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European Nuclear Energy Agency

Organisation for Economic Co-operation and Development

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LEGISLATIVE AND REGULATORY ACTIVITIES

• *Austria*

RADIATION PROTECTION

Federal Bill on Radiation Protection

The Austrian Ministry of Social Administration has drafted a "Federal Bill on measures to be taken for protecting the life or health of persons and their descendants, against damage arising from ionizing radiations" (Act on radiation protection) which will shortly be put before Parliament

The provisions of this Act mainly concern

- the construction and operation of installations in which radioactive materials are handled or which contain radiation-emitting apparatus,
- the handling of radioactive materials, and the functioning of apparatus producing or utilizing radiations,
- the control of the Authorities in relation to radioactive contamination of the environment and relevant measures for protection

[A translation of this Bill is given in the Supplement to this issue of the Bulletin]

• *Denmark*

THIRD PARTY LIABILITY

As reported in the last issue of the Bulletin, a legislative committee working in co-operation with representatives from Norway, Sweden and Finland examined the possibility of revising the Danish Nuclear Installations Act of 16th May 1962, with a view to enabling Denmark

to ratify the Paris Convention on Third Party Liability in the Field of Nuclear Energy and the Brussels Supplementary Convention. Accordingly, the Committee proposed to the Danish Government a Nuclear Liability Bill which is very similar to the Swedish Act of 8th March 1968

It now appears that this Bill cannot be submitted to Parliament before autumn 1969 and that ratification of the Paris Convention by Denmark is unlikely before the beginning of 1970

PATENTS

In respect of the new Scandinavian legislation on patents, refer to "Sweden" in the Chapter on legislative and regulatory activities.

• *France*

THIRD PARTY LIABILITY

Publication of the Paris Convention

The Convention on Third Party Liability in the Field of Nuclear Energy of 29th July 1960 and its Additional Protocol of 28th January 1964 have been published in the Official Gazette of 11th February 1969 by Order No 69-154 of 6th February 1969

This publication brings into force the Act of 30th October 1968⁽¹⁾ on Third Party Liability in the Field of Nuclear Energy, thus abrogating the Act of 12th November 1965 which established on a provisional basis a special regime for liability in respect of nuclear incidents.

Act No 68-1045 of 29th November 1968 / Official Gazette of 30th November 1968

This Act amends several Sections of the Act No 65-956 of 12th November 1965, on the third party liability of operators of nuclear ships, for the purpose of harmonizing these Sections with the provisions of the Act No 68-943 of 30th October 1968 on third party liability in the field of nuclear energy

The text of the Act of 12th November 1965, including the changes introduced by the amending Act, is reproduced under the heading "Texts" in the present issue of the Nuclear Law Bulletin

(1) The text of this Act has been published in the second issue of the Nuclear Law Bulletin

NUCLEAR-POWERED SHIPS

Decree No. 69-169 of 4th February 1969 / Official Gazette of the French Republic of 19th February 1969/

This Decree which relates to Commissioners to implement Decree No. 68-206 of 17th February 1968 on the safety of life at sea and the suitability of living conditions on board, is intended to complement the provisions of the latter Decree which aims at clarifying certain conditions of application of Act No 67-405 of 20th May 1967 on the same subject.

Section 6 of the Decree of 17th February 1968 provides for the delivery of a certificate of security for nuclear cargo vessels, issued by the Minister of the Merchant Navy after the agreement of the Minister charged with Atomic Questions.

Section 1 of the new Decree stipulates that, in respect of nuclear ships, the Central Security Commission ("Commission Centrale de Sécurité") set up for studying plans and documents relating to ships, or for advisory purposes, will include a representative of the Minister charged with Atomic Questions from among its members who have deliberative powers.

It should be recalled that Section 6 of the Decree of 17th February 1968 makes provision for the delivery of a certificate of security for nuclear-powered cargo ships, issued by the Minister of the Merchant Navy following the agreement of the Minister responsible for Atomic Questions.

PATENTS

Order of the Ministry of Industry of 5th December 1968, published in the Official Gazette of the French Republic of 7th December 1968

The purpose of this Order is to determine the requests for patents and the requests for additional certificates in connection with requests for patents or patents mainly filed in the technical sectors of the international classification for patents, which are governed by the provisions in Chapter VI of Decree No. 68-1100 of 5th December 1968, published on 7th December 1968 and relating to requests for patents and certificates of utilization, to the issue and maintenance of such certificates.

The table of technical sectors drawn up in this Order contains in particular the requests concerning nuclear reactors, radiation and X-ray measurements and strontium, radium and thorium compounds.

• *Germany*

GENERAL REGULATIONS

Bill to amend the Atomic Energy Act of 1959

On 23rd January 1969, the Government submitted to the Federal Council a Bill for a "Second Act" amending and supplementing the Atomic Energy Act. This effects a limited revision of the Atomic Energy Act, it introduces certain amendments to the procedure for authorization of nuclear installations and adapts the essential features of the Act's provisions relating to third party liability for the carriage of nuclear fuels, so as to bring them into line with the relevant principles laid down in the Paris Convention on Third Party Liability in the Field of Nuclear Energy. In particular, in accordance with the provisions of the Paris Convention, the Bill extends to establishments manufacturing or processing nuclear fuels, and to carriage of such fuels, the operator's liability under Section 25 of the Atomic Energy Act, and the liability for compensation incumbent upon the Federal Government under Section 36

In addition, work on a general revision of the Atomic Energy Act is continuing with a view to bringing it into line with the Paris Convention and the Brussels Supplementary Convention

AIR TRANSPORT

Air Transport Act of 4th November 1968 (BGBl, I, page 1113) as amended and Ordinance on air transport authorizations dated 28th November 1968 (BGBl, I, page 1263) as amended

Pursuant to Section 27 of the Air Transport Act (Luftverkehrsgesetz-LuftVG) and Sections 76 and 77 of the Ordinance on air transport authorizations (Luftverkehrs-Zulassungs-Verordnung-LuftVZO), air carriage of nuclear fuels and other radioactive substances requires official authorization

The Federal Bureau of Air Transport is the authority empowered to grant such authorization (Section 78 of LuftVZO). This regulation does not affect the provisions applicable under other Acts on the carriage of nuclear fuels and other nuclear substances (Section 27 (1) of LuftVG)

• *Netherlands*

GENERAL REGULATIONS

Nuclear Energy Act of 21st February 1963 / Bulletin of Acts, Orders and Decrees No 82 of 1963/

It is expected that the Nuclear Energy Act of 1963 will come into force in its entirety during 1969. The aim of this Act is to

promote the development of nuclear energy, regulate the use of radioactive substances and equipment emitting ionizing radiations and provide protection from the dangers involved. Its implementation is dependent on the promulgation of certain general administrative regulations which are to supplement the provisions

The only part of the Act currently in force is Chapter II under the heading "Councils". This Chapter entered into force on 27th March 1963, pursuant to Section 89 of the Act, and institutes several advisory bodies responsible for furnishing the competent Ministers, institutions and authorities with opinions on matters concerning nuclear energy and ionizing radiations, their industrial applications, the scientific aspects of nuclear research and the utilization of its findings, and health problems. The following bodies have been set up for this purpose

- the Central Council for Nuclear Energy,
- the Industrial Council for Nuclear Energy;
- the Scientific Council for Nuclear Energy.

In addition, the Health Council advises on health matters and collaborates with the abovementioned bodies.

Entry into force of the other Chapters of the 1963 Act is dependent on the promulgation of the following Administrative Regulations which are at present in an advanced stage of preparation and are intended to supplement or clarify the provisions

- Order on Definitions referred to in the Nuclear Energy Act,
- X - the Fissionable Materials and Ores Registration Order,
- the Nuclear Establishments, Fissionable Materials and Ores Order,
- 3' X - the Order on Radioactive Materials and Costs of Food Inspection Departments,
- the Order on Radioactive Materials referred to in the Act,
- the Fissionable Materials, Ores and Radioactive Materials Transport Order,
- the Order on Devices referred to in the Act,
- 3' - the Order on Appeals referred to in the Act,
- the Order on Duties relating to Food Inspection referred to in the Act,
- 5 - the Order on Operators' Contributions towards Expenses referred to in the Act,
- the Order on Exemptions for National Defence referred to in the Act,
- the Order for the Entry into Force of the Chapters of the Act (other than Chapter II).

THIRD PARTY LIABILITY

General Administrative Order of 11th September 1968 / Bulletin of Acts, Orders and Decrees 1968, No 471, p 1222/

Pursuant to Section 4(4) of the Nuclear Liability Act of 27th October 1965, this Order extends the scope of third party liability of operators of nuclear installations in the Netherlands to damage which may be suffered on the territory of the Federal Republic of Germany, Belgium, France and Luxemburg. These Regulations were adopted following the construction of a nuclear power station at Dodewaard, which became critical in 1968, and the entry into service of a research reactor at the Eindhoven Institute of Technology. Both installations are located in frontier zones. It should be recalled that Germany, Luxemburg and the Netherlands have not yet ratified the Paris Convention.

• *Norway*

GENERAL REGIME

Work concerning a general law on atomic energy in Norway

1. In 1957 a Committee of Experts was established by Royal Decree to study the possibility of drafting a general law on atomic energy in Norway. The Committee forwarded its report to the Ministry of Industry in 1966 (printed in 1967). The Committee recommended the ratification of the Paris Convention and the Brussels Supplementary Convention but for the time being did not recommend that Norway ratify the Vienna Convention. However, it drew up a Bill which also provides for the ratification of the Vienna Convention. It will therefore not be necessary to amend the provisions in the Bill should Norway decide to ratify the Vienna Convention. Subsequently, certain provisions will only come into force by special Royal Decree when Norway has ratified the Vienna Convention.

2. A full translation in English and in French of the Norwegian Bill figures in the Supplement to No 1 of the Nuclear Law Bulletin. The draft act has 59 Sections. It is recalled that Chapter I contains, inter alia, definitions of the concepts in the Bill corresponding to the international convention on third party liability and insurance in connection with damage caused by a nuclear incident. Chapter II includes provisions concerning licensing for nuclear installations and relating to the supervision, construction and operation of nuclear installations. Chapter III provides for authorization (from the Ministry of Industry) to manufacture, own, store, handle, transport, sell or otherwise possess or dispose of nuclear substances. Chapter IV gives detailed provisions concerning liability and insurance in the field of nuclear energy. These provisions are based on the international conventions on third party liability, i.e. the Paris Convention, its Brussels Supplementary Convention and the Vienna Convention, although as mentioned above, the Committee has not (for the time being) recommended the ratification of the Vienna Convention.

As mentioned in the Nuclear Law Bulletin No 1 (p 17) and No 2 (p 18 and 22, concerning Denmark and Sweden respectively) the Norwegian Bill has been elaborated in close co-operation with the Danish, Swedish and Finnish Authorities. The Danish Bill and the new Swedish Nuclear Liability Act are commented in detail in the second issue of this Bulletin. The Norwegian Bill is very similar to the Danish Bill and the Swedish Act as regards liability and insurance (Chapter IV), it is unnecessary to make a survey of the Norwegian Bill. Instead, a few more specific questions will be reviewed.

3 Nuclear ships (or other nuclear conveyances) do not fall within the scope of the Paris and Vienna Conventions. However, under the Norwegian Bill (Section 49) the King is empowered to bring into force wholly or in part the provisions in Chapter IV (liability and insurance) concerning reactors in ships and in other conveyances. A Convention on the liability of operators of nuclear ships, was signed on 25th May 1962. Norway has not ratified this Convention, particularly in view of the high maximum amount for liability, but the Committee has suggested a provision which will make it possible to ratify this Convention at a later date.

4 The Committee of Experts has proposed to set up a State Atomic Inspectorate for separate supervision of nuclear installations. Chapter V of the Bill (Section 50 miscellaneous) contains provisions concerning the organisation and activities of the Inspectorate. Regulations shall be issued by the Crown (Royal Decree).

5 After the Committee forwarded its report to the Ministry of Industry, it was sent to several organisations and institutions for comments in respect of the Bill. The Bill will be prepared by the Ministry of Industry. It is mentioned in Bulletin No. 1 (p.17) that a Bill could be submitted to Parliament (Stortinget) in 1969. However, it is not possible at present to specify the date of such submission.

PATENTS

In respect of the new Scandinavian legislation on patents, refer to "Sweden" in the Chapter on legislative and regulatory activities.

• *Portugal*

ORGANISATION AND STRUCTURE

Joint Order No 23 527 of 9th August 1968 setting up a Committee for Nuclear Fuels and Power Stations

This Order, which was made by the Prime Minister and the Ministers for Public Works and for the Economy, established within the Junta de Energia Nuclear a Standing Committee responsible for submitting proposals to the Council of Ministers in regard to production of and trade in nuclear fuels and construction and operation of nuclear power stations.

The Committee also has the task of promoting studies on nuclear fuels and power stations and co-ordinating and assisting the work of public and private bodies which are active in this field.

The Chairman of the Committee is the Chairman of the Junta de Energia Nuclear and the Committee consists of five other members drawn from the Junta, the Ministry of Public Works and the State Secretariat for Industry

The above Order came into force on 1st October 1968.

Order by the Prime Minister of 31st July 1968

This Order provides that guidance and co-ordination of studies for the establishment and operation of nuclear-powered electricity generating stations and of seawater desalination plants shall be carried out at top level by the Council of Ministers for Economic Affairs, consisting of the Secretary of State attached to the Prime Minister, the Ministers for the Economy and for Public Works and the Secretary of State for Industry, the Chairman of the Junta attending when the nature of the business to be dealt with so requires. This Order came into force on 1st October 1968.

Decree-law No 48 567 of 4th September 1968, amending Decree-law No 41 995 of 5th December 1958 on the reorganisation of the Junta de Energia Nuclear

This Decree-law amends some of the provisions of Decree-law No 41 995 on reorganisation of the Junta de Energia Nuclear, which in turn amended Decree-law No 39.580 of 29th March 1954, which created this body

The amendments effected by the new enactment are as follows

- the Head of the Department of Administrative Services replaces the Head of the Treasury Office of the Central Services on the Executive Committee of the Junta (Section 7 of Decree-law No 41 995),
- the Board of Management of the Junta will henceforth contain representatives of the Mining Prospection and Exploration Services, the Directorate-General for Fuels and Industrial Nuclear Reactors and the Laboratory of Nuclear Physics and Engineering (Section 8),
- the Junta de Energia Nuclear now contains the following services the Directorate-General of Mining Prospection and Exploration Services, the Laboratory of Nuclear Physics and Engineering, the Directorate-General for Fuels and Industrial Nuclear Reactors, the International Services Directorate and lastly the Directorate of Central Services (Section 10), alterations have been made in the staff of the Junta to correspond with the changes made in the organisation of the Junta itself (Sections 20, 30 and 37).

The above Decree-law came into force on 1st October 1968.

Decree-law No. 48.568 of 4th September 1968, subjecting enterprises carrying on nuclear activities to control by the Junta de Energia Nuclear

This Decree-law, which was enacted on the same day as the foregoing one, institutes control by the relevant departments of the Junta de Energia Nuclear over enterprises engaged in prospecting for and mining radioactive ores, in production and processing of and trade in radioactive substances and nuclear fuels, in construction and operation of nuclear reactors and in radiation protection

Control, which covers both scientific and technical aspects, is to check that the installations concerned are efficient and that measures exist, in particular with regard to protection against ionizing radiations

The inspectors responsible for such control are appointed by the Prime Minister on a proposal from the Chairman of the Junta and come under the authority of the latter. Enterprises undergoing inspection are required to supply the inspectors with all information and documents necessary for the accomplishment of their task. The inspectors are required to inform the Chairman of the Junta of any irregularities they may find so that he may take the appropriate measures and may be enabled, in case of serious danger or other emergency, to order immediate cessation of a given activity.

This Decree-law came into force on 1st January 1969

• *Spain*

ORGANISATION AND STRUCTURE

Decree of the Presidency of the Government No 87 of 18th January 1968
/Official Gazette No 22/

This Decree concerns the reorganisation of the Ministry of Industry and applies to the Junta de Energia Nuclear, the latter is attached to the Ministry in the form of an autonomous organisation. It should be recalled that the provisions governing the competence, the organisation and the functioning procedure of the Junta are determined by the Nuclear Energy Act of 29th April 1964.

