill on nuclear third party liability, a translation of which was published in the last issue of the Bulletin, could not be completed before the Chamber of Representatives was dissolved in December 1971. Early in the parliamentary session which has just begun following the elections, the Government will submit a new proposal concerning the same Bill and will also seek approval for Finland to accede to the Paris Convention and the Brussels Supplementary Convention.

It is also intended to add to the Bill, as given in the supplement to Bulletin No. 8, new provisions relating to compensation from public funds in implementation of the Brussels Supplementary Convention, which will be based upon Section 33 of the Swedish Act on nuclear liability dated 8th March 1968.

On 30th December 1971, the Nuclear Liability Committee submitted to the Government its report concerning the Decrees and Orders necessary for implementing the above-mentioned Bill when it has become law.

• *France*

RADIATION PROTECTION

Protection of workers in basic nuclear installations

The Ministry for Scientific and Industrial Development and the Ministry of Employment and Labour are preparing a draft decree concerning the protection of workers in basic nuclear installations against the hazards of ionizing radiations.

The Decree of 15th March 1967 concerning protection of workers is not applicable in these large installations. This important draft would therefore concern all workers or employees in nuclear research centres, nuclear power stations and fuel fabrication plants.

It would impose various administrative requirements on the operator of the nuclear installation (as regards declarations, maintaining accurate records, marking of areas, drawing up safety instructions, monitoring installations and verifying measuring instruments and protective equipment), similar to those set out in the Decree of 15th March 1967.

In addition, all matters concerning individual supervision of workers (wearing of film badges, medical supervision) would come under the responsibility of the employer responsible for the contract of employment.

The draft would also contain general safety measures concerning the layout of working areas and various technical instructions dealing in particular with radioactive fluids and wastes and fresh or irradiated fuels.

Order of 6th December 1971 (Official Gazette of the French Republic, 18th February 1972)

Under an Order issued by the Minister of State responsible for national defence, the Director of the Health Department is responsible for radiological safety in installations and protection of persons against ionizing radiations, within the Ministerial Department of national defence.

He has the particular task of suitably advising and briefing the Minister and the Military authorities concerned, and of providing co-ordination with the Ministries of Labour, Employment and Population, and of Public Health and Social Security. He must also prepare regulations for the Minister, in the technical and medical fields, issue the necessary authorisations for installations, equipment and products involving radiological hazards, and finally arrange for technical and medical supervision. The organisation of radiological safety in national defence installations will be laid down in an instruction.

REGIME OF NUCLEAR INSTALLATIONS

The Government is at present considering modifying and supplementing the regulations concerning basic nuclear installations. The drafts currently being studied would cover the following aspects

Modification of the Decree of 11th December 1963 relating to basic nuclear installations

The amendment being considered would be intended first to bring all installations situated on the site of a given establishment under a single system of authorisation, whether they be nuclear installations proper or separate, ancillary installations considered hazardous for other reasons.

Its purpose would also be to establish a simplified authorisation procedure for certain temporary or mobile nuclear installations, or for a series of installations produced to the same specification.

The draft would also alter the composition of the Interministerial Committee for basic nuclear installations, and would clarify a number of points in the procedure for examining applications for authorisation, and in the conditions under which these are granted.

Control of liquid and gaseous discharges from basic nuclear installations

A draft decree is intended to lay down the conditions under which liquid and gaseous discharges from basic nuclear installations

would be authorised, and in particular the procedure to be followed by operators, authorisation would be given for installations individually, under certain conditions and following a comprehensive investigation of the possible consequences to the population and environment of the radioactive discharges in question.

• *Ireland*

RADIATION PROTECTION

1972 Regulations on Ionising Radiations (Sealed Sources)

In Nuclear Law Bulletin No. 4 mention was made of Draft Regulations on Ionising Radiations (Sealed Sources) which were in the course of preparation. These Regulations, entitled "Factories Ionising Radiations (Sealed Sources) Regulations 1972" [Statutory Instrument No. 17 of 1972], have been made and came into operation on 1st March 1972.

The text closely follows that of the United Kingdom's Ionising Radiations (Sealed Sources) Regulations 1969, which were reviewed in Nuclear Law Bulletin No. 4. The purpose of the Regulations in general is to prescribe measures which must be taken to ensure the adequate protection of persons employed in factories and other places to which the Factories Act 1965 applies, against ionising radiations arising .

- from radioactive substances sealed in a container, and
- from any machine or apparatus including irradiating apparatus that is intended to produce ionising radiations in which charged particles are accelerated by a voltage of not less than 5 kilovolts.

Part I of the Regulations deals with interpretation, application and exemptions. Part II concerns administration, notification and records. The basic principles of protection of workers are laid down in Part III, and in Part IV provisions concerning the radiological supervision of workers are set out. Arrangements for medical supervision of workers are given in Part V, and Part VI deals with organisation of work. Part VII is concerned with monitoring and Part VIII lays down precautions to be observed in radiography and other similar processes. Parts IX and X deal respectively with X-ray crystallographic and spectrometric apparatus, and measuring and detecting devices and static eliminators. In the Schedule the maximum permissible doses of radiation are laid down for different categories of workers.

• Italy

ORGANISATION AND STRUCTURE

Act concerning the reorganisation of the Comitato Nazionale per l'Energia Nucleare /Act No. 1240 of 15th December 1971 - Official Gazette No. 20, 24th January 1972/

Following a long period of preparation [see Bulletin Nos 1 and 2], the Italian Parliament has passed an Act reorganising the Italian National Committee for Nuclear Energy (CNEN) which had been set up in 1960.

The CNEN is henceforth empowered, subject to approval by the Interministerial Committee for Economic Planning (CIPE), to undertake directly the construction and development of reactor prototypes and experimental installations. Its Chairman will now be a person designated by the Minister for Industry, Commerce and Crafts and will be appointed for a term of five years. In addition to the Chairman, the Board of Directors comprises 14 members nominated for five years by Decree of the Prime Minister on the proposal of the Minister for Industry. The Board includes specialists in nuclear science and technology, and in financial and administrative matters, the Director-General for energy sources and basic industries at the supervising Ministry, as well as staff representatives. It is appropriate to note here that the new CNEN statute gives considerable importance to consultation of the different staff categories. The Vice-Chairman of the CNEN is elected by the members of the Board of Directors.

An Executive Board is instituted, consisting of the Chairman and four other members of the Board of Directors, this Board carries out the functions delegated to it by the Board of Directors, and in emergency can act in its stead. The General Manager is appointed on the recommendation of the Board of Directors, he attends its meetings and is responsible for implementing its decisions and for overall management of CNEN.

A Consultative Commission is set up within the Ministry for Industry, Commerce and Crafts, with the task of advising on the industrial uses of nuclear energy and co-ordinating the activities of the competent bodies in this field.

The Act reorganising the CNEN also covers the operation of the National Institute of Nuclear Physics and authorises the CNEN to transfer, in accordance with instructions from the Minister for Industry, certain of its assets to the Institute.

On coming into force, this Act repeals practically all the provisions of the Act under which the CNEN was created, i.e. Act No. 933 of 11th August 1960.

• Japan

THIRD PARTY LIABILITY

Act No. 53 of 1st October 1971

The Japanese legislation on nuclear third party liability was modified by a "Law Amending the Law on Compensation for Nuclear Damage and the Law on Indemnity Agreements for Compensation of Nuclear Damage", this Act came into force on 1st October 1971. The main amendments include the following

- unless specially agreed otherwise, the nuclear operator, who is the consignor of nuclear substances is now held liable, if damage occurs during the transportation of nuclear substances. According to previous provisions the receiving operator was liable in such a case,
- the provisions, which gave the nuclear operator a right of recourse for nuclear damage against persons who are engaged in the supply of materials, equipment or services and have caused such a damage by a fault, have been deleted. The operator now has only a right of recourse against third parties, who have caused nuclear damage intentionally,
- the amount available per installation for compensation of nuclear damage to be provided by insurance, has been raised from 5 billion yen to 6 billion yen, which is the equivalent of about 20 million EMA units of account;
- provisions have been inserted concerning the liability of operators of nuclear ships. The liability of operators of nuclear ships can be limited in contrast to the unlimited liability of operators of land-based installations. The maximum amount for which an operator of a foreign ship visiting Japan may be held liable, is to be fixed in a bilateral agreement. It cannot be less than 36 billion yen, and corresponds broadly with the amount laid down in the 1962 Brussels Convention on Liability of Operators of Nuclear Ships. Similar arrangements may be made for a Japanese nuclear ship visiting a foreign country,
- the provisions concerning indemnity agreements, which originally ended on 31st December 1971, have been extended for a period of ten years until 31st December 1981. Under an indemnity agreement the Japanese Government undertakes to indemnify a nuclear operator for compensation paid for damage, which exceeds the amount covered by insurance,
- under the amended law foreign operators of nuclear ships visiting Japan will also benefit from the assistance to be provided by the Japanese Government in the cases where the compensation to be paid exceeds the amount covered by insurance.

The text of the Law on Compensation for Nuclear Damage, as amended, is reproduced in the supplement to this Bulletin.

• *Norway*

GENERAL REGIME

Atomic Energy Act

The Atomic Energy Act was passed by the Norwegian Parliament on 25th April 1972. Before it was approved, the Atomic Energy Act was submitted for consideration to the Parliamentary Commission for Industry which made certain amendments to it, in particular, concerning the licensing of nuclear installations, which now comes under responsibility of the Parliament. More detailed information on the type of amendments brought to the Act will be provided at a later date. The draft law has already been published in the Supplement to Nuclear Law Bulletin No. 1

• *Philippines*

REGIME OF NUCLEAR INSTALLATIONS

Draft regulations concerning atomic energy facilities were prepared under Act No. 5 207. They will be reviewed by a separate committee, which will examine whether they are in accordance with the statutory requirements and standards prescribed in the Act. As reported in Nuclear Law Bulletin No. 6 Act No. 5 207 provides the legal framework for the construction and operation of nuclear power stations in the Philippines.

In accordance with Administrative Order 293 of 23rd June 1971, the Head of the State has established a Co-ordinating Committee for Nuclear Power Study. This Committee has, among other things, the task of undertaking a technical and economic study concerning the construction of a nuclear power station on the island of Luzon by 1978 or 1979.

REGIME OF RADIOACTIVE MATERIALS

Regulations for the safe disposal of radioactive wastes, which were drafted and reviewed by an Ad Hoc Committee (see Nuclear Law Bulletin No. 8), will be published in the Philippine Official Gazette in order to enable them to enter into force. In addition to the waste disposal regulations, the Ad Hoc Committee is now preparing regulations providing for standards of protection against radiation for those who are engaged in the handling and use of radioactive materials.

• Portugal

THIRD PARTY LIABILITY

Draft Decree-Law concerning third party liability for damage of nuclear or radioactive origin

Portugal, as one of the Signatory countries of the Paris Convention on Third Party Liability in the Field of Nuclear Energy, is now preparing to ratify this Convention and is also drawing up a draft Decree-Law covering nuclear third party liability.

In this draft, a distinction is made between a nuclear installation as defined in the Paris Convention, and a radioactive installation, which comprises any appliance or equipment, either containing a source of ionizing radiations, or emitting ionizing radiations, or any premises where radioactive materials are produced or stored. In the second place the draft defines a radioactive incident as any event or succession of events having caused loss of human life or physical injury, or the total or partial loss of material goods, on condition that such injury or loss is the direct or indirect consequence of the radioactive properties of materials situated in a radioactive installation or that they result from ionizing radiations emitted by any appliance or equipment considered to be a radioactive installation.

The operator of a nuclear or radioactive installation is the person designated as such by the Junta de Energia Nuclear.

The scope of the draft Decree-Law extends to incidents and damage occurring in a non-contracting country on condition, however, that the nuclear installation of the responsible operator is situated on Portuguese territory.

Except where otherwise provided in an international Convention or Agreement, the liability of the operator of a nuclear installation is fixed approximately at 140 million escudos (about 10 million units of account), per nuclear incident. The operator must provide financial security of an equivalent amount, in the form of insurance, of deposited moneys or investments, or in any other form approved by the Ministry of Finance.

Actions for compensation for damage caused by a nuclear incident must be brought within 2 years from the day on which the party suffering damage became, or should normally have become, aware of such damage and of the identity of the person responsible. Notices must be published following a nuclear incident so that, within a time-limit of six months, persons having suffered damage may submit their claims to the competent court, i.e. the court of the locality where the activity giving rise to the damage is carried on.

Finally, it should be mentioned that the Junta de Energia Nuclear may, after due consideration, permit a carrier to take the place of the operator of a nuclear installation and assume the latter's liability.

REGIME OF NUCLEAR INSTALLATIONS

A draft Decree laying down the provisions concerning the procedure for the licensing of nuclear installations supplements Decree-Law n° 49 398 of 24th November 1969 on the licensing of nuclear activities in the industrial field (see Nuclear Law Bulletin n° 6).

The operation of a nuclear power plant requires prior agreement, to be given jointly by the Electricity Services Directorate General and the Junta de Energia Nuclear, and published in the Official Gazette. An application for authorisation to construct the plant, separate from the above agreement, must first be made to the Electricity Services Directorate General; it must mainly consist of a preliminary safety and protection report for installations, as well as a study of the different characteristics of the neighbouring areas.

Both these competent bodies must give their decision within a specified time-limit; the authorisation may be subject to additional procedures to be complied with by the operator.

The construction of the plant remains under the constant inspection of both the above bodies as regards the quality control of the materials and equipment used for the purpose of nuclear safety and radiological protection.

