Risks

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Cross-border nuclear accident

Threat assessment: The likelihood of a nuclear accident occurring in Estonia's nearby region is low. Compared to the previous assessment, the risk level has not changed.

For Estonia, the greatest potential cause of a nuclear accident would be a serious incident at the closest nuclear power plants (NPPs). These are the Leningrad NPP in the Russian Federation (about 70 km from Narva) and the Loviisa NPP in the Republic of Finland (90 km north of Estonia's coast at Kunda). Under unfavourable weather conditions, radioactive contamination from these plants could be carried through the air to Estonia within a few hours, leading to widespread environmental radioactive contamination and exceeding intervention levels.

The Loviisa NPP in Finland, although about 90 km from Estonia's coastline, does not pose a threat, as its operations and procedures are transparent and reliable. In addition, cooperation with Finnish authorities is ensured. The primary at-risk area in the event of an accident at either the Leningrad or Loviisa NPPs would be Ida-Viru County, but North and Northeastern Estonia would also be affected.

The number of nuclear power plants in neighbouring countries continues to grow. Older reactors are being closed after the commissioning of newer ones, and several new sites are planned (for example, in Poland).



Nuclear power plants within a radius of 500 km from Estonia

THREATS

- ✓ The worst likely scenario is an accident at the Leningrad Nuclear Power Plant in Sosnovy Bor, located about 70 km from Estonia's mainland.

- ✓ Despite advancements in safety standards and technologies, the risks of a nuclear accident will remain for Estonia in the future–the issue lies more in the level and scale of those risks. Even if all old reactors at the Leningrad NPP are closed, new reactors are built, and the issue of storing radioactive waste is resolved, Estonia will still have an obligation, based on IAEA recommendations, to be prepared to mitigate the risks of a nuclear accident.

ACTIONS

- ✓ A cross-border nuclear accident occurring outside Estonia cannot be brought under Estonia's control. However, the early warning system for radiation hazards serves this purpose by ensuring that the Environmental Board can receive information about a nuclear accident in a neighbouring country at the earliest possible stage.

- ✓ From a radiation safety perspective, nuclear power plants are far enough from Estonia that there is no immediate threat to the lives of Estonian residents.

GUIDELINES

If you hear or see an official warning about radiation spread, the use of nuclear weapons, or a nuclear power plant accident in a nearby country, then:

- ✓ Take shelter indoors immediately.
- ✓ Follow the instructions provided through official channels.

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