

Does the Fukushima Nuclear Incident Require a Revision of the International Legal Regime on Nuclear Safety?

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by

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I.

In the immediate aftermath of the 1986 Chernobyl nuclear incident States convened and adopted after only four weeks of negotiations in September 1986 the Early Notification Convention¹ and the Assistance Convention². In the following two decades, States negotiated and established the currently existing international legal framework governing the peaceful use of nuclear energy. This includes the reformation of the international nuclear liability regime, the strengthening of the existing and the adoption of newly established instruments on nuclear safety, security and safeguarding. Among the main achievements was the 1994 Convention on Nuclear Safety (CNS)³. The concept of the famous “Three-S-Approach” to nuclear energy requesting “safety – security – safeguarding” was based on sound comprehensive international legal grounds.

Hence, States used the momentum of the Chernobyl accident in a most effective way. Can we identify a comparable momentum consequential to the Fukushima nuclear incident?

The Fukushima nuclear accident occurred in a legal environment different to that of Chernobyl. At the time of Chernobyl, only fragments of the now existing international regime were available. In particular, the CNS did not yet exist. That situation immediately challenged States to consider establishing a comprehensive international legal framework. Now such framework is available, and there is no urgent need for international legal action. However, Fukushima without any doubt requires us to reconsider the existing international nuclear safety regime regarding both the technical and the legal elements. As for the legal elements, the main focus of this short presentation shall be placed on the Convention on Nuclear Safety. It may also be useful to briefly look at the interaction of the Nuclear Safety Convention with other conventions.

¹ 1986 Convention on Early Notification of a Nuclear Accident (IAEA INFCIRC/335), currently 110 Contracting Parties.

² 1986 Convention on Assistance in the Case of a Nuclear Accident or a Radiological Emergency (IAEA INFCIRC/336), currently 105 Contracting Parties.

³ 1994 Convention on Nuclear Safety (IAEA INFCIRC/449), currently 72 Contracting Parties.

This approach is in line with recent high rank political declarations of intent. Special reference shall be made to the Deauville G8 Summit of 26/27 May 2011⁴ and to the 20th EU – Japan Summit held in Brussels on 28 May 2011⁵. The politicians underlined the need for further strengthening the international legal regime. This may include the revision of existing and the adoption of new international conventions.

However, a caveat has to be made. Revising an existing international regime based on treaties is not an exercise, which can be achieved, so to speak, “en passant” and hastily just to prove that there is action. Embarking on exercises to amend existing treaties requires a clear goal and a high degree of probability that the negotiations will be successful and the result will be adopted by as many States as possible. Efforts for improvements which fail are counterproductive and rather harm and weaken the existing regime. This has to be taken into account already at an early stage of the deliberations.

Prior to investigating whether the existing international instruments should be or need to be revised or complemented by additional instruments, a final and detailed analysis of the Fukushima occurrences has to be available. In particular, lawyers would need clarity if and to which extent possible shortcomings of the international legal regime contributed to the accident or failed to mitigate its consequences. In substance, a legal exercise of reforming the legal regime has to build on progress in the technical requirements of nuclear safety. Such progress does not only cover the technical lessons learnt by the Fukushima incident but has to include the entire technical progress made since the adoption of the CNS. I refer to the progress achieved in developing and in redeveloping the Safety Standards of the IAEA, and in particular to the Fundamental Safety Principles (Safety Fundamentals) 2006⁶. The 10 Principles of the Fundamentals are to be the technical yardstick against which the legal instruments have to be measured, or in other words: are the CNS and the other conventions appropriate legal instruments to implement the Safety Fundamentals and other internationally recognized standards? And I have to put the perhaps provocative question to our technical colleagues: Did the Fundamentals stand the Fukushima test or do they perhaps also need reconsideration?

II.

Binding obligations under public international law as, *e. g.*, established by international treaties are restrictions of the sovereignty of the Contracting Parties. This applies particularly if the subject of the respective treaty is the control of activities performed under the jurisdiction of the Contracting Parties. States normally are most reluctant to agree to such

⁴ “G8 Declaration renewed Commitment for Freedom and Democracy”, Section. IV “Nuclear Safety”, Paragraphs 28 – 48 (<http://www.g20-g8.com/g8-g20/g8/english/live/news/renewed-commitment-for-freedom-and-democracy.1314.html>). Paragraph 44 welcomes actions to strengthen the CNS.

⁵ Council of the European Union, 20th EU-Japan Summit Brussels, 28 May 2011. Joint Press Statement, 11015/11 Presse 162 (http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/122303.pdf). See in particular the Annex: “EU-Japan Cooperation Following the Great East Japan Earthquake and the Accident at the Fukushima-Daiichi Nuclear Power Plant”, Section A: “Work together to Ensure the Highest Levels of Nuclear Safety Worldwide”.