During operation, all the technical and administrative measures relating to the functioning of the installation must be approved by the Junta de Energia Nuclear, which is empowered to carry out inspections at any time. In addition, the operator must prepare an operating record, submitted to the opinion of the two bodies and drafted under the supervision of the inspectors of the Directorate-General of the Electricity Services.

RADIATION PROTECTION

Certain provisions of Decree-Law No. 40 060 of 25th November 1961, concerning protection against ionizing radiations, will be replaced by a Decree-Law now in draft form.

In the first place, the draft alters the administrative organisation of the National Committee for protection against ionizing radiations. Henceforth this body will be chaired by the Chairman of the Junta de Energia Nuclear, assisted by the Director-General of the Health and Social Security Department and the Director-General of Overseas Health and Social Security, as Vice-Chairmen. This Committee will also comprise twelve members designated from amongst the various sectors concerned in the Committee's activities. The Chairman may also invite private undertakings or other officials to participate in its work. The Junta de Energia Nuclear will provide the Secretariat for the Committee and will be responsible for implementing its decisions.

In the second place the draft Decree-Law will increase the powers of the Committee for protection against ionizing radiations, whose tasks include .

- defining the principles of national policy regarding protection against ionizing radiations,

- disseminating information about protective measures against ionizing radiations and arranging for their supervision,
- making proposals to the Government regarding the various regulatory provisions concerning radiation protection prepared by the competent departments of the Junta de Energia Nuclear,
- preparing legislation for the Government concerning working conditions in installations.

However, trade in or use of radioactive substances will still require prior authorisation from the Junta de Energia Nuclear in accordance with the guidelines drawn up by the Committee for protection against ionizing radiations this Committee, in liaison with the General Directorate for Health and Social Security in metropolitan Portugal, Angola and Mozambique, retains overall authority as regards the implementation of health protection.

The draft Decree-Law also stipulates that the constructional drawings and operating conditions for nuclear installations and the various items of equipment emitting ionizing radiations, as well as the measures for protection and health physics control of such installations and equipment, must be submitted for approval by the competent departments of the Junta de Energia Nuclear, so that the latter may ascertain that proper arrangements for protection against ionizing radiations have been made. If conditions laid down on this occasion by the Junta should be disregarded, the Chairman of the Junta may order suspension of operation or seizure of the installation.

This draft also stipulates that nuclear installations where emissions of ionizing radiations are substantial shall set up their own radiation protection services which will nevertheless be subject to inspection by the Junta.

Finally it must be stressed that anyone contravening the legislation in force is liable to criminal penalties including fines and extending to confiscation of unlawful goods by the State.

• *Spain*

ORGANISATION AND STRUCTURE

Decree No. 3 322 of 23rd December 1971 / Official Gazette No. 15 of 18th January 1972/

The National Industrial Institute has been made responsible for setting up, under its own control, a National Uranium Undertaking, in co-operation with the Junta de Energia Nuclear.

The major part of the share capital of this Undertaking will be held by the Industrial Institute; its specific tasks will be to prospect and exploit uranium deposits, produce concentrates, enrich uranium, and fabricate, process and market nuclear fuels.

Deposits currently reserved for exploitation by the Government and which appear economically viable, will be transferred to the Undertaking.

In all its activities, the National Uranium Undertaking will receive technical assistance from the various departments of the Junta de Energia Nuclear. It should be established within a period of three months from the date on which the present Decree comes into force, (i.e. the day after its publication).

REGIME OF NUCLEAR INSTALLATIONS

Order of 27th October 1971 (Official Gazette No. 268 of 9th November 1971)

Under the Nuclear Energy Act of 29th April 1964, it is possible for certain installations or equipment to be exempted from the system applying to radioactive installations when the intensity of radiation which can be emitted is too low to cause a serious hazard. The Ministry for Industry has therefore issued an Order according to which a category of installations will no longer be considered as radioactive installations. The installations involved are those where radioactive materials or radioactive sources are produced, used or stored, the activity of which is less than the limits set out in the Order or which satisfy the conditions specified therein. Certain installations containing materials the activity of which is greater than the values set out in the Appendix to this Order may also receive the benefit of these provisions subject to certain safety and radiation shielding conditions, and subject also to approval by the Ministry for Industry. Radiation-generating equipment, emitting electrons of an energy not exceeding 5 keV, is also exempted from the regime governing radioactive installations.

Persons who produce, sell or install systems which have received approval are obliged to keep a register giving details of all transactions involving such systems.

• *United Kingdom*

THIRD PARTY LIABILITY

Orders in Council of 4th February 1972 /SI 1972/121 - 128/ extending certain provisions of the Nuclear Installations Act 1965 to some Dependent Territories

These eight Orders, which were made on the same lines as the Nuclear Installations (Gibraltar) Order of 1970 (see Nuclear Law Bulletin No. 6), came into operation on 15th March 1972. They extend, with certain adaptations and modifications, certain provisions of the U.K. Nuclear Installations Act 1965 to the following Dependent Territories Bahamas, British Solomon Islands Protectorate, Cayman Islands, Falkland Islands and Dependencies, Gilbert and Ellice Islands, Hong Kong, Montserrat and St. Helena.

The Sections of the Act which are extended to these Territories are Sections 10 to 17 inclusive, 21, 26 and 30. Under these provisions an operator of a nuclear installation in a country which has ratified the Paris Convention would be liable for damage caused by a nuclear incident in one of the Territories during carriage on his behalf. A similar, but unlimited liability is imposed on any person who is not a Paris Convention operator and on whose behalf any nuclear matter which may be involved in a nuclear incident in one of the Territories is being carried. Compensation has to be paid for any injury or damage caused by such nuclear incident for which a Paris Convention operator is liable. Various exceptions are laid down and time-limits are prescribed for the bringing of claims. A Paris Convention operator is to be only liable to pay compensation under the Act if and to the extent that he would have been liable to do so under his home law if the incident had occurred in his own territory. The provisions as to jurisdiction lay down that the Courts of the Territories shall not have jurisdiction if in accordance with the Paris Convention the courts of some other country have jurisdiction.

In connection with the above Orders the United Kingdom has notified, as it may do under Article 23 (b) of the Paris Convention, the Secretary-General of OECD that the relevant Sections of the Nuclear Installations Act have been extended to enable the Paris Convention to be applied to the above Territories.

RADIATION PROTECTION

Radioactive Substances (Road Transport Workers) (Great Britain) Regulations 1970

These Regulations were made by the Secretary of State for the Environment under Section 5 of the Radioactive Substances Act 1948. These Regulations impose on carriers and employees engaged in the transport of radioactive materials by road in Great Britain certain requirements additional to those imposed generally (for the purpose of preventing injury to health being caused by such transport) by the Radioactive Substances (Carriage by Road) (Great Britain) Regulations 1970.

• *United States*

REGIME OF NUCLEAR INSTALLATIONS

The United States Atomic Energy Commission has taken an initial step designed to improve its safety and environmental reviews of applications for licences to build and operate nuclear power plants and other nuclear facilities.

The Commission is making additions to its existing organisational structure and reassigning some functions to facilitate the ability to review safety and environmental issues in a consistent and timely manner and to reduce the current backlog in the reactor licensing process.

An important consideration is the development of a systematic and interdisciplinary approach which ensures the integrated use of the many sciences and disciplines required in planning and decision-making.

Three divisions of the Commission will be affected - Reactor Licensing, Reactor Standards, and Radiological and Environmental Protection. The major elements of the restructured organisation will include

- Additional review of environmental and safety issues on a functional basis and less review on a project basis, resulting in more comprehensive and consistent treatment,
- Additional support for planning, training, scheduling and programming in order to increase efficiency;
- Additional emphasis on the development of standards, codes of practice, criteria and safety guides.

The Division of Radiological and Environmental Protection, which has the primary responsibility for development of environmental impact statements required under the National Environmental Policy Act, will be strengthened by the addition of specialised capability in environmental technology and cost-benefit analyses.

More elements of safety evaluations will be placed on a functional basis by the establishment of a number of specialised groups to review : various reactor plant features including containment systems, auxiliary power supply and power conversion systems, quality assurance and technical specifications, effluent treatment, accident analysis, and reactor primary coolant and emergency core cooling systems, in addition more emphasis will be placed on the development of standards, codes, criteria and safety guides by assigning full-time staff to this

Other changes will include the establishment of a group responsible for fast reactor projects, reflecting the rapidly increasing importance of the fast breeder reactor, and provision for an improved capability for internal planning and scheduling.

INTERNATIONAL ORGANISATIONS AND AGREEMENTS

INTERNATIONAL ORGANISATIONS

● *International Atomic Energy Agency*

TRAINING AND ADVISORY SERVICES IN NUCLEAR LAW

Under the IAEA Fellowships Programme, five lawyers, one each from the National Atomic Energy Commissions of Bulgaria, Chile, Cuba, Indonesia and the Philippines respectively, received training in the IAEA Secretariat on the organisational, regulatory, liability and safeguards aspects of nuclear activities in the course of last year and early this year. The IAEA also participated in the International Law Programme of the United Nations Institute of Training and Research (UNITAR) by providing training in 1971 to two lawyers from Romania and the Syrian Arab Republic respectively. A UNESCO Fellow from Egypt and a lawyer from the Federal Republic of Germany started research work and training in nuclear law at the IAEA Headquarters in March of this year.

At the request of the Governments concerned, members of the IAEA Secretariat performed short-term assignments in 1971 and early 1972 as consultants in nuclear law in Cuba, Indonesia, Israel, New Zealand, the Philippines and Thailand. Such advisory services related to a review of existing legislation for nuclear activities in the light of its implementation and to the framing of further legislation which was deemed desirable to cope with developments in national programmes on atomic energy, in particular the elaboration of safety regulations, liability provisions and licensing procedures for nuclear power projects contemplated in some of these countries. The legislative and regulatory requirements for the introduction of nuclear power were also amongst the topics dealt with at a Regional Training Course on Bid Evaluation and Implementation of Nuclear Power Projects, held in December 1971 in Tokyo by the IAEA in co-operation with the Japanese authorities and Japan Atomic Industrial Forum, with the attendance of 31 participants from China, Indonesia, Iran, Japan, Korea, Pakistan, Philippines, Singapore and Thailand.

TRANSPORT OF RADIOACTIVE MATERIALS

A comprehensive revision of the IAEA Regulations for the Safe Transport of Radioactive Materials (IAEA Safety Series No. 6, 1967 Edition), which started in February 1970 with the first meeting of a review panel convened in Vienna, has now reached the final stage after a second panel meeting held in October 1971 at the IAEA Headquarters. The fifth and final revised draft of the Regulations, which takes into account the comments and suggestions of Member States in the light of their experience with the Regulations, the observations of other international organisations and the views of the panel members, will be submitted to the IAEA Board of Governors for approval at its meeting in June.

It may be recalled that the purpose of these Regulations is to establish standards of safety which provide an acceptable level of control of the radiation hazards to persons, property and the environment that are associated with the transport of radioactive materials. The Regulations apply to such transport by land, water or air and have been to date incorporated into almost all international transport regulations governing the carriage of dangerous goods by different means of transport.

PHYSICAL PROTECTION OF NUCLEAR MATERIALS

Measures for the physical protection of nuclear materials against, for example, theft, forcible seizure, or loss during transport are required not only because of the value of such materials and the potential radioactive hazards that might ensue from their loss, but also because of the potential military use of many types of nuclear material. The physical protection of nuclear materials is, therefore, an essential supplement to a national system of accounting for and control of nuclear materials.

A Working Group convened by the IAEA in Vienna in June 1971 to consider Guidelines for Physical Protection of Nuclear Materials when in use, storage and transit, suggested that the IAEA, with the help of selected consultants, should draw up recommendations for consideration and possible use by Member States in their physical protection system. A meeting of consultants from Hungary, the Federal Republic of Germany, the United Kingdom, the United States of America and the USSR was subsequently held by the IAEA in Vienna in November 1971, and their recommendations were considered by a panel of experts which met at the IAEA Headquarters from 6th to 10th March 1972. The panel was composed of experts from France, India, Japan and the countries mentioned above, and observers from Australia, Austria and Sweden. A set of recommendations on requirements for the physical protection of nuclear materials in storage, use and transport was adopted by the panel for use by the IAEA in giving advice to Member States, upon request, in the establishment of national systems of physical protection.

SAFEGUARDS

Considerable progress has been made in the past few months with respect to the negotiation and conclusion of agreements for the application of safeguards by the Agency in connection with the Treaty on Non-Proliferation of Nuclear Weapons. Eighteen such agreements have been signed with the following countries : Austria, Bulgaria, Canada,

Czechoslovakia, Denmark, Finland, the German Democratic Republic, Greece, Hungary, Iraq, Ireland, Malaysia, New Zealand, Norway, Poland, Romania, Uruguay and Zaire. An agreement with Yugoslavia will be signed shortly.

Negotiations are now in course with more than twenty other countries as well as with EURATOM.

CONSULTATION GROUP ON THE LEGAL ASPECTS OF FOOD IRRADIATION

A Consultation Group on the Legal Aspects of Food Irradiation was convened jointly by FAO, IAEA and WHO, with the participation of representatives of ENEA. The Group which met in Vienna from 20th to 24th March 1972, was composed of eight experts representing the different professional fields concerned with food irradiation legislation, namely public health, food and legal matters.

The terms of reference of the Group were to examine the legal aspects of international trade in irradiated food and the present status of legislation and irradiation facilities were reviewed.

The Group recommended to the three Organisations in question that a common approach on the international level should be adopted to establish methods of safety evaluation of irradiated food, to make such evaluations and to propose regulations, in collaboration with the Codex Alimentarius Commission (Joint FAO and WHO programme). It was also recommended that Governments should harmonize their regulations in this field as far as possible.

