

A legislative framework for the safety of nuclear installations in the European Union

by S. Kuş and S. Emmerechts*

For the first time since the inception of the European Community in 1957 and after two previously unsuccessful attempts, on 25 June 2009 the Council of the European Union adopted European-wide, binding requirements on nuclear safety.¹

The goal of the “Council Directive establishing a Community framework for the nuclear safety of nuclear installations” (“the Directive”) is to maintain and to promote the continuous improvement of nuclear safety and to ensure that a high level of nuclear safety is provided by EU member states to protect workers and the general public against the dangers arising from nuclear installations. The Directive is based on the IAEA Safety Fundamentals and the Convention on Nuclear Safety.

The 27 member states of the Community are required to bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by 22 July 2011.

Background

In 2003, the European Commission proposed a so-called “nuclear package” containing EU-wide, harmonised rules in the fields of nuclear safety and the safe management of spent fuel and radioactive waste.² The proposal was very ambitious, including verifications of national safety authorities by the EU Commission, the development of EU-specific safety standards, strict rules on financial resources for the decommissioning of nuclear installations and on the independence of national safety authorities.

One of the main arguments of the Commission to justify its initiative was that greater harmonisation of safety requirements for nuclear installations in the EU is a prerequisite for the future development of

nuclear energy, especially in view of the forthcoming enlargement of the Community.³ The Commission also argued⁴ that nuclear energy must remain an option in the energy mix of the future in order to achieve greenhouse gas emission reductions driven by the targets in the Kyoto Protocol.⁵

The initiative encountered strong opposition and criticism by several member states which led the Commission to submit in September 2004 new and revised legislative proposals.⁶ However, the Council remained strictly divided between member states supporting and those strongly opposing the Commission’s initiative. The main arguments of the opponents were that the European Community lacks legal competence in the field of nuclear safety, that its legislative proposals were not substantive enough and that they did not provide an additional value *vis-à-vis* existing international co-operation at the level of the International Atomic Energy Agency (IAEA), the OECD Nuclear Energy Agency (NEA) and other groups such as the Western European Nuclear Regulators Association (WENRA).

In that context, instead of discussing the proposals further the Council commenced an alternative process. In 2004, it created an ad hoc Council working party to engage in a wide-ranging consultation process with experts from member states facilitating the choice of effective legal instrument(s) for achieving nuclear safety and the safe management of spent fuel and radioactive waste. Despite extensive discussions

* Ms. Selma Kuş (selma.kus@oecd.org) and Mr. Sam Emmerechts (sam.emmerechts@oecd.org) are Legal advisers in the NEA Legal Affairs Section.

and reports during 2005 and 2006, there was still no consensus on the adoption of the legislative proposals.

In 2007, the Council paved the way for the creation of the High Level Group on Nuclear Safety and Waste Management⁷ [later renamed the European Nuclear Safety Regulators Group (ENSREG)], an independent, authoritative expert body composed of senior officials from national regulatory or nuclear safety authorities from all 27 member states to advise and assist the Commission in progressively developing common understanding and eventually additional European rules on the safety of nuclear installations and the safety of the management of spent fuel and radioactive waste. The discussions and the compromises reached within this High Level Group were instrumental in adopting the Directive on 25 June 2009.⁸

Main provisions

The Directive applies to a range of nuclear installations that is wider than the one adopted in the Convention on Nuclear Safety.⁹ The Directive applies to any civilian nuclear installation, defined as:

- a) an enrichment plant, nuclear fuel fabrication plant, nuclear power plant, reprocessing plant, research reactor facility, spent fuel storage facility; and
- b) storage facilities for radioactive waste that are on the same site and are directly related to nuclear installations listed under point a).

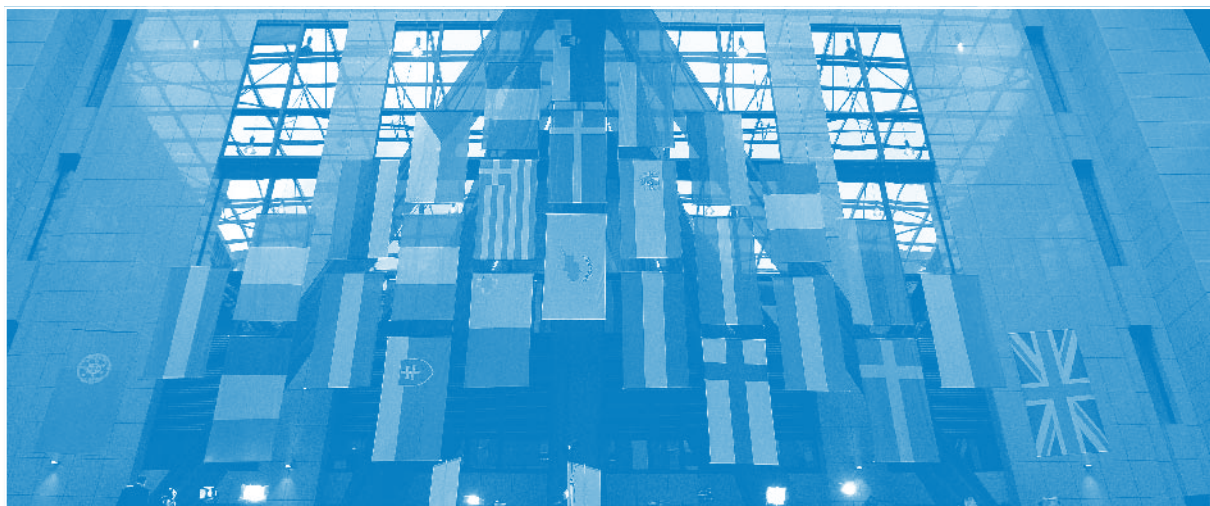
The scope of the Directive ranges further in time than the Convention on Nuclear Safety, also covering the decommissioning phase of a nuclear installation.¹⁰ Another interesting difference is that while the Convention on Nuclear Safety is silent on the definition of nuclear safety, the Directive

attempts such a definition in that it states that “nuclear safety” means “the achievement of proper operating conditions, prevention of accidents and mitigation of accident consequences, resulting in protection of workers and the general public from dangers arising from ionizing radiations from nuclear installations”.¹¹