Decree of the Ministry of Industry No 1484 of 11th July 1968 /Official Gazette No. 167/

The preceding Decree was subsequently amended by the present Decree which, within the Directorate General for Industry and Fuels, provides for the establishment of two Sub-Directorates General, one concerning fuels and the other industries dealing with the production of energy

Decree of the Ministry of Industry No 2072 of 27th July 1968 /Official Gazette No 200/

This Decree which determines a classification for industries, notably enjoins that industries which produce and utilize nuclear energy and radioactive substances must obtain prior authorization from the Ministry of Industry

Order of the Ministry of Industry of 17th January 1969 /Official Gazette
No 19/

The purpose of this Order is the creation of a Technical Advisory Commission on the problems of atmospheric pollution of industrial origin. It provides in particular that a representative of the Junta de Energia Nuclear must be a member of the Commission

SYSTEM GOVERNING NUCLEAR INSTALLATIONS

Draft regulations on nuclear installations, on installations using radioactive materials, and on ores

A Commission, appointed especially by the Government and which includes representatives of the Junta de Energia Nuclear, has been charged with elaborating two draft regulations, one relating to nuclear installations and to installations using radioactive materials and the other to radioactive ores. The texts which will be enforced under the Nuclear Energy Act of 29th April 1964 are well under way

The first draft is divided into five chapters

The first includes general provisions, the second concerns nuclear installations, and in particular their classification and the authorization system which governs them prior to their construction and their entry into service, the third sets the provisions concerning the definition, the classification and the type of authorization for installations using radioactive materials, the fourth concerns the inspection of nuclear installations and installations using radioactive materials as well as their staff, finally, the fifth relates to the manufacture of radioactive apparatus. In addition, tables in the Annex divide the radioactive installations into four groups according to the quantity of radionuclides they contain. The less dangerous category will be exempted from the obligation to provide financial cover for nuclear hazards

The second regulation includes three chapters respectively dealing with the prospection of radioactive ores, their exploitation and finally with the right of pre-emption of the State in respect of radioactive ores.

• *Sweden*

PATENTS

New Acts on patents came into force in Denmark, Finland, Norway and Sweden and were published respectively on 21st December 1967 (No. 479), 15th December 1967 (No 550), 15th December 1967 and 1st December 1967 (No 837). These Acts are the result of close collaboration between the authorities of the Nordic countries which consulted together constantly throughout the legislative procedure in order to achieve complete harmonization of these texts.

Although the new Acts did not contain special provisions relating to the field of nuclear energy, it can be noted meanwhile that they provide that the government concerned may order, when in the public interest, that the right to a particular invention shall be surrendered to the State. Reasonable compensation shall be paid for such renunciation. Moreover, the inventions relating to the defence of the country are subject to special legislation.

● *Switzerland*

ORGANISATION AND STRUCTURE

Reorganisation of the Federal administrative authorities in the nuclear field /Order of the Federal Council of 23rd December 1968/

A new Science and Research Division was set up within the Federal Department of the Interior by an Order of the Federal Council of 23rd December 1968 and started its work on 1st March 1969. The Office of the Delegate for Atomic Energy Questions, attached to the Federal Department of Transport and Communications and of Energy, ceased to function at the same date.

The new Division is notably in charge of dealing with problems relating to the promotion of research and development in the atomic energy field. The powers granted to the Division in this respect are of a temporary nature and will last until the Federal Assembly promulgates a relevant Order under Section 27 of the Federal Act of 26th March 1914 on the organisation of federal administration. In accordance with Section 35 of the abovementioned Act (amended by the Federal Act of 14th December 1962), the Delegate for Atomic Energy Questions was empowered to draft and enforce legislation in the nuclear field, to study questions concerning the use of atomic energy and to co-ordinate efforts made in this field as well as to elaborate relevant international treaties together with the Federal Political Department, and to supervise the application thereof.

As from now, these tasks are entrusted to the Office of Energy Economics attached to the Federal Department of Transport and Communications and of Energy whenever they do not fall within the jurisdiction of the Science and Research Division.

The Office is competent, inter alia, to issue licences under the Atomic Energy Act as well as for safety questions in respect of nuclear installations including nuclear power stations.

The Federal Office of Energy Economics includes a sub-division for atomic energy which comprises a section in Würenlingen for the safety of nuclear installations, as well as a restricted legal and administrative department in Bern. The Federal Commission for the Safety of Nuclear Installations is also attached, for administrative purposes, to the Office of Energy Economics.

• United Kingdom

THIRD PARTY LIABILITY

Bill amending the Nuclear Installations Act 1965

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~~The purpose of this Act is to amend~~
~~A Bill has now been drafted in the United Kingdom with the~~
~~purpose of amending the Nuclear Installations Act 1965~~ to bring that
~~Act~~ into full compliance with the international conventions on nuclear
third party liability to which the United Kingdom is a Signatory, namely,
the Paris Convention, the Brussels Supplementary Convention and the
Vienna Convention. (NEP)

Clause 1 of the Bill amends Section 12 of the 1965 Act with the insertion of a new subsection (3A) to avoid that damage caused to the nuclear installation itself or to property on the site thereof entail liability other than to the extent provided by the Conventions.

The new subsection is drafted as follows

"(3A) Subject to subsection (4) of this Section, where damage to any property has been caused which would have been caused in breach of a duty imposed by Sections 7, 8, 9 or 10 of this Act if in subsection (1)(a) or (b) of the said Section 7 the words 'other than the licensee' or in subsection (1) of the said Section 10 the words 'other than that operator' had not been enacted, no liability which, apart from this subsection, would have been incurred except -

- (a) in pursuance of an agreement to incur liability in respect of such damage entered into in writing before the occurrence of the damage, or
- (b) where the damage was caused by an act or omission of that person done with intent to cause injury or damage".

In addition, this new subsection is referred to in subsection (4) of Section 12, as follows

"(4) Subject to Section 13(5) of this Act, nothing in subsection (1)(b) or in subsection (3A) of this Section shall affect -

- (a) the operation of the Carriage of Goods by Air Act 1924, or
- (b) the operation of the Carriage by Air Act 1932, the Carriage by Air Act 1961 or the Carriage by Air (Supplementary Provisions) Act 1962 in relation to any international carriage to which a convention referred to in the Act in question applies, or

(1) The 1965 Act has been published in the Supplement to the Nuclear Law Bulletin No. 1.

(e) The operation of any Act which may be passed to give effect to the Convention on the Contract for the International Carriage of Goods by Road signed at Geneva on 19th May 1956."

The purpose of the second clause of the Bill is to counteract the effects of the devaluation of sterling in 1967 by increasing from £ 1 3/4 million to £2,100,000 the amounts referred to in Sections 17(3)(b)(ii) and 21(1) of the 1965 Act, moreover, in subsections (1) and (4) of Section 18 the sum of £43 million is increased to £50 million.

The purpose of clause 3 of the Bill is to extend the scope of application of paragraph (b), subsection (5) of Section 13 of the 1965 Act to bring it into full accord with Article 6(e) of the Paris Convention. Paragraph (b) is amended as follows

"(b) the occurrence took place or the injury or damage was incurred, within the territorial limits of a country which is not a relevant territory, and the payment is made by virtue of a law of that country and by a person who has his principal place of business in a relevant territory

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Regulations of 16th January 1969 amending the Nuclear Installations (Insurance Certificate) Regulations of 20th October 1965

These Regulations amend Section 3 of the 1965 ^{Regulations} ~~Act~~ which prescribes the particulars contained in the Insurance Certificate for the carriage of nuclear substances as set down in ~~Section 21(3)~~ of the Nuclear Installations Act 1965. The purpose of this amendment is to ~~suppress paragraph 7 of Section 3 of the 1965 Regulations which require~~ mention in the Certificate of the total number of packages carried and identifying marks thereon. ~~These Regulations came into force on 1st February 1969.~~ (NEA)

PROTECTION AGAINST RADIATIONS

Draft Regulations on the protection of workers exposed to ionizing radiations arising from sealed radioactive substances have been elaborated under the responsibility of the Secretary of State under the provisions of the 1961 Factories Act. The purpose of these draft Regulations is to bring the provisions of Regulation No. 4170 made in 1961 and relating to the protection of workers exposed to ionizing radiations arising from sealed sources, into line with Regulation No. 780 of 1968 on unsealed radioactive substances (which is the subject of the following analysis).

These draft Regulations contain, as does the 1968 Regulation, chapters devoted to administrative measures in respect of utilization of radioactive substances (here in sealed form), general principles for protection against ionizing radiations, and the radiological and medical supervision of classified workers respectively. In addition, special chapters deal with the organisation of work regarding sealed radioactive substances, the use of monitoring instruments and registration of the intensity of ionizing radiations, the conditions of use of ionizing radiations in radiography or fluoroscopy as well as the use of X-rays

in crystallographic apparatus and apparatus used for X-ray spectrometry. The last chapter contains the Regulations applicable to the utilization of sealed sources in various apparatus for measurements, detection and gauging apparatus ...

However, these draft Regulations do not contain provisions which are as detailed as those of the Regulation on unsealed radioactive substances in respect of the physical protection of workers against ionizing radiations

The Annex contains the established maximum permissible doses applicable to persons handling radioactive substances in sealed form as well as the doses for pregnant women.

The Ionising⁽¹⁾ Radiations (Unsealed Radioactive Substances) Regulations No. 780, 1968

These Regulations were made by the Minister of Labour by virtue of the powers conferred on her under the Factories Act 1961. These Regulations concern workers handling unsealed radioactive substances and impose a limitation on the hazards arising from excessive exposure to ionizing radiations.

They are divided into nine Parts and also include three Schedules.

1. Part I is devoted to interpretation and general provisions, in particular it defines a series of terms used in these Regulations, limits the scope of application thereof and makes provision for exemptions.
2. Part II deals with administration, notifications and records. The occupier of a factory to which these Regulations apply must give one month's notice of the entry into service or cessation of activities of the factory to the competent inspector. Similar notification must be sent as soon as possible when any loss of unsealed radioactive substances is discovered or when any fire or explosion that involves such substance occurs. The Regulations make provision for the appointment of a competent person to exercise supervision with regard to the observance of these requirements.
3. Part III comprises the basic principles for the protection of workers against exposure to ionizing radiations and contamination. It also imposes preventive measures in respect of inhalation and ingestion of radioactive substances and establishes an appropriate radiation protection system. Workers must receive instruction concerning the hazards involved and the precautions to be observed. The Chief Inspector responsible for protection has important powers conferred upon him to ensure protection in this field and can notify the occupier that he is under obligation to make arrangements for persons employed by him to wear a dosimeter and to keep and up-to-date record of the relevant doses. He can also require that every person employed be medically examined and that the amount of radioactive substances in his body be determined and recorded

⁽¹⁾ Also spelt ionizing

- 4 Part IV of these Regulations concern radiological supervision. According to these requirements a person employed is considered a classified worker and must comply with the relevant requirements when he is working with unsealed radioactive substances in areas provided for such purpose and he is likely to be exposed to ionizing radiations. A person employed not more than 14 days in any calendar year in such activities does not enter into that category. Also, no person under the age of 18 can be employed on work which requires him to be designated as a classified worker. The names of the latter must be entered in the health register. This Part also indicates the procedure for defining the amount of radiation dose received by workers, notably with the help of film dosimeters and by regular recording of the dose received. Also indicated are the steps to be taken when a worker has received any radiation dose in excess of the maximum permissible dose or has ingested or inhaled a significant amount of radioactive substances.
5. The arrangements for medical supervision are contained in Part V of the Regulations. Such supervision is compulsory and the occupier must make available the services of a doctor and provide him with all the necessary equipment to carry out his work. A classified worker must undergo medical examination before employment as such, and thereafter submit to periodic or special examinations when he has received a radiation dose greater than permitted. Medical examinations include a blood examination and must take place at intervals of not more than fourteen months. In addition, the appointed doctor is empowered to suspend any worker from employment in active areas, that is, areas where unsealed radioactive substances are handled and where exposure to radiation is liable to occur. He must enter in the health register the result of the medical examinations.
- 6 Part VI lays down the measures for protection to be taken on the premises and within the plant. They concern barriers and notices to be put up marking the boundaries of active areas, other means for separating such areas, and facilities for storing equipment for protection and decontamination.
- 7 The problem of personal protection of workers is dealt with in Part VII. Persons working in active areas must be provided with personal protective equipment which includes clothes to prevent contamination and breathing apparatus. This Part of the Regulations also comprises provisions in respect of personal hygiene, the steps to be taken in case of superficial cuts, and first aid to be given when such cuts occur when the worker is in an active area.
- 8 The provisions laying down the procedure to be followed for the utilization, accounting, storage and transport within a factory of unsealed radioactive substances figure in Part VIII. Also indicated are the measures to prevent spills and accidental escapes of substances, by ensuring for example that the containers used are adequate and are not submitted to an internal build-up of pressure. In addition, the requirements for cleaning active areas as well as the conditions of entry into total enclosures are specified.

- 9 The ninth and final Part deals with the use and maintenance of monitoring instruments as well as with the procedure for preventing bodily contamination, contamination of protective equipment, personal clothing and all other surfaces.
10. There are three Schedules included in these Regulations

The first specifies the maximum permissible radiation doses for a classified worker in any calendar year. The sum of such dose is set at 75 rems to the hands, forearms, feet and ankles of which not more than 40 must be received in any calendar quarter, 15 rems to the lenses of the eyes (not more than 8 per calendar quarter) and 30 rems to other parts of the body (not more than 15 per calendar quarter). In respect of persons who are not classified workers, the sum of the doses must not exceed 3 rems for any calendar year and in the case of a pregnant female person it must not exceed 1 rem from the time her pregnancy is known and for the rest of that period

The second Schedule gives the maximum permissible levels of contamination of surfaces according to their category, and the relevant methods of assessment.

The third Schedule gives a classification of radionuclides into four categories according to high toxicity, medium toxicity (this category includes two sub-groups) and low toxicity.

11. These new Regulations on protection against ionizing radiations from unsealed radioactive substances came into force on 29th May 1968 in respect of Regulations 1(1) and 2 to 5 and the Schedules and on 15th November 1968 as regards the other provisions. At that date the Factories (Luminising) Special Regulations 1947 were revoked.

• *United States*

REGIME OF NUCLEAR INSTALLATIONS

New Regulations

Under a recent requirement AEC licensees conducting certain industrial-type activities (e.g. operators of power and test reactors, processors and reprocessors of reactor fuel, industrial radiographers) must report annually exposure information for monitored individuals who receive:

- (1) annual doses in excess of the quarterly values established for "restricted areas" (areas access to which is controlled for purposes of radiation protection), or

- (ii) if the individual is under 18, 10 per cent of the quarterly values. Such licensees must also report the number of individuals for whom personnel monitoring was required or provided.

When an individual terminates employment or work assignment with such an AEC licensee, the licensee must report that individual's exposure during his employment or work assignment.

Under the Atomic Energy Act and AEC regulations, licences to operate utilization or production facilities include "technical specifications" which set forth the specific characteristics of the facility and the conditions for its operation that are required to provide adequate protection for the health and safety of the public. AEC regulations have recently been revised to place emphasis on two general classes of technical matters

- (i) those related to prevention of accidents and
- (ii) those related to mitigation of the consequences of accidents

By systematic analysis and evaluation of a particular facility, each applicant is required to identify those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity. Such items are expected to be the subjects of technical specifications in the operating licence. An applicant for a construction permit must submit a preliminary safety analysis report which emphasizes the principal safety features of the facility and their relation to the site. The analysis and evaluation of the facility must provide the necessary information from which technical specifications will be selected and the detailed bases of the specifications derived.

Legislative activity

Draft legislation (H.R. 9647) under Congressional consideration would eliminate the requirement for an AEC finding of "practical value", i.e. "that any type of utilization or production facility has been sufficiently developed to be of practical value for industrial or commercial purposes". If such a finding were made, different authority would govern issuance of licences which would be subject to different qualifications and conditions. No such finding has been made because of the lack of meaningful operating information from other than prototype-size power reactors. Licences have continued to be issued under the authority to licence facilities "involved in the conduct of research and development activities leading to the demonstration of the practical value of such facilities for industrial or commercial purposes". This statutory distinction between "developmental" and "commercial" reactors has historical basis but serves no useful function now.

There is currently considerable discussion of "thermal pollution" in the United States. The AEC's present authority with respect to effluents from reactors is limited to radiological aspects. Among the legislation which has been introduced is one Bill (S 7) which would bar Federal agencies from issuing a construction permit for power plants (nuclear and non-nuclear) unless and until a required water quality certification had been issued by the responsible state agency.

The November 1968 Nuclear Law Bulletin described a Bill (S 3961) dealing with third party liability in connection with transportation of radioactive materials on the high seas. That Bill was not enacted during the 90th Congress but has been reintroduced in the new Session (H R 9645). Other legislative proposals under consideration in Congress include establishment of civil penalties for violation of licensing requirements (H R 9648) and authorization for the AEC to provide "Plowshare" services on a commercial basis (H R 477).