As to the content of regulations controlling food practices, the Group recommended that the safety of each irradiated food or group of foods should be subject to prior approval of the competent national authorities. For this purpose it should be ensured, among other things, that all possible information is provided to the authorities and included in the permission, that dosimetry records of the irradiation process are maintained and that irradiated food is labelled as such.

● *European Nuclear Energy Agency*

INTERNATIONAL LEGAL CONFERENCE ON MARITIME CARRIAGE OF NUCLEAR SUBSTANCES

This Conference, the preparation of which was reported in Nuclear Law Bulletin No. 8, was jointly organised by IMCO, ENEA and IAEA, and took place in Brussels from 29th November to 2nd December 1971. Thirty-eight countries were represented at the Conference, which considered a draft Convention on maritime carriage of nuclear substances together with observations and proposals submitted thereon by a number of Governments. As a result, a Convention consisting of three Articles and final clauses was adopted under the title of "Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material".

The purpose of the Convention is to remove the practical difficulties, which at present impede the maritime carriage of nuclear substances. Under the present maritime law shipowners carrying nuclear substances may be held liable for nuclear damage, if they can be shown to have been at fault. The limitations on their liability established by the maritime Conventions have a less general application than those of nuclear law. As they are not willing to risk being held liable for damage which exceeds the limit of liability and insurance of nuclear operators, the shipowners and their insurers have demanded, as a condition of acceptance of most consignments of nuclear substances, a virtually unlimited indemnity or financial guarantee.

In the new Convention it is laid 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 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 either the Paris or the Vienna Conventions. In addition, shipowners are excluded from liability for damage to the nuclear installation or the means of transport. At the same time it is expressed, however, that the liability of the operator of a nuclear ship is not affected, and this liability remains, consequently, as established by the 1962 Brussels Convention on the Liability of Operators of Nuclear Ships.

The Convention which opened for signature on 17th December 1971 in Brussels, was signed on that date by Belgium, Brazil, France, the Federal Republic of Germany, Italy, Portugal, Sweden, United Kingdom and Yugoslavia. It will remain open for signature in London until 31st December 1972 and will enter into force 90 days after the date on which five States have signed it without reservation as to ratification, acceptance or approval or have deposited an instrument of ratification, acceptance, approval or accession.

The Convention is reproduced in the "Texts" chapter of this Bulletin.

NUCLEAR-POWERED SHIPS

The fact that the Brussels Convention on the Liability of Operators of Nuclear Ships is not yet in force and that difficulties are created by the lack of harmonization between national laws, are a serious obstacle to the conclusion of bilateral agreements for visits of nuclear ships. In order to facilitate the elaboration of such agreements, the ENEA Group of Governmental Experts on Third Party Liability in the Field of Nuclear Energy set up a Working Party instructed to prepare a Draft Model Agreement, which may be used in the preparation of the agreements. The Model Agreement lays down provisions which directly or indirectly relate to the third party liability of the operators of nuclear ships, and which are mainly based on the Paris Convention and the 1962 Brussels Convention on the Liability of Operators of Nuclear Ships.

According to its provisions, a nuclear ship means any ship equipped with a nuclear power plant, with the exception of a warship. Visits of such nuclear ships are subject to an authorisation, which is to be granted by the Host (i.e. receiving) State and will be valid for all visits of the nuclear ship until it is withdrawn by the Host State. In addition, each visit to any of the ports of the Host State has to be notified in advance.

The operator of the visiting nuclear ship is absolutely liable for damage caused by a nuclear incident, which involves the nuclear fuel or radioactive products or waste produced in the ship and occurs in the territory or the territorial waters of the Host State during the visit. This liability regime may be extended to cases where the nuclear incident occurs in the course of a voyage which is not connected with a visit to the Host State. The operator will have a right of recourse if a nuclear incident is caused intentionally or if a nuclear incident results from a wreck-raising operation of the nuclear ship carried out without the authority of the operator or that of the Host State, or if recourse is expressly provided for by contract.

The liability of the operator concerning damage caused by a nuclear ship on the occasion of a nuclear incident is limited to 100 million European Monetary Agreement units of account, which corresponds to similar provisions in the Brussels Convention on the Liability of Operators of Nuclear Ships. The operator is required to cover his liability by an insurance or any other financial security and must produce, at the request of the authorities of the Host State, the certificate issued by the insurer. The right to compensation for nuclear damage expires after a period of ten years. Contrary to the Brussels Convention on the Liability of Operators of Nuclear Ships, but in accordance with the Paris Convention, actions for compensation must be brought before the competent court of the Host State. The Contracting States may, however, adopt another solution, provided that only one single court is declared competent. A final judgment entered by the court of the one State will be recognised in the territory of the other State except when the judgment is obtained by fraud or where the operator was not given a fair opportunity to present his case.

AGREEMENTS

• *France*

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD

On 26th October 1970, there were deposited with the United Nations Organisation certain amendments to technical annexes A and B of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) signed on 30th September 1957.

These amendments were published in France in Decree No. 597 of 15th July 1971 (Official Gazette of the French Republic dated 20th July 1971); the Agreement itself was published in Decree No. 794 of 22nd June 1960 and annexes A and B in Decree No. 1023 dated 8th November 1968.

• *France-Germany*

CONVENTION ON THE CONSTRUCTION AND OPERATION OF A HIGH FLUX REACTOR

On 6th July 1971, an agreement was signed implementing the Franco-German Convention on the construction and operation of a high flux reactor, concluded on 19th January 1967 [See Bulletin No. 17]. This supplementary agreement deals with the amount of the respective contributions of the two Governments to the cost of building and operating the reactor by the Institut Max von Laue Paul Langevin. This supplementary agreement may be terminated only in conjunction with the Convention of 19th January 1967. In France, this supplementary agreement was the subject of a Decree, issued on 25th February 1972, published in the Official Gazette of the French Republic on 4th March 1972.

• *France-Switzerland*

CO-OPERATION AGREEMENT FOR THE USE OF ATOMIC ENERGY

On 14th May 1970, the French Government and Swiss Federal Government concluded a co-operation Agreement on the use of atomic energy for peaceful purposes.

The aim of this Agreement is to strengthen the collaboration already existing between the two countries, of which a notable example is that within the framework of the European Nuclear Energy Agency. In particular it covers the possibility of nuclear fuels being supplied to Switzerland by France and of irradiated Swiss fuels being reprocessed in French plants. The Agreement also provides for exchanges of information on research carried out in the two countries as well as for exchanges of specialists and trainees. The Co-operation Agreement, which was concluded for a period of ten years, will in no way affect France's obligations under the Euratom Treaty.

The instruments ratifying the Agreement were exchanged on 27th September 1971 and the Agreement was published in France on 7th December 1971 in Decree No. 961 dated 30th November 1971.

• *Germany*

NUCLEAR-POWERED SHIPS

The "Treaty between the Federal Republic of Germany and the Argentine Republic concerning the entry of nuclear-powered ships into Argentine territorial waters and the stay in Argentine ports" of May 1971 (see Nuclear Law Bulletin No. 8), was approved by the German Bundestag by an Act dated 22nd February 1972 (BGBl. 1972 II, p. 68). The Treaty mainly corresponds with port entry agreements for the "Otto Hahn" concluded between the Federal Republic of Germany and other States. However, the liability for nuclear damage caused by the "Otto Hahn" was established differently. While the other treaties expressly refer to Articles I, II, III, IV, VIII and X of the Brussels Convention of 25th May 1962 on Liability of Operators of Nuclear Ships thus taking as a basis for liability the provisions of the Brussels Convention, this reference to the Brussels Convention was not included in the Treaty with Argentina. Instead, the Treaty contains special liability provisions in Articles 6 et seq. which are directly applicable. The decisive difference compared with the other treaties is that these provisions do not provide for legal channeling of the liability solely on the operator of the nuclear-powered ship.

There is no provision corresponding to Article II(2) of the Brussels Convention which means that persons other than the operator may also be held liable. As a rule the operator is absolutely liable

according to Article 6 of the Treaty such liability being limited to DM 400 million. Up to this amount the Federal Republic of Germany has agreed to guarantee the payment of compensation for damage. The right to compensation for nuclear damage expires after a period of ten years. The liability provision, pursuant to Article 7, applies to nuclear damage occurring within Argentine waters - which according to Article 1 (7) covers an area of water along the Argentine coast 200 nautical miles wide - or on Argentine territory if the nuclear event has occurred within Argentine waters or on Argentine territory; or out of Argentine waters on the way to or from an Argentine port or to or from Argentine waters.

By an Act of 22nd February 1972 (BGBl. 1972, II, p. 57) the Bundestag also approved the "Treaty between the Federal Republic of Germany and the Portuguese Republic concerning the use of Portuguese waters and ports by N.S. "Otto Hahn", concluded on 29th January 1971 (see Nuclear Law Bulletin No. 7). This Treaty regulates the question of liability in the same way as in the majority of the other port entry agreements by reference to the Brussels Convention.

SEA-BED TREATY

The Federal Government is preparing the ratification of the "Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and the Subsoil thereof", of 11th February 1971. The Bill for its ratification has been brought before the Bundesrat (Bundesrat-Drucksache 495/71).

TEXTS

● *Italy*

ACT NO. 1240 OF 15TH DECEMBER 1971

Rules for the reorganisation of the "Comitato nazionale per l'energia nucleare", (National Committee for Nuclear Energy) (CNEN)*

Part I

Article 1

The National Committee for Nuclear Energy set up by Act No. 933 of 11th August 1960, shall be a corporation governed by public law with headquarters in Rome; it shall be subject to the supervision of the Ministry of Industry, Commerce and Crafts, after consultation with the Minister for Co-ordination of Scientific and Technological Research where preparation of research and development programmes is concerned, and shall pursue its activities in accordance with the directives of the Interministerial Committee for Economic Planning (CIPE).

Article 2

The task of the CNEN, in relation to the use of nuclear energy for peaceful purposes, shall be .

- (1) to undertake, including undertaking to order, and to promote (with appropriate co-ordination) studies, research and experiments in the field of nuclear disciplines, nuclear installations and technologies, plantsafety and protection from ionizing radiations.
- (2) to be responsible, in co-operation with the national industries specialising in this field, for the design, construction and development of prototype reactors and prototype nuclear installations and components, for experimental and pilot use, including those connected with nuclear fuels, reprocessing and utilization of substances of nuclear interest and the related technologies. In the absence of such co-operation, the CNEN shall proceed directly to undertake such tasks, subject to the approval of the CIPE;

* Unofficial translation by the Secretariat.

- (3) to maintain and develop scientific and technical co-operation with international bodies operating in the nuclear field, within the framework of international agreements and on the basis of directives from the Ministry of Industry, Commerce and Crafts and the Ministry of Foreign Affairs, after consultation with the Minister for Co-ordination of Scientific and Technological Research;
- (4) to operate such controls as may be necessary for the nuclear safety of workers and populations and their health protection against ionizing radiations; to control special fissile materials, source materials and ores; to perform the obligations arising from international agreements regarding the system of safeguards to be applied to special fissile materials, source materials and ores;
- (5) to promote and encourage the technical training of staff with specialized knowledge in the field of nuclear energy and its related applications and technologies;
- (6) to disseminate knowledge of nuclear problems and the results of nuclear activities;
- (7) to furnish opinions to, and co-operate with, Government departments in all questions relating to ores, source materials and radioactive substances and to installations producing nuclear energy and, in general, all matters relating to nuclear energy and its applications.

In order to carry out the tasks referred to in paragraphs (1) (2) and (3) of this Article, the CNEN :

- (a) may, by means of appropriate agreements or contracts, entrust research and experimental institutes, or other bodies or firms, with studies, research or experiments for implementing specific scientific programmes, provided such work is co-ordinated with the CNEN's own activities;
- (b) shall co-operate with national industries in the nuclear field, by means of appropriate agreements and contracts, in producing prototype, experimental and pilot installations, and components and may make available to such industries personnel, know-how, patent licences and equipment;
- (c) may, within the framework of programmes approved by the CIPE and subject to authorisation from the Ministry of Industry, Commerce and Crafts, hold a minority interest in industrial consortia, including those taking the form of joint-stock companies, or in companies and firms constituted in international form, whose object is the industrial development of the peaceful uses of nuclear energy. Contributions to national companies shall be solely in the form of provision of know-how and experience, equipment and the services of qualified staff.

Article 3

The Interministerial Committee for Economic Planning (CIPE) .

- (1) shall lay down directives concerning the activities of the CNEN in the general framework of scientific research and the nuclear sector;
- (2) shall discuss the pluri-annual programmes drawn up by the CNEN and forwarded to the CIPE by the Minister for Industry, Commerce and Crafts.

Article 4

The CNEN shall have the following executive organs :

The Chairman;
The Board of Directors;
The Executive Board,
The Board of Auditors

Article 5

The Chairman shall be appointed by Decree of the President of the Republic, on the proposal of the Minister for Industry, Commerce and Crafts, after consultation with the Council of Ministers. He shall hold office for five years and may be re-appointed for one five-year term only.

The office of Chairman shall be incompatible with the functions of administrator or official of public economic bodies, or member of the organs of management of commercial companies.

The Chairman shall be relieved of office if, within sixty days of notification, the situation giving rise to incompatibility has not come to an end.

Any official of the State or of a non-economic public body who is appointed Chairman shall be placed on the non-active list.

Article 6

The Chairman shall :

- (a) represent the organisation in law;
- (b) convene and preside over meetings of the Board of Directors;
- (c) convene and preside over meetings of the Executive Board; draw up the agenda after consultation with the General Manager;
- (d) supervise the general running of the Organisation;

- (e) submit to the Minister for Industry, Commerce and Crafts the budget estimates and final statement of accounts and, by 30th April each year, after consultation with the Board of Directors, a report on the organisation's activities during the previous year.

