

Legislation and Rules Applicable to Nuclear Transport and Transit*

November 2023

COUNTRY SHEET: SWEDEN

Sweden is a member country of the OECD Nuclear Energy Agency. For more information on the legal, regulatory and institutional frameworks for nuclear activities in Sweden, see here.

1. APPLICABLE NUCLEAR THIRD PARTY LIABILITY REGIME

International convention(s):

- 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy ("Paris Convention")
- 1963 Brussels Convention Supplementary to the 1960 Paris Convention ("Brussels Supplementary Convention")
- 1988 Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention ("Joint Protocol")

National law(s):

- Act on Liability and Compensation for Nuclear Incidents ("SFS 2010:950"), available only in Swedish
- Ordinance on Liability and Compensation for Nuclear Incidents ("SFS 2021:1142"), available only in Swedish
- The Swedish Radiation Safety Authority's Regulation on exemptions from the Act on Liability and Compensation for Nuclear Incidents ("SSMFS 2022:15"), available only in Swedish, including the referred annex

2. NUCLEAR THIRD PARTY LIABILITY AMOUNT(S) UNDER THE APPLICABLE NATIONAL LAW(S)¹

Transport to/from a nuclear installation located in Sweden ("the Country"):

- Unlimited liability for damage suffered in: (i) Sweden; (ii) Finland, Denmark and Norway; and (iii) States with no nuclear installations;
- Based on reciprocity for nuclear damage suffered in States with nuclear installations

Sweden is party to the Paris Convention, amounts of nuclear liability for transport applicable to operators of nuclear installations situated in the territory of a Contracting Party to the Paris Convention shall be determined by the national legislation of the operator liable wherever the nuclear incident occurs [i.e. Article 7(d) of the Paris Convention applies].

Transit through the Country:

There are no specific provisions on the amounts of nuclear liability applicable to transit under SFS 2010:950. The requirements relevant to transport will also apply to transit.

Moreover:

- (i) amounts of nuclear liability for transit through the Swedish territory applicable to operators of nuclear installations situated in the territory of a Contracting Party to the Paris Convention shall be determined by the national legislation of the operator liable [Article 7(d) of the Paris Convention]; and
- (ii) amounts of nuclear liability for transit through the Swedish territory applicable to operators of nuclear installations situated in the territory of a non-Contracting Party to the Paris Convention shall be in accordance with SFS 2010:950 [i.e. Article 7(e) of the Paris Convention applies].

3. FINANCIAL SECURITY/INSURANCE LIMITS UNDER THE APPLICABLE NATIONAL LAW(S)

Domestic transport:

• EUR 80 – 700 million

International transport to/from a nuclear installation located in the Country:

• EUR 80 - 700 million

Transit through the Country:

There are no specific provisions on the financial security limits required for transit under SFS 2010:950. The requirements relevant to transport will also apply to transit.

Financial security/insurance limits to cover transit through the Swedish territory by operators of nuclear installations situated in the territory of a Contracting Party to the Paris Convention shall be determined by the national legislation of the operator liable [Article 7(d) of the Paris Convention].

Financial security/insurance limits to cover transit through the Swedish territory by operators of nuclear installations situated in the territory of a non-Contracting Party to the Paris Convention shall be in accordance with SFS 2010:950. There is a possibility to apply for a lower financial security/insurance limit to the Swedish Radiation Safety Authority.

Swedish law does not provide that certificates of financial security detail the amount applicable for each transit country.

4. CERTIFICATE OF FINANCIAL SECURITY REQUIRED UNDER THE APPLICABLE NATIONAL LAW(S)

Certificate of Financial Security for national transports:²

Not required [SFS 2010:950, Section 16-21, 24 and 25]

Type of Certificate of Financial Security for international carriage:

 International transport to/from a nuclear installation located in the Country:

Required [SFS 2010:950, Section 40]

An operator liable shall submit a security certificate to the transporter. It shall contain information on the installation operator's name and address; the amount, type and duration of the securities, and what types of nuclear substances or nuclear waste and which transport the securities relate to. The certificate must include a declaration that the installation operator is the operator of a nuclear installation within the meaning of the Paris Convention. The declaration must be issued by the Governmentappointed authority.

