

To what extent international law constitutes an appropriate answer to nuclear accidents ?

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INTRODUCTION

◇ The Fukushima accident had devastating consequences ⇒ It challenged the **effectiveness of the international governance of civil nuclear energy**. 25 years after Chernobyl which led to the adoption of 4 international conventions in the safety and emergency preparedness fields, Fukushima appears as new opportunity to improve the current regime.

◇ Perspectives of evolution ⇒ Legislative proliferation ? Strengthening the existing instruments? After the accident, the **international community has been greatly involved**. However, only few concrete changes have been made so far. Will those changes be enough or must we take further action ?

◇ Interest ⇒ Provide an overview of the current framework, and a critical analysis of the major changes made after Fukushima.



INTERNATIONAL LAW AS A WAY OF PREVENTION

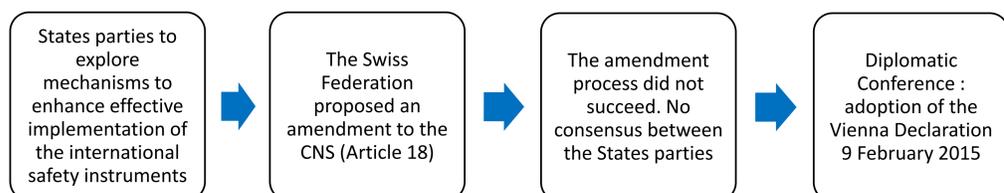
After the Chernobyl accident

- ◇ Adoption of several instruments :
 - Emergency preparedness and response : Convention Notification 1986/ Convention Assistance 1986 ⇒ Need for global cooperation
 - Safety "Sister Conventions" : Convention on Nuclear Safety 1994/ Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management 1997

After the Fukushima accident

- ◇ **IAEA Action Plan on Nuclear Safety – September 2011** : Action 7 : "Improve the effectiveness of the international legal framework"

How ?



Vienna Declaration : Adoption of guiding principles :

- Safety objective : "preventing accidents in the commissioning and operation and, should an accident occur, mitigating possible releases of radionuclides causing long-term off site contamination and avoiding early radioactive releases or radioactive releases large enough to require long-term protective measures and actions. "
- Safety assessments : periodically and regularly in order to identify safety improvements that are oriented to meet the above objective.
- National matters : national safety law shall take into account the relevant IAEA Safety Standards and, as appropriate, other good practices as identified inter alia in the Review Meetings of the CNS.

- ◇ **New European Directive 2014/87/EURATOM of 8 July 2014** (Replacing the 2009 Directive on Nuclear Safety)

What's new ?

- Introduces a high-level EU-wide safety objective, emphasizing accident prevention and the avoidance of significant radioactive releases aimed at addressing specific technical issues across the entire lifecycle of nuclear installations
- Strengthen the role and effective independence of the national regulatory authorities
- Enhance transparency in nuclear safety and emergency preparedness and response
- Enhance accident management and on-site emergency response, and ensure continuous review and adoption of lessons learned
- Highlighting the importance of the human factor by promoting an effective nuclear safety culture
- Set up an EU-wide system of topical peer reviews

The importance of safety has clearly increased after the accident, it also demonstrated that "Nuclear Safety is a Continuum, not a Final Destination".

INTERNATIONAL LAW AS A WAY OF COMPENSATION

After the Chernobyl accident

- ◇ Adoption of a new instrument :
 - Convention on Supplementary Compensation for nuclear damage (CSC) 1997
- ◇ Update of existing instruments :
 - Joint Protocol 1988
 - Protocol to amend Vienna Convention 1997
 - Protocols to amend Paris and Brussels Conventions 2004 (not yet in force)

After the Fukushima accident

No change have been made to the conventions. The Japanese operator, TEPCO is currently dealing with a long and expensive compensation process.

- ◇ Highlight : **Japan ratified the CSC** - January 2015
 - ↳ Consequences :
 - Japan is finally subjected to one of the international nuclear liability regimes, a strong symbol after the Fukushima accident.
 - With Japan joining the Convention, the adherence of at least 5 States with a minimum of 400 000 units of installed nuclear capacity has been met. The Convention entered into force on 15 April 2015, meaning that the United States, world's largest producer of nuclear power is now also subjected to the obligations of the CSC.

Its entry into force is in line with the IAEA Action Plan on Nuclear Safety , which calls upon Members States to work towards establishing a global nuclear liability regime and to give due consideration to the possibility of joining the international nuclear liability instruments

CSC in a nutshell : 2 main objectives :

- Establish a global nuclear liability regime : the Convention is opened to States parties to Vienna and Paris Convention but also to other States, as long as their national legislation complies with the rules mentioned in the Annex to the Convention.
- Increase the amount of compensation available in case of a nuclear incident : the Convention foresees the establishment of a minimum national compensation amount and an international fund, with contributions from the Contracting Parties.

CONCLUSION

◇ **Strong involvement of the international community** after the Fukushima accident : States, International Organizations (IAEA, OECD/NEA...) ⇒ common objective : learn the lessons from the catastrophe.

◇ Highlights :

- **Promotion of exchanges** between States regarding the implementation of the existing legal framework rather than creating new treaties
- Encourage States **to ratify instruments** composing this framework.
- **Need for a flexible international regime** seems to be confirmed : political declaration, new regional directive...

◇ As a matter of fact, there will not be a complete reform of the legal system such it has been made after the Chernobyl accident. Those two catastrophes cannot be compared as the context was completely different. Also, **issues at stake in the 80s have changed**, such as nuclear technology, safety culture, environmental consideration to name but a few.

◇ The evolution of the international framework is certainly not completed yet, much remains to be done in order to draw lessons from the Japanese accident . International organizations are currently working in that direction. In addition, nuclear law shall anticipate, as far as possible, the **future legal challenges**. A relevant example comes from fusion installations which are not subjected to any international nuclear liability regime.