⁶ Fundamental Safety Principles – Safety Fundamentals, jointly sponsored by the European Atomic Energy Community, et alia, IAEA Safety Standards Series No. SF-1, Vienna 2006.

restrictions of their national sovereignty, especially in the nuclear field. This is the reason why only in 1994 in the light of the Chernobyl nuclear accident the CNS could be established. The agreement of States was achieved through introducing a most prudent legal technique. The CNS – and likewise the 1997 Joint Convention⁷ – does not establish an international licensing and control mechanism for nuclear activities. Both Conventions do not touch upon respective national competences. They make use of a “soft” approach to achieving their objectives, they are so-called “incentive conventions”. This concept refrains from setting up a strict regime of enforcing obligations under the convention or of dispute settlement with final reference to an arbitrator or a tribunal. The “enforcing instrument” is the peer review exercised by the Contracting Parties at the Review Meetings. There is criticism of that concept as being too soft and less effective. But again a caveat is needed. Meanwhile, we have the experiences of five Review Meetings under the CNS which allow assessing the effectiveness of the incentive approach much better. Before agreeing to a change or a substantive modification of the incentive approach, lawyers would require a sound proof that a more binding instrument with less soft means of enforcement would entail better results. Lawyers particularly need proof that States most likely will accept such additional restrictions of their sovereign rights. If such proof cannot be provided, there is no reason to make the CNS less soft.

Nevertheless it appears to be necessary to walk through the CNS Article by Article. This will be a joint task of both technicians and lawyers. While the technical colleagues will have to provide the technical requirements for enhancing nuclear safety, the lawyer will have to answer the question whether the current drafting of the text is sufficient to implement the requirements.

III.

Time constraints do not allow going into more detail but I, at least, want to address some issues where, from a merely legal or political point of view, an amendment could be desirable.

According to my view, mandatory involvement in national licensing and control procedures of experts selected by the IAEA or other competent international governmental organisations should be considered. The participation of independent international experts in national procedures would not only strengthen nuclear safety but would also support public acceptance. The IAEA Review missions today work at the request of States. Perhaps scenarios can be developed where international expertise is made a mandatory part of national procedures. However, would States be prepared to accept such obligation?

‘Regulatory independence’ is a concept which enjoys greatest attention on the discussion agenda. Clearly, the concept needs to be supported and strengthened because it is one of the main pillars to guarantee nuclear safety. But on the other hand, we should be aware that independence is in the first place an attitude of the acting persons rather than an organisational matter. Defining criteria of independence may be a supportive means for the interpretation of Article 8 (2) CNS. But such criteria may also interfere with traditional and well-proved national administrative structures which is not desirable.

⁷ 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (IAEA INFCIRC/546), currently 58 Contracting Parties.

The scope of application of the CNS is according to its Article 2 (i) limited to land-based civil nuclear power plants. It would certainly be ideal to extend that scope to all installations of the nuclear fuel cycle. However, it might be questioned whether extending the scope of the CNS is a matter of urgency. The Joint Convention covers additional nuclear facilities of the nuclear fuel cycle. With regard to research reactors, the 2004 Code of Conduct on the Safety of Research Reactors⁸ is available. Although the Code is not a binding instrument it nevertheless provides an internationally agreed basis for guaranteeing safe management of research reactors.

A major issue of concern is emergency preparedness and response. The CNS addresses this issue in its Article 16. This provision has to be assessed in connection with obligations under other international conventions. Special reference has to be made to the 1986 Early Notification Convention⁹, to the 1986 Assistance Convention¹⁰, and also, as the case may be, to the nuclear liability conventions¹¹. Emergency response requires cooperation and interaction of the operator, the regulatory body and other State entities. If off-site damage occurs, insurers, other financial guarantors as well as domestic and foreign victims come into play. Most probably Fukushima will teach specific lessons in this field. If my information is correct, Japan received assistance from other States. Since Japan is a Party to the Assistance Convention and the assisting States most probably as well, the role of that Convention comes into special focus.

In summary, there are issues which might suggest revising the existing international regime on nuclear safety. But as I stressed earlier, a possible decision to embark on a revision exercise would need careful preparation. Perhaps an informal working party consisting of technical and legal experts to deal with this issue should be convened.

⁸ Measures to Strengthen International Cooperation in Nuclear, Radiation and Transport Safety and Waste Management. Code of Conduct on the Safety of Research Reactors (IAEA GC(48)/7, 19 July 2004).

⁹ Fn. 1.

¹⁰ Fn. 2.

¹¹ 1963 Vienna Convention on Civil Liability for Nuclear Damage (IAEA INFCIRC/500); 1997 Vienna Convention on Civil Liability for Nuclear Damage (IAEA INFCIRC/566 Annex); 1997 Convention on Supplementary Compensation for Nuclear Damage (IAEA INFCIRC/567) (not yet in force); 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy as amended 1964 and 1982 (http://www.oecdnea.org/law/nlparis_conv.html); 2004 Paris Convention of 1960 on Third Party Liability in the Field of Nuclear Energy as amended 1964 and 1982 (not yet in force) (<http://www.oecdnea.org/law/Unofficial%20consolidated%20Paris%20Convention.pdf>).