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# **NUCLEAR LEGISLATION IN OECD COUNTRIES**

## **Regulatory and Institutional Framework for Nuclear Activities**

**Denmark**

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## NUCLEAR ENERGY AGENCY

The OECD Nuclear Energy Agency (NEA) was established on 1<sup>st</sup> February 1958 under the name of the OEEC European Nuclear Energy Agency. It received its present designation on 20<sup>th</sup> April 1972, when Japan became its first non-European full member. NEA membership today consists of 28 OECD member countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Portugal, the Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities also takes part in the work of the Agency.

The mission of the NEA is:

- to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes, as well as
- to provide authoritative assessments and to forge common understandings on key issues as input to government decisions on nuclear energy policy and to broader OECD policy analyses in areas such as energy and sustainable development.

Specific areas of competence of the NEA include safety and regulation of nuclear activities, radioactive waste management, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability, and public information. The NEA Data Bank provides nuclear data and computer program services for participating countries.

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

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# DENMARK

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## **I. GENERAL REGULATORY REGIME**

### **1. Introduction**

At present Denmark has no nuclear power programme. In 1985, a resolution of the Danish Parliament determined that nuclear power was not to be generated in Denmark and that the sites that had been reserved for the construction of nuclear power plants were to be released. As a result of that, by means of a specific decision, it was agreed that future Danish public energy planning should be based on the assumption that no new nuclear power plants would be built.

Denmark had three research reactors, DR1 (2kW), DR2 (5MW) and DR3 (10 MW) located at Risø National Laboratory which were shut down respectively in 1975, 2000 and 2001 and are in the process of being decommissioned.

Spent fuel from research reactors DR2 and DR3 have been transferred to the United States pursuant to an agreement with the US Department of Energy. All radioactive waste resulting from the operation of the research reactors and generated by the use of radioactive materials for medical, industrial and research purposes is stored at storage facilities at Risø National Laboratory awaiting a decision on its final management. A radioactive waste management plant at the Risø site has responsibility for the collection, conditioning and storage of radioactive waste. In March 2003, the Parliament agreed to initiate a study to serve as a basis for the decision on the construction of a Danish disposal facility for low and medium level waste.

The principal instruments governing activities involving nuclear and radioactive materials are the 1953 Radioactive Substances Act (as amended by the 1991 Health Sector in Greenland Act) and the 1962 Nuclear Installations Act (as last amended by the 2004 Amendment Act regarding specific laws under the Ministry of the Interior and Health). An Act on Nuclear Installations [Act No. 244 of 1976] was adopted in 1976 but has not yet entered into force, with the exception of Section 11 and the first paragraph of Section 12. This legislation will only come into force if the 1985 Resolution is reversed and a decision is made to implement a nuclear power programme. It would also be necessary that the Danish Parliament approve a new act enforcing the provisions of the 1976 Act.

### **2. Mining Regime**

There is no special legislation in Denmark on nuclear ores. Under the general Danish mining law [Act No. 213 of 1981], ores found in the subsoil are State property, therefore the State alone is entitled to prospect for and use such ores.

The Government grants concessions to prospect for and extract ores for not more than 50 years. The Danish Geological Survey Bureau must be informed of the discovery of ores and controls prospecting and extraction operations.

As regards Greenland, prospecting, exploration for and exploitation of minerals, including uranium, is covered by the 1991 Act on Mineral Resources in Greenland as amended [Act No. 335 of 1991]. This Act is administered by the Bureau of Minerals and Petroleum under the Greenland Home Rule Government.

### **3. Radioactive Substances, Nuclear Fuel and Equipment**

No radioactive substance whether in a natural state, in the form of a mixture or incorporated into machines or instruments can be manufactured, possessed or imported without a licence from the National Institute of Radiation Hygiene under the National Board of Health (formerly referred to as the National Health Service) [Radioactive Substances Act No. 94 of 1953, Section 1].

Exceptions to the licensing rule are however provided by Decree No. 546 of 1981 of the Minister of the Interior for certain nuclear substances and for most natural radioelements and chemical compounds.

Permanent licences to hold and produce radioactive substances may be granted by the National Board of Health to scientific institutes and university laboratories provided that these substances are intended solely for the purposes of teaching or research in such institutes [Section 2 of the 1953 Radioactive Substances Act ].