Article 7

The Board of Directors shall consist of

- (1) the Chairman,
- (2) eight members, five of whom shall be experts in nuclear science and technology and its applications, two experts in business management and one in industrial technology,
- (3) two experts appointed respectively by the Minister for the Budget and Economic Planning and the Minister for Co-ordination of Scientific Research;
- (4) the Director-General responsible for the Directorate-General for energy sources and basic industries at the Ministry of Industry, Commerce and Crafts;
- (5) three members of the staff, one of whom shall be a research worker to be chosen from lists of three names put forward by the most representative trade unions in the organisation.

The members of the Board of Directors shall be appointed by Order of the Prime Minister, after consultation with the Council of Ministers, on the proposal of the Ministry for Industry, Commerce and Crafts, and shall hold office for five years. The Board of Directors shall elect a Vice-Chairman from among its members, for a similar term of office. The Vice-Chairman besides carrying out the tasks delegated to him by the Chairman, shall replace the latter in case of absence or inability to attend.

The Board of Directors shall be convened by the Chairman whenever he considers it necessary or at the request of not less than five members of the said Board.

The Board of Directors shall :

- (a) decide upon the internal rules and regulations of the CNEN,
- (b) ensure implementation of the directives of the CIPE, and on the basis of these decide on the pluri-annual programmes of the Committee,
- (c) decide on the budget eight months before the beginning of each financial year, and on any provisions amending it, and on the final balance-sheet within four months after the end of the financial year.
- (d) decide on those expenditure commitments for which responsibility has not been delegated to bodies or services;

- (e) decide on the matters referred to in sub-paragraphs (a), (b) and (c) of the last paragraph of Article 2,
- (f) elect the members of the Executive Board.

The Board of Directors shall be empowered to determine, in respect of the members of the Executive Board, whether such membership is compatible with any other professional activity or with public and private commitments.

Any civil servant or official of non-economic public bodies appointed a member of the Executive Board and whose situation the Board of Directors has found to be incompatible with his duties in accordance with the preceding paragraph shall be placed on the non-active list.

The decisions of the Organisation shall not be subject to the approval of the supervisory authority, except for those relating to the budget and the final balance-sheet as referred to in sub-paragraph (c) in the fourth paragraph of this Article and those concerning matters referred to in sub-paragraphs (a) and (b) in the final paragraph of Article 2, but for those referred to in sub-paragraph (a) only as regards agreements and contracts involving more than thirty million lire.

The said decisions shall be approved by the Minister for Industry, Commerce and Crafts, after consultation with the Minister for the Treasury.

The Board shall take its decisions by majority vote. In the case of a tie, the Chairman shall have the casting vote. At least seven members, including the Chairman or his substitute must be present for decisions to be valid.

In drawing up programmes, the Board of Directors must consult a Committee of not more than eight members elected by the scientific research staff.

Before deciding on programmes, the Board of Directors must consult the Labour Organisations regarding the financial and organisational guidelines for the implementation of the said programmes. It must also consult these same Organisations with regard to drawing up or amending the internal rules and regulations.

Article 8

The Executive Board shall consist of a Chairman, who shall be the Chairman of the Organisation and of four members elected by the Board of Directors among those of its members who are referred to in sub-paragraphs (2) and (3) of the first paragraph of Article 7.

The task of the Executive Board shall be :

- (a) to draw up the agenda for the Board of Directors' meetings and prepare the necessary documents,
- (b) to deputize for the Board of Directors in emergencies, taking the necessary measures which must be submitted to the Board of Directors for ratification at their next meeting;

- (c) to fulfil all other functions delegated to it by the Board of Directors.

Article 9

On the proposal of the Chairman of the CNEN, the Minister for Industry, Commerce and Crafts may, by Order, and for a limited period, set up advisory committees in respect of particular problems relating to the Organisation.

Article 10

The Board of Auditors shall be appointed by Order of the Minister for Industry, Commerce and Crafts; it shall be composed of three regular members and two deputies, whose term of office shall be five years. Of the said members :

- (a) one regular Auditor, who shall also act as Chairman, and one deputy shall be appointed by the Ministry for the Treasury,
- (b) two regular Auditors and one deputy shall be chosen from among the officials of the Ministry of Industry, Commerce and Crafts.

The Board of Auditors shall verify the administrative acts of the Organisation, check the proper keeping of the account books and accounting entries and carry out cash audits. It shall draw up a report on the balance-sheet, and periodically report back to the Minister for Industry, Commerce and Crafts. They may attend meetings of the Board of Directors.

The Board of Auditors shall also exercise its functions even if the management of the Organisation is entrusted to a Government Commissioner.

Article 11

The emoluments of the members of the Board of Directors, the Executive Board and the Board of Auditors shall be laid down by Order of the Minister for Industry, Commerce and Crafts after consultation with the Minister for the Treasury.

Article 12

The General Manager shall be appointed on the recommendation of the Board of Directors, by Order of the Minister for Industry, Commerce and Crafts. The General Manager may be relieved of office, have his appointment terminated or his functions suspended by Order of the aforesaid Minister.

The salary of the General Manager shall be laid down by the Board of Directors.

Article 13

The General Manager shall.

- (a) participate in an advisory capacity in meetings of the Board of Directors and the Executive Board and have the power to initiate and propose action,
- (b) supervise the implementation of the Board's decisions;
- (c) prepare the budget and final balance-sheet to be submitted to the Board of Directors;
- (d) supervise the activities of the Organisation and be answerable to the Board of Directors for the same,
- (e) exercise any other function relating to the management of the Organisation which may be entrusted to him by the Board of Directors and which is not the exclusive responsibility of another body.

Any remuneration payable to the General Manager or to other officials in respect of external tasks undertaken as representatives of the CNEN shall be paid over to the latter's budget.

Article 14

The rules governing the legal status, remuneration and provident scheme for staff members shall be laid down in regulations drawn up by the Board of Directors, and in accordance with the agreements reached with the trade unions.

For particular requirements, the Board of Directors shall be empowered by way of exception to the provisions of Act No. 230 of 18th April 1962, to engage highly qualified technical staff or advanced research staff on fixed-term contracts.

The regulations must be approved by the Minister for Industry, Commerce and Crafts in agreement with the Minister for the Treasury.

Article 15

Any rights in respect of industrial inventions made within the framework of a contract of employment or in any manner in the course of providing services to the CNEN, in which study, research and experiments are the object of the relationship and remunerated accordingly, shall be the property of the Organisation, without prejudice to the inventor's right to be recognised as such.

The inventor shall receive a fair reward, which shall take into account the importance of the invention.

Article 16

In case of default of such a kind as to prejudice the normal technical operation and administration of the Organisation, or where the directives of the Interministerial Committee for Economic Planning are repeatedly disregarded, the Board of Directors may be dissolved by Decree of the President of the Republic on the proposal of the Minister for Industry, Commerce and Crafts.

In such case the powers of the Chairman of the Board of Directors shall be exercised by a Commissioner appointed by the same Decree by which the ordinary executive organs are dissolved.

A new Board of Directors must be appointed within six months following the appointment of the Commissioner.

Article 17

The balance-sheet of the CNEN shall be annexed to the statement of estimated expenditure of the Ministry of Industry, Commerce and Crafts for the financial year following that in which the said balance-sheet was approved.

Article 18

The State Audit Office shall be responsible for verifying the proper financial administration of the CNEN according to the procedures laid down in Articles 4, 7, 8, 9 and 12 of Act No. 259 of 21st March 1958.

Article 19

After the balance-sheet has been submitted to the Minister for Industry, Commerce and Crafts, the Chairman of the Board of Directors of the CNEN or his substitute shall be required to give an account of the programmes carried out and the results obtained in research, before a Parliamentary Commission consisting of five Senators and five Deputies chosen by the Presidents of the two Chambers.

Article 20

The CNEN shall carry out the tasks referred to in Article 2 of this Act with funds derived from its own assets, contributions from the State, other bodies and private persons and any other resources arising from its activities.

Charges for technical services provided for firms or private persons involving tests, analyses, controls and certificates, must be paid for by those requesting them, according to scales laid down by the Board of Directors.

Article 21

The management of the assets and finances of the Organisation shall be governed by a set of accounting rules which shall take into consideration the specific nature of the Organisation and shall be decided by the Board of Directors. The said rules must be approved by the Minister for Industry, Commerce and Crafts, after consultation with the Minister for the Treasury.

Article 22

Articles 1 to 11 and 17 to 19 of Act No. 933 of 11th August 1960 are hereby repealed.

Article 23

The legislative measures concerning the financing of the CNEN's pluri-annual programmes, approved by the CIPE as laid down in Article 3 of this Act, shall be proposed by the Minister for Industry, Commerce and Crafts in agreement with the Minister for the Treasury, after consultation with the Minister for the Co-ordination of Scientific Research and Technology.

Any appropriations provided for under the Finance Acts that are not committed during the financial year for which they were approved shall be carried forward and added to the funds allocated in subsequent years for the execution of the pluri-annual programmes to which they relate.

Article 24

A Commission shall be set up, attached to the Ministry for Industry, Commerce and Crafts, to advise on the industrial uses of nuclear energy and the co-ordination of activities of the bodies working in this field.

The Commission, whose Chairman shall be the Minister for Industry, Commerce and Crafts, or his deputy, shall be appointed by Order of the said Minister and shall consist of not more than ten members, nominated by the public or private bodies operating in the nuclear sector, at the request of the Minister.

The Commission shall hold office for five years.

Part II

National Institute of Nuclear Physics

Article 25

The National Institute of Nuclear Physics (INFN) at present governed by the Ministerial Order of 26th July 1967 shall be a corporation governed by public law with an independent budget.

The Minister for Industry, Commerce and Crafts, in agreement with the Minister for Education, shall decide which assets of the CNEN should be transferred to the INFN having regard to the tasks entrusted to the latter, and the CNEN shall be authorised to transfer the assets so selected to the INFN.

Article 26

The Interministerial Committee for Economic Planning (CIPE) shall decide upon the pluri-annual programmes proposed by the INFN and forwarded by the Ministry of Education.

Article 27

The legislative measures concerning the financing of the pluri-annual programmes of the Institute, approved by the CIPE as laid down in the preceding Article of this Act, shall be proposed by the Minister of Education in agreement with the Minister for the Treasury.

Any appropriations provided for under the Finance Acts that are not committed during the financial year for which they were approved shall be carried forward and added to the funds allotted in subsequent years within the limits of the pluri-annual programme to which they relate.

This Act, bearing the State seal, shall be entered in the Official Register of Acts and Decrees of the Republic of Italy. It shall be the duty of all concerned to observe it and see that it is observed as a law of the State.

Done in Rome on 15th December 1971

ENEA-IAEA-IMCO

CONVENTION RELATING TO CIVIL LIABILITY IN THE FIELD OF MARITIME CARRIAGE OF NUCLEAR MATERIAL

The High Contracting Parties,

CONSIDERING that the Paris Convention of 29th July 1960 on Third Party Liability in the Field of Nuclear Energy and its Additional Protocol of 28th January 1964 (hereinafter referred to as "the Paris Convention") and the Vienna Convention of 21st May 1963 on Civil Liability for Nuclear Damage (hereinafter referred to as "the Vienna Convention") provide that, in the case of damage caused by a nuclear incident occurring in the course of maritime carriage of nuclear material covered by such Conventions, the operator of a nuclear installation is the person liable for such damage.

CONSIDERING that similar provisions exist in the national law in force in certain States,

CONSIDERING that the application of any preceding international Convention in the field of maritime transport is however maintained,

DESIROUS of ensuring that the operator of a nuclear installation will be exclusively liable for damage caused by a nuclear incident occurring in the course of maritime carriage of nuclear material,

HAVE AGREED as follows

Article 1

Any person who by virtue of an international convention or national law applicable in the field of maritime transport might be held liable for damage caused by a nuclear incident shall be exonerated from such liability

- (a) if the operator of a nuclear installation is liable for such damage under either the Paris or the Vienna Convention, or
- (b) if the operator of a nuclear installation is liable for such damage by virtue of a national law governing the liability for such damage, provided that such law is in all respects as favourable to persons who may suffer damage as either the Paris or the Vienna Convention.

Article 2

1. The exoneration provided for in Article 1 shall also apply in respect of damage caused by a nuclear incident .

- (a) to the nuclear installation itself or to any property on the site which is used or to be used in connexion with that installation, or

- (b) to the means of transport upon which the nuclear material involved was at the time of the nuclear incident,

for which the operator of the nuclear installation is not liable because his liability for such damage has been excluded pursuant to the provisions of either the Paris or the Vienna Convention, or, in cases referred to in Article 1(b), by equivalent provisions of the national law referred to therein.

2. The provisions of paragraph 1 shall not however, affect the liability of any individual who has caused the damage by an act or omission done with intent to cause damage.

Article 3

No provision of the present Convention shall affect the liability of the operator of a nuclear ship in respect of damage caused by a nuclear incident involving the nuclear fuel of or radioactive products or waste produced in such ship.

Article 4

The present Convention shall supersede any international Conventions in the field of maritime transport which, at the date on which the present Convention is opened for signature, are in force or open for signature, ratification or accession but only to the extent that such Conventions would be in conflict with it; however, nothing in this Article shall affect the obligations of the Contracting Parties to the present Convention to non-Contracting States arising under such international Conventions.

Article 5

1. The present Convention shall be opened for signature in Brussels and shall remain open for signature in London at the Headquarters of the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as "the Organization") until 31st December 1972 and shall thereafter remain open for accession.

