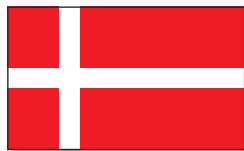


# **N**uclear Legislation in **OECD and NEA Countries**

Regulatory and Institutional  
Framework for Nuclear Activities



**Denmark**

# 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, 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 (2 kW), DR2 (5 MW) and DR3 (10 MW) located at the former Risø National Laboratory. The three reactors were shut down in 1975, 2000 and 2001 respectively, and according to a Parliamentary Decision in March 2003, all the nuclear facilities at the Risø Peninsula are to be decommissioned. DR1 and DR2 have been fully decommissioned by the state-owned company Danish Decommissioning, and DR3 is under decommissioning. In addition to the research reactors, three other nuclear facilities are subject to decommissioning requirements: the Hot Cell Facility (under decommissioning), the Fuel Fabrication Plant (decommissioned) and the Waste Management Plant (to be decommissioned).

Spent fuel from research reactors DR2 and DR3 have been transferred to the United States pursuant to an agreement with the United States 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 the Risø Peninsula awaiting a decision on its final management. Danish Decommissioning operates a radioactive waste management plant at the Risø site and 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 a decision on the construction of a Danish disposal facility for low- and medium-level waste. In 2012, a majority of the political parties decided that two other possibilities should also be investigated along with the continued investigation of the disposal solution: long-term storage and export.

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 Health). An Act on Nuclear Installations<sup>1</sup> 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,<sup>2</sup> ores found in the subsoil are state property, and 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.

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1. Act No. 244 of 1976.  
2. Act No. 213 of 1981.

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.<sup>3</sup> 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).<sup>4</sup>

Exceptions to the licensing rule are, however, provided by Decree No. 546 of 1981 of the Minister of Health 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.<sup>5</sup>

Licences issued to hospitals using radioactive substances for diagnostic purposes are granted on the basis of a list containing authorised radioactive materials that 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.<sup>6</sup>

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.<sup>7</sup>

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.<sup>8</sup>

Apart from the standard licence, it is possible to obtain a special licence permitting the use of the radioactive drugs that 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.<sup>9</sup>

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

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3. Act No. 335 of 1991.

4. Radioactive Substances Act No. 94 of 1953, Section 1.

5. Ibid., Section 2.

6. Regulation No. 514 of 1992, as amended by Regulation No. 877 of 2000.

7. Radioactive Substances Act No. 94 of 1953, Sections 2 and 3.

8. Regulation No. 1231 of 2005.

9. Order No. 315 of 1972, Section 1.

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 Health of imports of nuclear materials;
- 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 enterprises, etc., that hold nuclear materials and to make any necessary control measures, including inspections, measurements and samplings.<sup>10</sup>

#### **4. Nuclear installations**

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

At present, licensing matters concerning the existing nuclear installations at the Risø Pensinsula 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 paragraphs.

The licensing procedure involves three permits – site approval, construction permit and operating permit – all granted by the Minister of Health subject to such conditions as are deemed necessary with regard to safety or other vital public interests.<sup>11</sup> 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.<sup>12</sup>

The nuclear safety aspects of an application for any permit are examined by the Emergency Management Agency<sup>13</sup> and the National Board of Health. The agencies submit recommendations to the Minister of Health.<sup>14</sup> These recommendations must be accompanied by statements prepared by the Nuclear Division (formerly the Nuclear Installations Inspectorate) of the Emergency Management Agency.<sup>15</sup>

Public hearings are held for nuclear reactor site applications. The hearings are arranged by the Minister of Health in co-operation with the regional and municipal authorities concerned before the recommendations 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.<sup>16</sup>

The regional and municipal authorities concerned have to deliver their opinion on nuclear reactor, reprocessing or waste storage facilities' site applications.

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10. Ibid., section 4.

11. Ibid., section 2.

12. Ibid., section 4(3).

13. Formerly referred to as the Civil Defence and Emergency Planning Agency; this change resulted from the Danish Emergency Preparedness Act of 23 December 1992.