Licences issued to hospitals using radioactive substances for diagnostic purposes are granted on the basis of a list containing authorised radioactive materials which are available to users. These licences must also take into account the maximum level of activity authorised in the hospital department concerned, which depends on the type of treatment being applied and on the laboratory's facilities [Regulation No. 514 of 1992 as amended by Regulation No. 877 of 2000].

The National Board of Health is authorised to issue further general regulations and to lay down special rules for each case of licensing with regard to storage, warning signs, qualifications of the user responsible, premises, transport, treatment of waste and reporting of incidents [Sections 2 and 3].

The licence is issued to the person responsible provided that he/she possesses the qualifications required; it remains valid as long as this person retains his/her post and until the relevant authority decides otherwise. The licence authorises its holder to perform laboratory experiments, to use the radioactive substances in proven diagnostic methods and also for element research in accordance with the above-mentioned list of radioactive substances for medical purposes. The holder of the licence may also use these substances in new diagnostic and research methods provided prior notification of such use is sent to the National Board of Health [Regulation No. 1231 of 2005].

Apart from the standard licence, it is possible to obtain a special licence permitting the use of the radioactive drugs which are on the above-mentioned list.

Executive Order No. 315 of 1972 issued by the Ministry of Education under Sections 8 and 38(3) of the 1962 Nuclear Installations Act provides that a licence is required for the possession of nuclear materials, defined as uranium, plutonium and thorium, unprocessed – apart from ores – or processed, in metallic form, alloy or chemical compound [Order No. 315 of 1972, Section 1].

This licence is issued by the Emergency Management Agency which replaced the Atomic Energy Commission in this respect.

Anyone in possession of nuclear materials must:

- keep records of their possession of such materials and insofar as nuclear facilities are concerned, maintain records of operational conditions;
- submit reports on the results from the above-mentioned records;
- give advance notice to the Ministry of the Interior and Health of imports of nuclear materials; and
- co-operate in the implementation of the control referred to in Section 4 of the 1972 Executive Order.

The Order provides that persons specified in the licence will be authorised to have access to undertakings etc., holding nuclear materials and be entitled to take the necessary control measures, including examination of records, stocks and facilities, measurements and sampling [Section 4 of the 1972 Executive Order].

#### **4. Nuclear Installations**

##### ***a) Licensing and inspection, including nuclear safety***

At present, licensing matters concerning the existing nuclear installation (Risø National Laboratory) are governed by the 1962 Nuclear Installations Act. However, as any possible future nuclear installation in Denmark will be subject to the provisions of the Act of 1976 (which, if it were to come into force, would repeal the 1962 Act), the licensing procedure laid down in that act is described in the following.

The licensing procedure involves three permits – site approval, construction permit and operating permit – all granted by the Minister of the Interior and Health subject to such conditions as are deemed necessary with regard to safety or other vital public interests [Section 2]. These conditions may, at any time, be replaced by other conditions, or a permit can be withdrawn.

Applications must be accompanied by the appropriate documentation regarding nuclear safety and environmental aspects [Section 4(3)].

The nuclear safety aspects of an application for any permit are examined by the Emergency Management Agency (formerly referred to as the Civil Defence and Emergency Planning Agency; this denomination resulted from the Danish Emergency Preparedness Act of 23 December 1992) and the National Board of Health. The agencies submit recommendations to the Minister of the Interior and Health [Section 4(1)]. These recommendations submitted by the Emergency Management Agency

must be accompanied by statements prepared by its nuclear Division (formerly the Nuclear Installations Inspectorate) [Section 12(2)].

For nuclear reactors, public hearings are held with respect to site applications. The hearings are arranged by the Minister of the Interior and Health in co-operation with the regional and municipal authorities concerned before the recommendations of the Emergency Management Agency are submitted to the Minister. During these hearings, information is provided on the essential assessments of safety and environmental protection matters which are made in connection with each application [Sections 3 and 14(7)].

For nuclear reactors, reprocessing or waste storage facilities the regional and municipal authorities concerned have to deliver their opinion on the site application.