2. States Members of the United Nations or any of the Specialized Agencies or of the International Atomic Energy Agency or Parties to the Statute of the International Court of Justice may become Parties to the present Convention by :

- (a) signature without reservation as to ratification, acceptance, or approval;
- (b) signature subject to ratification, acceptance or approval followed by ratification, acceptance or approval, or
- (c) accession.

3. Ratification, acceptance, approval or accession shall be effected by the deposit of a formal instrument to that effect with the Secretary-General of the Organization.

Article 6

1. The present Convention shall enter into force on the ninetieth day following the date on which five States have either signed it without reservation as to ratification, acceptance or approval or have deposited instruments of ratification, acceptance, approval or accession with the Secretary-General of the Organization.

2. For any State which subsequently signs the present Convention without reservation as to ratification, acceptance or approval, or deposits its instrument of ratification, acceptance, approval or accession, the Convention shall come into force on the ninetieth day after the date of such signature or deposit.

Article 7

1. The present Convention may be denounced by any Contracting Party to it at any time after the date on which the Convention comes into force for that State.

2. Denunciation shall be effected by a notification in writing delivered to the Secretary-General of the Organization.

3. A denunciation shall take effect one year, or such longer period as may be specified in the notification, after its receipt by the Secretary-General of the Organization.

4. Notwithstanding a denunciation by a Contracting Party pursuant to this Article the provisions of the present Convention shall continue to apply to any damage caused by a nuclear incident occurring before the denunciation takes effect.

Article 8

1. The United Nations where it is the administering authority for a territory, or any Contracting Party to the present Convention responsible for the international relations of a territory, may at any time by notification in writing to the Secretary-General of the Organization declare that the present Convention shall extend to such territory.

2. The present Convention shall, from the date of receipt of the notification or from such other date as may be specified in the notification, extend to the territory named therein.

3. The United Nations, or any Contracting Party which had made a declaration under paragraph 1 of this Article may at any time after the date on which the Convention has been so extended to any territory declare by notification in writing to the Secretary-General of the Organization that the present Convention shall cease to extend to any such territory named in the notification.

4. The present Convention shall cease to extend to any territory mentioned in such notification one year, or such longer period as may be specified therein, after the date of the notification by the Secretary-General of the Organization.

Article 9

1. A Conference for the purpose of revising or amending the present Convention may be convened by the Organization.

2. The Organization shall convene a Conference of the Contracting Parties to the present Convention for revising or amending it at the request of not less than one-third of the Contracting Parties.

Article 10

A Contracting Party may make reservations corresponding to those which it has validly made to the Paris or Vienna Convention. A reservation may be made at the time of signature, ratification, acceptance, approval or accession.

Article 11

1. The present Convention shall be deposited with the Secretary-General of the Organization.

2. The Secretary-General of the Organization shall

(a) inform all States which have signed or acceded to the present Convention of :

- (i) each new signature and each deposit of an instrument together with the date thereof;
- (ii) any reservation made in conformity with the present Convention;
- (iii) the date of entry into force of the present Convention,
- (iv) any denunciation of the present Convention and the date on which it takes effect;
- (v) the extension of the present Convention to any territory under paragraph 1 of Article 8 and of the termination of such extension under the provisions of paragraph 4 of that Article stating in each case the date on which the present Convention has been or will cease to be so extended;

(b) transmit certified true copies of the present Convention to all Signatory States and to all States which have acceded to the present Convention.

3. As soon as the present Convention comes into force, a certified true copy thereof shall be transmitted by the Secretary-General of the Organization to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

Article 12

The present Convention is established in a single original in the English and French languages, both texts being equally authentic. Official translations in the Russian and Spanish languages shall be prepared by the Secretariat of the Organization and deposited with the signed original.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed the present Convention.

DONE at Brussels this seventeenth day of December 1971

STUDIES AND ARTICLES

ARTICLES

ADMITTANCE OF NON-MILITARY NUCLEAR PROPULSION SHIPS IN TERRITORIAL WATERS AND FOREIGN PORTS

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1. The recent application of nuclear energy to naval propulsion has brought about serious legal problems closely associated with the particular hazards arising from the installation of a nuclear reactor on a vessel that is to sail on the shipping lanes. At present, there are only three non-military nuclear ships: the Soviet ice-breaker "Lenin", the U.S. "Savannah" and the German "Otto Hahn". Next year the Japanese "Mitsu" should also be commissioned.

The hazards entailed by the operation of these nuclear propulsion ships have already prompted the passing of a great number of national laws in Sweden, Belgium, Spain and France, and of international laws based on bilateral agreements and conventions. These laws aim to achieve two ends on one hand, preventing any damage that could be produced by nuclear propulsion by the enforcement of adequate safety standards; and on the other, the satisfactory attribution of liability for compensating damage in the event of an incident.

The need for fixed rules conceived specifically for nuclear navigation and the inadequacy of legislation on traditional navigation depend on the peculiarity of the nuclear naval hazards. Apart from all the hazards common to traditional navigation, such as the risk of collision, fire, etc., nuclear propulsion ships are subject to all the risks of land-based nuclear plants, the main one being the escape of highly dangerous radioactive material. To these risks are to be added the risks peculiar to nuclear navigation, such as the probability that a typically maritime incident will cause a nuclear incident and vice versa.

* The ideas expressed, and the facts given in this article are under the sole responsibilities of the author.

The international conventions on nuclear energy are the 1960 Paris Convention and the 1963 Vienna Convention. These Conventions, however, only provide for incidents arising from the utilization of nuclear plants on land, expressly excluding from their sphere of jurisdiction the reactors installed on a means of transport. Two conventions have been elaborated for the latter Chapter VIII of the London Convention on the protection of human life at sea of 17th June 1960, which aims to harmonise the legislation on safeguards and was ratified by eighty-two countries, and the Brussels Convention on the liability of nuclear ship operators of 25th May 1962, which follows the basic principles sanctioned by the Paris Convention.

2. For the particular purpose of admitting nuclear ships in territorial waters and foreign ports, the London Convention prescribes that prior authorisation is to be obtained from the Host State, which is also entitled to choose the port where it deems it appropriate for the ship to berth.

Some find that in such obligation to obtain an authorisation there is a deviation from the general principle of international law, which consecrates free circulation of ships, the right to free inoffensive transit in territorial waters and the right to stop and berth in cases of force majeure or need. It is our opinion that there is no such deviation, and in this connection we feel that the authoritative doctrine of Conforti, Quadri and Leanza should be followed, which stems from a spatial delimitation of the coastal State's jurisdiction and does not acknowledge the principle of territorial sovereignty on adjacent waters. In this manner, it is possible to avoid admitting free inoffensive transit as an exception and a limitation on the State's sovereignty, but it may be taken as the expression of a general principle. This can be achieved by considering, on one hand, that the powers of the coastal State have functional, rather than geographic limits that are closely related to the needs of the community residing in the territory; and, on the other hand, that the power of the flag State is likewise a function of the community on board of the ship. Under these conditions, as long as the life and activities of one community do not interfere in any way with those of the other, neither State has any power to intervene in respect of the other's community. Thus, transit in adjacent waters and even landing in foreign ports may take place freely as long as no interference between the two communities arises.

However, when some manifestations of the ship's community are apt to have an actual or potential impact on the life of the territorial community, the coastal State may then intervene to settle the conflict of interests by exercising its jurisdiction also on the ship's community, so as to guard its own interest in the undisturbed course of the life and activities of its territorial community, an interest which has priority and is acknowledged by law. Likewise, when the transit or stay of a ship in adjacent waters or in foreign harbours entails an interference between the two communities, the transit can no longer be called inoffensive, and the coastal State is entitled to intervene for the purpose of protecting the interests of its community. Of course, the legal powers of the coastal State over the ship's community will be greater as the connection between the two countries becomes closer, that is, they will have a greater bearing on a ship at berth in the port than on a ship in transit in territorial waters. Therefore, inoffensive transit cannot be taken as an autonomous right of the flag State limiting the territorial sovereignty of the coastal State, but it is to be regarded as one of the flag State's many ways of exercising its rule over the ship's community, which rule is enforced independently of any connection with the coastal State, at least as long as the transit is inoffensive.

This context also allows an interpretation of Section III of the 1958 Geneva Convention on territorial waters and adjacent zone, which actually deals with the "Right of inoffensive transit", although the provisions of this Convention are based on the recognition of the coastal State's territorial sovereignty on adjacent waters delimited spatially. Article 14 acknowledges the right of inoffensive transit in territorial waters, including the right to stop and anchor in cases of force majeure or if such need arises from ordinary navigation trouble.

It also defines an inoffensive transit to be one that is not prejudicial to the peace, good order or safety of the coastal State.

The powers of the coastal State are set out in Articles 15 and 16, which specify that the coastal State cannot oppose inoffensive transit, but on the other hand, it can take any measures required in its territorial waters to prevent any transit that is not inoffensive. It may also temporarily forbid the right of inoffensive transit in certain areas of its territorial waters if this is indispensable for protection of the coastal State's safety.

In these provisions the Geneva Convention has merely codified the principles of general international law described above. Indeed, to recognise the freedom to transit as long as peace, good order and safety are not affected, means merely recognising the flag State's autonomy of jurisdiction on its own ship's community, as long as the latter does not interfere with the peaceful, orderly and safe performance of activities of the community residing in the territory.

When such an interference does occur in the manner described above, however, the Geneva Convention rules that the coastal State's interest is to prevail and that the coastal State is empowered to exercise its jurisdiction on the ship's community and to take any action necessary to protect its territorial community.

As regards nuclear propulsion vessels, the high potential of danger always present in the nuclear reactors installed on them never allows their transit in foreign territorial waters to be qualified as inoffensive, since the hazard to the coastal State's safety is evident, and even more so in the event of anchoring in ports.

We therefore believe that the London Convention, in regulating the admittance of nuclear propulsion vessels in territorial waters and foreign ports, does not deviate from the principles of international law, but rather implements them by determining the modalities for their application.

3. The authorisation of the Host State, according to the London Convention is subject to the examination of special documents as no direct check can be carried out by the naval authorities, since the nuclear reactor on board is installed in a sealed enclosure. It is thus necessary to produce a Safety Assessment Report including the safety requirements specified for the nuclear plant and ship, and to submit it to the discretionary evaluation of the naval authorities of the State whose authorisation is sought.

A Nuclear Passenger (or Cargo) Ship Safety Certificate is also required. This document, whose validity cannot exceed twelve months, is to be periodically renewed and should certify the compliance of the nuclear ship with all the provisions of Chapter VIII of the London Convention and with the requirements specified in the Safety Assessment Report.

At any rate, these provisions, as well as the other more technical provisions of Chapter VIII of the London Convention, are only general rules as to the minimum requisites and can be extended or adapted to the particular needs of each State, as has indeed occurred in all the bilateral agreements concluded so far. It is actually this general character of the Convention that has ensured the concurrence of nearly all the countries in the world, but this does not prevent it from proving inadequate and from requiring supplementary and more detailed provisions for each particular case. However, for the time being, it does not appear advisable to modify the Convention in a more restrictive and specific direction, as it would receive support from a very small number of countries and would risk slowing down the development of nuclear propulsion.

4. With regard to the problems of third party liability arising from nuclear ships in transit in territorial waters or anchoring in foreign ports, the Brussels Convention takes up the well-known principles of the Paris Convention, that is, attribution of absolute liability to the operator, except in the case of an act done with intent to cause damage, for every nuclear damage excluding damage to the ship itself and its cargo, limitation of the liability to a ceiling of one and a half billion gold francs, compulsory insurance coverage; obligation of the State that issued the licence for operation of the nuclear vessel to pay compensation for damage up to the aforesaid ceiling if the insurance coverage is less.

At any rate, since the Brussels Convention has not yet become effective and nuclear vessels do not come within the scope of application of the Paris and Vienna Conventions, and since specific rules concerning the attribution of the third party liability associated with the operation of a nuclear vessel are lacking, and where, for the time being no previous agreements between the parties exist, the effective rules of the individual countries' legislations may be enforced as are applicable to each particular case.

This explains the reason for the growing number of bilateral agreements between the States owning a nuclear vessel and the States requested to harbour it. So far, to our knowledge, Germany has entered into two agreements for the "Otto Hahn" * and the United States have entered into fifteen for the "Savannah", one of which with Italy, dated 23rd November 1964. The latter agreement was updated on 16th December 1965 by an Exchange of Notes, for the ratification and implementation of which a Bill has been presented in Italy but not yet passed.

This Agreement, which basically follows the same pattern as the others, first specifies the safety rules. The entry of the ship in Italian waters and ports is subject to the Italian Government's approval; Italy reserves the right to choose the most suitable ports and the right to go on board for any inspections as may be deemed necessary; the discharge of radioactive waste is forbidden unless an explicit authorisation therefor has been granted, reference is made to the London Convention for every other question concerning safety. The Agreement then sets forth the rules on third party liability, which is attributed absolutely to the operator up to a maximum of five hundred million dollars. Finally, the jurisdiction of the Italian courts based on the Italian law prevails. The same ceiling of five hundred million dollars has been stipulated in all the agreements for the "Savannah", whereas in the agreements for the "Otto Hahn" the maximum liability is four hundred million marks.

* With ENEA Member States.

The practice of bilateral agreements, though necessary and irreplaceable, at least for the time being, entails long and difficult negotiations and gives rise to complex juridical problems, especially as concerns liability. This situation is bound to last until the Brussels Convention becomes effective, and this is not foreseeable in the short term, mainly because the Convention would be applicable to military ships as well.