14. Order No. 315 of 1972, section 4(1).

15. Ibid., section 12(2).

16. Ibid., sections 3 and 14(7).

Applications for site approval for nuclear reactors, reprocessing or waste storage facilities must be approved by parliamentary decision upon proposal of the Minister of Health. Only after parliamentary approval can the minister issue a site approval. For other types of nuclear installations, the Minister of Health must consult the relevant parliamentary committee. The final decision on a site approval is made by the Minister of Health; however, in the case of nuclear reactors, reprocessing or waste storage facilities, the Minister for the Environment must first be consulted.<sup>17</sup>

Construction and operating permits are granted by the Minister of 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.<sup>18</sup>

A Special Advisory Safety Council is set up for each nuclear reactor. 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 Minister of Defence is responsible for the Danish Emergency Preparedness System for Nuclear Accidents, which is based on the National Nuclear Emergency Contingency Plan (revised in October 2001). This plan serves 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. The Danish Technical University (DTU), Danish Decommissioning and the National Institute of Radiation Protection 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<sup>19</sup> provides that nuclear materials shall not be exported from Denmark without the authorisation of the Danish Energy Agency. Denmark is a member of the Nuclear Suppliers Group and of the Zangger Committee.

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17. Ibid., section 3(1).

18. Ibid., sections 3(2) and 5(2).

19. Act No. 170 of 1962.

## 6. Radiation protection

The main purpose of Danish legislation governing nuclear activities is to ensure protection against radiation hazards; however, more specific provisions on radiation protection can be found in the Order on the Safe Use of Radioactive Substances.<sup>20</sup> Other relevant provisions in connection with the protection of the public are the Regulations on Protective Measures against Accidents in Nuclear Plants<sup>21</sup> 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.<sup>22</sup>

With respect to nuclear installations, the Minister of 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 that should, if possible, not be exceeded in the case of an accident.<sup>23</sup>

At the request of the Emergency Management Agency, an emergency plan to be approved by the Minister of 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.<sup>24</sup>

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 Health and with the police authority concerned. It is provided that this committee, which may be directed by the Minister of 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.<sup>25</sup>

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<sup>26</sup> and 84/466/Euratom,<sup>27</sup> which deal 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 respectively. The Order Concerning Medical Surveillance of Work with Ionising

20. Order No. 574 of 1975.

21. Regulation No. 278 of 1963.

22. Order No. 574 of 1975, section 1.

23. Regulation No. 278 of 1963, Sections 1(1) and (2), as amended by Regulation No. 502 of 1974.

24. Regulation No. 278 of 1963, Section 7.

25. *Ibid.*, section 9.

26. Council Directive 80/836/Euratom of 15 July 1980 amending the Directives laying down the basic safety standards for the health protection of the general public and workers against the dangers of ionizing radiation, *Official Journal of the European Communities* L 246 (17 September 1980).

27. Council Directive 84/466/Euratom of 3 September 1984 laying down basic measures for the radiation protection of persons undergoing medical examination or treatment, *Official Journal of the European Communities* L 265 (5 October 1984).

Radiation<sup>28</sup> 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,<sup>29</sup> pursuant to Council Directive 96/29/Euratom,<sup>30</sup> and requirements for dose monitoring of workers exposed to ionising radiation.<sup>31</sup> Orders relating to radiation protection in the context of medical treatment include the Order on X-ray Diagnostic Equipment for Medical Use<sup>32</sup> 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,<sup>33</sup> the Order on Smoke Detectors and Consumer Articles containing Radioactive Materials<sup>34</sup> and the Order on Industrial Gamma Radiography Treatment.<sup>35</sup> In 1995, the Board of Health issued seven Orders Concerning the Medical Application of Ionising Radiation.<sup>36</sup> These orders, all of which amended existing orders of the Board of Health, were made to take into account Council Directive 93/42/EEC.<sup>37</sup> 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

The provisions for management of radioactive waste are set out in Council Directive 2011/70/Euratom.<sup>38</sup> 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 deposited its instrument of acceptance for the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management on 3 September 1999.

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28. Order No. 821 of 1990.

29. Order No. 823 of 1997.

30. Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation, *Official Journal of the European Communities* L 159 (29 June 1996).

