

HUTRAIN'24 IAEA

Country: **Luxembourg**

Agenda item: **Technology infrastructure for prevention, detection and responses regarding nuclear security.**

Luxembourg may be small in size, but the goals it strives for are focused on global contribution and to provide the best to its citizens while polishing its name as the last Grand Duchy on earth. Being one of the six founding members of the EU and one of the twelve founding members of NATO proves the significant importance of this Grand Duchy. Luxembourg does not only stand out in politics it also stands out for its usage of sustainable and renewable energy. Its climate law sets the target to climate neutrality by 2050 which is achieving zero net greenhouse gas emissions. And since only 12% of global electricity will be produced with nuclear energy by 2050, Luxembourg encourages the use of other green energy resources as much as possible to contribute to the rest of the world that doesn't have access to nuclear energy.

As Luxembourg, a nation that is not suitable to have nuclear power plants due to our size, we participate in general conferences and ratify treaties and conventions regarding nuclear security and usage—such as CTBT, CHP and PTBT—because we are located between countries that have power plants—France and Belgium. If any casualty occurs we will be affected as well. Especially the Tihange 3 Nuclear Power Plant(commercial operation in 1985) 65 km to our border with Belgium and the Cattenom Nuclear Power Plant (commercial operation in 1987) located 22 km into our border with France presents a significant threat to us and our citizens safety. Safety issues have occurred in 2017 and even before that we have been in favor of closing the Cattenom Power Plant. We want nuclear power plants close to our borders to be shut down when they fulfill their estimated times. As our DRP(Radiation Protection Division)has stated “Although many measures are heading in the right direction and will make it possible to increase the reactor’s resistance to a potential accident, differences will remain between extended-life nuclear power plants, which are permitted to operate to lower requirements, and new reactors for which planning permission has been granted after 2014 (...), which will be designed, built and operate to more stringent standards.” .

Respectively we would like to emphasize that we are not against nuclear energy and our CSV will not be returning to the anti-nuclear committee. We don’t believe that nuclear energy is sustainable nor cost effective, but we acknowledge that it is a low-carbon energy source and it's important in order to fight climate change. As our Prime Minister Luc Frieden said “Although the government is still in favour of closing power plants close to the border in France and

Belgium, it is "open to technology" when it comes to the future development of nuclear energy” and added “Nuclear research must be supported, including with EU funds”.

We believe real-time data sharing that provides early warning systems and monitoring of critical parameters between nations, joint research to build safer and less waste producing reactors, developing advanced recycling technologies for waste management, usage of AI to strengthen cybersecurity and international cooperation would be beneficial. And as the safety issue in 2017 Cattenom proves, manpower is needed on-site, but the lack of manpower could be closed by technology giving notices. These solutions should be elaborated in order to achieve the safety a nation is promised.

As Luxembourg, we remain committed to playing a significant role in the global discourse of nuclear energy. We want to be a voice for other small nations that are concerned for their safety. We advocate for a future where nuclear energy is sustainable, secure and safe. Nuclear energy has a future with technology.

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The Delegate of Luxembourg