5. To overcome these difficulties, the European Nuclear Energy Agency of the Organisation for Economic Co-operation and Development has recently undertaken the task of studying the matter carefully in an effort to eliminate the existing inconveniences. It was felt that, since no new fact has emerged to justify the hope that the Brussels Convention will be enacted soon on a generalised basis, all negotiations for visiting vessels will continue on the basis of bilateral agreements, therefore, in the meantime, while hoping that the situation of nuclear propulsion navigation will be settled soon so that international Conventions, and not bilateral agreements, can be applied in all countries, it was considered appropriate to hold multilateral discussions among all the States concerned through the "Group of Governmental experts on third party liability in the field of nuclear energy". This would facilitate the negotiations for visits by nuclear ships by means of a model agreement that can temporarily serve as a pattern for the bilateral agreements.

A Restricted Group of Experts was instructed in 1971 to examine a Model Agreement prepared by the Secretariat of the Agency. On the basis of the amendments proposed at the meeting, a new draft has been prepared and is now being examined by the members of the Working Group. The proposed text does not deal with safety regulations, as the minimum requirements specified in the London Convention are considered adequate for the purpose, thus it was possible to avoid imposing rigidity on laws that must be flexible enough to be easily fitted to the particular circumstances of each bilateral agreement. The new text only defines the boundaries of liability in harmony with the provisions of the Brussels Convention, with adaptations as required to the specific case of visits by nuclear vessels.

Article 1 contains the same list of definitions given in Article I of the Convention, but explicitly excludes warships from the definition of "nuclear ships" and adds the terms "visit by a nuclear ship" and "Host State". The former concerns the ship's entry and stay in the territorial sea, inland waters or harbours of the Host State, the latter is defined as the Contracting State which is visited by the nuclear ships. Articles 2 and 10 are completely new and determine respectively the sphere of application of the agreement to visits by nuclear ships whose operation has been authorised by a Signatory State, and the notice that the captain is to give in the event of an accident. However, the regulations concerning the attribution of liability (Articles 4, 6 and 9), limitation in time (Article 7), joint liability (Article 8), are the same as those in the Brussels Convention.

However, there are also some substantial differences. One important point, which constitutes a step forward from the standpoint of administrative procedures, is that the authorisation of the Host State is valid for one year, automatically renewable; therefore, its application can be extended to several visits during the period of validity of the authorisation (Article 3).

The outstanding provision concerns the sphere of territorial application of the visiting agreements. Article 4(a) refers to damage suffered on the territory or on the territorial waters or on a ship of the Host State, during a visit to that State or during a voyage to or from that State *.

The proposed model agreement differs from the Brussels Convention also with regard to the limitation of liability. Article 5 states that the operator's maximum liability is one hundred million EMA u/a, but leaves the Contracting States free to increase this maximum by mutual agreement.

Moreover, the provisions on the limitation of liability specify that the evidence of insurance coverage or other financial security must be set out in a certificate that is to be made available to the Host State's authorities on request.

Another important difference from the Brussels Convention is that the Host State has exclusive jurisdiction on the matter (Article 11) and that any judgments passed therein are to be honoured by the other Contracting State (Article 12). It is also ruled that the legislation of the State of the competent court will be applicable on a subsidiary basis (Article 13). These provisions favour the damaged party to a greater extent than those of the Brussels Convention, according to which the plaintiff may bring a claim before the court of the State that has authorised operation of the nuclear ship or before the court of the territory on which the damage was suffered.

The OECD proposal is undoubtedly most appropriate and worthy of support, and the approval of a model agreement similar to the one described above would be extremely useful as it would not only favour considerably the formulation of all subsequent visiting agreements, but it would also serve as a reference for countries that have no particular rules in this respect and would thus minimize inconsistencies between the legislations of different countries.

* It is also provided that Contracting States may, by option, extend the liability regime of the Agreement to cases where a nuclear incident has occurred during a voyage which is not connected with a visit to the Host State (note by the Secretariat).

CONSIDERATIONS ON THE ATTRIBUTIONS OF CNEN INSPECTORS *

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The attributions given to the National Nuclear Energy Commission by the Act establishing its institutional tasks (1), also include the attributions specifically conferred on CNEN Inspectors which were laid down under Section 13 of Presidential Decree No. 185 of 13th February 1964.

The concept of "attribution" may take on, according to circumstances, the most diverse meanings (2). As a result, the multiple meanings taken on by the term "attributions" give rise to a difficulty relating to the determination of the character and limits of such attributions.

In the case in point, we will try to remedy what may be considered as an imperfection of our juridical language, or rather as an easy synthetic expression, by reviewing the basic provisions in point, and namely Sections 13 and 14 of Presidential Decree No. 185 (see Annex).

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- (1) Act No. 933 of 11th August 1960 recently amended by Act No. 1240 of 15th December 1971.
- (2) In effect, attributions may be defined as competences, functions, options, rights, powers and duties. From the viewpoint of competence, the attribution proves to be restricted to a rather precise context, according to the juridical provisions defining it, then within the context of competence, an attribution may be envisaged as a function (of the mechanism of that body) as an aim or as an aptitude to reach an aim (hence the adjective "functional"); by power is meant the practical manifestations of the body's activity, i.e. the concrete possibility of using the instruments made available; such instruments materialize from time to time as rights, powers and duties. The rights represent the attribution of specific acknowledgements that the system of law grants to subjects in order to enable the exercise of juridical acts; the powers are to be envisaged as direct interventions, susceptible of immediately altering the juridical sphere of third parties and those protected by the law. In conclusion, from a passive standpoint, a duty represents, for the holder of a right, an obligation in that it involves responsibility, a burden in that it influences the the exercise of the right.

* Translation kindly provided by the authors.

** The ideas expressed, and the facts given in this article are under the sole responsibility of the authors.

I. First of all, it is worth determining whether the concept of the "attributions" of CNEN Inspectors is to be identified with the expression "inspection functions for the enforcement of this law" /Presidential Decree No. 1857, i.e. in a purely "fiscal" sense, or construed in a broader sense, by also envisaging the attributions that are not specifically limited to the individual Administrations, as set forth in the first paragraph of Section 13. In this connection, it is important to define the scope of the reserve set forth by the lawmaker with the words "Apart from, etc..." which open the Section involved.

This wording introduces a precise distinction and at the same time determines a non-exclusiveness. a distinction insofar as it concerns the specific relations between CNEN and the four Ministries mentioned in the provision (3), in that the law recognises, in points of nuclear control, that a competence of CNEN Inspectors exists or comes into being ex novo, along with the other conventional Administrations involved; a non-exclusiveness insofar as the attributions entrusted to the control bodies of the four Ministries concerned do not appear to be incompatible with those given to CNEN Inspectors, in that in the sphere where such Administrations act ope legis, the said Inspectors come to acquire a functional competence, since the law empowers them to achieve their inspecting ends (4).

If we consider this issue more attentively, the non-exclusive nature of the reserve would mean that the sphere of control of conventional Administration fails to reproduce that reserved for CNEN by law, be it from the material or functional (scope, objectives) standpoint.

Let us try to explain the above considerations better. Above all, it should be observed that the inspecting functions of conventional administrative bodies are mainly carried out in those matters governed by Chapters IV (regulations of the mining police), VIII (health protection of workers) and IX (health protection of the population) of Presidential Decree No. 185.

It should be underlined at this stage how the law expressly provides for the competence of the Ministry of Health and of the Ministry of Labour (the former usually exclusive, the latter normally compatible with the intervention of CNEN inspectors) in relation to plants to be solely and directly used for medical, diagnostic and therapeutic purposes (Section 13, penultimate and last paragraphs). With reference to the above, however, one cannot rule out the possibility of interventions, concerning plants governed by Chapter VII, by the control bodies of the aforementioned administrations, within the framework of the provisions contained in Chapters VIII and IX ratione materiae, whereas the remaining sphere of competence set forth under Chapter VII would mean, the law being silent, a predominant competence of CNEN.

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- (3) Ministry of Industry, Ministry of Labour, Ministry of the Merchant Navy, Ministry of Health.
 - (4) Apart from what is expressly stated under the penultimate paragraph of Section 13 (inspections concerning plants used directly and solely for medical, diagnostic and therapeutic purposes).

II. The above considerations seem to be sufficiently valid in the face of a possible tendency to consider the figure of CNEN inspectors as a "duplicate" with respect to conventional inspecting bodies. Above all, one should start from the idea that the lawmaker could not have wanted the establishment of a superfluous body, despite the fact that a comparative review of analogous foreign legislation supposes that no figure sui generis and entirely new such as that of the above-mentioned inspectors exists.

Having made this assumption, the next step is to illustrate the thesis, which we will try to do by way of two considerations. First, one can note the competence of CNEN inspectors is a general competence, whereas the competences of other inspectors are sectorial. Thus the interventions performed by CNEN may be considered as necessary from the "eclectic" standpoint as well as from that of any need of a national nature seen from an overall and long-term angle.

Secondly, the competence of CNEN inspectors is not to be considered only from the cumulative aspect in point of competences of others, save for the due exceptions, but is to be considered above all from a specialised angle. The latter is relevant to CNEN inspectors who are the representatives of the competent body "par excellence" for all nuclear matters, whereas the other inspecting bodies are competent "par excellence" in other sectors, more or less broad, of the human activity and, consequently, of the nuclear sector, where and if they are called upon to do so. In short, the action of CNEN inspectors appears to be more specialised, continuous and particular.

A brief mention here of the provisions of Section 14 of Presidential Decree No. 185 may prove timely, in that from them, enlightening considerations may be drawn as to the problem of the supposed "conflict of competences" or of the supposed uselessness of CNEN inspectors vis-à-vis the other inspecting bodies.

From the study of the abovementioned provisions, which govern in matters of "joint inspections", it follows that such inspections are only a part of the whole inspecting case-history, if not they would have been placed within a broader text, namely under the same Section 13. If they are therefore special cases in point, it follows that, normally, the respective competences do not overlap, or at least do not interfere with one another to the extent of requesting the enactment of more than one provision, by different bodies, one of which is always represented by CNEN inspectors. This characteristic is found in the same second paragraph which, by supposing cases of "grave and impending danger", implicitly admits that CNEN inspectors may immediately take all necessary steps, provided notice is given as soon as possible to the "competent administrations". In connection with the interpretation to be given to the paragraph under consideration, two approaches are equally possible. According to the former, it could entail a literal inaccuracy and as a result

- (a) CNEN is to be included among the "competent Administrations" which are to be immediately informed, or
- (b) the intent of the lawmaker was to establish for the Ministries and consequently for their inspecting bodies, the obligation to inform immediately only the "competent Administrations", other than CNEN.

On the basis of the first approach, it goes without saying that each of the inspecting bodies concerned may take any step deemed necessary, following it up with a notice directed to the Authority usually empowered to take such step.

On the basis of the second approach, the provision under consideration can be, on the other hand, construed to the effect that, whereas CNEN inspectors may take all the suitable steps giving immediate notice to the other Ministries, the other inspecting bodies may take steps falling within the competences of other Administrations except those belonging to CNEN, since it seems inconceivable that powers exclusively given to CNEN be taken without informing that body.

In other words, the impossibility for conventional inspecting bodies to take steps belonging to CNEN would be contingent upon the fact that the law rules out the communication of the said steps, if any, to CNEN itself.

III. Again referring to Section 14 in connection with its wording and place, two points can be observed

- (a) that "cases of grave and impending danger" are cases calling normally for joint inspections, the latter, however, may be ruled out due to essential reasons of lack of time,
- (b) that for cases other than those of grave and impending danger, joint inspections are necessary only when there are reasons justifying the adoption of joint steps, of which several always originate from CNEN not only for the subject germane to the inspecting function, but also for the one pertinent to the "institutional tasks" of CNEN. Nevertheless, a restrictive interpretation seems here to be required for the obvious reasons that, otherwise, "joint inspections" would be necessary in most cases, whereas the normal separate ones would become somewhat rare. By contrast, the same law mentions inspections which are "as a rule" performed jointly in the above case, thus conferring a restrictive tone to the very provision. Moreover, one should consider that CNEN inspectors, though only exceptionally in the case of a grave and impending danger, are empowered to take steps falling outside the framework of their limited functions. This forms the subject of consideration in favour of a further reason to justify the existence of such body.

Drawing a first conclusion, aimed at determining the limits of the competences of CNEN inspectors, we may state that they are set forth as follows :

- attributions of a supervisory nature for the enactment of the Presidential Decree in general and of the provisions thereof (see note 3);
- attributions of a supplementary or rather complementary nature to those more specifically attributed by the Presidential Decree to other inspecting bodies, both from a qualitative and quantitative standpoint,
- attributions at least partly replaceable (on request of the Ministry) for those entrusted to the conventional bodies as for instance the case in point of Section 13, last paragraphs.

IV. The necessity to underscore the autonomy of the inspecting functions ascribed to CNEN stems from the fact that a first reading of the introductory wording of Section 13 may lead one to think of the occurrence of interferences between the bodies to which the inspectors belong. In other words, of the event of "conflicts of competences". In this connection two distinctions should be drawn.

Within the general conflicts of competences between Administrations, it is evident that such conflicts fail to take form, at least at the institutional level, in that the competences attributed to the various Administrations are distinct from one another owing to the fact that the tasks and functions are distinct.

"Conflicts of competences" may be considered, however, on the basis of what might occur in practice, be it for the natural tendency of the bodies - in exerting their activities - to go beyond the limits institutionally attributed to them with the aim of supplementing given functions which have proved defective, be it for the recurring difficulty of agreeing on an interpretation of the provisions of law establishing the tasks and functions of the various bodies.