31. Order No. 821 of 1990.

32. Order No. 217 of 1977.

33. Order No. 319 of 1991.

34. Order No. 154 of 1990.

35. Order No. 308 of 1984.

36. Order Nos. 18-24 of 1995.

37. Council Directive 93/42/EEC of 14 June 1993 concerning medical devices, *Official Journal of the European Union* L 169 (12 July 1993).

38. Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safety management of spent fuel and radioactive waste, *Official Journal of the European Union* L 199 (2 August 2011).



## 8. Nuclear security

The Nuclear Installations Act<sup>39</sup> specifies that a licence to operate (or construct) a nuclear installation may be refused for reasons of security or other reasons of public policy. The act further specifies that the Minister of 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.<sup>40</sup>

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 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.<sup>41</sup>

## 9. Transport

The legal basis for regulations concerning the transport of radioactive materials in Denmark is the Radioactive Substances Act.<sup>42</sup> Under the act, the Minister of Health is authorised to issue orders concerning the necessary precautionary measures relating, among 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,<sup>43</sup> 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 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

39. Act No. 170 of 1962.

40. Ibid., Sections 4 and 8.

41. Act No. 170 of 1962, Section 7.

42. Act No. 94 of 1953.

43. Council Directive 80/836/Euratom of 15 July 1980 amending the Directives laying down the basic safety standards for the health protection of the general public and workers against the dangers of ionizing radiation, *Official Journal of the European Communities* L 246 (17 September 1980).

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 1988 Joint Protocol relating to the Application of the Paris Convention and the Vienna Convention, ratified on 26 May 1989.

The national legislation implementing Denmark's obligations under these treaties is the Consolidation Act on Compensation for Nuclear Damage.<sup>44</sup>

The aggregate liability of the operator of a nuclear installation situated in Danish territory is limited to SDR 60 million for any one nuclear incident.<sup>45</sup>

The act provides that the operator of a nuclear installation situated in Denmark must take out insurance to cover its liability and must, in addition, obtain the approval of the Minister of Justice in relation to such insurance.<sup>46</sup>

If, nevertheless, the operator's insurance is inadequate and it is, therefore, unable to pay the compensation for which it 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 SDR 300 million.

Denmark is also a signatory of the 2004 Protocols to amend the Paris and Brussels Supplementary Conventions. The ratification and implementation legislation for the 2004 Protocols was adopted in May 2008.<sup>47</sup>

Denmark has not yet deposited the instrument of ratification for the 2004 Protocols, and Act No. 492 of 17 June 2008 has therefore not yet entered into force (February 2015).

## II. Institutional Framework

In Denmark, several ministers, in particular the Minister of 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.

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44. Act No. 993 of 2014.

45. Ibid., Section 21(1).

46. Ibid., Sections 26(1) and (2).

47. Act No. 492 of 17 June 2008.

## 1. Regulatory and supervisory authorities

### a) Minister of Health<sup>48</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<sup>49</sup> 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 and subsequently the Ministry of Health in 2015. 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 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.<sup>50</sup> If the act governing the Safety and Environmental Conditions Applicable to Nuclear Installations<sup>51</sup> 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.<sup>52</sup> Finally, the minister has powers with respect to regulating the transport of radioactive materials.<sup>53</sup>

### b) Minister for the Environment and Food<sup>54</sup> / Minister of Energy, Utilities and Climate<sup>55</sup>

Immediately after the oil crisis in 1973-1974, the Danish government decided to give the Minister for Trade and Industry responsibility for all matters concerning energy policy (this portfolio is presently held by the Minister of Energy). Specifically, the 1976 Act on Energy Policy Measures<sup>56</sup> 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 2015 was based on a Royal Resolution of 28/06/2015. The Minister of Energy, Utilities and Climate is now responsible for carrying out 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 of the Environment.

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48. The website for the Minister of Health can be found at: [www.sum.dk](http://www.sum.dk).