CASE LAW AND ADMINISTRATIVE DECISIONS

CASE LAW

• *Belgium*

CRIMINAL LIABILITY ARISING FROM ACCIDENTAL IRRADIATION

1. Mr. Jansen, employed in the reactor physics department of the Nuclear Energy Research Establishment at Mol, while working on the nuclear reactor Venus on 30th December 1965, suffered a severe dose of radiation which six months later necessitated amputation of his left leg.

As a result of this incident, criminal proceedings were instituted by the public prosecutor in the "Tribunal Correctionnel" at Turnhout, in the province of Antwerp, in the course of which the injured party, appearing as civil claimant, asked for damages, against, first, the higher technical officer under whose orders the injured party was working, secondly, two other accused who were fellow workers of the latter and, thirdly, the Nuclear Research Establishment, as employer of the first three

The question of liability under criminal law

2. It appears from the investigation of the case by the examining Magistrate and from the expert's report on the circumstances of the accident (although it should be noted that this report, having been drawn up in French whereas the procedural language was Dutch, was subsequently ordered to be disregarded) that the first accused was directly in charge of the experiment carried out and therefore responsible for the safety of the staff working under his orders, of which Mr. Jansen was a member, moreover, he had extensive experience in this field and was fully conversant with the safety regulations

It furthermore appears that Mr. Jansen's accident was the result of a general failure to observe the safety instructions governing the operation he was carrying out

Accordingly, the Court adopted the Prosecutor's conclusions in regard to the first accused, finding that the present case was indeed one of conscious failure to apply peremptory and well-known safety instructions and that this failure, which was the cause of Mr Jansen's

injuries, amounted to such lack of foresight and care as was specified in Sections 418-420 of the Belgian Penal Code

On the other hand, the Court found the investigation had failed to establish that the second and third accused had contributed by lack of foresight or negligence to the injuries caused to Mr Jansen. There was accordingly insufficient proof of guilt in their case.

The Nuclear Energy Research Establishment, as the employer of the first accused, was held civilly liable for the costs the latter was ordered to pay consequent upon the acts of which he was accused and which he had committed in the course of his employment.

The question of civil liability

3 The "Tribunal Correctionnel" first considered whether it could entertain the claim made by the civil claimant.

This in turn raised the question of the jurisdiction of the Court. The accused contended that the Court lacked jurisdiction

- first, by reason of Belgian legislation on industrial accidents and occupational diseases, which provides that claims for payment of compensation by a person suffering injury as a result of an industrial accident or occupational disease shall not be a matter for the criminal courts,
- secondly, by reason either of Section 16 of the Act of 27th July 1962 on the third party liability of the Nuclear Energy Research Establishment or of Section 10 of the Act of 18th July 1966 on third party liability in the field of nuclear energy, laying down certain measures for immediate implementation of the Paris Convention, in respect of acts founded on the above provisions these Sections confer exclusive jurisdiction on the Brussels Court of First Instance.

In regard to the first contention, the Court considered that the provisions quoted did not, in the circumstances, constitute an exception to the applicability of Section 4 of the Act of 17th April 1878 (Code of Criminal Investigation) which provides that a civil claim may be brought at the same time as criminal proceedings and before the same court.

As regards the second ground, the Court pointed out in the first place that the Act of 18th July 1966 did not apply to the present case since it had not come into force at the date of the accident, secondly, while recognizing that the Act of 27th July 1962 applied in this case, it considered that this Act, by reason of its temporary and provisional nature, could not introduce an exception to the general principles governing civil liability and in particular to the provisions of Section 4 of the abovementioned Act of 17th April 1878. For the foregoing reasons the Court held that it had jurisdiction and that the application by the civil claimant could be entertained.

4 Turning next to consideration of the justification of the claim for damages made by the civil claimant, who had alleged that he had contracted an occupational disease knowingly caused by his employer, the Court first recalled the principle under which whenever the injury, as in the present case, is the consequence of an act which occurred within the terms of an employment contract or within the scope of an occupational

hazard, a claim for damages under the general law can only be justified if it is established that the accident or disease was caused knowingly.

In the circumstances, the Court held that the injury suffered by Mr. Jansen must be considered as an industrial accident and not, as claimed by the civil claimant, an occupational disease, on account of the sudden and unusual nature of the injury suffered in the course of the contract of employment, which in turn had equally suddenly caused a serious physical disorder leading ultimately to a disability. The fact the injured party alleged that he was suffering from a disease appearing in the list of occupational diseases contained in Section 1 of the Royal Order of 18th January 1964 was held not to be sufficient, in the light of the circumstances in which the injury occurred, to make the latter an occupational disease, the Court adding that a disease could be regarded as a consequence of an industrial accident, even if it was one of those listed as occupational diseases.

The Court moreover found that the investigation had revealed no ground for considering that the first accused or his employer had knowingly caused the accident or that they could be legally deemed to have committed such an act knowingly, and accordingly declared that the claim for damages under the general law could not be sustained in the present state of that law.

5. On the basis of the above findings, the "Tribunal Correctionnel" of Turnhout, on 14th February 1969, sentenced the first accused to a fine of B.Frs 2,000, suspended on condition of good behaviour for three years (with an alternative of a month's imprisonment in default of payment of the fine within the time required by law) and ordered him to pay the costs of the proceedings. The Nuclear Energy Research Establishment was declared civilly and jointly liable for the costs of the proceedings. The second and third accused were acquitted

Finally, as stated above, the civil claimant's request for damages, which was held to be entertainable but not substantiated, was dismissed

● *France*

COMPENSATION FOR WORKERS SUFFERING FROM OCCUPATIONAL DISEASES DUE TO IONIZING RADIATIONS

1. The Paris Court of Appeal recently delivered another judgment⁽¹⁾ in a case concerning an occupational disease caused by ionizing radiations. The "Caisse Primaire Centrale de l'Assurance Maladie de la Région Parisienne" had appealed against a decision dated 11th January 1967, of the Paris Social Security Board of First Instance for Contentious Cases which had upheld the French Atomic Energy Commission's application to quash the decision of the "Caisse" admitting Mr Saltel to benefit in respect of the occupational disease he had suffered

(1) The Case Law contained in the first issue of the Nuclear Law Bulletin included a report of the judgments of the Paris Court of Appeal and the Social Affairs Division of the Court of Cassation in the Majoni Case. It also gave the list of occupational diseases in Table No 6, Book IV, of the Social Security Code

Mr Saltel, a storekeeper at the Fontenay-aux-Roses establishment of the CEA had suffered since April 1968 from moderate normochromic anaemia. The Caisse Primaire had originally refused to recognize his entitlement to benefit in respect of this condition, but on the insured taking the matter to the Reviewing Panel of the Caisse Primaire, the latter by a decision of 25th January 1965 admitted him to benefit.

This decision brought the insured within the provisions of Book IV of the Social Security Code in respect of the anaemia from which he was suffering, under Table No 6 "Occupational diseases caused by X-rays, natural or artificial radioactive substances or any other particle-emitting source".

The CEA, after having, without success, opposed Mr. Saltel's admission to benefit in respect of his anaemia before the Reviewing Panel, applied to the Board of First Instance (contentious cases) to quash the decision. The latter, having found that Mr. Saltel had failed to prove direct exposure, by reason of his occupation, to one of the radiation hazards listed in Table 6, and noting moreover that the enquiry conducted had shown there to be practically no danger of irradiation, held that the CEA was entitled to succeed in its application.

The Paris Court of Appeal found, in the first place, that the anaemia from which Mr. Salter was suffering fell within the description contained in Table 6. It went on to recall that in accordance with well settled principles of case law a presumption that an occupational disease was caused in the course of employment arose the moment it was shown that the insured had been exposed to the hazard in question, but the Court held that it was for the Caisse Primaire to establish the fact that the insured had been exposed to radiation hazards within the time limit prescribed for admission to benefit, which in the case of moderate anaemia was one year.

However, the conclusions of an enquiry carried out by an expert at the request of the Caisse Primaire itself showed that the work on which Mr. Saltel was engaged during the period prescribed for admission to benefit (i.e. April 1957 to April 1958, on which latter date his anaemia was diagnosed) did not involve any contact with radiation sources, and moreover the film badges had never shown traces of radiation during the same period accordingly, radiation hazards appeared to have been practically nil.

The Court of Appeal held that in the absence of genuine exposure to radiation hazards during the period prescribed for admission to benefit, the conditions for recognition of the insured's anaemia as an occupational disease were not fulfilled and accordingly on 8th February 1969 it confirmed the decision of the Board of First Instance.

It should be pointed out that this judgment, against which a right of appeal lay, within two months, to the Court of Cassation, does not, under French Social Security Law, affect Mr. Saltel's prior admission to benefit. Consequently, he will continue to draw benefits from the Caisse Primaire Centrale de l'Assurance Maladie de la Région Parisienne in respect of occupational disease, but the Caisse will have to make the payments out of its own funds. Moreover, the effect of the Court of Appeal's judgment is to stop the Caisse Primaire from taking this man's disability into account in calculating the CEA rates of contribution to industrial accidents and occupational disease insurance.

This new judgment of the Paris Court of Appeal, following as it does that delivered in the Majoni case, clearly shows the limits circumscribing the presumption of causation of ionizing radiations in connection with various pathological conditions described in Table No.6 of occupational diseases, by requiring the Social Security Services to provide proof of actual exposure of the insured to radiation hazards.

2. The Paris Court of Appeal has furthermore delivered its judgment following the appeal filed by Mrs Majoni against the decision⁽¹⁾ delivered on 29th June 1966, by the Paris Social Security Board of First Instance for Contentious Cases, which had dismissed Mrs. Majoni's application for an increased pension, based on inexcusable negligence by her employer, the French Atomic Energy Commission. This decision had been supported on the grounds that Mrs Majoni had failed to provide any evidence, even by way of presumption, of the existence of an exceptional degree of negligence on the part of her employer, arising from a voluntary act or omission and implying knowledge of the danger involved.

In support of her appeal Mrs. Majoni relied in particular on variations in her blood count which, she claimed, indicated the presence of extremely grave disorders, and also on the absence of any special protective measures designed to shield her from ionizing radiations during periods of pregnancy.

It appears from consideration of the facts and from the medical evidence produced during the proceedings that the appellant had not been exposed to excessively large doses of radiation. Moreover, two recent enactments, Decrees No 66-450 of 20th June 1966 and 67-228 of 15th May 1967, fixed the maximum permissible dose of ionizing radiations that a worker can receive without danger, at 5 rems (these Decrees did not exist at the date of the facts involved in the case and for this reason were not quoted at the time of the various judgments which recognized that the anaemia suffered by Mrs Majoni was an occupational disease caused by radioactive substances), it had been proved, however, that the claimant had never, in the course of her work received a dose amounting to even half the maximum permissible dose of 5 rems.

The Court also found that Mrs Majoni, as an employee of the CEA, had enjoyed the benefit of all necessary protective measures meeting (even before publication of the regulations quoted above) the safety standards subsequently laid down, she had, furthermore, been required to carry a personal film badge and was under constant medical supervision, moreover, the anomalies in her blood count had been observed at times when she was absent from work or was not exposed to ionizing radiations, moments which, moreover, coincided with her successive pregnancies, during which, as had been proved, she had been kept completely away from any radiation hazards

The Paris Court of Appeal, finding that in these circumstances the CEA could not possibly be charged with any act or omission amounting to inexcusable negligence, on 12th March 1969, confirmed the previous judgment and declared Mrs Majoni's appeal to be groundless.

(1) See paragraph No. 4 of the Note on Case Law in the first issue of the Nuclear Law Bulletin

ADMINISTRATIVE DECISIONS

• *Belgium*

RECOGNITION OF THE EUROCHEMIC COMPANY AS THE OPERATOR OF A NUCLEAR INSTALLATION

By Royal Decree of 31st December 1968 ("Moniteur Belge" of 15th January 1969) the European Company for the Chemical Processing of Irradiated Fuels (Eurochemic) established at Mol (Belgium) is recognized as the operator of a nuclear installation. The Act of 18th July 1966 on third party liability in the field of nuclear energy, which sets certain provisions for the immediate application of the Paris Convention, consequently applies to the Company, from the date of the reception of notification of this recognition, such notification being dated 20th January 1969

• *Sweden*

THIRD PARTY LIABILITY

Royal Decree of 19th December 1968

By Decision of the King in Council of 19th December 1968 under Section 17 of the Nuclear Liability Act (No. 45) of 8th March 1968, the liability of the new AB-ASEA-ATOM Company, which operates an installation for the production of fuel elements, was fixed at S Kr 25 million per nuclear incident instead of S Kr 50 million as provided under the general law

INTERNATIONAL ORGANISATIONS AND AGREEMENTS

INTERNATIONAL ORGANISATIONS

● *International Atomic Energy Agency*

COMPOSITION OF THE BOARD OF GOVERNORS

At its twelfth session in September 1968, the IAEA General Conference adopted a resolution requesting the Board of Governors to review Article VI of the Statute on the composition of the Board, and to submit to the General Conference, in September 1969, a report containing a study of ways and means by which the membership of the Board will adequately reflect

- (1) the progress and developments in the peaceful uses of nuclear energy achieved by many members of the Agency, including the developing countries,
- (ii) an equitable geographical distribution, and
- (iii) the continuing need for the effectiveness of the Board as the executive body of the Agency.

The General Conference adopted this resolution after the great majority of non-nuclear weapon States, during their Conference at Geneva in September 1968, expressed the desire to participate more actively in the executive body of the IAEA. The General Assembly of the United Nations also took note of this resolution on 20th December 1968 and requested the Director General of the IAEA to keep the Secretary-General of the United Nations informed of action taken in connection with this matter.

Already once before, in 1961, Article VI had been amended in order to achieve more adequate representation for the area of Africa and the Middle East. It provides for designation, by the outgoing Board of Governors, of 13 Member States for one year, and for election by the General Conference of 12 Member States for two years. The members to be designated by the Board are

- (a) the five States most advanced in nuclear technology,
- (b) five other States most advanced in the geographical areas not represented by the aforementioned five

- (c) two States which are producers of nuclear source materials,
- (d) one State supplying technical assistance

The General Conference, with due regard to equitable geographical representation, elects three States from Latin America, three from Africa and the Middle East, one State from Western Europe, one from Eastern Europe, one from South Asia, one from South-East Asia, one from the Far East and one for the so-called floating seat

At its meeting in February 1969, the Board of Governors examined memoranda on the review of Article VI submitted by Italy, Mexico and Pakistan, and decided to set up an ad hoc Committee of the whole to continue the review of Article VI. Members of the Agency not serving on the Board were invited to take part in the meeting of this Committee. More than 20 Member States of the Agency not serving on the Board were represented on the Committee, which met in Vienna on 15th-17th April 1969. The Committee will meet again on 3rd June 1969. Present Members of the Board are Algeria, Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, Ceylon, Finland, France, India, Iran, Italy, Japan, Madagascar, Peru, Philippines, Poland, Singapore, South Africa, Turkey, USSR, United Kingdom, United States and Venezuela.

SAFEGUARDS TRANSFER AGREEMENT

On 4th March 1969 Iran, the United States of America and the IAEA concluded a new trilateral agreement superseding a previous Safeguards Transfer Agreement of 4th December 1964, which expired on 19th April 1969. The IAEA has now concluded, with 30 Member States, 40 safeguards agreements involving 71 reactors with a total thermal capacity of over 3,200 MW. The reactor under IAEA safeguards in Iran is a 5 MW(th) pool type reactor located near Teheran.

SAFETY STANDARDS

At its February regular session, the Board of Governors authorized the Director General to promulgate, as part of the IAEA Safety Standards, a code of practice for the safe operation of critical assemblies and research reactors, and to recommend the Member States that this code be taken into account in the formulation of national regulations or recommendations. In June 1968, the Board already authorized the Director General to promulgate one such code on the safe operation of nuclear power plants. The World Health Organization (WHO), which has a particular interest in the subject, has participated in the elaboration of both codes. The other codes of practice previously issued by the IAEA under its statutory functions relate to the safe handling of radioisotopes, the management of radioactive wastes produced by radioisotope users, the provision of radiological protection services, the basic requirements for personal monitoring, and radiological protection in mining and milling of radioactive ores (the latter being a joint IAEA/ILO publication). In co-operation with FAO, ILO and WHO, the IAEA is preparing a manual on the planning for handling radiation accidents.

RADIOACTIVITY IN THE SEA

An agreement concerning developmental studies on the effects of radioactivity in the sea was signed on 27th March 1969 between the Government of the Principality of Monaco and the IAEA. The agreement, which took effect on 1st January 1969, will extend for six years, it supersedes an agreement signed in March 1961, for three years, and later extended until the end of 1968. The parties to the new agreement have taken into consideration that over the years there have been a number of changes in the work since the project started. Its purposes are now:

- (a) to promote the development of reference analytical methods and techniques for investigating the effects of radioactivity on marine biota. These data are necessary for future evaluation of health and safety aspects of radioactivity in the marine environment
- (b) to promote the adoption of these methods and techniques by national and international institutions that are studying the effects of radioactivity on marine biota and the behaviour of radionuclides in the marine environment, so as to ensure the comparability of the results of this investigation.