As a further qualification of the above, it can be added that, in the case in point, the possibility of "conflicts of competences" seems to be indeed improbable on the administrative or, so to speak, executive level, in that CNEN has a "horizontal" place above Administrations proper. In fact, CNEN is an essentially technical body, i.e. a Body established for performing interventions on the basis on an overall nation-wide competence.

On the other hand, we might talk of interferences between CNEN and other technical bodies with inspecting functions. In this case, there seems to be no justification for considering useless a possible repetition of acts having an analogous or absolutely identical subject, since the content of the inspecting action differs according to the criteria and particular view of the body carrying it out. And even when convergence in content occurs between the inspecting actions, they can be nonetheless distinguished since they will inevitably give rise to additional interventions featuring a diverse nature and character. Moreover, the very wording of Section 14, substantiates that, if on one hand the occurrence of interferences on the inspection side may be possible, these are however only a rare event. In fact, in the case of grave or impending danger they are solved automatically by the sole corrective measure of immediate communication. On the contrary, in cases other than the latter, interferences are governed by way of a special practice, namely joint inspections.

Having determined the measure of the autonomy of CNEN inspecting functions in the abovementioned circumstances, as regards content and subject matter, it is deemed wise to draw attention to the fact that the plants defined in Chapter VII of the Presidential Decree are not the only field of exercise of inspecting functions for the purpose of health protection control. In effect, consideration of the third paragraph of Section 13 underscores that health protection inspectors, being entitled to access wherever radioactive equipment, nuclear and radioactive matter are held or used ...", are implicitly called upon to perform their activity even in fields other than plants proper, namely firms, companies and users in general carrying out an activity involving risks due to ionizing radiations.

In this case too, it is understood that additional competences, if any, provided for by law in point of controls for other reasons in favour of just as many bodies remain valid and effective - thus by no means taking on a conflicting nature. As aforestated, this is due to the fact that a possible convergence of inspecting actions may well entail subsequent interventions of a distinct nature, each proper to the body carrying them out.

Continuing in the review of the more significant provisions of Section 13, in order to reach a better understanding of the nature and limits of the attribution given to CNEN inspectors, we note that the fifth expressly provides for the qualification of judiciary police officers to be given to the said inspectors "acting in their official capacity".

Let us attempt to elucidate the latter expression: an inspector is said to be acting in his official capacity not only when he is actually effecting an inspection, but also every time he accomplishes juridically-relevant acts with a view to carrying out his inherent duties. However, it must be borne in mind that "acting in his official capacity" is not to be identified with the terms of such post.

It is also deemed useful somehow to determine, with a view to detecting the limits of their capacity, to what extent one can talk of juridically-relevant acts with respect of the exercise of the same. To this end, a classification of such action can be attempted as an indication:

- (a) actions specifically indicated in Presidential Decree No. 185 (see points 1 to 6 of paragraph 4 of Article 13) as an explicit power of a CNEN inspector,
- (b) actions provided for in Section 2 and 219 to 238 C.P.P. (5) for judiciary police officers,
- (c) actions that, though not inherent in the exercise of inspecting functions, are to be objectively linked to them, due to their suitability in helping, to various extents, to reach the aim proper of the inspecting activity.

We would like to advance here several brief observations concerning the figure of the judiciary police officer from an organisational standpoint.

In Italy, there has never been an actual judiciary police organisation, while the task which the judiciary police officer is to perform has always been established. Nevertheless, all judiciary police officers belong to organs which, among the numerous other activities attributed to them, also have the task of exerting the said functions (as in fact would be the case for CNEN inspectors). The result of this phenomenon is evident, namely a failure to become further specialised and a not always prompt availability in view of other tasks to be performed.

We may single out, among the tasks of the said "officers", a sector featuring a general nature and a sector denoting a special nature. Limiting ourselves to considering only the more representative ones within the former sector, we will mention drawing up reports (Section 2 C.P.P., compulsory or optional arrest in flagrant delicto (Sections 222, 235, 236 C.P.P.), controls, surveys and other technical operations (Article 223 C.P.P.), delivery of documents and information of the judiciary Authority (Section 227 C.P.P.), etc.

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- (5) Book I, Chapter I and Book II, Chapter I, Section I. Acts of the judiciary police (219 to 234); Chapter II, Section I Arrest (235 to 238).

Those worthy of mention in the latter sector are access to plants, etc. (third paragraph of Section 13 with the limits contained in the penultimate and last paragraphs, points 1 to 6 set forth in Section 13, assistance during nuclear and non-nuclear tests (Sections 44 and 46, third paragraph, of Presidential Decree No. 185), the latter mainly relevant to surveillance functions in a broad sense.

V. We would still like to express several considerations as regards the nature, aims and limits of inspections. In this connection several essential facets of the inspecting activities should be specified. It is evident how the latter activity represents the opposite of the advisory activity. In fact, while in the latter the adviser-user relationship is or should be characterised by an exchange of views on a basis of equality, the inspector-user relationship is characterised by the concept of authority, and consequently of subordination of the latter to the former. It seems therefore necessary for a CNEN inspector to be a person who does not exercise technical-advisory functions, at least not in the field where he carries out inspections.

An inspector must know the juridical content (i.e. the ratio and scope of the provisions in point) of these inspections, which are to be divided between those carried out in flagrante delicto and those laid down in Section 13 which mainly concern an effective "means of control of the observance of health protection and nuclear safety regulations. In effect, the former are subsequent to the presumed infringement of the penal law whereas the latter are preventative as regards a possible infringement of civil, administrative or penal laws. Anyhow, it is understood that actions performed during inspections are highly binding and always to be carried out in full respect of law, since they restrict the freedom of others. Indeed, this study should be widened here as regards attributions proper of CNEN inspectors to those options which - in the spirit of the entire legislation on inspection of work - they in all probability, have in fostering better conditions in the matter of work with radiations, accident and injury prevention, etc.

With the intent, however, of completing the frame of limits within which inspections are performed by virtue of the attributions granted by law to CNEN inspectors, we will briefly review the last and penultimate paragraphs of Section 13. The latter has often been already quoted, in that it contains a limiting provision as to the sphere of action, broadly speaking, of CNEN inspectors. Indeed, they can carry out inspections on plants directly and solely used for medical, diagnostic and therapeutic purposes only at the request of the Ministry of Health. In addition to this provision, other cases of intervention may occur when, for instance, a CNEN inspector is requested by the judiciary Authority to take action in respect of the said plants by virtue of Section 109 of the Italian Constitution (6), should the said Authority deem special or grave reasons to do so. It should be specified that if an inspecting body of the Ministry of Health is then carrying out an inspection on behalf of its own administration, such inspection cannot be considered a "joint inspection" as per Section 14.

(6) "The judiciary authority is directly charged with the judiciary police"
(See also Section 220 CPP: Subordination of the judiciary police).

In conclusion, with regard to the last paragraphs of Section 13, namely the possibility for CNEN inspectors to intervene in respect of plants mentioned in the penultimate paragraph, at the request of the Ministry of Labour, it should be specified that such intervention is justified by the presence of risks from radiation in the activities carried out in such plants. Thus, the Ministry of Labour, even where the case falls within its own competence, would avail itself of the inspecting bodies of CNEN as highly specialised technical bodies of the State in such matters. In short, this constitutes a relaxation of the limitation set forth in the penultimate paragraph. CNEN inspectors may carry out an inspection on their own or jointly with the inspectors of the Ministry of Labour. Notwithstanding even this latter case, we would be outside the case in point indicated under the "joint inspections" of Section 14 both as concerns the inspectors of the Ministry of Labour and the inspectors of the Ministry of Health who might already be effecting an inspection on behalf of their own Administration.

VI. A few final considerations it might prove useful to list the points which this survey has touched upon and which have a more direct and concrete significance for CNEN inspectors. Such list may focus the attention on various issues considered in this article, in the light that has appeared to be the most adequate.

- (a) Presidential Decree No. 185 introduces into the Italian legislation a competence ex novo that of CNEN inspectors.
- (b) The sphere of action of Administrations' control and CNEN control are not exactly the same, in the subject matter examined herein.
- (c) There is no reason to consider CNEN inspectors as "duplicates". such inspectors - among other things - have a greater freedom of choice in interventions and at the same time have a higher "specialisation".
- (d) The joint inspections envisaged by Presidential Decree No. 185 cover only a part of the case-history of inspections in addition to such inspections there is ample space for autonomous separate inspections by CNEN inspectors.
- (e) CNEN inspectors have attributions of a general nature in point of controls over nuclear activities and as regards attributions of a complementary nature - and exceptionally also substitutive - with respect to those of other control bodies.
- (f) Moreover, conflicts of competences are limited in view of the "horizontal" place of CNEN among the bodies of public intervention. However, it should be borne in mind that the repetition of control actions in matters of prevention can definitely not be considered as a procedure to be widely used. In effect, in the majority of cases, it may create a certain confusion or even give rise to resistance by the user which factors are certainly not of help in the exercise of a fruitful and functional inspection by the bodies established to this end in the interest of work and of the whole collectivity.

- (g) It should be stressed once again that Chapter VII of Presidential Decree No. 185 is certainly not the only sphere of action of the inspecting activity of CNEN.
- (h) CNEN inspectors are officers of the judiciary police when they are acting in their official capacity. This includes not only the subject of the inspecting action for the activities indicated under Presidential Decree No. 185, but also other actions which may be linked objectively to the aforementioned functions.

A N N E X

DECREE NO. 185 OF 13TH FEBRUARY, 1964

Article 13

CNEN INSPECTORS

Whilst the responsibilities laid upon individual Government Departments by existing regulations and the special responsibilities delegated to the Ministry of Industry and Commerce, the Ministry of Labour and Social Security, the Ministry of Mercantile Marine and the Ministry of Health under the provisions of Chapters IV, VIII and IX remain unchanged, the functions of inspection under the present law are carried out by the CNEN through its own inspectors.

The CNEN inspectors are authorised to exercise their functions by order of the President of CNEN. They have a right of access to all nuclear plants and to all places where apparatus for producing ionizing radiations, and nuclear and radioactive materials are stored in quantities such as to constitute a hazard from ionizing radiation. The CNEN Inspectors may, in particular :

- (1) request and obtain data and information relating to the operatives working in the plants;
- (2) have access to all documents concerning nuclear safety and health protection;
- (3) request a demonstration of the efficiency of the machines and apparatus;
- (4) carry out any checks on nuclear safety which in their view may be necessary in order to ensure the observance, in the operation of the plants, of the particular technical regulations mentioned in Chapter VII of the present law, and the maintenance of technical standards,
- (5) obtain information, including restricted and secret information, relating solely to the nuclear safety and health protection aspects of the plants covered by Law No. 1860 of 31st December, 1962,
- (6) carry out all necessary verification in order to ensure the observance of the provisions of the present law.

In the exercise of their functions, CNEN Inspectors are officials of the Judiciary Police.

CNEN inspectors reporting for inspection duties must, on request, disclose their identity and show their passes (with photograph), issued to them by the President of CNEN. Persons engaged in activities covered by the present law must give them all facilities for visits and inspections and provide any assistance requested by the inspectors for the carrying out of their duties, including the supply of any necessary technical equipment.

An appropriate report of each inspection must be compiled, which will include particulars of the tests carried out and of recommendations made, a copy of the report will be handed, on request, to the operator or his representative on the spot.

The operator or his representative have the right to have inserted in the report any observations that they wish to make in their own interests, should they refuse to sign it, the CNEN inspector will mention this in the report, indicating the reasons put forward for such refusal.

The Committee's inspectors may not carry out inspections of plants which are directly and exclusively concerned with medical, diagnostic or therapeutical matters except at the request of the Ministry of Health.

As regards questions arising in connection with the plants referred to in the preceding paragraph which are within the competence of the Ministry of Labour and Social Security, the authorities of that Ministry may request inspection by CNEN inspectors.

Article 14

JOINT INSPECTIONS

When the object of the inspections carried out by CNEN concerns inspection duties normally assigned by law to other Departments, or when inspectors from other Departments undertake inspections which are within the province of CNEN, the inspections will, as a general rule, be carried out jointly.

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NUCLEAR LAW

Bulletin

S U P P L E M E N T T O N O . 9

JAPAN : LAW NO. 53 OF 1971 ON COMPENSATION
FOR NUCLEAR DAMAGE

April 1972

J A P A N

LAW NO. 53 OF 1971 AMENDING THE 1961 LAW
ON COMPENSATION FOR NUCLEAR DAMAGE *

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* Unofficial translation edited by the Secretariat.

Chapter I

General Provisions

(Purpose)

Article 1

It is the purpose of this Law to protect persons who may suffer nuclear damage and also to contribute to the sound development of the nuclear industry by establishing the basic system for compensation in the case of the occurrence of nuclear damage caused by the operation of a reactor, etc.

(Definitions)

Article 2

1. For the purpose of this law, "operation of a reactor, etc." means the performance of any activity which comes under any one of the following items, including transportation, storage and disposal of nuclear fuel material and material contaminated by nuclear fuel material (including nuclear fission products, as is also the case in the next paragraph) incidental thereto, as provided by Cabinet Order * :

- (i) Operation of the reactor;
- (ii) Fabricating;
- (iii) Reprocessing;
- (iv) Use of nuclear fuel material.

2. For the purpose of this Law, "nuclear damage" means any damage caused by the effects of the fission process of nuclear fuel material, by the effects of radiation from nuclear fuel material or material contaminated by nuclear fuel material (in paragraph 2 of Article 3 referred to as "nuclear fuel material, etc. "), or due to the toxic nature of such materials (which means the effects that cause toxication or deuteropathy; for the human body by ingestion or inhalation of such materials); provided that the damage suffered by a nuclear operator within the meaning of Article 3 and the damage suffered by his employees in the course of performing their professional duty are excluded.