Applications for site approval for nuclear reactors, reprocessing or waste storage facilities must be approved by parliamentary decision upon proposal of the Minister of the Interior and Health before the Minister can issue a site approval. For other types of nuclear installations, the Minister of the Interior and Health must consult the relevant parliamentary Committee. The final decision on a site approval is made by the Minister of the Interior and Health; in the case of nuclear reactors, reprocessing or waste storage facilities, following consultation with the Minister for the Environment [Section 3(1)].

Construction and operating permits are granted by the Minister of the Interior and Health after consultation with the relevant parliamentary committee. Concerning the conditions attached to the permit, the Emergency Management Agency, upon recommendation from the Danish Environmental Protection Agency, and the National Board of Health, may specify supplementary conditions for the construction – and operation – of the installation [Sections 3(2) and 5(2)].

For each nuclear reactor a Special Advisory Safety Council is set up. This Council is composed of representatives from the plant personnel and management, the Directorate of Labour Inspection, the Emergency Management Agency and the municipal authorities as well as elected representatives of the population concerned.

This Council must, either upon request or at its own initiative, provide advice to the operator of the reactor and the authorities responsible for ensuring nuclear safety.

Nuclear installations are subject to inspection by the Nuclear Division of the Danish Emergency Management Agency and the National Institute of Radiation Hygiene.

At the international level, Denmark ratified the 1994 Convention on Nuclear Safety on 13 November 1998.

#### ***b) Emergency response***

The Danish Emergency Preparedness System for Nuclear Accidents is under the responsibility of the Minister of Defence and is based on the National Nuclear Emergency Contingency Plan which was revised in October 2001. This Plan is to serve as a guide for measures to be taken whenever necessary to protect the public and the environment in the event of a nuclear or radiological

emergency. The nuclear Division and the National Rescue Corps under the Danish Emergency Management Agency are primarily responsible in this field. Riso National Laboratory and the National Institute of Radiation Hygiene are also involved in the process.

Denmark expressed its consent to be bound to the 1986 Convention on Early Notification of a Nuclear Accident on 26 September 1986.

## **5. Trade in Nuclear Materials and Equipment**

Denmark's import and export policies reflect the fact that Denmark is a Party to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons. An Executive Order of 1972 issued by the Ministry of Education under Sections 8 and 38(3) of the 1962 Nuclear Installations Act [No. 170 of 1962] provides that nuclear materials shall not be exported from Denmark without the authorisation of the Danish Energy Authority. Denmark is a Member of the Nuclear Suppliers Group and of the Zangger Committee.

## **6. Radiation Protection**

The main purpose of Danish legislation governing nuclear activities is to ensure protection against radiation hazards; however there exist provisions which apply more particularly to radiation protection in the Order on the Safe Use of Radioactive Substances [Order No. 574 of 1975]. Other relevant provisions in connection with the protection of the public are the Regulations on Protective Measures against Accidents in Nuclear Plants [Regulation No. 278 of 1963] and various orders, detailed below, concerning the installation and operation of X-ray apparatus.

The 1975 Order on the Safe Use of Radioactive Substances provides for safety measures to be taken in connection with the import, production, use, storage, transport and disposal of radioactive materials used for medical, industrial, agricultural, scientific and other purposes. The provisions of the order specify that the protection measures must comply with the recommendations of the International Commission on Radiological Protection (ICRP) whose maximum permissible doses must not be exceeded. Radiation doses must at all times be kept as low as possible and every effort must be made to limit the number of persons exposed to ionising radiation. The National Board of Health is authorised to lay down special safety rules for each individual case [Order No. 574 of 1975, Section 1].

With respect to nuclear installations, the Minister of the Interior and Health not only determines the maximum release of radiation to the general public permitted during normal operation of the plant, but also lays down maximum radiation doses for persons which should, if possible, not be exceeded in the case of an accident [Regulation No. 278 of 1963, Section 1(1) and (2), as amended by Regulation No. 502 of 1974].

At the request of the Emergency Management Agency, an emergency plan to be approved by the Minister of the Interior and Health must be established for every nuclear plant and every Danish port to which nuclear vessels are admitted. This plan establishes the safety measures to be implemented when the population is exposed to radiation as a result of a nuclear incident [Regulation No. 278 of 1963, Section 7].