Under the agreement, IAEA designates a chief scientist to take charge of research and provides the necessary staff and funds for equipment and operation. The Monaco Government undertakes to assist in providing the means for research, laboratories, and additional scientific, technical and administrative staff by an annual voluntary contribution of F Fr.220,000 (US\$45,000) to the IAEA General Fund.

IAEA AGREEMENT ON PRIVILEGES AND IMMUNITIES

The thirty-second instrument of acceptance of the Agreement on Privileges and Immunities of the IAEA⁽¹⁾ was deposited by the Government of Ecuador on 16th April 1969. The Agreement, which was approved by the Board of Governors on 1st July 1959, pursuant to Article XV.C of the IAEA Statute, broadly follows the Convention on the Privileges and Immunities of the Specialized Agencies. It defines the legal capacity of the IAEA and provides for the application to the Agency, its officials and experts, and representatives of Member States at meetings convened by the Agency, of such privileges and immunities as are necessary for the exercise of their functions. The following countries up to now are parties to the Agreement in the chronological order of the deposit of their instruments of acceptance: Finland, Federal Republic of Germany, Iraq, India, New Zealand, Sweden, United Kingdom, Norway, Korea, Denmark, Thailand, Philippines, United Arab Republic, Pakistan, Japan, Netherlands, Yugoslavia, Argentina, Ghana, Belgium, Brazil, Canada, USSR, Ukrainian SSR, Byelorussian SSR, Hungary, Jamaica, Tunisia, Czechoslovakia, Bolivia, Bulgaria and Ecuador.

⁽¹⁾ The text of this Agreement has been reproduced in Agency document INFCIRC/9/Rev 2

LEGISLATIVE ASSISTANCE

At Government request, advice was provided by the IAEA Secretariat to several countries in the framing of legislation covering the following fields

- establishment of national bodies on atomic energy (Jamaica)
- radiation protection (Cyprus, Iraq, Lebanon, Madagascar, Malaysia, Singapore),
- licensing of nuclear installations and nuclear power reactors (Greece, Ireland, South Africa),
- safety standards for nuclear activities and siting criteria for nuclear installations (Yugoslavia),
- visits of nuclear ships to national ports (South Africa),
- transport of radioactive materials (Indonesia),
- civil liability for nuclear damage (Mexico, Thailand)

● *European Nuclear Energy Agency*

THIRD PARTY LIABILITY

1. The limits of what might be called the "technical scope of application" of the Paris Convention on nuclear third party liability raises important problems of a practical nature. In actual fact Article 1 of this Convention defines the categories of installations which fall within its scope, and Signatory Governments must interpret this provision when in domestic law they take decisions relating to the classification of nuclear installations producing or utilizing nuclear substances. It would be most desirable for these decisions to be harmonized in the Signatory countries in order to avoid difficulties when nuclear substances are transferred from one country to another. Moreover, it is a fact that application of the exceptional regime of the Paris Convention should be avoided in respect of installations which do not involve hazards great enough to justify such a measure and the relevant insurance requirements.

In order to help solve these problems ENEA convened an ad hoc Group of Legal and Technical Experts charged with defining the criteria for the exclusion of certain nuclear installations from the scope of application of the Paris Convention. The IAEA has been associated with the work of this Group which met in December 1968 and February 1969.

2. As a result of these meetings the Group recognized that it would be desirable to exclude from the scope of application of the Paris and Vienna Conventions, by using an indirect procedure which would consist of excluding small quantities of nuclear substances from the scope of application of these Conventions, certain installations not

presenting significant hazards. Decisions in this respect could be taken by the ENEA Steering Committee in accordance with Article 1(b) of the Paris Convention and by the IAEA Board of Governors under Article I(2) of the Vienna Convention. This procedure would have the advantage of harmonizing the provisions of application of both Conventions, as wished by the Group.

The Group was also in favour of setting limits for exclusion applicable both to installations and to transport.

It should be emphasized that such decisions, taken jointly, would define the scope of application of the nuclear conventions, facilitate the task of national authorities which have to decide which third party liability regime is applicable, and harmonize the measures taken by the various countries in this respect

3 At the present stage, the ad hoc Group has only reached incomplete conclusions, and they are considered as a first step towards an agreement for a more general exclusion of nuclear substances. These conclusions concern limits for exclusion by activity level in respect of plutonium and its daughter products as well as limits by mass applicable to all fissile materials. It is proposed that these limits be set down in a Decision on the pattern of the Decision adopted in 1964 by the ENEA Steering Committee in relation to nuclear substances during transport, but would apply equally to substances within installations

With a view to attaining similar measures for the application of the Paris and Vienna Conventions, the Steering Committee requested the Director General to transmit the conclusions of the Experts to the IAEA for submission to the Standing Committee of the Vienna Convention. In this way, identical decisions could be proposed to the ENEA Steering Committee and the IAEA Board of Governors

AGREEMENTS

• *Euratom*

CO-OPERATION AGREEMENT / Official Gazette of the European Communities
No. L 73 of 26th March 1969/

A new Co-operation Agreement for the peaceful uses of nuclear energy was signed in Brussels on 3rd February 1969 between the European Atomic Energy Community and the United Kingdom Government. This Agreement extends for a further period of two years from 4th February 1969, the Agreement signed in London on 4th February 1959 which came to expiry

• *France*

CARRIAGE OF NUCLEAR SUBSTANCES

Decree No 68-1023 of 8th November 1968, publishing Annexes A and B, as amended, to the European Agreement concerning the international carriage of dangerous goods by road (A D R) of 30th September 1957 /Official Gazette of the French Republic of 26th November 1968/

Annex A is entitled "regulations relating to dangerous substances and objects" and essentially covers general definitions and regulations specific to radioactive substances. It also has an Appendix A6 which includes various tables (Part A), the method of applying the criteria for Category I under nuclear safety regulations (Part B) and methods for testing packaging to be used for radioactive substances in Category IV b (Part C)

Annex B is entitled "regulations relating to transport equipment and carriage" and contains notably the general provisions covering the carriage of all categories of dangerous substances, regulations specific to the carriage of substances in each category, particularly radioactive substances, and an Appendix B4 concerning the carriage of substances in Category IV b

The new Annexes replace those in the Convention of 30th September 1957, published in the Official Gazette of the French Republic of 4th August 1960

• *Germany-Netherlands*

NUCLEAR-POWERED SHIPS

As reported in the last issue of the Bulletin, an Agreement was signed on 28th October 1968 between the Federal Republic of Germany and the Kingdom of the Netherlands concerning the use of Dutch coastal waters and ports by the first German nuclear-powered research ship "Otto Hahn"

In regard to safety, the Agreement cites the provisions relating to nuclear-powered ships contained in the Annexes to the International Convention for the Safety of Life at Sea (London, 1960). With respect to liability, the Agreement is based - with a few exceptions - on the Brussels Convention of 1962 relating to the third party liability of operators of nuclear ships (which has not yet come into force) The Government of the Federal Republic of Germany is liable up to an amount of DM.400 million, insofar as the amount is not already covered by insurance or another guarantee

Any differences shall be settled by a board of arbitration (Schiedsgericht) The Agreement is to be submitted for ratification in both countries It may be denounced by giving six months' notice. /The full text of the Agreement has been translated and is reproduced under the heading "Texts" in the present issue of the Bulletin/

In Germany, the Bill ratifying this Agreement has been submitted to the Bundestag

• *Netherlands*

INTERNATIONAL CONVENTION ON THE THIRD PARTY LIABILITY OF OPERATORS OF NUCLEAR SHIPS

On 30th December 1968, the Netherlands Government signed the Brussels Convention of 25th May 1962, relating to the third party liability of operators of nuclear ships. Preparatory work is in hand with a view to the ratification of this Convention by the Netherlands. In this connection, a Bill containing provisions relating to the application of the Convention in the Netherlands and determining the liability of operators of nuclear ships where the 1962 Brussels Convention is not applicable, will also be submitted to Parliament.

MISCELLANEOUS

ENEA ANALYTICAL STUDY ON NUCLEAR LEGISLATION

ERRATUM IN THE STUDY ON NUCLEAR THIRD PARTY LIABILITY

• *Canada*

A mistake occurred in the English version of the Chapter "Canada" of the ENEA Analytical Study on Nuclear Third Party Liability.

The last paragraph on page 23 should read:

"Compensation for nuclear damage is, however, not accorded when this damage was caused by the wilful default or bad faith in the performance of the contract of a senior official of the contractor, sub-contractor or supplier concerned".

UPDATING OF ENEA ANALYTICAL STUDY ON NUCLEAR THIRD PARTY LIABILITY

• *Sweden*★

Act No. 45 of 8th March 1968 on nuclear liability replaces the earlier Act of 3rd June 1960 on compensation for nuclear damage, which had been introduced as a provisional measure. The new Swedish Act came into force on 1st April 1968 with the exception of Sections 29 to 31 which will come into force at a later date to be fixed by the Government.

★ This study has been updated on the basis of information made available to the Secretariat and in no way involves the responsibility of the national authorities.

NATURE OF THIRD PARTY LIABILITY

I - DAMAGE ENTAILING LIABILITY

Act No. 45 of
8.3.1968
Section 1(VIII)

For the purposes of this Act, damage involving the liability of a nuclear operator is that caused by the radioactive properties of nuclear fuel or radioactive products or a combination of radioactive properties with toxic, explosive, or other hazardous properties of such fuel or products, and also damage caused by ionizing radiations emitted from any source of radiation inside a nuclear installation other than nuclear fuel or radioactive products

Section 3(a)

Damage resulting from nuclear incidents occurring in the territory of a non-Contracting State of the Paris Convention is outside the scope of this Act. However, the Swedish Government may determine that compensation for nuclear damage suffered in the territory of a non-Contracting State shall be payable in Sweden, subject to reciprocal treatment by that State. Moreover, where a non-contracting State has established a system of compensation equivalent to that under the Paris Convention, the Government may, having due regard to Sweden's obligations under the Paris Convention, determine that such State shall for the purposes of this Act be deemed to be a Contracting State

Section 3(c)

Section 4

Section 1(b)

The Government may also prescribe that any nuclear fuel or radioactive products shall be excluded from the application of this Act, if the small extent of the risks involved so warrants

II - PERSONS LIABLE

(a) Installations

Section 5

The operator of a nuclear installation is liable to pay compensation for nuclear damage caused by a nuclear incident in his installation, even if there has been no fault or negligence on his part.

Section 11(a)

Section 2

The Government may determine that two or more installations operated by one and the same operator and located at the same site shall be deemed to be one single installation.

Section 9

Where nuclear damage is caused by nuclear substances which are not in the possession of any operator at the time of the incident, liability lies with the operator who last had the substances in his possession

(b) Carriage

- Section 6 A Swedish nuclear operator is liable for nuclear damage occurring in the course of carriage of nuclear substances from a nuclear installation situated in Sweden, he is also liable for damage occurring in the course of carriage of nuclear substances of which he is the consignee, either from the moment when he took in charge the nuclear substances being carried or from the time fixed by a written contract between him and the consignor
- Section 7(a) Where nuclear substances are sent from a non-Contracting State of the Paris Convention to a nuclear installation situated in Sweden, the operator of such installation is, subject to his written consent, liable for any nuclear incident which occurs in the course of carriage. These provisions also cover damage caused by nuclear substances stored in a nuclear installation during transport, except when the operator of that installation is liable for such damage pursuant to a contract in writing. Liability arising from carriage of nuclear substances in transit across Swedish territory lies with the person authorized under this Act to perform the carriage
- Sections 5 and 8
- Section 7(c) The Swedish Atomic Energy Commission is authorized to determine, on application by a carrier and with the consent of the operator concerned, that the carrier shall be liable in the place of the operator for nuclear damage occurring during carriage, the carrier must prove that he has provided adequate financial security. In the case of international carriage of nuclear substances involving the liability of a Swedish nuclear operator, the latter must provide the carrier with a certificate issued by the insurer containing particulars of the operator concerned, a description of what is to be carried and how, and details of the insurance cover
- Royal Decree No.46 of 8th March 1968
Section 3
- Act No 45 of 8th March 1968
Section 39(a)
- Section 14(c) In accordance with the Paris Convention, the provisions of this Act regarding liability arising from nuclear incidents occurring in the course of carriage shall not affect the application of any international agreement in force or open for signature, ratification or accession on 29th July 1960, or any provisions of national legislation based on such agreement.

(c) Rights of recourse

- Section 15(a) Any person who has been held liable to pay compensation under such international agreement shall acquire by subrogation the rights of the person suffering the damage against the operator liable under this Act.

When the Government has decided to compensate in Sweden damage suffered on the territory of a non-Contracting State of the Paris Convention, the person required to pay such compensation shall have a right of recourse against the operator who would normally have been liable if the Government had not taken such a decision.

Section 20

An operator who has been held liable to pay any sum as compensation under this Act has a right of recourse against any individual who has caused the damage intentionally or who has assumed liability under the express terms of a contract in writing.

III - EXONERATION FROM LIABILITY

Section 11(b)

The operator is not liable when the nuclear damage is directly due to an act of war, armed conflict, civil war or insurrection. The same applies when the damage was caused by a grave natural disaster of an exceptional character

Section 12(a)

Similarly, the operator is not liable for damage to the nuclear installation itself or to any property which, at the time of the incident, was on the site of the installation and was used in connection therewith. On the other hand, the Swedish Act provides that the nuclear operator shall be liable for damage caused to the means of transport, provided however that this shall not have the effect of limiting to an amount less than Sw Kr 25 million (approximately 5 million EMA units of account) the liability of the operator for damage other than damage to the means of transport

Sections 12(b) and 17(a)

Section 12(c)

Claims for compensation for nuclear damage for which the operator is not made liable under the two preceding paragraphs can be brought only against an individual who has caused the damage intentionally

FUNCTIONING OF THIRD PARTY LIABILITY

I - FINANCIAL SECURITY

(a) Limits of liability and insurance

Section 17(a)

The operator's liability for nuclear damage is limited to Kr.50 million (about 10 million EMA units of account). The Government may, however, fix a lower amount, taking into account the size or character of the nuclear installation concerned. Nevertheless, this amount cannot be less than Kr 25 million (about 5 million EMA units of account). The same applies to carriage of nuclear substances, taking account of its extent

Section 18(a) Where nuclear damage gives rise to the liability of two or more operators, they are jointly and severally liable to pay compensation. In such event the liability of each operator is limited to the maximum amount established with respect to him individually. However, when several consignments of nuclear substances are carried on one and the same means of transport or are stored during transport in one and the same nuclear installation, the aggregate liability of the operators shall not exceed the highest amount of liability established with respect to any of them

Section 18(b) The apportionment of the aggregate liability as between the operators liable shall be determined with due regard to the extent to which the damage caused is attributable to each of the nuclear installations involved.

Section 22(a) The operator of a nuclear installation is required to take out and maintain insurance sufficient to enable him to compensate for nuclear damage up to the amount established in respect of his liability. The insurance taken out by the nuclear operator must be approved by the Government or the competent authority appointed by the Government. Such insurance may either cover liability for each nuclear incident that may occur or cover at any time the nuclear installation itself up to an agreed amount.

Section 22(b)

Section 22(c) Carriage of nuclear substances may be covered by a separate insurance.

Section 23(a) Where the insurance covers each nuclear incident, the amount thereof must not be less than the amount of liability established with regard to the operator concerned, while in cases where the insurance covers the nuclear installation, the amount of the insurance may not be less than 120 per cent of the amount of the liability of the operator

Section 23(b) Insurance of the nuclear installation must be restored to its original amount by supplementary insurance whenever such amount is reduced by any payments made from it

The insurer's liabilities towards any person suffering nuclear damage continues for two months from the date at which the competent authority has been notified in writing by the insurer of the cancellation or expiry of the policy. Moreover, where the insurance policy covers carriage of nuclear substances, and such carriage has started before the expiry of the said period of two months, the insurer remains

liable to pay compensation until such carriage has come to an end, unless the nuclear incident occurs after the date on which a new insurance contract has come into force.

Section 25

The Government may relieve a nuclear operator from the obligation to take out insurance, provided that the operator furnishes evidence of adequate financial security to cover his obligations.