3. For the purpose of this Law "nuclear operator" means :

- (i) Any person who is granted a licence including acknowledgements, as is also the case in sub-paragraphs (ii) and (iii) 7 as provided by Article 23, paragraph 1 of the Law for Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors

* The phrases underlined in the text of this Law indicate the changes made as compared to the original text.

(Law No. 166 of 1957, hereinafter referred to as "Regulation Law"), including a person who is regarded as a reactor operator under the provisions of Article 39, paragraph 5 of the Regulation Law:

- (i) bis A person who is granted a licence as provided by Article 23-2, paragraph 1 of the Regulation Law
- (ii) A person who is granted a licence as provided by Article 13, paragraph 1 of the Regulation Law;
- (iii) A person who is granted a licence as provided by Article 52, paragraph 1 of the Regulation Law;
- (iv) The Japan Atomic Energy Research Institute (JAERI);
- (v) The Power Reactor & Nuclear Fuel Development Corporation (PNC).

4. For the purpose of this Law, "reactor" means a reactor as provided by Article 3, paragraph 4 of the Atomic Energy Basic Law (Law No. 186 of 1955), "nuclear fuel material" means nuclear fuel material as provided by Article 3, paragraph 2 of the Atomic Energy Basic Law (including spent fuel as provided by Article 2, paragraph 7 of the Regulation Law), "fabricating" means fabricating as provided by Article 2 paragraph 6 of the Regulation Law, "reprocessing" means reprocessing as provided by Article 2, paragraph 7 of the Regulation Law, "radiation" means radiation as provided by Article 3, paragraph 5 of the Atomic Energy Basic Law and "nuclear ship" or "foreign nuclear ship" means a nuclear ship or a foreign nuclear ship as provided by Article 23-2, paragraph 1 of the Regulation Law.

Chapter II

Liability for Nuclear Damage

(Liability without fault and channelling of liability, etc.)

Article 3

1. When nuclear damage has occurred owing to or during the operation of a reactor, etc., the nuclear operator who is engaged in the operation of the reactor, etc. on that occasion shall be liable for the damage, except for the case where the damage is caused by an extraordinarily grave natural disaster or by a serious social disturbance.

2. When nuclear damage is covered by the preceding paragraph and if the damage is caused as a result of the transportation of nuclear fuel material, etc. from one nuclear operator to another, the nuclear operator who is the consignor of the nuclear fuel material, etc. shall be liable for the damage, unless there is a special agreement between the nuclear operators.

Article 4

1. In the case where nuclear damage is covered by Article 3, no person other than the nuclear operator who is liable for the nuclear damage in accordance with Article 3 shall be liable for this nuclear damage.

2. In the case where the nuclear damage is covered by Article 3, paragraph 1, the liability of the nuclear ship operator who furnishes the financial security in accordance with Article 7-2, paragraph 2 and who intends to bring the foreign nuclear ship into the territorial waters of Japan is limited to the amount as provided by Article 7-2, paragraph 2.

3. The provisions of Article 690, paragraph 1 and Article 798, paragraph 1 of the Commercial Law (Law No. 48 of 1899) shall not apply to damage of a nuclear nature which has occurred owing to the operation of a reactor, etc.

(Rights of recourse)

Article 5

1. In the case where nuclear damage is covered by Article 3 and if the damage is caused by a wilful act of a third party, the nuclear operator who has paid compensation for nuclear damage in accordance with Article 3, retains a right of recourse against such a third party.

2. The provisions of the preceding paragraph shall by no means prevent a nuclear operator from making a special agreement with any person regarding the rights of recourse.

Chapter III

Financial Security

Section 1

(Duty to provide financial security)

Article 6

A nuclear operator is prohibited from operating a reactor, etc. unless the financial security for compensation of the nuclear damage (hereinafter referred to as "the financial security") has been provided.

(Details of financial security)

Article 7

1. Financial security, except in the case referred to in the next Article, shall be provided by means of contracts of liability insurance for nuclear damage and an indemnity agreement for compensation of nuclear damage or a deposit which the Director-General of the Science and Technology Agency approves as an arrangement that makes available for compensation of nuclear damage, the amount of six billion yen (in the case

of such operation of a reactor, etc. as provided by Cabinet Order, this amount which is not more than six billion yen, is provided by the Cabinet Order; hereinafter this amount is referred to as "the financial security amount") per one factory or one undertaking or per one nuclear ship, or any equivalent arrangement which the Director-General of the Science and Technology Agency approves.

2. In the case where the amount available for compensation of nuclear damage becomes less than the amount of financial security as a result of the nuclear operator having compensated for nuclear damage in accordance with Article 3, the Director-General of the Science and Technology Agency may, if he deems necessary for ensuring the payment in full of the compensation, order the nuclear operator to bring the amount available for compensation of the nuclear damage up to the amount of financial security within the designated time.

3. In a case coming under paragraph 2, the provisions of Article 6 are not applied until the order referred to in paragraph 2 is made (until the time designated by the order, in case the order made in accordance with paragraph 2 has elapsed).

Article 7 bis

1. The financial security, in the case of a nuclear ship operator bringing a nuclear ship into the territorial waters of a foreign country, shall be provided by means of contracts of liability insurance for nuclear damage and an indemnity agreement for compensation of nuclear damage or any other financial security, which the Director-General of the Science and Technology Agency approves as being sufficient for compensation of the nuclear damage, of an amount to be agreed between the Government of Japan and the Government of the foreign country as the amount for which the nuclear operator of the nuclear ship is liable for compensation of the nuclear damage.

2. The financial security in the case of the nuclear ship operator bringing a foreign nuclear ship into the territorial waters of Japan shall be provided by the financial security which the Director-General of the Science and Technology Agency approves as being sufficient for compensation of the nuclear damage, of an amount (not less than 36 billion yen in respect of nuclear damage attributed to one incident) to be agreed between the Government of Japan and the Government of the foreign country as the amount for which the nuclear operator of the foreign nuclear ship is liable for compensation of the nuclear damage.

Section 2

(Contract of liability insurance for nuclear damage)

Article 8

The contract of liability insurance for nuclear damage (hereinafter referred to as "liability insurance contract") shall be the contract under which an insurer (a person who is authorised to engage in liability insurance in accordance with the Insurance Business Law /Law No. 41 of 1939/ or the Law Concerning Foreign Insurers /Law No. 184 of 1949/ (hereinafter an insurer is limited to this meaning) undertakes to indemnify a nuclear operator for his loss arising from paying compensation for nuclear damage due to certain causes in case the nuclear operator becomes liable, and under which the insured undertakes to pay a premium to the insurer.

Article 9

1. Any person who may suffer nuclear damage shall, with regard to his claim for nuclear damage, have priority over other creditors to receive compensation from the amount provided by the liability insurance contract.
2. The insured may claim from the insurer the insurance payment only to the extent that the insured has paid, or has acquired the consent of persons suffering nuclear damage, with regard to the amount of compensation paid to them.
3. The right to claim the insurance payment under the liability insurance contract shall not be assigned, mortgaged, or seized; provided that persons who suffer nuclear damage may seize within their right to claim compensation for the nuclear damage.

Section 3

(Indemnity agreement for compensation of nuclear damage)

Article 10

1. The indemnity agreement for compensation of nuclear damage (hereinafter referred to as "the indemnity agreement") shall be the contract under which the Government undertakes to indemnify a nuclear operator for his loss arising from paying compensation for the nuclear damage not covered by the liability insurance contract or any other financial security for compensation of nuclear damage in case the nuclear operator becomes liable, and by which the nuclear operator undertakes to pay the indemnity fee to the Government.
2. Matters concerning the indemnity agreement shall be provided by another law.

Article 11

The provisions of Article 9 shall be applied mutatis mutandis to the indemnity payment provided by the indemnity agreement.

Section 4

(Deposit)

Article 12

Deposit as a financial security arrangement shall be made in the Legal Affairs Bureau or the District Legal Affairs Bureau nearest to the main office of the nuclear operator, either in cash or in securities as provided by the Order of the Prime Minister's Office.

(Compensation from deposit)

Article 13

Any person suffering nuclear damage may, with regard to his claim receive compensation out of the cash or securities deposited by the nuclear operator in accordance with Article 12.

(Withdrawal of deposit)

Article 14

1. A nuclear operator may withdraw the cash or securities deposited in accordance with Article 12 with the approval of the Director-General of the Science and Technology Agency :

- (i) in case the nuclear damage has been compensated;
- (ii) in case other financial security has been provided in lieu of deposit; or
- (iii) in case operation of the reactor, etc. has ceased.

2. When the Director-General of the Science and Technology Agency grants his approval in the cases referred to in sub-paragraphs (i) and (iii) of paragraph 1, he may, to extent that he deems necessary for ensuring the payment in full of the compensation of the nuclear damage, designate the time when the nuclear operator can withdraw the cash or securities and the amount thereof.

(Implementation by Order)

Article 15

Matters concerning the deposit, other than those provided by this Section, shall be provided by Order of the Prime Minister's Office and the Ministry of Justice.

Chapter IV

Measures taken by the State

Article 16

1. In the case where nuclear damage occurs, the Government shall give to the nuclear operator (except the nuclear operator of a foreign nuclear ship) such aid as may be required by him to compensate the nuclear damage, when the amount which he should pay in compensation in accordance with Article 3, exceeds the corresponding amount of financial security and when the Government deems this necessary in order to fulfil the purpose of this Law.

2. The aid prescribed by paragraph 1 shall be given to the extent that the Government is authorised to do so by a decision of the National Diet.

Article 17

The Government shall, in the case of the proviso in Article 3, paragraph 1, or in the case where nuclear damage under Article 7 bis, paragraph 2 occurs and where the amount which the nuclear operator should pay in compensation for the nuclear damage, is deemed to exceed the amount as provided by Article 7 bis, paragraph 2, take the necessary measures to relieve victims and to prevent the damage from being increased.

Chapter V

Dispute Reconciliation Committee for Nuclear Damage Compensation

Article 18

1. The Government may establish a Dispute Reconciliation Committee for Nuclear Damage Compensation (hereinafter referred to as "the Reconciliation Committee") as an Organisation attached to the Science and Technology Agency in accordance with the provisions of a Cabinet Order, which shall be in charge of mediation for the reconciliation of disputes arising from compensation of nuclear damage.
2. The Reconciliation Committee shall :
 - (i) Act as a mediator for the reconciliation of disputes arising from the compensation of nuclear damage, and
 - (ii) Conduct investigations and assessments of the nuclear damage necessary for dealing with matters referred to in sub-paragraph (i).
3. Matters concerning the organisation and operation of the Reconciliation Committee as well as the procedures for application for and conclusion of mediations other than those provided in paragraphs 1 and 2 shall be provided by Cabinet Order.

Chapter VI

Miscellaneous Provisions

(Presentation of report and written opinion to the National Diet)

Article 19

1. The Government shall, in the case where nuclear damage occurs on a comparatively large scale, report to the National Diet, as soon as possible, the extent of the damage and the measures taken by the Government in accordance with this Law.
2. Where nuclear damage occurs, the Government shall submit to the National Diet the written opinion concerning action taken to deal with disposal, prevention, etc. of the damage, which the Atomic Energy Commission has presented to the Prime Minister.

(Application of the provisions of Article 10, paragraph 1 and Article 16, paragraph 1)

Article 20

The provisions of Article 10, paragraph 1 and Article 16, paragraph 1 shall be applied to nuclear damage arising from the operation of a reactor, etc. of which any of the related activities referred to in Article 2, paragraph 1, have been started before 31st December 1981.

(Collection of reports and inspection)

Article 21

1. The Director-General of the Science and Technology Agency may, if he deems necessary for the purpose of ensuring the execution of the provisions of Article 6, require a nuclear operator to present necessary reports or allow his officials to enter the office, factory or place of undertaking of the nuclear operator or the nuclear ship to inspect his books, documents and other necessary objects or to ask questions of the persons concerned.

2. When an official enters premises in accordance with the provisions of paragraph 1, he shall carry an identification card and present it if requested by the persons concerned.

3. The authority based on the provisions of paragraph 1 shall not be exercised for the purpose of criminal investigation.

(Consultation with the Minister of International Trade and Industry or the Minister of Transportation)

Article 22

The Director-General of the Science and Technology Agency shall, in the case where he is going to take an action in accordance with Article 7, paragraph 1, Article 7 bis, paragraph 1 or 2, or to make out an order, in accordance with Article 7, paragraph 2, to consult in advance with the Minister of International Trade and Industry in cases related to reactors for electric power generation or with the Minister of Transportation in cases related to reactors installed in ships.

(Exclusion of application to the State)

Article 23

The provisions of Chapter III, Article 16 and Chapter VII shall not be applied to the State.

Chapter VII

Penal Provisions

Article 24

A person who violates the provisions of Article 6 shall be punished by a term of imprisonment of not longer than one year, or by a fine not exceeding one hundred thousand yen, or both.

Article 25

A person who acts in one of the following ways shall be punished by a fine not exceeding ten thousand yen:

- (i) failing to make a report, or making a false report, in accordance with Article 21, paragraph 1;
- (ii) refusing, interrupting or evading entrance or inspection, or failing to answer to questions or make a false answer to the questions, in accordance with Article 21, paragraph 1.

Article 26

When the representative of a juridical person, or the agent or other employee of a juridical person or of a person commits any one of the violations referred to in Articles 24 and 25 in connection with the business of the juridical person or the person, the juridical person or the person shall, in addition to the punishment of the actual offender, be punished by a fine as provided in those respective Articles.