The implementation of any of these measures shall be decided by the Emergency Management Agency after consultation with an expert Committee appointed by the Minister of the Interior and Health and with the police authority concerned. It is provided that this Committee, which may be directed by the Minister of the Interior and Health to take over preparation of the emergency plan referred to above, should consist of representatives of the Emergency Management Agency, although it has the power to call in other experts [Section 9].

Various orders have been passed dealing with safety measures in relation to people exposed to ionising radiation in the course of their employment or in the course of medical treatment. Many of these orders implement Council Directives 80/836/Euratom and 84/466/Euratom which deal respectively with health protection of the general public and workers against the dangers of ionising radiation and radiation protection standards governing persons undergoing medical examination and treatment. The Order Concerning Medical Surveillance of Work with Ionising Radiation [No. 821 of 1990] requires that those who work in conditions that are likely to expose them to ionising radiation in doses exceeding 15 millisieverts (mSv) per year must undergo a medical examination before commencing that work. They are also subject to an annual medical examination as long as they engage in such work, and to a special examination in the event of any incident (such as improper handling or an accident involving radiation). The worker is obliged to give the medical practitioner relevant information to enable an effective examination to occur. Medical records of the examinations must be forwarded to the State Labour Inspectorate and be kept for at least 30 years after the people concerned have ceased such work. The order contains criminal sanctions for non-compliance with these provisions.

Other orders specify dose limits for ionising radiation for both workers and the general public [No. 823 of 1997], pursuant to Council Directive 96/29/Euratom of 13 May 1996, and requirements for dose monitoring of workers exposed to ionising radiation [No. 821 of 1990]. Orders relating to radiation protection in the context of medical treatment include the Order on X-ray Diagnostic Equipment for Medical Use [No. 217 of 1977] and the National Board of Health Order No. 954 of 23 October 2000 on the Use of Unsealed Radioactive Sources in Hospitals, Laboratories, etc. This order establishes a licensing system for the purchase and use of unsealed radioactive sources and requirements for their storage and disposal. The licensing authority is the National Board of Health. Other Orders made in implementation of the Euratom directives referred to above include: the Order on the Use of Electron Accelerators for Treatment of Patients [No. 319 of 1991]; the Order on Smoke Detectors and Consumer Articles containing Radioactive Materials [No. 154 of 1990]; and the Order on Industrial Gamma Radiography Treatment [No. 308 of 1984]. In 1995, the Board of Health issued seven Orders Concerning the Medical Application of Ionising Radiation [Nos. 18-24 of 1995]. These orders, all of which amended existing orders of the Board of Health, were made to take into account Council Directive 93/42/EEC of 14 June 1993 Regarding EC Labelling of Medical Devices. The Board of Health also issued Order No. 918 of 4 December 1995 on the Use in Denmark of Sealed Radioactive Sources in Industry, Hospitals, Laboratories etc.

## **7. Radioactive Waste Management**

There is no legislation in Denmark dealing specifically with the management of radioactive waste. Denmark is a Party to both the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention, ratified by Denmark on 3 November 1976) and the 1974 Convention on the Protection of the Marine Environment of the

Baltic Sea (the Helsinki Convention) and as such prohibits the dumping of any radioactive waste at sea.

Denmark accepted the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management on 3 September 1999.

## **8. Nuclear Security**

The Nuclear Installations Act [No. 170 of 1962] specifies that a licence to operate (or construct) an installation may be refused for reasons of security or other reasons of public policy. The act further specifies that the Minister of the Interior and Health may make the necessary regulations in the event of international conventions providing for inspections to guarantee that nuclear installations are used solely for peaceful purposes and specifies that these regulations may include directives allowing inspectors to enter installations to make the necessary checks [Sections 4 and 8].

Denmark has ratified both the 1968 Treaty on the Non-Proliferation of Nuclear Weapons, on 3 January 1969, and the 1979 Convention on the Physical Protection of Nuclear Material, on 6 September 1991. It also ratified the 1996 Comprehensive Nuclear Test Ban Treaty on 21 December 1998. The Nuclear Installations Act [No. 170 of 1962] gives the Emergency Management Agency and its Nuclear Division a right of access, without grant of any judicial warrant, to nuclear installations for the exercise of inspections in connection with the implementation of international agreements to ensure that nuclear installations are used exclusively for peaceful purposes [Section 7].