The model certificate of financial security provided in the Steering Committee Recommendation of 8 October 2021 is followed [NEA/NE(2021)14, Annex 2, Appendix A].³

Transit through the Country:

Required

As SFS 2010:950 does not contain specific requirements relating to transit, the requirements relevant to transport will also apply to transit.

Specific requirement(s) regarding the entity to issue the Certificate of Financial Security:

 International transport to/from a nuclear installation located in the Country:

No specific requirement

• Transit through the Country:

No specific requirement

5. ENTITY BEARING NUCLEAR LIABILITY AND REFERRED TO IN THE CERTIFICATE OF FINANCIAL SECURITY⁴

Transport to/from a nuclear installation located in the Country:

■ Operator

■ National carrier

▼ Foreign carrier

[SFS 2010:950, Section 16-21, 24 and 25]

Transit through the Country:

■ Operator

■ National carrier

▼ Foreign carrier

As SFS 2010:950 does not contain specific requirements relating to transit, the requirements relevant to transport will also apply to transit.

6. EXCLUSIONS UNDER THE APPLICABLE NATIONAL LAW(S)5

Exclusion of small quantities of nuclear substances:6

- Provided under national law [Section 9 of SFS 2010:950], but not applied in practice. The government or an authority designated by the Government may issue regulations or decide in individual cases that SFS 2010:950 shall not apply to nuclear installations, nuclear substances and nuclear waste where the risk associated with the installations, substances or waste is low. The Swedish Radiation Safety Authority may issue regulations to the effect that SFS 2010:950 shall not apply to nuclear facilities, nuclear substances and nuclear waste where the risk associated with the facilities, substances or waste is low [Section 22 of SFS 2021:1142]. The Swedish Radiation Safety Authority has not yet issued regulations on the matter.
- Steering Committee Decision of 3 November 2016 [NEA/SUM(2016)2/NEA/NE(2016)8/FINAL] is not implemented in national legislation

Exclusion of radioisotopes which have reached the final stage of fabrication:⁷

- Applied under national law
- Steering Committee Recommendation of 19 April 2018 [NEA/SUM(2018)1/NEA/NE(2018)3/FINAL] implemented in national legislation [SFS 2010:950, Section 3(2)]

Exclusion of certain kinds of nuclear substances (only applies to Contracting Parties to the Paris Convention):⁸

- Applied under national law
- Steering Committee Decision of 27 October 1977 [NE/M(77)2/NE(77)20] implemented in national legislation [SSMFS 2022:15, paragraph 3]

Other exclusions:

No available information

Liability regime applicable to exclusions:

No

Compulsory financial security for exclusions

No

7. COMPETENT PUBLIC AUTHORITIES

In charge of verifying the certificate of financial security:

Swedish Radiation Safety Authority

In charge of authorising a national/foreign carrier to bear nuclear liability:

Swedish Radiation Safety Authority

In charge of stating in the certificate of financial security that the person named in the certificate is an operator in accordance with the nuclear legislation in the Country:

Swedish Radiation Safety Authority

Entitled to confirm that the transported substances are covered by the definition of "nuclear substances" (as defined under the Paris Convention) or "nuclear material" (as defined under the Vienna Conventions and the CSC):

There is no such approval process in place. In Sweden, it is the operator who has to confirm whether the substances to be transported may be qualified as being "nuclear substances" within the meaning of the Paris Convention.