Section 27(b)

The State, on the other hand, is exempted from the obligation to take out insurance

Section 27(a)

(b) State intervention

Where the sums available to meet the liability of the operator of a nuclear installation in Sweden or another State party to the Brussels Supplementary Convention are insufficient to satisfy the claims, or the compensation payable has been reduced by virtue of a decision of the Government and jurisdiction over actions for compensation lies with the Swedish courts, nuclear damage incurred in Sweden or on the territory of another State party to the said Convention, or on or over the high seas on board a ship or aircraft registered in Sweden or in such other State, will be compensated out of public funds. The total amount of compensation payable by the operator and the State shall not exceed an amount equivalent to 120 million EMA units of account.

Section 29(a)

Section 31(a)

These provisions will become applicable only when the Government shall have so decided by a Royal Decree after the Brussels Convention has come into force.

Where damage due to a nuclear incident for which a Swedish operator is liable has not come to light until after the right to compensation has been extinguished under this Act, but within 30 years of the date of the incident, compensation for such damage is paid by the State. The same applies when nuclear damage comes to light before the right to compensation has been extinguished and the person suffering damage has failed, for reasons regarded as valid, to take appropriate measures against the liable operator.

Section 32(a)

The State, acting in the role of a surety, also compensates for nuclear damage where it proves impossible to recover compensation from the liable operator or his insurer. In such event the total compensation payable by the State cannot exceed the maximum amount of

Section 28 liability established with respect to the operator concerned The State moreover has a right of recourse against the operator or insurer who has failed to make payment

Section 35(a) In addition, where the financial security is not sufficient to meet the damage in toto, and compensation is not payable out of public funds, pursuant to Section 29, such compensation shall nevertheless be payable under terms and conditions to be determined by the Government and Parliament.

Section 33 The Government has power to decide that compensation shall be payable in respect of nuclear damage suffered outside Sweden

Section 32(c)

II - COMPENSATION

Section 17(b) Compensation payable in respect of loss of life or personal injury may not exceed Kr 1 million (about 200,000 EMA units of account) for each person killed or injured

Section 16 Where a person has simultaneously suffered nuclear damage and other damage which is not reasonably separable, such person is to be compensated under the provisions of the Act without any distinction being drawn between the two categories of damage

Section 13(b) The operator may be exonerated in whole or in part from liability to compensate a person suffering nuclear damage, where such person has intentionally been a contributory cause of the damage.

Section 19
Section 31(b) Compensation for nuclear damage may be reduced where the maximum amount of the operator's liability is not sufficient to satisfy all claims in full Where there is reason to believe that such a reduction may prove necessary the Government may decide that, until further notice, only a percentage of the total compensation due shall be paid The same applies where the compensation is paid out of public funds.

Section 24 Claims for compensation may be brought directly against the insurer of the liable operator.

III - LIMITATION IN TIME

The right to bring an action for compensation for nuclear damage becomes statute-barred if not brought against the liable operator

Section 21(a)

or his insurer within three years from the date on which the person suffering damage had knowledge or ought reasonably to have known both of the operator liable and of the fact that he had suffered damage entitling him to compensation.

Section 21(b)

The right to compensation for nuclear damage is extinguished if no action has been brought against the operator or his insurer within ten years from the date of the incident. However, where the nuclear substances which caused the incident have been stolen, lost or abandoned and have not yet been recovered, actions for damages may be brought within 20 years from the date of the theft, loss or abandonment.

IV - COMPETENT COURTS AND MISCELLANEOUS PROVISIONS

Section 36(a)

The Swedish courts are competent to hear actions claiming compensation for damage caused by a nuclear incident which occurred in whole or in part in Sweden. The Swedish courts are also competent if the nuclear installation concerned is situated in Sweden and the nuclear incident occurred in whole outside the territory of any Contracting State or the place of the nuclear incident cannot be determined with certainty. The Government may be required to restrict the jurisdictional competence of Swedish courts in order to comply with decisions of the European Nuclear Tribunal.

Section 36(b)

Jurisdiction lies with the court within whose jurisdictional area the nuclear incident occurred. Where competence would thus lie with two courts, the action may be brought before either of them. Should there be no competent court under the foregoing rules for choice or jurisdiction, the action is to be brought before the City Court of Stockholm.

Section 37

Any judgment entered by the competent courts, under the Paris Convention, of another Contracting State are enforceable in Sweden. Applications for enforcement must however comply with a certain number of formalities and, in particular, must be accompanied by a declaration issued by the competent authority of the Contracting State.

Section 38

Persons contravening the provisions of this Act regarding the obligation to furnish financial security are liable to criminal penalties

Comments

The new Swedish Act, promulgation of which simultaneously brought into effect the Paris Convention, contains provisions which are more complete and better harmonized with that Convention and the Brussels Supplementary Convention than those of the previous Act enacted in 1960

The draftsman has closely followed the provisions of these two Conventions, adapting them to the special conditions affecting their application to Sweden

Problems arising, more particularly in regard to liability connected with carriage of nuclear substances, and to the question of jurisdiction, in applying the Swedish Act and the legislation of Contracting States enacted pursuant to the two Conventions, as well as the regulations of non-Contracting States, have received careful attention.

PUBLICATIONS

● *European Nuclear Energy Agency*

GENERAL ORGANISATION OF NUCLEAR ACTIVITIES AND ADMINISTRATION

In 1967 ENEA undertook to publish an analytical study of the major aspects of nuclear energy legislation in force in OECD countries in consultation with the competent services of the countries concerned

This study includes the following four sections

- Nuclear third party liability (already published)
- General organisation of nuclear activities and administration
- Rules with respect to nuclear installations and health protection
- Transport of nuclear matter

The next section which is due to be published in July 1969 deals with the general organisation of nuclear activities and administration It reviews, along a standardized plan for all the countries in order to facilitate research and comparisons, the different

administrative or political supervisory authorities, the consultative bodies and the public or semi-public management agencies which make up the institutional framework for nuclear energy activities.

This section also includes an analytical survey of the legislation governing nuclear activities in each country and refers to the legal texts which determine the regime for nuclear substances (ores, manufacture, utilization of and trade in nuclear substances), security control, patents and third party liability. Finally, the main bilateral agreements concluded in respect of the peaceful uses of atomic energy are mentioned.

PROCEEDINGS OF THE ENEA-IAEA SYMPOSIUM ON THIRD PARTY LIABILITY AND INSURANCE IN THE FIELD OF MARITIME CARRIAGE OF NUCLEAR SUBSTANCES

The European Nuclear Energy Agency, organised jointly with the International Atomic Energy Agency, an international Symposium on third party liability and insurance in the field of maritime carriage of nuclear substances, which was held in Monaco from 7th to 11th October 1968. The preceding issue of the Bulletin gave an account of this meeting, the purpose of which was to study third party liability problems raised by the carriage of nuclear substances by sea, taking into account the provisions of the Vienna and Paris Conventions and the Brussels Supplementary Convention, as well as those of the maritime conventions in force or in course of ratification, its aim was also to study insurance problems stemming from the maritime carriage of nuclear substances

The Proceedings of this Symposium, which will be published in September 1969, will be issued in two versions, one in French and the other in English. They will include the list of participants, the full texts of the 37 papers presented at the Symposium, a summary of the discussions which took place after every session, as well as the report of the Restricted Committee, which included prominent personalities representative of the different interest concerned, whose task it was to make a synoptic report of the work carried out at the Symposium.

TEXTS

● *France*

TEXT⁽¹⁾ OF THE ACT OF 12TH NOVEMBER 1965 ON THE THIRD PARTY LIABILITY OF OPERATORS OF NUCLEAR SHIPS, INCORPORATING THE AMENDMENTS INTRODUCED BY THE ACT OF 29TH NOVEMBER 1968⁽²⁾

Section 1

The operator of a nuclear ship shall be absolutely liable, to the exclusion of any other person, for nuclear damage caused by a nuclear incident.

Operator means the person authorized by the Flag State to operate a nuclear ship, or the State which operates such a ship.

Nuclear ship means any ship equipped with a power plant in which a nuclear reactor is, or is to be used as, the source of power, whether for propulsion of the ship or for any other purpose.

Nuclear damage means any damage which arises, in whole or in part, out of the radioactive properties of nuclear fuel or of radioactive products or waste of that ship.

Section 2

Where the origin of damage is both nuclear and other than nuclear and the effect of each of these causes of the incident is not reasonably separable, the provisions of this Act shall be applicable to the entire damage.

Section 3

Between the launching of the ship and the time authorization is granted for her operation, the owner of the ship shall be deemed to be the operator for the purposes of this Act and the ship shall be deemed to be flying the flag of the State in which she was built.

(1) This text is an unofficial translation by the Secretariat.

(2) The amendments to the original text of 1965 are underlined

Section 4

The operator shall not be liable under this Act with respect to nuclear incidents occurring before the nuclear fuel has been taken in charge by him, or after the nuclear fuel or radioactive products or waste have been taken in charge by another person duly authorized

Section 5

Nuclear damage suffered by the nuclear ship itself, its equipment, fuel or stores shall not be included within the operator's liability

Section 6

No liability under this Act shall attach to the operator in respect of nuclear damage imputable to an act of war, civil war, hostilities or insurrection

Section 7

If the operator proves that the nuclear damage resulted from an act or omission of the person suffering damage done with intent to cause damage ("faute intentionnelle"), he shall be exonerated from all liability with respect to that person

Section 8

The operator shall have the right of a recourse

- (1) against a person who has wilfully caused or provoked the incident,
- (2) if the incident occurred as a consequence of any wreck-raising operation, against the person who carried out such operation without the authority of the operator and of either the State whose flag the ship flew or the State in whose waters the wreck is situated
- (3) against a person who, by contract, has undertaken to meet all or part of the damage in question

Section 9

The liability of the operator as regards one nuclear ship shall be limited to 500 million francs in respect of any one nuclear incident, notwithstanding that the nuclear incident may have resulted from any fault of privity of that operator, such limit shall include neither any interest nor costs awarded by a court in actions for compensation under this Act.

However, the maximum amount of liability for the operator of a foreign nuclear ship is, save where an agreement has been concluded with the Flag State, the amount established by the law of that State, provided, however, that such amount may in no event be less than the amount established in the preceding paragraph of this Section

A single nuclear incident means any occurrence or series of occurrences having the same origin which causes nuclear damage

Section 10

The operator shall be required to maintain insurance or furnish other financial security covering his liability for nuclear damage

Section 11

Where nuclear damage engages the liability of more than one operator and the damage attributable to each operator is not reasonably separable, the operators involved shall be jointly and severally liable for such damage.

Each such operator shall be liable for the entire damage, provided, however, that he shall have a right of recourse against the other operators in proportion to the fault attaching to each of them. If the degree of fault attaching to each of them cannot be determined, they shall all bear the liability in equal parts

The liability of any one operator shall, in no case, exceed the limit established in Section 9 above

Section 11-1

As regards bodily injuries, a Decree issued after a report from the Minister responsible for Atomic Energy and the Minister for Social Affairs shall establish, having regard to the irradiation and to the contamination received, and to the time elapsed before the disorder was observed, a non-restrictive list of disorders that shall be presumed to have been caused by the incident, in the absence of proof to the contrary.

Section 11-2

The provisional or final compensation actually paid to victims may not be reduced on account of the limits of liability and financial guarantee provided for in Section 9 here above.

Section 12

A person suffering damage may bring an action directly against the insurer of the operator liable or against any person who has provided financial security.

Section 13

A person who has paid compensation to persons suffering damage shall acquire the rights of recourse attributed to the operator under Section 8 above.

Section 14

~~The Civil Courts shall have jurisdiction in all cases of claims brought in application of this Act.~~

If a criminal court is seised it may under no circumstances pronounce judgement on the civil suit.

Section 15

Should it appear following a nuclear incident that the total damage caused by that incident is likely to exceed the maximum liability under Section 9 above and, where applicable, Section 11, a decree by the Council of Ministers published in the Official Journal shall confirm this situation, at the latest within six months of the day of the incident.

Such decree may define measures of special control which the public shall be required to undergo in order to determine which persons have suffered damage as well as the extent of provisional compensation, which may not be reduced, which may be allocated by the competent Court to persons suffering damage. A further decree may increase such compensation if this is rendered possible by new factors.

The final rules for compensation, effected within the limits of liability provided for under Sections 9 and 11 above, shall be established at the appropriate time under the same conditions

Section 16

All actions for compensation for nuclear damage must be brought within fifteen years from the day of the incident. If, however, the law of the Flag State provides that the liability of the operator shall be covered by insurance or other financial security for a period longer than fifteen years, such actions may be brought during that entire period, without prejudice, however, to the rights of persons who have brought an action for loss of life or personal injury against the operator before the expiry of the aforesaid period of fifteen years.

Where nuclear damage is caused by nuclear fuel, radioactive products or waste which were stolen, lost, jettisoned or abandoned, the period established under the preceding paragraph shall be computed from the date of the nuclear incident causing the nuclear damage, but the period shall in no case exceed a period of twenty years from the date of the theft, loss, jettison or abandonment.

The periods provided for under this Section are firm.

Section 17

Without prejudice to the period of prescription established by the preceding Section, the right to compensation in respect of nuclear damage shall be extinguished if an action is not brought within three years from the date on which the claimant had knowledge that the damage was caused by a given nuclear incident.

Section 18

The sums provided by insurance or by the financial security referred to in Section 10, shall be exclusively available for compensation of the nuclear damage covered by this Act

Section 19

With respect to French nuclear ships, compensation for damage shall be borne by the State as a subsidiary intervention, to the extent that the insurance or other financial security is not sufficient for the payment of claims established against the operator, up to the amount established by Section 9 above. If that subsidiary intervention is consequential to the operator's failure to observe the duty assigned to him with respect to insurance or security, the State may require that he reimburse the compensation which it had to pay out as a result thereof

The State may intervene, even for the first time in a case on appeal, with a view to challenging the basis, or the amount, of compensation in all actions brought against the operator, his insurer or guarantor. In such case, the State shall intervene as a party and may revert to any type of recourse available under the law.

Section 20

In the event of damage resulting from the nuclear fuel of, or radioactive products or waste produced in a nuclear ship, the operation of which was not at the time of the incident authorized by a State, the owner of the ship shall be deemed to have been the operator thereof, except that the amount of his liability shall not be limited

In the case of a French nuclear ship, the State shall assume responsibility for the compensation of damage suffered in French territory, within the limits and under the conditions provided for in Sections 9 and 19 above

Section 21

This Act does not derogate from either the rules established by legislation with respect to social insurance and compensation for industrial injuries and occupational diseases and by legislation of the same kind applicable to certain professional categories, in particular with respect to rights of recourse provided for by such legislation.

With the exception of those cases where the person suffering damage was employed by the operator at the time of the nuclear incident and received compensation for either a work or service accident or an occupational disease, rights of recourse shall be exercised against the operator, his insurer or those persons having provided security

If the person suffering damage was in the service of the operator at the time of the nuclear incident and received compensation for a work or service accident or an occupational disease, and if such incident was caused by someone other than the operator or his employees, the rights of recourse held by the person suffering damage and the

organisation which paid him social insurance benefits, against the person who caused the incident, may be exercised against the operator only.

Rights of recourse shall be exercised within the limits and under the conditions provided for by Sections 9 and 14 above.

Section 22

A foreign nuclear ship may be refused access to territorial waters, internal waters and French ports if the operator thereof and the Flag State do not expressly accept to provide security which is at least equivalent to that required under this Act.

Section 23

Anyone who knowingly violates the provisions of Section 10 shall be punishable by either or both of the following two penalties: imprisonment of from two to six months and a fine of from 10,000 to 100,000 francs.

Anyone who knowingly violates the prohibition of Section 22 shall be punishable by either or both of the following penalties: imprisonment of from two months to five years and a fine of from 20,000 to 200,000 francs.

Section 23-1

The provisions of the present Act override the special rules concerning the prescription of claims against the State, departments, local administrations and public bodies.

Section 24

A decree by the Council of State shall establish, as necessary, the terms of application of this Act, in particular Sections 1, 10, 19 and 22.

This Act shall be enforced as a law of the State.

• *Germany-Netherlands*

TREATY BETWEEN THE KINGDOM OF THE NETHERLANDS AND THE FEDERAL REPUBLIC OF GERMANY ON THE USE OF NETHERLANDS TERRITORIAL WATERS AND PORTS BY THE NUCLEAR SHIP "OTTO HAHN" (1)

The Kingdom of the Netherlands and the Federal Republic of Germany,

(1) The English translation is from an unofficial French translation by the Secretariat.

Being desirous of promoting, in their mutual interest, the peaceful uses of nuclear energy, and more particularly the application of such energy to merchant ships,

Have agreed as follows

Article 1

(1) Access to and use of Netherlands territorial waters and ports by the nuclear ship "Otto Hahn" (hereinafter called "the ship"), whose present owner is "Gesellschaft für Kernenergieverwertung in Schiffbau und Schifffahrt mbH, Hamburg", shall be subject to prior authorization by the Government of the Kingdom of the Netherlands.