## **9. Transport**

The legal basis for regulations concerning the transport of radioactive materials in Denmark is the Radioactive Substances Act [No. 94 of 1953]. Under the act, the Minister of the Interior and of Health is authorised to issue orders concerning the necessary precautionary measures relating, amongst other things, to the transport of radioactive materials. Accordingly, Order No. 993 of 5 December 2001 on the Transport of Radioactive Materials, which implements the transport requirements of Council Directive 80/836/Euratom on Health Protection of the General Public and Workers Against the Dangers of Ionising Radiation has been issued and lays down rules for transport by road, rail, air and sea. The provisions are based on the IAEA Regulations on the Safe Transport of Radioactive Materials (1996 edition).

The order nominates the National Board of Health as the authority responsible for the transport of radioactive materials. It provides that the consignor of the radioactive substances must hold a licence for their use under the 1953 Act. The consignor is responsible for the packaging of the substances and must designate an appropriately qualified person to supervise and implement the safety controls required during the transport operation. The carrier must ensure that staff are aware of the relevant regulations (for example, those dealing with loading and storage); that safety devices are functioning properly; and that the substances carried are protected against theft and damage. The carrier must be approved by the National Board of Health, which can impose conditions on the transport operation. The National Board of Health has access to consignments, documentation and the means of

transport at all times. Any decision of the Board relating to a particular consignment may be appealed to the Ministry of the Interior and Health.

The order also requires that an approval certificate be obtained for the transport of certain types of radioactive material. This certificate is issued by the National Board of Health in the case of land transport, the National Aviation Department for Air Transport, and the Maritime Navigation Department for Sea Transport.

The order lays down procedures to be followed in the case of an accident. The National Board of Health and other authorities concerned must be informed immediately. The personnel in charge of the transport must restrict access to the affected area, keep it under surveillance and monitor radiation levels. The authorities must also be informed immediately in the event of any loss or theft in the course of transport.

## **10. Nuclear Third Party Liability**

Denmark is a Party to the following international instruments on nuclear third party liability:

- the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy and the 1963 Brussels Convention Supplementary to the Paris Convention, both of which were ratified on 4 September 1974, as amended by the two 1982 Protocols;
- the 1971 Brussels Convention on Civil Liability in the Field of Maritime Carriage of Nuclear Material, also ratified on 4 September 1974;
- the 1988 Joint Protocol relating to the Application of the Paris Convention and the Vienna Convention, ratified on 26 May 1989.

The national legislation which implements Denmark's obligations under these treaties is the Act on Compensation for Nuclear Damage [No. 332 of 1974], as amended three times, by the Increase of Restitution Act 1988, the Revision of Compensation Act 1994 and the Revision of the Penal System Act 2000.

The aggregate liability of the operator of a nuclear installation situated in Danish territory is limited to 60 million Special Drawing Rights (SDRs) for any one nuclear incident [Section 21(1)].

The act provides that the operator of a nuclear installation situated in Denmark must take out insurance to cover his liability and must, in addition, obtain the approval of the Minister of Justice in relation to such insurance [Section 26(1) and (2)].

If, nevertheless, the operator's insurance is inadequate and he is, therefore, unable to pay the compensation for which he is liable, the State will provide financial assistance up to the liability of the operator in question.

The State will also intervene up to the limit provided for in the Brussels Supplementary Convention, to compensate any claim in excess of the amount of the insurance or financial security provided by the operator, subject to compliance with the provisions of the Act. The maximum coverage involving State funds stands at the figure of SDRs 300 million.

## II. INSTITUTIONAL FRAMEWORK

In Denmark, several Ministers, in particular the Minister of the Interior and Health, share power with respect to nuclear activities and the National Board of Health and the Emergency Management Agency also have extensive responsibilities in this field. Assistance is provided to these authorities by various advisory councils and technical and research institutes.

### 1. Regulatory and Supervisory Authorities

#### a) *Minister of the Interior and Health*<sup>1</sup>

Pursuant to a Royal Decree on Reorganisation of the Competent Authorities Concerned with Nuclear Installations, which came into effect in 1988, the administration of the 1962 Nuclear Installations Act [No. 170 of 1962] was transferred from the Minister for the Environment to the Minister of the Interior which was then transformed into the Ministry of the Interior and Health in 2001. By virtue of this change, the tasks of the previous Atomic Energy Commission as a nuclear safety authority were assigned to the Emergency Management Agency (formerly referred to as the Civil Defence and Emergency Planning Agency), which, together with the National Board of Health, form the bodies responsible for nuclear safety. The Minister of Interior and Health supervises the National Board of Health.