8. CONTACT FOR QUESTIONS RELATING TO NUCLEAR LIABILITY AND TRANSPORT IN THE COUNTRY

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NOTES

- * "Transport" means an international or domestic carriage of nuclear substances by any means of transportation (i.e. sea, air or land) beginning with the departure from a nuclear installation of the sending operator and ending with the arrival at a nuclear installation of the receiving operator.
 - "Transit" means temporary movement of nuclear substances within the territory of a State that is not the State of departure, where the sending operator is located, or the State of destination, where the receiving operator is located.
- All nuclear liability conventions (with the exception of the Vienna Convention) expressly provide that the amount of compensation will be determined by the national legislation of the liable operator. See Article 7(d) of the Paris Convention, Article V.3 of the Revised Vienna Convention, and Article 6.1 of the Annex to the Convention on Supplementary Compensation (CSC).
 - Notwithstanding the above, a country may, under certain conditions, subject the transit of nuclear substances through its national territory to an increased nuclear liability amount not exceeding the maximum amount of liability of the operator of a nuclear installation situated in its territory. This is expressly provided in Article 7(e) of the Paris Convention and Article 6.2 of the CSC Annex.
- 2 National law may exclude the obligation of the operator liable to provide the carrier with an insurance certificate or other financial security if the carriage takes place wholly within the national territory of a country. This is expressly provided in Article 4(d) of the Paris Convention and Article III of the Revised Vienna Convention.
- The NEA Steering Committee for Nuclear Energy (the "Steering Committee") recommended to the Contracting Parties to the Paris Convention a model certificate of financial security for the carriage of nuclear substances on 8 June 1967 [NE/M(67)1/NE(67)9]. On 8 October 2021, the same Committee adopted a Recommendation [NEA/NE(2021)14, Annex 2, Appendix A] to replace the Recommendation [NE/M(67)1], which was revoked on 21 April 2022. There is no distinction between transport and transit regarding this recommendation.
- 4 National law may provide that a carrier bears nuclear liability in substitution for an operator of a nuclear installation in its territory. This is expressly provided in Article 4(e) of the Paris Convention, Article II.2 of the Vienna Convention and the Revised Vienna Convention, Article 3.2 of the CSC Annex.
- All nuclear liability conventions exclude from their scope of application certain categories of nuclear substances or material to ensure that the risk associated with their use may be dealt with under general tort law. Specifically, natural and depleted uranium are excluded from the definitions of "nuclear substances" or "nuclear material" provided in all nuclear liability conventions. Radioisotopes which have reached the final stage of fabrication so as to be usable for purposes specified in the conventions are also excluded from the relevant definitions of "radioactive products or waste" provided in conventions. Moreover, nuclear liability conventions allow for the exclusion of certain other types of nuclear substances or material, subject to specific conditions being met (e.g. exclusion of small quantities of nuclear substances for all conventions; exclusion of certain kinds of nuclear substances (for the Paris Convention only).
- Small quantities of nuclear substances or material in use outside a nuclear installation can be excluded from the application of the nuclear liability conventions, to the extent they comply within certain defined limits [see Article 1(b) of the Paris Convention, Article 1.2 of the Vienna Conventions and Article 1.2(b) of the CSC Annex]. For technical criteria applicable to the Paris Convention, see the Steering Committee Decision of 3 November 2016 [NEA/SUM(2016)2/NEA/NE(2016)8/FINAL]; for technical criteria applicable to the Vienna Conventions and the CSC, see the Board of Governors Resolution of 20 November 2014 [GOV/2014/63]. There is no distinction between transport and transit regarding this exclusion.
- Radioisotopes which have reached the final stage of fabrication so as to be usable for any scientific, medical, agricultural, commercial or industrial purpose are excluded from the scope of application of the Vienna Conventions and the CSC [see Article of I.1(g) of the Vienna Convention and the Revised Vienna Convention, and Article 1.1(e) of the CSC Annex]. Except for certain slight differences in the relevant provisions (i.e. unlike the Vienna Conventions and the CSC, the Paris Convention specifies that radioisotopes shall be outside a nuclear installation and also provides that they can be usable for educational purposes), the Paris Convention also allows for this exclusion [see Article 1(a)(iv) of the Paris Convention]. There is no distinction between transport and transit regarding this exclusion.
 - To further clarify the scope of the exclusion, the Steering Committee adopted a Recommendation of 19 April 2018 [NEA/SUM(2018)1/NEA/NE(2018)3/FINAL], according to which "The radioisotopes reach the final stage of fabrication, under Article 1(a)(iv) of the Paris Convention, when they may be used for any industrial, commercial, agricultural, medical, scientific or educational purpose. The radioisotopes which have reached the final stage of fabrication are excluded from the scope of application of the Paris Convention and shall not be made subject to it at a later stage."
- 8 See the Steering Committee Decision of 27 October 1977 [NE/M(77)2/NE(77)20]. This Decision intends to exclude substances consisting substantially of uranium, which, for all practical purposes, present no greater risk than natural uranium, from being considered nuclear substances for the purposes of the Paris Convention, subject to certain conditions and criteria described in the Decision being met. There is no distinction between transport and transit regarding this exclusion.