(2) The Government of the Federal Republic of Germany shall inform the Government of the Kingdom of the Netherlands of any change in ownership

Article 2

Save as otherwise provided in the present Treaty, the ship shall, while in Netherlands territorial waters or in a Netherlands port, be subject to the principles and procedures set forth in Chapter VIII of the International Convention for the Safety of Life at Sea, 1960, and to Annex C to the Final Act to the International Conference on Safety of Life at Sea, 1960

Article 3

At the request of the owner, the Government of the Kingdom of the Netherlands shall determine what territorial waters and what port(s) may be visited by the ship and shall designate the official departments which are to be responsible for specifying the conditions governing access and stays in port by the ship and for carrying out the special controls provided for in Chapter VIII, Regulation 11, of the International Convention for the Safety of Life at Sea

Article 4

(1) To enable the Government of the Kingdom of the Netherlands to grant authorization, with full knowledge of the facts, for the ship to enter and use Netherlands territorial waters and ports, the owner of the ship shall submit the Safety Assessment provided for in Chapter VIII, Regulation 7, of the Convention for the Safety of Life at Sea and in the Recommendations contained in Annex C to the Final Act of the International Conference on the Safety of Life at Sea, 1960.

(2) The Government of the Kingdom of the Netherlands shall inform the Government of the Federal Republic of Germany, upon receipt of the Safety Assessment and of the request submitted by the shipowner pursuant to Section 3, what territorial waters and ports of the Netherlands the ship may enter and use in accordance with the present Treaty and with such other conditions as may be jointly agreed

Article 5

(1) The Government of the Kingdom of the Netherlands shall draw up, with the appropriate local authorities, regulations covering use by the ship of Netherlands territorial waters and ports.

(2) The master shall be responsible for control of access to the ship. Any special rules covering visits to the ship shall be laid down by the master. They shall require approval from the competent Netherlands authorities.

(3) The master shall be subject to local regulations providing the latter do not conflict with the terms of the Safety Assessment and the Operating Manual for the reactor. He shall also be bound to comply with the directives of the local authorities insofar as he considers they shall not prejudice the safety of the reactor. Should he be unable to comply with these directives he shall immediately so inform the appropriate department of the Government of the Netherlands.

(4) The master shall immediately inform the local authorities of any incident which extends the lay days agreed for the ship.

Article 6

While the ship is in Netherlands territorial waters or a Netherlands port the competent Netherlands authorities shall be allowed free access to the ship. They shall also have access to the log and to the Operating Manual relating to the reactor, so as to be able to judge whether the ship has been and is being operated in compliance with the instructions contained in the said Manual, and to carry out the special control provided for in Chapter VIII, Regulation 11, of the Convention on Safety of Life at Sea.

Article 7

The shipowner shall take all necessary steps to ensure that radioactive products or wastes are not discharged from the ship during its stay in Netherlands territorial waters or a Netherlands port unless the competent Netherlands authorities shall have previously expressly authorized such discharge.

Article 8

(1) Maintenance of, repairs to, or provision of services in relation to the ship's nuclear installation in the territorial waters or in a port of the Netherlands shall be entrusted solely to enterprises expressly authorized by the competent Netherlands authorities for the purpose of supplying such services

(2) The competent Netherlands authorities must be informed of any maintenance or repair work or of any other provision of services in connection with the nuclear installation while the ship is in the territorial waters or a port of the Netherlands. No repairs which extend the lay days agreed for the ship or which affect its ability to navigate under its own power may be undertaken without the agreement of the competent authority

Article 9

In the event of an accident likely to lead to an environmental hazard whilst the ship is in the territorial waters or a port of the Netherlands or while it is entering the same, the master shall immediately notify the competent Netherlands authority thereof in accordance with Chapter VIII, Regulation 12 of the Convention for the Safety of Life at Sea.

Article 10

(1) If the competent Netherlands authorities consider that an immediate environmental hazard exists while the ship is in the territorial waters or a port of the Netherlands or is entering the same, the master shall be required to comply with any instructions given by such authorities.

(2) If, for reasons of safety, the master shall be unable to comply with the instructions of the said authorities, he shall immediately give notice thereof to the competent department of the Government of the Netherlands which may then forbid the ship to continue using the territorial waters or ports of the Netherlands

Article 11

(1) If the ship runs aground, becomes a wreck or sinks in the territorial waters or in a port of the Netherlands, the competent Netherlands authorities shall be entitled to take at the expense of the owner all such measures as they deem necessary to avoid imminent risk of nuclear damage, if and insofar as any measures decided by the Netherlands authorities shall not have been taken by the owner or by the Government of the Federal Republic of Germany

(2) The Government of the Federal Republic of Germany shall for this purpose, and in agreement with the Government of the Kingdom of the Netherlands, provide all possible assistance in the form of personnel and equipment

(3) Nothing shall affect the powers of the Netherlands authorities in regard to the avoidance of obstacles to navigation and removal of wrecks.

Article 12

In cases not provided for by the present Treaty, the Government of the Kingdom of the Netherlands reserves the right, after consulting the master, to take measures for ensuring the safety of the ship and its environment.

Article 13

For the purposes of Articles 14 to 21 of this Treaty, the expressions "nuclear damage", "nuclear incident", "nuclear fuel", and "radioactive product or waste" shall have the same meaning as in the Convention on the Liability of Operators of Nuclear Ships, signed on 25th May 1962 at Brussels and hereinafter referred to as "the Convention".

Article 14

(1) Liability for nuclear damage caused by a nuclear incident attributable to the nuclear fuel of the ship or to the radioactive products or waste produced on board the ship, shall be covered by Articles II, III(1), IV and VIII of the Convention, and by the following Articles of this Treaty, provided nevertheless that the amount of the liability mentioned in Article III(1) of the Convention shall be limited to 400 million DM (in words four hundred million).

(2) For the purposes of this Treaty, the owner shall be considered as the operator of the ship within the meaning of the Convention.

Article 15

(1) The right to compensation pursuant to Article 14 of this Treaty shall cease if proceedings are not instituted within ten years from the date of the nuclear incident

(2) Where nuclear damage is caused by nuclear fuels or by radioactive products or waste which have been stolen, lost, jettisoned or abandoned, the period of time mentioned in paragraph (1) above shall run from the date of the nuclear incident which caused the nuclear damage, it shall in no case exceed 20 years from the date of such theft, loss, jettison or abandonment

(3) Provided the time limit laid down in paragraphs (1) and (2) is not exceeded, the right to compensation provided for in Article 14 of this Treaty shall be statute-barred at the end of three years from the date on which the person instituting proceedings claiming compensation for nuclear damage had knowledge or ought reasonably to have had knowledge of such damage and of the person responsible therefor

Article 16

Insofar as the social insurance legislation of the Netherlands includes compensation for nuclear damage, the services responsible for making such payments shall enjoy by subrogation the rights of the person entitled to compensation under 14 of this Treaty. For the purpose of calculating their value in this regard any payments in the nature of an annuity shall be capitalized.

Article 17

The Federal Republic of Germany shall guarantee the payment of compensation for nuclear damage due by the owner in accordance with this Treaty, by allocating for the purpose the necessary financial resources up to an amount of 400 million DM (in words four hundred million) The amount so earmarked shall only be drawn upon if the proceeds of insurance and other financial security are insufficient to provide compensation in full

Article 18

(1) Actions for payment of compensation under Article 14 and actions for repayment of expenses under Article 11 of this Treaty may be brought only before the "arrondissementsrechtbank" at the Hague.

(2) The Federal Republic of Germany may become a party to any proceedings brought against the owner of the ship

(3) Any provisions of domestic law or of international agreements on limitation of the liability of a shipowner shall be inapplicable to proceedings brought under Article 11(1) and Article 14 of this Treaty.

Article 19

Recognition and enforcement of decisions of the Netherlands courts in disputes under Article 18(1) shall be governed by the provisions of the Treaty signed on 30th August 1962 between the Kingdom of the Netherlands and the Federal Republic of Germany on mutual recognition and enforcement of court judgments and other documents conferring a right to payment in civil and commercial matters. Nevertheless, only those decisions which are *res judicatae* shall be entitled to recognition and enforcement

Article 20

Articles 14 to 19 of this Treaty shall apply to nuclear damage occurring on Netherlands national territory, if the incident occurred

- (a) within the limits of Netherlands national territory,
- (b) outside the limits of Netherlands national territory while in transit to or from a Netherlands port or Netherlands territorial waters.

Article 21

Articles 14 to 19 of this Treaty shall also apply to nuclear damage

- (a) occurring within the limits of Netherlands territorial sovereignty or suffered by a Netherlands national in the estuary of the Ems within the meaning of Article 7 of the Treaty of 8th April 1960 on co-operation in the estuary of the Ems in a spirit of good neighbourly relations (Ems-Dollart Treaty), if such damage is caused by a nuclear incident occurring in the estuary of the Ems within the meaning of Article 7 of the Ems-Dollart Treaty,
- (b) suffered by a Netherlands national in the estuary of the Ems within the meaning of Article 7 of the Ems-Dollart Treaty, if such damage is caused by a nuclear incident as defined in Article 20

Article 22

In accordance with Article 48 of the Ems-Dollart Treaty, the Government of the Federal Republic of Germany shall ensure that the owner of the ship informs in due time the competent Netherlands authorities of his arrival in the port of Emden and of his departure from such port

Article 23

If any questions covered by this Treaty are governed by the coming into force of an international multilateral agreement or by the domestic legislation of one of the Contracting Parties the latter shall within a reasonable time initiate negotiations for the revision of this Treaty.

Article 24

(1) Any differences regarding interpretation and application of this Treaty shall be settled so far as possible by the Governments of the two Contracting Parties

(2) If a difference cannot be settled in this manner, it shall, at the request of one of the Contracting Parties, be submitted to a board of arbitrators.

(3) The board of arbitrators shall be constituted ad hoc. It shall consist of one member chosen by each Contracting Party, these two members shall agree on the choice of a national of a third country as Chairman. Such Chairman is then appointed by the Governments of the two Contracting Parties. The members of the board of arbitrators shall be nominated within two months, and the Chairman within three months, from the date when one Contracting Party shall have notified the other of its intention to submit the difference to arbitration.

(4) If the time limits specified in paragraph (3) above are not observed, either Party may, in the absence of other agreement, request the President of the Court of Justice of the European Communities to make the necessary appointments. If such President is a national of one of the Contracting Parties or if he is prevented from acting for other reasons, the nominations shall be made by his Deputy. If such Deputy is also a national of one of the Contracting Parties or otherwise prevented, the appointments shall be made by the next most senior member of the Court who shall not be a national of either of the Contracting Parties

(5) The board of arbitrators shall give its decision by majority vote. Its decisions shall have binding effect. Each Contracting Party shall bear the costs of its national member of the board and its representatives throughout the proceedings before the board of arbitrators, the costs of the Chairman as well as incidental expenses shall be shared equally between the two Contracting Parties. The board of arbitrators may decide that the expenses shall be apportioned in a different manner. In all other respects, the board of arbitrators shall decide on its own procedure

Article 25

This Treaty shall also apply to "Land" Berlin, unless the Government of the Federal Republic of Germany shall otherwise inform the Government of the Kingdom of the Netherlands within three months from the date when this Treaty comes into force

Article 26

As regards the Kingdom of the Netherlands, this Treaty shall only apply to that part of such Kingdom which is situated in Europe.

Article 27

(1) This Treaty shall require ratification, the instruments of ratification shall be exchanged at Bonn as soon as possible.

(2) This Treaty shall come into force one month after the exchange of instruments of ratification.

Article 28

This Treaty may be denounced on giving six months notice

IN WITNESS WHEREOF, the Plenipotentiaries have affixed their signatures hereto.

Done at The Hague, 28th October 1968 in two copies, one in Dutch and the other in German, both texts being authentic.

For the Kingdom of the Netherlands

(S.) J. LUNS

For the Federal Republic of Germany

(S.) HANS ARNOLD

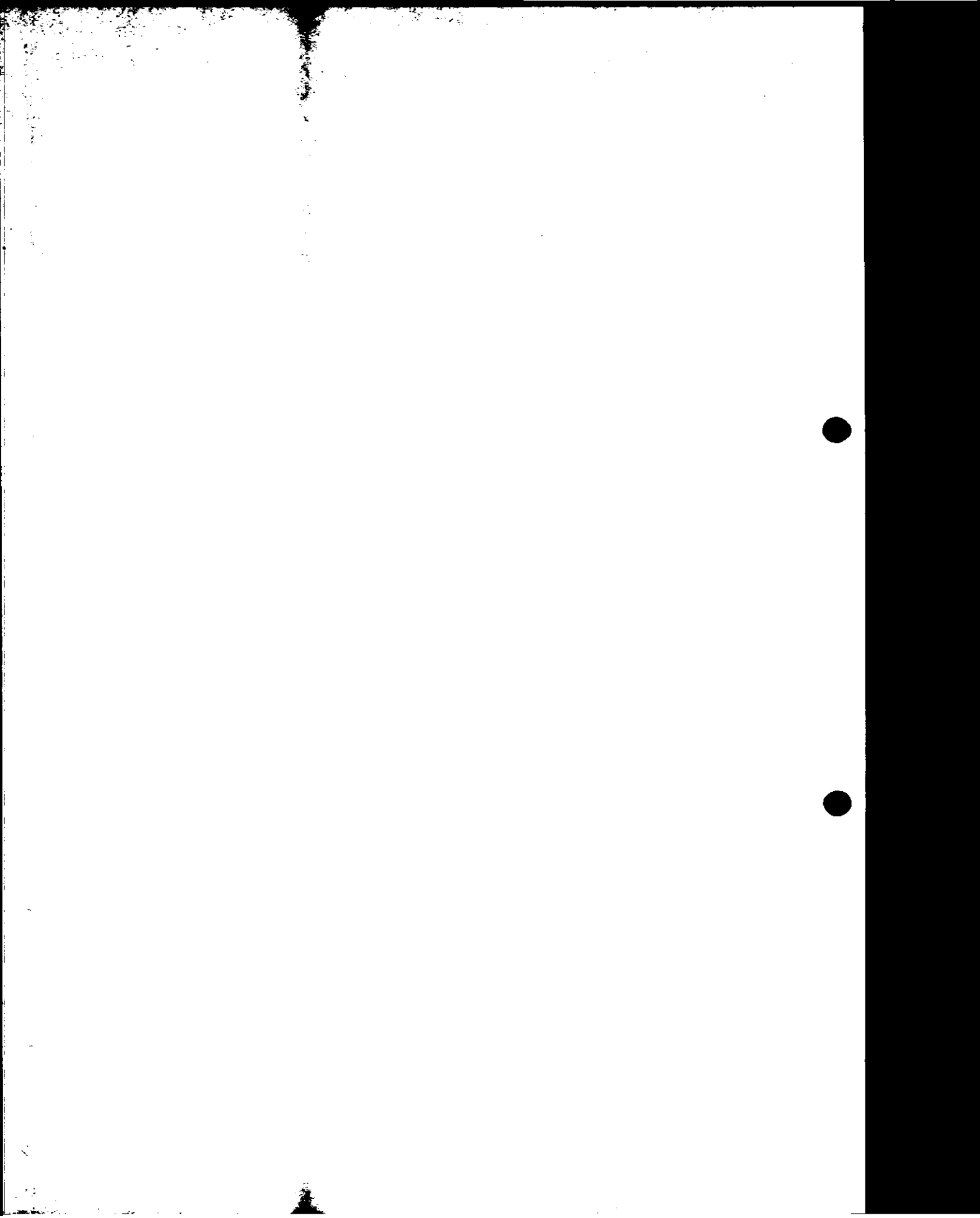
NUCLEAR LAW

Bulletin

S U P P L E M E N T T O N O 3

AUSTRIA: BILL ON RADIATION PROTECTION

April 1969



A U S T R I A

FEDERAL BILL REGARDING MEASURES FOR
PROTECTING THE LIFE AND HEALTH OF PERSONS AND THEIR
DESCENDANTS AGAINST INJURY BY IONIZING RADIATIONS
(LAW ON RADIATION PROTECTION)⁽¹⁾

The National Council decides:

PART I

General Provisions

Scope

Section 1

The present Federal Act regarding measures for protecting the life and health of persons and their descendants against injury by ionizing radiations shall apply to:

- (a) the building and operation of installations in which radioactive materials are to be handled or radiation-emitting equipment is to be housed;
- (b) the handling of radioactive materials, the functioning of equipment producing or utilizing radiation and the conditions of approval of the different types of sources of radiation;

⁽¹⁾ Unofficial translation by the Secretariat.