The Minister of the Interior and Health would also be the licensing authority for all three permits required under the 1976 Act Governing the Safety and Environmental Conditions Applicable to Nuclear Installations. Furthermore, the Minister is responsible for the granting of approvals, licences and exemptions which are necessary for the siting and operation of a nuclear reactor and are laid down in a number of other acts dealing with land-use planning and environmental protection.

The Minister also has general legislative competence with respect to the safe use of radioactive substances and materials and may lay down regulations for the inspection of nuclear installations provided for by international agreements [Act No. 94 of 1953]. If the act governing the Safety and Environmental Conditions Applicable to Nuclear Installations [No. 244 of 1976] were to be brought into force, the Minister would also have administrative responsibilities regarding the arrangement of public hearings with respect to site applications for nuclear reactors and setting up of emergency plans for all nuclear plants. The Minister would also have regulatory powers in relation to installations for the storage and processing of spent fuel and radioactive waste [Section 3]. Finally, the Minister has powers with respect to regulating the transport of radioactive materials [Order No. 574 of 1975].

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1. [www.im.dk](http://www.im.dk).

**b) *Minister for the Environment*<sup>2</sup> / *Minister of Transport & Energy*<sup>3</sup>**

Immediately after the oil crisis in 1973-1974, the Danish Government decided to give the Minister for Trade and Industry (now the Minister for Transport and Energy) responsibility for all matters concerning energy policy. Specifically, the 1976 Act on Energy Policy Measures [No. 194 of 1976] requires the Minister to prepare statements on energy policy including assessments of energy requirements and possibilities of energy supply, objectives and programmes for a rational supply and utilisation of different forms of energy, and programmes for energy research and development.

Governmental reorganisation in 2001 was based on a Royal Resolution of 27/11/2001. The Minister of Transport and Energy is now responsible for policy in the areas of aerial-, naval-, and road transport, and the carrying out of all tasks relating to production, supply and consumption of energy in Denmark, both on a national and international basis.

The Danish Environmental Protection Agency operates under the Ministry for Transport and Energy.

If the Nuclear Installations Act of 1976 were to enter into force, the Ministry for the Environment would be involved in the approval procedure concerning the siting of nuclear reactors or nuclear facilities for the processing and storage of nuclear waste. It would be consulted by the Ministry of the Interior and Health on this matter.

**c) *Minister of Justice*<sup>4</sup>**

The Minister of Justice has the power, in certain cases, to fix the maximum amount of liability of the operator of a nuclear installation. In all cases, the Minister's approval must be obtained with regard to the insurance taken out by an operator to cover its liability [Act No. 332 of 1974].

**d) *Minister of Defence*<sup>5</sup>**

In accordance with a Royal Resolution of 19 January 2004, the jurisdiction for issues regarding the emergency preparedness act and the National Emergency Management Agency has been transferred from the Minister of the Interior and Health to the Minister of Defence. Therefore, the Minister of Defence is the main body responsible for emergency management.

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2. [www.mim.de](http://www.mim.de).

3. [www.trm.dk](http://www.trm.dk).

4. [www.jm.dk](http://www.jm.dk).

5. [www.forsvaret.dk/fmn](http://www.forsvaret.dk/fmn).

e) ***National Board of Health***<sup>6</sup>

Because of the variety and the importance of responsibilities allocated to it, the National Board of Health (formerly the National Health Service) may be considered as the principal government agency competent in the field of radiation protection. This is demonstrated not only by the general powers conferred by its constituent instrument, *i.e.* the Act on Public Health Central Administration [No. 182 of 1932] which designates it as the main supervisory authority for public health in Denmark, but also by the special functions assigned to it by a number of legislative and regulatory texts containing specific provisions on radiation protection, nuclear installations and the transport of radioactive materials.

Thus, as seen above, the National Board of Health, which is under the supervision of the Minister of the Interior and Health has both licensing and regulatory powers in relation to the manufacture, possession or import of radioactive materials and equipment as well as powers of inspection with regard to medical equipment [Act No. 94 of 1953].