49. Act No. 170 of 1962.

50. Act No. 94 of 1953.

51. Act No. 244 of 1976.

52. Ibid., Section 3.

53. Order No. 574 of 1975.

54. The website for the Minister for the Environment can be found at: [www.mfvm.dk](http://www.mfvm.dk).

55. The website for the Minister of Energy, Utilities and Climate can be found at: [www.efkm.dk](http://www.efkm.dk).

56. Act No. 194 of 1976.

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. The Ministry for the Environment and Food would be consulted by the Ministry of Health on this matter.

**c) Minister of Justice<sup>57</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.<sup>58</sup>

**d) Minister of Defence<sup>59</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 Health to the Minister of Defence. Therefore, the Minister of Defence is the main body responsible for emergency management.

**e) Danish Health and Medicines Authority<sup>60</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,<sup>61</sup> 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 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.<sup>62</sup>

In relation to nuclear installations, the National Board of Health would, if the 1976 Act<sup>63</sup> 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.

**i) National Institute of Radiation Protection**

The National Institute of Radiation Protection, which forms part of the Danish Health and Medicines Authority, in fact carries out all the latter's tasks, as described above, with regard to radiation protection.<sup>64</sup>

57. The website for the Minister of Justice can be found at: [www.jm.dk](http://www.jm.dk).

58. Consolidation Act No. 993 of 2014.

59. The website for the Minister of Defence can be found at: [www.forsvaret.dk/fmn](http://www.forsvaret.dk/fmn).

60. The website for the Danish Health and Medicines Authority can be found at: <http://sundhedsstyrelsen.dk>.

61. Act No. 182 of 1932.

62. Act No. 94 of 1953.

63. Act No. 244 of 1976.

64. 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. The staff of the Institute are government officials.<sup>65</sup>

### **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 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"). 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 Danish Technical University, Danish Decommissioning and other national and international institutions.<sup>66</sup>

#### *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**

### **a) The Danish Ministry of Energy, Utilities and Climate<sup>67</sup> and the Danish Energy Agency<sup>68</sup>**

The Danish Ministry of Energy, Utilities and Climate and the Danish Energy Agency do not have specific regulations with respect to nuclear activities.

The Danish Ministry of Energy, Utilities and Climate is responsible for national and international efforts to prevent climate change, as well as energy issues, national geological surveys in Denmark and Greenland, meteorology and utilities.

The Danish Energy Agency was established as a directorate under the Ministry of Energy by the Act of 1976 on Energy Policy Measures.<sup>69</sup> The Agency is supervised by the Danish Ministry of Energy, Utilities and Climate.

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65. Act No. 170 of 1962.

66. Act No. 244 of 1976.

67. The website for the Danish Ministry of Climate, Energy and Building can be found at: [www.efkm.dk](http://www.efkm.dk).

68. The website for the Danish Energy Agency can be found at: [www.ens.dk](http://www.ens.dk).

69. Act No. 194 of 1976.

The Danish Energy Agency surveys and evaluates energy production, supply, consumption and research activities in Denmark and abroad.

The Danish Energy Agency retains, among other things, administrative powers with regard to the administration of laws and regulations concerning energy, collection of energy data and international collaboration concerning energy. The agency aims to ensure security of supply and the responsible development of energy in Denmark from economic, environmental and security perspectives. The mandate of the Danish Energy Agency is outlined in Notice No. 436 of 11 May 2012. Specifically, the 1976 Act on Energy Policy Measures<sup>70</sup> 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.

### **3. Public and semi-public agencies**

#### ***a) Risø National Laboratory***

##### *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 was a government research institution under the supervision of the Ministry for Science, Technology and Innovation. By 2007, the research facilities at the Risø Peninsula became part of the Danish Technical University.

##### *ii) Responsibilities*

The Danish Technical University 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.

The Danish Technical University has a special responsibility for maintaining the necessary scientific knowledge base to advise the Danish authorities on nuclear matters.

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70. Ibid.

## ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 34 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Commission takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

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views of the Organisation or of the governments of its member countries.*

## NUCLEAR ENERGY AGENCY

The OECD Nuclear Energy Agency (NEA) was established on 1 February 1958. Current NEA membership consists of 31 countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Poland, Portugal, Russia, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Commission 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;
- 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 the 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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