- (c) official monitoring of the environment for radioactive contamination, and the necessary protection and safety measures.

Human exposure to ionizing radiations

Section 2

1. Human exposure to ionizing radiations shall be kept as low as possible and maintained within the maximum permissible radiation doses set by the present Federal Act; any unnecessary exposure shall be avoided.
2. Ionizing radiations shall be applied to the human body for medical purposes only, and solely to the extent justified by existing medical and scientific knowledge.

Definitions

Section 3

For the purposes of the present Federal Act:

- (a) "ionizing radiations" means high-energy photon emission (X-rays and gamma-rays) or particle radiation capable of producing ions;
- (b) "sources of radiation" means radioactive materials or radiation-emitting equipment;
- (c) "radioactive materials" means materials which, through spontaneous nuclear phenomena, emit ionizing radiations. This designation extends to materials or objects containing radioactive materials or having such materials on their surface;
- (d) "radiation-emitting equipment" means equipment designed to produce ionizing radiations or giving off such radiation while in operation, insofar as such ionizing radiation is not produced by spontaneous nuclear phenomena;
- (e) "the handling of radioactive materials" means the mining, production, storage, transport, consigning, receiving, processing, use and disposal of radioactive materials and any other operation involving radioactive materials during which radiation may be released;
- (f) "radiation dose" means the amount of ionizing radiation received by the human body in excess of natural background radiation;
- (g) the term "radiation zone" designates a zone in which individuals may be exposed to doses of radiation in excess of the levels generally considered permissible, in the light of existing scientific knowledge, with respect to the protection of their own or their descendants' life or health; and
- (h) the term "controlled zone" designates any part of a radiation zone within which persons may be exposed, while working or in training, to radiation doses sufficiently in excess of the levels generally considered permissible, in the light of existing scientific knowledge, with respect to the protection of their own or their

descendants' life or health as to necessitate medical surveillance and regular measurement by physical techniques;

- (i) the term "surveillance zone" designates any part of a radiation zone within which persons may be exposed, while working or in training, to radiation doses in excess of the levels generally considered permissible, in the light of existing scientific knowledge, with respect to the protection of their own or their descendants' life or health, but not constituting a controlled zone within the meaning of sub-paragraph (h) above;
- (j) the term "occupationally exposed persons" denotes both persons employed in controlled zones or repeatedly handling unsealed radioactive materials in excess of fixed activity limits and radiation protection officers;
- (k) the term "radiation protection officer" designates, in the context of a given operation, any person physically and intellectually capable of performing this function, who, having demonstrated an adequate knowledge of radiation protection, has been made responsible for ensuring such protection.

Section 4

The authorities shall, in the light of the latest scientific knowledge, issue regulations setting the permissible radiation doses for the zones defined in Sections 3(g), (h) and (i), together with the permissible activity levels of unsealed radioactive materials for the purposes of Section 3(j).

PART II

The building of installations

Authorization and notification

Section 5

1. Authorization shall be required for the building of installations in which radioactive materials are to be handled or radiation-emitting equipment is to be housed, and the operation of which requires, from the time of building, suitable measures to ensure adequate protection of the life or health of persons and their descendants against injury by ionizing radiations. It shall be prohibited to build such installations before authorization has been granted.

2. The building of installations of the type defined in paragraph 1 above for use in a branch of activity covered by the "Gewerbeordnung" (Industrial Trade Code) shall be subject to approval, as stipulated in Article 25 of said Code. Such approval shall be granted only in compliance with the procedure set out in Articles 28 to 31 of the Code, and shall also be in lieu of the authorization referred to in paragraph 1.

3. Authorization as referred to in paragraph 1 or approval in lieu of such authorization under the terms of paragraph 2 above, shall be granted on condition that:

- (a) adequate precautions have been taken, having regard to the proposed site, to protect the life or health of persons and their descendants against injury by ionizing radiations;
- (b) the applicant's reliability is established in relation to the branch of activity in which he plans to engage. Under no circumstances shall this quality of the applicant be challenged once established.

4. The official notification that the authorization referred to in paragraph 1 or approval in lieu thereof under paragraph 2 has been granted shall, when appropriate, stipulate what conditions and obligations must be met in order to ensure that the life and health of persons and their descendants are protected against injury by ionizing radiations. The official notification of approval shall stipulate that it is in lieu of the authorization referred to in Section 5(1) of the present Act.

5. In the event that even the aforesaid conditions and obligations should not suffice to ensure adequate protection for the life or health of persons and their descendants against injury by ionizing radiations, the authorization referred to in paragraph 1, or approval in lieu of such authorization under paragraph 2, shall be refused.

6. In requesting authorization under paragraph 1 or approval in lieu of such authorization under paragraph 2, applicants shall submit such documentation as may be needed to appraise their proposals including a detailed description of the installation complete with plans, a description of the type of operations to be engaged in, and a statement of the radiation protection measures envisaged.

7. Experts shall be required to determine whether the prior conditions set out in Section 3(a) are fulfilled.

8. Such additional measures designed to protect the life and health of persons and their descendants against injury by ionizing radiations may also be imposed, with all due consideration for vested rights, as may be required in the light of the practical experience or scientific knowledge gained during building.

Operation of installations

Section 6

- 1. Installations covered by Section 5 may be operated only after an operating permit has been granted following inspection and, where necessary, operating trials have been carried out.
- 2. Such operating permits shall be granted on condition that:
 - (a) the installation has been built in compliance with the provisions of the present Federal Act and with any conditions and obligations imposed under Section 5(4) and (8);
 - (b) a radiation protection officer has been appointed; and
 - (c) regular operation of the installation entails no hazard from ionizing radiations to the life or health of persons and their descendants.

3. With due regard to the authorization referred to in Section 5(1) or the approval in lieu of such authorization referred to in Section 5(2), operating conditions and obligations to be complied with in order to ensure that the life and health of persons and their descendants are protected against injury from ionizing radiations may be stipulated in the official notification of the granting of the operating permit. When the branch of activity and the required radiation protection measures so warrant, the presence of other persons demonstrating on adequate knowledge of radiation protection may be made compulsory in the notification.

4. If the conditions in paragraph 2 are met only by certain parts of the installation or for an operating capacity smaller than envisaged, the operating permit may be limited in consequence.

5. If the conditions in paragraph 2 are not fulfilled and a limited permit under paragraph 4 is not granted, the operating permit shall be withheld pending elimination of the defects observed.

6. Applicants shall submit the necessary documentation with their request for an operating permit, including a detailed description of the operations they intend to engage in and a statement of the radiation protection measures envisaged. Applications for permits shall mention the name of the radiation protection officer; in addition, applicants shall produce due proof of compliance with any conditions and obligations imposed under Sections 5(4) and (8).

Section 7

1. The operation of installations in which radioactive materials are to be handled or radiation-emitting apparatus is to be housed, the building and operation of which are not covered by Sections 5 and 6, shall be subject to an operating permit. Such installations must not be brought into service before the permit has been granted.

2. Installations referred to in paragraph 1 above and intended for use in a branch of activity covered by the Industrial Trade Code, shall be subject to prior approval, under Article 25 of the aforesaid Code. Such approval shall be in lieu of the permit referred to in paragraph 1.

3. The operating permit referred to in paragraph 1 or approval in lieu thereof under paragraph 2 shall be granted on condition that:

- (a) adequate precautions have been taken, having regard to the proposed site, in order to protect the life and health of persons and their descendants against injury by ionizing radiations;
- (b) a radiation protection officer has been appointed;
- (c) the applicant's reliability is established in relation to the branch of activity in which he intends to engage. Under no circumstances shall this quality of the applicant be challenged once established.

4. The official notification that the operating permit referred to in paragraph 1 or approval in lieu thereof under paragraph 2, has been granted may stipulate the conditions and obligations to be complied with in order to ensure that the life or health of persons and their descendants are protected against injury by ionizing radiations. Should the activity envisaged and the required radiation protection measures so warrant, the

notification may stipulate that other persons demonstrating an adequate knowledge of radiation protection in their field of activity must be present. The official notification of the granting of approval under the terms of paragraph 2 shall stipulate that such approval is in lieu of the operating permit referred to in Section 7(1) of the present Act.

5. If the conditions set out in paragraph 3 are met for certain parts of the installation only or for an operating capacity smaller than that envisaged, the operating permit or approval may be limited in consequence.

6. If the conditions set out in paragraph 3 are not met and a limited operating permit or approval is not granted under paragraph 5, the operating permit or approval shall be withheld until elimination of the defects observed.

7. In requesting an operating permit or approval, applicants must submit the necessary documentation, including a detailed description of the activity which they intend to engage in and a statement of the radiation protection measures envisaged. Applications for permits shall mention the name of the radiation protection officer.

Modification or enlargement of installations

Section 8

Sections 5 to 7 shall apply to any modification in or enlargement of an installation in which radioactive substances are handled or radiation-emitting apparatus is housed, when such modifications or enlargement are such as to entail an additional hazard to the life or health of persons and their descendants.

Change in authorization holder

Section 9

1. Any authorization granted under Sections 5 to 7 may be transferred to another holder without losing its validity.

2. The successor shall immediately inform the authorities of the change of holder and submit evidence of reliability. Certified proof of this quality shall be required. Failing this, the authorities shall prohibit the person in question from continuing to operate the installation. Should the decision be appealed, its effect shall not be stayed thereby.

Other cases involving the handling of radioactive materials or the operating of radiation-emitting equipment

Section 10

1. Authorization shall also be required for the handling of radioactive materials or the operating of radiation-emitting equipment,

not requiring special installations subject to authorization or approval under Sections 5 or 7.

2. Such authorization shall be granted on condition that:
 - (a) adequate precautions have been taken to protect the life and health of persons and their descendants against injury by ionizing radiations;
 - (b) a radiation protection officer has been appointed;
 - (c) the applicant's reliability is established in relation to the branch of activity which he intends to engage in. Under no circumstances shall this quality of the applicant be challenged once established.
3. The official notification of the grant of authorization may specify the conditions and obligations to be complied with in order to protect the health or life of persons and their descendants against injury by ionizing radiations.
4. If the conditions set out in paragraph 2 are not fulfilled, authorization shall be withheld.
5. Applicants for authorization must submit the necessary documentation with their request, including a detailed description of the type of operation they intend to engage in and a statement of the radiation protection measures envisaged. Applications must specify the name of the radiation protection officer.

Further provisions

Section 11

If, after the granting of authorization in due and proper form under Sections 6, 7 or 10, it is ascertained that despite compliance with the required conditions and obligations the health or life of persons and their descendants are not sufficiently protected against injury by ionizing radiations, the right to operate may be made contingent upon compliance with further obligations, with all due consideration for vested rights.

Expiry of authorization

Section 12

1. The official notification of the grant of authorization shall specify the lapse of time within which the activities covered thereby must be completed. The time limit shall take account of the type and size of the undertaking. It shall not exceed:
 - (a) one year from the granting of authorization to the time construction begins;

- (b) five years from beginning to end of construction;
- (c) one year from the granting of the operating permit to the time the installation is commissioned.

2. The authorization shall expire at the end of the period specified under paragraph 1 if the activity for which it was granted has not been undertaken or completed within that period.

3. Authorizations granted under Sections 6, 7 or 10 shall expire if the activity they cover is interrupted for more than three years.

4. Expiry of the authorization shall be evidenced by official decision.

5. Should unforeseen difficulties prevent their being met, the time limits set by the authorities under paragraph 1 may be extended if a request is made before the authorization expires; the authorization shall be automatically extended pending an official decision on such a request.

Waiver of compulsory authorization

Section 13

1. The authorities may, in the light of scientific knowledge, issue a regulation waiving the compulsory authorization referred to in Sections 7 or 10 for the handling of radioactive materials or the operating of radiation-emitting equipment in cases where the ionizing radiations so produced cannot endanger the life or health of persons or their descendants.

2. The compulsory authorization referred to in Sections 7 or 10 shall also be waived for the handling of radioactive materials or the operating of radiation-emitting apparatus when radiation sources of types officially approved under Section 19 are involved.

3. The compulsory permit shall also be waived for the handling of radioactive materials in the course of transport, insofar as such transport is governed by the regulations applying to the transport of goods by road, rail, waterway or air or by parcel post.

4. When radioactive materials are handled or radiation-emitting equipment is operated regularly, as part of an occupation subject to licensing on account of the special hazards occasioned by ionizing radiations to the life or health of persons and their descendants, it shall not be necessary to apply for authorization under Section 10.

Cases in which a person is no longer reliable

Section 14

1. Should the holder of an authorization granted under Sections 5 to 7 prove to be no longer reliable, the authorities shall forbid him from continuing to operate.

2. Should the holder of an authorization granted under Section 10 prove to be no longer reliable, the authorities shall withdraw his authorization.

Persons required on the premises

Section 15

1. Holders of authorizations granted under Sections 6, 7 or 10 shall see to it that the required number of persons having the knowledge and responsibility to apply appropriate radiation protection regulations are present when the installation is in operation. ~~Section 6(2)(b); Section 6(3); Section 7(3)(b); Section 7(4); Section 10(2)(b)~~.

2. In the case of installations which, even when not in operation, entail specific dangers, a person having the knowledge and responsibility to apply appropriate radiation protection regulations may be required to remain on a stand-by basis.

Change of radiation protection officer

Section 16

1. Holders of authorization granted under Sections 6, 7 or 10 shall immediately notify the authorities of any change of radiation protection officer, submitting the necessary documentation along with this notification.

2. If the person whose name has been given is not qualified for the post, the authorities shall, within four weeks, forbid any further operation of the installation (Sections 6 and 7) or any further handling of radio-active materials or operating of radiation-emitting equipment (Section 10).

Suspension of operations and measures in case of imminent danger

Section 17

1. The operation of installations within the meaning of Sections 6 or 7, the handling of radioactive materials or the operation of radiation-emitting equipment within the meaning of Section 10 shall be forbidden should failure to meet one of the conditions for authorization entail dangers for the health or life of persons and their descendants.

2. The operation of installations within the meaning of Sections 6 or 7, the handling of radioactive materials and the operating of radiation-emitting equipment in the sense of Section 10 shall not be resumed until the authorities have established that the defects motivating the suspension have been removed.

3. Should a decision under paragraph 1 be appealed, the decision shall not be stayed thereby.

Section 18

1. In case of imminent danger created by an installation in which radioactive materials are handled or radiation-emitting equipment is housed, the authorities shall take all appropriate measures to avert the danger. To this end, they may issue provisional instructions and, after consulting the radiation protection officer, act in compliance with Section 4 of the "Verwaltungsvollstreckungsgesetz" (V.V.G.) of 1950 (Act on the implementation of official regulations) concerning procedures for acting on behalf of those concerned.
2. Interim instructions issued under paragraph 1 shall be immediately enforceable within the meaning of Section 8(2) of the V.V.G. of 1950.

Official approval of models of different types of instruments or equipment

Section 19

1. Models of instruments containing radioactive materials or of radiation-emitting equipment shall be approved by administrative decision provided the intensity of radiation does not exceed the values set by regulation.
2. Models of instruments containing radioactive substances shall receive official approval only if the radioactive materials remain confined within an airtight, solid, inactive encapsulation which under normal operating conditions offers full protection against the accidental release of radioactive materials.
3. The regulations referred to in paragraph 1 above shall specify the intensity of radiation at a given distance from the surface in such a way as to ensure adequate protection of the life or health of persons and their descendants against injury by ionizing radiations, insofar as existing scientific knowledge permits.
4. Applications for official approval of a model shall be accompanied by an expert report from an officially recognized testing laboratory certifying that the conditions set out in paragraphs 1 and 2 are met. Applicants shall submit along with their requests any documents of use in making an appraisal, including a detailed description of the instrument containing radioactive materials or the radiation-emitting equipment, together with a set of plans and a statement of the use envisaged. Where appropriate, a detailed statement shall be given of the radiation protection features it is intended to provide.
5. In granting approval, the authorities shall stipulate the characteristics of the model, the purposes for which it may be used, and the conditions and obligations governing its use.
6. Instruments or radiation-emitting equipment covered by paragraph 1 above shall not be distributed or used within this country before approval is granted.

Section 20

1. In the case of instruments containing radioactive materials or of radiation-emitting equipment releasing intensities in excess of the limit set by regulation under Section 19, models may be approved by administrative decisions upon request by one of the persons mentioned in Section 21, on condition that:

- (a) such instruments or equipment are built in keeping with the provisions of the present Federal Act or with any regulations issued pursuant thereto for the protection of the life or health of persons and their descendants against injury by ionizing radiations;
- (b) they meet technical operating safety norms;
- (c) their use is without danger.