In relation to nuclear installations, the National Board of Health would, if the 1976 Act [No. 244 of 1976] were brought into force, determine the maximum release of radiation permitted during operation and would have important duties in ensuring that nuclear installations are operated under safe conditions.

The National Board of Health has authority to lay down specific rules for the transport of radioactive materials and is responsible for supervising observance of the regulations applicable for all modes of transport.

*National Institute of Radiation Hygiene*

The State Institute of Radiation Hygiene, which forms part of the National Board of Health, in fact carries out all the latter's tasks, as described above, with regard to radiation protection [Act No. 94 of 1953].

The Institute is run by a director and is divided into three departments covering X-rays, radiation medicine and other types of radiation respectively. The staff of the Institute are government officials [Act No. 170 of 1962].

f) ***Emergency Management Agency***

i) *Legal status*

As a result of the Danish Emergency Preparedness Act of 23 December 1992, the former Civil Defence and the Emergency Planning Agency were incorporated in the Emergency Management Agency. This act also established a new organisation, the National Rescue Preparedness Service, which took over the functions of the former National Fire Service and the Civil Defence. The Danish

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6. [www.sst.dk](http://www.sst.dk).

Preparedness Act of 2 October 2000, as amended, details the responsibilities of the Emergency Management Agency.

*ii) Responsibilities*

The Emergency Management Agency is responsible for the preparation and execution of emergency response plans and has a duty to decide on the prescribed emergency safety measures to be taken when the population has been exposed to radiation as a result of a nuclear incident. Like the National Board of Health, the Agency also has extensive duties with respect to the safe operation of nuclear installations, including the power to impose supplementary conditions on construction and operating permits (see Part I, Section 4 “Nuclear Installations” *supra*). The Agency is in charge of studying all questions related to nuclear safety and will establish collaboration with other national and international authorities competent in this field. It may also request the help of the Risø National Laboratory and other national and international institutions [Act No. 244 of 1976].

*iii) Structure*

The Emergency Management Agency is a governmental agency under the supervision of the Ministry of Defence. The Agency is headed by a Director General and comprises a nuclear Division which is in charge of inspection of nuclear installations in Denmark.

## **2. Advisory Bodies**

### ***Danish Energy Authority***<sup>7</sup>

The Danish Energy Agency was established as a directorate under the Ministry of Energy (now the Ministry of Transport and Energy) by the Act of 1976 on Energy Policy Measures [No. 194 of 1976] to assist the Ministry and other public authorities. It was transformed into the Danish Energy Authority on 18 February 2005 and is supervised by the Ministry of Transport and Energy pursuant to a Royal Resolution of the same date.

It surveys and evaluates energy production, supply, consumption and research activities in Denmark and abroad.

The energy Authority retains, amongst other things, administrative powers with regard to administration of laws and regulations concerning energy, collection of energy data and international collaboration concerning energy. It aims to ensure security of supply and the responsible development of energy in Denmark from economic, environmental and security perspectives.

The mandate of the energy Authority is outlined in Notice No. 1335 of 14 December 2005.

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7. [www.ens.dk](http://www.ens.dk).

### 3. Public and Semi-Public Agencies

#### *Risø National Laboratory*<sup>8</sup>

##### *i) Legal Status*

Risø National Laboratory was established by Act No. 1076 of 1995 and its responsibilities were redefined by Act No. 326 of 5 May 2004 on Government Research Institutions. It is a government research institution under the supervision of the Ministry for Science, Technology and Innovation.

##### *ii) Responsibilities*

Risø National Laboratory conducts basic and applied scientific research to provide the Danish public with the potential for technological developments.

The research is directed towards areas that will contribute to the competitiveness of Danish industry, and to a reduction of environmental burdens in industry, energy and agriculture.

Risø Laboratory has a special responsibility for maintaining the necessary scientific knowledge base to advise the Danish authorities on nuclear matters.

##### *iii) Structure*

Risø National Laboratory is managed by a Board of Governors composed of ten members who serve terms of three years. The chairperson and up to seven of the members are appointed by the Minister for Science, Technology and Innovation. Two further members are elected by and among the staff of Risø.

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8. [www.risoe.dk](http://www.risoe.dk).