Member states shall establish and maintain a national legislative, regulatory and organisational framework with responsibilities for the adoption of national nuclear safety requirements; the provision of a system of licensing and prohibition of operation of nuclear installations without a licence; the provision of a system of nuclear safety supervision; and enforcement actions, including suspension of operation and modification or revocation of a licence.¹²

The Directive further includes a well-known requirement which many international instruments in the field of nuclear law address, namely that member states shall establish and maintain a competent regulatory authority, “functionally separate from any other body or organisation concerned with the promotion, or utilisation of nuclear energy, including electricity production, in order to ensure effective independence from undue influence in its regulatory decision making”.¹³

The obligation to give the competent regulatory authority the legal powers and human and financial resources necessary to fulfil its obligations in connection with the national framework is also customary under international nuclear law. However, what is rather unparalleled is to impose a similar obligation on license holders.¹⁴ At the level of the European Union and its supranational character, both obligations can imply greater impacts than at any other intergovernmental level. Other provisions address the prime responsibility of the licence holder, regular safety assessments and transparency.



On 25 June 2009, the Council of the European Union adopted European-wide, binding requirements on nuclear safety.

With respect to procedural provisions, the Directive obliges member states to report to the Commission on the implementation of the Directive for the first time by 22 July 2014, and every three years thereafter, taking advantage of the review and reporting cycles under the Convention on Nuclear Safety. On the basis of these reports, the Commission shall submit a report to the Council and the European Parliament.

Enforcement

The Directive is without doubt a milestone in international and regional law making in the field of nuclear law, not so much because of its content but because of the supranational nature of European law and the powers of EU institutions.

Member states have long resisted the Directive because of the powers which it delegates to the European Commission, and more importantly, to the European Court of Justice. The Commission, as the guardian of the treaties and the measures taken by the institutions, ensures that EU legislation is applied correctly by the member states. It can start infringement procedures if not satisfied with a member state's implementation of the Directive and refer the matter to the European Court of Justice. The court will therefore have the final decision on, for example, the implementation of nuclear safety requirements, the independence of the regulatory body and the adequacy of human and financial resources. As a last resort, the court may impose a lump sum or penalty payment on the member state which fails to fulfil an obligation.¹⁵ In this way, the Directive may generate a legal effect that is far more important than the Convention on Nuclear Safety, which is considered to be an "incentive" convention without strict enforcement possibilities.

Outlook

Even though the Directive faces criticism with respect to its "diluted" provisions, it is in theory forceful from the implementation and enforcement perspectives. It remains to be seen how rigorously the Commission will monitor the way in which the Directive is implemented, and especially its vaguer provisions which are also amongst the most controversial issues in the field of international nuclear law, e.g. the independence of the regulatory body from undue influence.

As the Directive states in its preamble, the member states of the European Union have already implemented measures enabling them to achieve a high level of nuclear safety within the Community. Both Euratom and its member states have co-operated at the international level, subjected their national regulators and regulations to international peer reviews

and helped to improve nuclear safety worldwide. The Directive is a major step for achieving a common legal framework and a strong nuclear safety culture in Europe which could become a model for other regions to translate internationally accepted safety standards into a legally binding framework. ■

References

1. "Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations". The legal basis for the Directive is Article 31 of the Euratom Treaty, in connection with Article 32 thereof, on health and safety.
2. European Commission document COM(2003) 32 final.
3. As of 4 November 2009, there were 145 NPPs operating in 15 member states of the European Union.
4. "Communication from the Commission to the Council and the European Parliament, Nuclear Illustrative Programme", COM(2006) 844 final.
5. Amendment to the United Nations Framework Convention on Climate Change, which was opened for signature on 11 December 1997 and came into force on 16 February 2005.
6. European Commission document COM(2004) 526 final. A Directive is a legislative instrument of the European Union which requires EU member states to achieve a particular result without dictating the means of achieving that result.
7. Commission Decision 2007/530/Euratom of 17 July 2007.
8. The Commission will continue its efforts to enact a legislative instrument for the management of spent fuel and radioactive waste. Paragraph 12 of the Directive's preamble states: "While this Directive concerns principally the nuclear safety of nuclear installations, it is also important to ensure the safe management of spent fuel and radioactive waste, including at storage and disposal facilities."
9. The scope of the Convention on Nuclear Safety is basically limited to operational land-based civil nuclear power plants and storage/treatment facilities on the same site and directly related to their operation.
10. The Convention on Nuclear Safety is generally understood to apply until a decommissioning programme has been agreed to by the regulator.
11. Article 3(2) of the Directive.
12. Article 4 of the Directive.
13. Article 5(1)(2) of the Directive.
14. Articles 5(3) and 6(5) of the Directive.
15. Article 143 of the Euratom Treaty.