2. Models of instruments containing radioactive substances shall receive official approval only if the radioactive substances remain confined within an airtight, solid, inactive encapsulation which under normal operating conditions offers full protection against the accidental release of radioactive materials.

3. Applications for approval of a model must be accompanied by an expert report from an officially recognized testing laboratory certifying that the conditions set out in paragraphs 1 and 2 are met. Applicants must submit with their request all documents of use in making an appraisal, including a detailed description of the instrument containing radioactive materials or of the radiation-emitting apparatus, together with a set of plans and a statement of the use envisaged. Where appropriate, a description of the radiation protection features it is intended to provide shall also be submitted.

4. In granting approval, the authorities shall specify the characteristics of the model, the use for which it is authorized and the conditions and obligations governing its use.

5. Approval of a model under paragraphs 1 to 4 above shall not constitute a waiver of the authorizations referred to in Sections 5, 6, 7 and 10 of the present Federal Act.

Section 21

Applications for the approval of models of radiation sources shall be made to the authorities by the manufacturer, or in the case of foreign manufacturers, by their official agents in Austria.

Section 22

1. Manufacturers of approved models, or in the case of foreign manufacturers, their agents in Austria, shall be required to attach to each article of an approved series a certificate containing:

- (a) the series number of the article;
- (b) a statement that the model has been granted official approval (with the date of approval) and that the article in question corresponds to such model;

- (c) the authorized use;
- (d) the officially imposed conditions and obligations to be observed in using the article;
- (e) the formalities necessary to comply with the officially imposed conditions and obligations entailed by the use of the article;
- (f) the manufacturer's recommendations for implementing the measures of control imposed by the authorities.

2. Users shall be required to observe the obligations and conditions of use prescribed by the authorities in approving the model.

Trade in radioactive materials

Section 23

Whoever buys or sells radioactive materials shall be required to keep a record of their nature and amount and of the name and address of the supplier or customer. Such records must be accessible at all times to administrative bodies and must be produced to the authorities upon request. They shall be kept for five years after the date of the last entry.

Section 24

Radioactive materials, the handling of which is subject to authorization under Sections 6, 7 or 10 shall be sold only to persons authorized under the terms of the aforementioned Sections 6, 7 or 10 to handle such types and amounts of radioactive materials.

Compulsory notification

Section 25

1. The authorities must be notified immediately of the possession of radioactive materials or of radiation-emitting equipment not subject to authorization under Sections 6, 7 or 10.

2. The following shall be exempt from notification:

- (a) the possession of radioactive materials, if the ionizing radiations which may be released when they are handled do not exceed the values fixed by regulation;
- (b) the possession of instruments containing radioactive materials or of radiation-emitting equipment of a model officially approved under Section 19 and exempted by the approving authority from the compulsory notification requirement.

3. In setting the values appearing in the regulations issued under paragraph 2(a), the need for protecting the life and health of persons and their descendants against harm from ionizing radiations should be considered in the light of existing scientific knowledge.

Loss or finding of radioactive substances

Section 26

1. The loss or finding of radioactive substances the possession of which is subject at least to notification (Section 25) should be reported immediately to the nearest safety authority.
2. Paragraph 1 above does not apply to the premises occupied by installations subject to authorization under Sections 6, 7 or 10, in case of loss or finding of radioactive materials the handling of which is covered by such authorization; however, the radiation protection officer must be immediately informed of such loss or finding.

PART III

Protection Rules

General provisions regarding radiation protection

Section 27

When handling radioactive materials or operating radiation-emitting equipment, suitable working procedures and protective measures should be adopted in order to ensure that:

- (a) the radiation dose to which persons are exposed is kept as low as possible;
- (b) the danger of radioactive materials being absorbed by the human body is kept to a minimum;
- (c) the amounts of radioactive materials released into the air, water or ground are kept as small as possible.

Section 28

Persons shall remain in controlled zones only if their presence is absolutely indispensable.

Section 29

Persons working in radiation zones shall be informed by the radiation protection officer of the potential danger they incur by remaining in such zones. Such persons shall be required to observe the rules of conduct laid down by the radiation protection officer.

Physical fitness

Medical surveillance and monitoring

Section 30

1. Activities involving occupational exposure shall be performed only by persons whose physical fitness therefor has been established by medical examination.

2. A medical certificate containing the results of the medical examination shall be drawn up not more than two months before the person reports for duty.

3. Persons who have not yet reached their 18th birthday, pregnant women and nursing mothers shall not work in radiation zones.

Section 31

1. Occupationally exposed persons shall undergo regular medical examinations.

2. In case of radiation-induced impairment to the health of such a person, a medical examination shall be ordered immediately. In addition, the incident shall be reported to the authorities.

3. Occupationally exposed persons no longer working in radiation zones or whose engagement is terminated shall be required to undergo a medical examination (termination examination).

4. If the results of this examination so warrant, such persons may be required to undergo further medical examinations at a later date.

Section 32

1. The authorization holder or his employer shall see to it that the medical examinations referred to in Sections 30 and 31 above are carried out. In the case of persons no longer required by employment contract to undergo a termination examination or further examinations under Section 31(3) and (4), such examinations shall be ordered by the authorities.

2. If the person undergoing such examinations holds accident insurance under the social security scheme, one-third of the cost of the medical examinations referred to in Sections 30 and 31 above shall be borne by the employer, one-third by the local agency of the accident insurance fund and one-third by the Federal Government. If the person undergoing examination does not hold accident insurance under the social security scheme, two-thirds of the ensuing costs shall be paid by the person himself and one-third by the Federal Government, with the latter bearing the full cost when the examinee is a trainee. The procedure for paying such costs shall be determined by regulation.

Section 33

1. If there is reason to suspect that the health of a non-occupationally exposed person may have been impaired by radiation, a medical examination shall be ordered immediately by the permit holder or his employer. In the case of an impairment to health sustained as the result of an activity subject to authorization under the terms of the present Federal Act by a person not bound by an employment contract to the employer engaging in this activity, the medical examination shall be ordered by the authorities.

2. If the results of the examination referred to in paragraph 1 so warrant, such persons may be required to undergo further medical examinations later on.

3. Insofar as the cost of the medical examinations referred to in paragraphs 1 and 2 above and the procedure for paying such costs is concerned, Section 32(2) shall apply by analogy, except that the cost of examinations ordered by the authorities shall be borne in full by the Federal Government, unless stipulated otherwise in the Act on third party liability in the field of nuclear energy (BGBl. No. 117/1964).

Section 34

The radiation dose received by occupationally exposed persons shall be monitored by physical methods.

Section 35

1. The medical examinations referred to in Sections 30, 31 and 33 above shall be performed by officially recognized doctors or hospitals.

2. In view of the object of these examinations, the doctors considered for official recognition must have the requisite knowledge for evaluating impairment to the life or health of persons and their descendants as a result of ionizing radiations.

3. Hospitals considered for official recognition must have on their staff a doctor with the requisite knowledge defined in paragraph 2 above.

4. Whenever official recognition is granted or withdrawn, notification must be made to the Association of Austrian doctors.

Special provisions concerning radiation protection

Section 36

In the light of existing scientific knowledge and insofar as necessary to protect the life or health of persons and their descendants against injury by ionizing radiations, the authorities shall issue regulations concerning:

- the requirements to be met by installations and radiation sources subject to authorization;
- the knowledge required of radiation protection officers and other persons responsible for such protection;
- the precautions, measures of surveillance and other measures to be taken in handling radioactive materials or operating radiation-emitting equipment;
- the precautions to be observed during operations involving the release of radiation;
- the radiation doses to which the human body may be exposed;
- the procedure for medical surveillance and physical monitoring, the interpretation and recording of the results of such surveillance and the measures to be taken in the light of these results;

- the form in which should be drafted recommendations and notifications concerning the handling and activity of radioactive materials, when no permit is required therefor.

PART IV

Radioactive contamination of the environment:

monitoring by the authorities; protection and safety measures

Monitoring by the authorities

Section 37

1. The Federal Minister for Social Affairs shall be responsible for routine monitoring of the radioactive contamination of the air, rain and other precipitations, ground and surface waters, soil, foodstuffs and farm products, as may be necessary to protect the life or health of persons and their descendants, in the light of current scientific knowledge and technology. Where required for routine monitoring of the environment, the Federal Minister for Social Affairs shall set up monitoring stations attached to the local authorities. The laboratories of the Federal Public Health Agency, the "Zentralanstalt für Meteorologie und Geodynamik" (Central Meteorological and Geodynamics Agency), the "Bundesanstalt für Wasserbiologie und Abwasserforschung" (Federal Institute for Water Biology and Research on Effluents), the relevant university departments and other bodies specialized in this area shall take part in routine monitoring operations and in the inspection of foodstuffs and farm products.

2. When a case of radioactive contamination is suspected, the local authorities shall see to it that the necessary tests and observations are made over and above the routine monitoring procedure. In the case of installations under the surveillance of the mining authorities, this task shall devolve upon the mines inspectorate. If the local authorities do not have properly qualified services, they may call upon the Federal Constabulary or the Federal Police to assist in recording and measuring the radiation emitted.

3. If a case of radioactive contamination endangering the life or health of persons or their descendants is suspected, the services responsible for taking observations shall have power, if necessary, to enter or pass through private property, even against the will of the persons having the lawful use thereof.

Protection and safety measures

Section 38

1. If the radiation from contamination by radioactive materials reaches a level of intensity at which the life or health of persons and their descendants may be endangered, insofar as is scientifically known, the "Landeshauptmann" (provincial governor) shall be notified; in addition to implementing the provisions of Sections 17 and 18, this official

shall take any other protective and safety measures which may be necessary.

2. Protective and safety measures within the meaning of paragraph 1 shall include restrictions on the movements of persons and objects, such as confining people to their homes, isolating people and objects, limiting the carriage of persons and goods, curtailing sales of foodstuffs and farm products and the use of water, evacuating certain zones or forbidding entry thereto, rendering dangerous objects harmless, quarantining and, if necessary, destroying animals and disposing of the bodies.

3. If such protective and safety measures are to be applied to the population at large, they shall be publicized as rapidly and on as wide a scale as possible, e.g. by posters in public places, radio or television.

4. The "Landeshauptmann" may call on the local authorities to implement protective and safety measures. If these authorities do not have adequately qualified services, the Federal Constabulary and the Federal Police shall assist in seeing that these measures are applied.

5. In case of imminent danger, protection and safety measures may be carried out, even if the person concerned objects, by force if need be.

PART V

Provisions of a penal nature

Section 39

1. Persons building an installation of the type referred to in Section 5, operating an installation of the type covered by Sections 6 or 7, handling radioactive substances or operating radiation-emitting equipment without authorization under the present Federal Act shall be guilty of an offence and shall be liable to a fine of up to 100,000 schillings or imprisonment for up to three months.

2. Holders of authorizations granted under the terms of Sections 5, 6, 7 or 10 who infringe by act or by omission:

- (a) the provisions of Sections 2(2), 9(2), 15(1), 16(1), 17(2), 23, 24, 28, 29, 30, 31(1),(2) and (3), 33(1) first sentence, 34; or unless otherwise stipulated in paragraph 3;
- (b) regulations pursuant to the present Federal Act;
- (c) orders issued under the present Federal Act or under any regulations made pursuant thereto,

shall be guilty of an offence and shall be liable to a fine of up to 30,000 schillings or imprisonment for up to six weeks.

3. Persons contravening the provisions of Sections 19(6) or 22, regulations made pursuant to Sections 19 to 22 of the present Federal Act, or orders or regulations made pursuant to the aforementioned provisions, shall be guilty of an offence and shall be liable to a fine of up to 10,000 schillings or imprisonment for up to two weeks.

4. The provisions of paragraphs 2 and 3 are applicable to wage earners in cases of deliberate offences; these shall be punishable with a maximum fine of 1,000 schillings or imprisonment for a maximum period of three days.

5. Persons contravening the provisions of Sections 25 or 26 shall be guilty of an offence and shall be liable to a fine of up to 1,000 schillings or imprisonment for up to three days.

6. Persons who, despite earlier warnings, contravene the protective and safety measures prescribed under Section 38, shall be guilty of an offence and shall be liable to a fine of up to 30,000 schillings or imprisonment for up to six weeks.

7. Both imprisonment and a fine may be inflicted in all cases.

PART VI

Transitional and final provisions

Section 40

1. Whoever at the time the present Federal Act comes into force is engaged in activities requiring authorization or notification under this Act, shall declare them to the relevant local authorities within six months of the date at which the said Act comes into effect and, if such activities are subject to authorization, apply at the same time for the authorization. If the local authorities referred to in Section 41 are not empowered to grant such authorization, they shall transmit the application immediately to the relevant authorities.

2. Pending action on the application submitted under the terms of paragraph 1, the applicant may pursue the aforementioned activity as before, provided all measures necessary to ensure compliance with the radiation protection rules enunciated in the present Federal Act or in regulations made pursuant thereto are taken immediately and, at the very latest, within one year of the date on which the present Act takes effect.

3. Pending action on the application submitted under the terms of paragraph 1, the authorities shall be empowered to order measures for eliminating any anomalies constituting a potential hazard to the life or health of persons and their descendants.

Section 41

1. The initial responsibility for implementing Parts I to III of the present Federal Act and any regulations pursuant thereto rests, save any provision to the contrary in paragraph 2, with:

(i) the Federal Minister, as regards:

(a) nuclear reactors;

(b) the handling of radioactive materials involved in the fabrication of nuclear fuels or the processing of irradiated fuels;

- (c) particle accelerators;
- (d) official approval of models (Sections 19 and 20);
- (e) official recognition under Section 35;
- (ii) the "Landeshauptmann", as regards:
 - (a) installations covered by Sections 5 and 6, except as regards installations within the meaning of sub-paragraphs (a) to (c) of paragraph (i);
 - (b) radiological equipment containing tubes with input voltages of over 150,000 volts;
- (iii) the local authorities in all other cases.

2. The cases covered by paragraphs (ii) and (iii) of subsection (1) are initially a matter for:

- (a) the mines inspectorate, in the case of installations under the supervision of the mining authorities;
- (b) the authorities initially responsible under the terms of Articles 141 to 143 of the Industrial Trade Code and any regulations pursuant thereto, in the case of installations covered by the aforesaid Code.

3. When certain parts of an installation are initially a matter for several authorities under the terms of subsections 1 or 2, the jurisdiction over the entire installation shall in all cases lie with the highest such authority.

4. The official channels for implementing the present Federal Act and any regulations pursuant thereto shall lead up to the competent Federal Minister.

5. The competent Federal Minister within the meaning of subsections 1(i) and 4 shall be:

- (a) in all cases not covered by the rules given in (b) and (c) hereunder, the Federal Minister for Social Affairs;
- (b) in regard to installations under the supervision of the mining authorities, the Federal Minister for Trade, Crafts and Industry, being the highest authority for the mines;
- (c) in regard to industries covered by the Industrial Trade Code, the Federal Minister for Trade, Crafts and Industry, except for the approval of models (Sections 19 and 20).

6. The implementation of Part V of the present Federal Act is initially a matter for the local authorities and, in the case of installations under the supervision of the mining authorities, for the mines inspectorate.

7. The duties and prerogatives of the authorities responsible for the protection of wage earners shall not be affected by the present Federal Act. Before any decisions or measures are taken pursuant to the present

Act or to implementing regulations regarding the protection of wage earners, these authorities shall be given an opportunity to state their views and make suggestions. Where such authorities do not exist, the protection of wage earners shall be ensured by the local labour inspectorate, as provided for in the Act regarding the supervision of labour.

8. The duties and prerogatives of the authorities, as defined in the legislation on water, veterinary services, forests and the protection of plant life, shall not be affected by the present Federal Act.

Section 42

1. The present Federal Act shall come into force on 1st January 1971.
2. Implementing regulations pursuant to the present Federal Act may be issued prior to such date, but shall not become effective before the Act itself.

Section 43

The following authorities shall be responsible for applying the present Federal Act.

1. In regard to installations under the supervision of the mining authorities, the Federal Minister for Trade, Crafts and Industry, being the highest authority for the mines.
2. In regard to questions concerning the protection of wage earners and to installations covered by the Industrial Trade Code, the Minister for Social Affairs in conjunction with the Federal Minister for Trade, Crafts and Industry.
3. In regard to installations covered by the Industrial Trade Code but not covered by subsection 2, the Federal Minister for Trade, Crafts and Industry in conjunction with the Federal Minister for Social Affairs.
4. In all other cases covered by Sections 32(2) and 33(3), the Federal Minister for Social Affairs in conjunction with the Federal Minister of Finance and, as regards installations covered by the Industrial Trade Code, with the Federal Minister for Trade, Crafts and Industry, and in cases covered by Sections 37(2), second sentence, and 38(4), second sentence, in conjunction with the Federal Minister of the Interior.