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# REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

## Implementation of Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations

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# 1. INTRODUCTION

## 1.1. Purpose of the report

Under Article 9(2) of Directive 2009/71/EURATOM (Nuclear Safety Directive), the Commission is required to submit a progress report on the implementation of the Directive. The Directive is secondary legislation deriving from Articles 2(b) and 30 of the Euratom Treaty.

This report is based on the Member States' national reports under Article 9(1) of the Directive, which requires them to submit a report to the Commission on its implementation for the first time by 22 July 2014.[1] The national reports demonstrate how Member States are addressing the objectives of the Directive and illustrate the approaches taken at national level.

The Council's adoption of the Nuclear Safety Directive on 25 June 2009 was a major step towards achieving a common legal framework on nuclear safety in Europe. Until then, nuclear safety was governed by national legislation and international conventions.[2] The existing system was supplemented by the Directive, which gave binding legal force to the main international nuclear safety principles.

The objective of the Directive is to maintain and promote the continuous improvement of nuclear safety. It requires Member States to make appropriate national arrangements for a high level of nuclear safety to protect workers and the general public against the dangers of exposure to ionising radiation from nuclear installations. The Directive includes provisions on the following:

- the establishment of a national legal framework for the nuclear safety of civilian nuclear installations;
- the organisation, duties and responsibilities of the competent regulatory authorities;
- the licence holders' obligations;
- the education and training of staff; and
- the provision of information to the public.

The Directive entered into force on 22 July 2009. The Member States had until 22 July 2011 to bring into force their laws, regulations and administrative provisions ensuring compliance with the Directive.

## 1.2. Major developments since the publication of Directive 2009/71/EURATOM

Over the past five years, major steps have been taken at EU level to improve nuclear safety. These have followed a two-track approach: verifying the capabilities of nuclear installations to resist serious safety events and strengthening the legal framework.

Following the 2011 Fukushima nuclear accident, the European Council asked the Commission and the European Nuclear Safety Regulators' Group (ENSREG)[3] to reassess the

[1] Most countries followed the unified structure for implementation reports developed under the aegis of the European Nuclear Safety Regulators' Group (ENSREG), as recommended in recital 16 of the Directive. All Member States submitted their report as required in Article 9(1) of the Directive.

[2] The main provisions of the Directive derive from the principles enshrined in the 1994 Convention on nuclear safety, to which all Member States are parties.

[3] Independent, authoritative expert body created in 2007 following a decision of the European Commission. It is composed of the national nuclear safety, radioactive waste safety or radiation protection regulatory

EU's 131 nuclear power reactors. The Commission and ENSREG carried out 'stress tests', which resulted in a number of recommendations. The implementation of these recommendations is regularly assessed through the peer review of national action plans.

The review of the Euratom legal framework for nuclear safety, also called for by Heads of State and Government, led to a Commission proposal for substantial amendments to Directive 2009/71/EURATOM. These were adopted by the Council on 8 July 2014. They take into account the lessons learned from the nuclear stress tests as well as the safety requirements of the Western European Nuclear Regulators Association (WENRA)[4] and the International Atomic Energy Agency (IAEA). The amended Directive is to be transposed into national law by 15 August 2017. The amendments:

- strengthen the independence of national regulatory authorities;
- introduce a high-level EU-wide safety objective to prevent accidents and avoid radioactive releases;
- set up a European system of peer reviews on specific safety issues every six years;
- increase transparency on nuclear safety matters by informing and involving the public; and
- promote an effective nuclear safety culture.

The Member States had to send their implementation reports by 22 July 2014. Since they cover the period prior to the adoption of the amendments, this report is based on the original version of the Directive. However, in order to give in this report a more complete picture of implementation of the current Euratom legal framework for nuclear safety, references to the amended Directive may appear, especially when an obligation arising from the original version has been expanded in the amended Directive.

### 1.3. Structure of the report and general approach

The report aims to provide the Council and Parliament with a complete overview on the current state of implementation of the Directive across the EU.

After a general introduction on how the Directive has been implemented, the report deals, in Section 3, with issues related to nuclear safety governance, corresponding to Articles 4, 5, 8 and 9(3) of the Directive. Section 4 is devoted to the safety of nuclear installations and addresses the technical and human aspects of nuclear safety, which are covered by Articles 6 and 7 of the Directive[5]. The main achievements in the field of nuclear safety are presented as long as they correspond to a provision of the Directive. Challenges in the implementation of the Directive are also identified under each topic. The report makes recommendations to the Member States in connection with these challenges and states what corrective measures the Commission has taken or plans to take. This report does not address the situation of the Member States individually but rather aims to underline dominant trends, thus focusing on major problems and identifying corrective measures. However, a short presentation of the

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authorities from all EU Member States as well as representatives of the European Commission. ENSREG helps to establish the conditions for continuous improvement and to reach a common understanding in the areas of nuclear safety and radioactive waste management.

[4] Association comprised of the nuclear regulatory bodies from 18 countries in Europe. It serves as a network of chief nuclear safety regulators exchanging experience and discussing significant safety issues.

[5] The other articles of the Directive do not impose obligations on Member States and are therefore not covered in this report.

steps taken by each Member State to implement the Directive is provided for in the accompanying Staff Working Document.

## 2. OVERVIEW OF IMPLEMENTATION AS REGARDS THE LEGAL FRAMEWORK AND THE REGULATORY AUTHORITY

In respect of the Directive's obligations regarding the establishment of a legal framework for nuclear safety, the setting-up of a regulatory authority, the allocation of appropriate resources, and the performance of international peer reviews of the system, it has been reported that all the Member States have adopted corresponding legislative measures.

However, some Member States need to make certain that their regulatory authority has adequate resources.

As regards international peer reviews of the regulatory infrastructure, 19 Member States (including all Member States with nuclear power plants) have hosted an Integrated Regulatory Review Service (IRRS) coordinated by the IAEA or plan to host one by the end of 2015. That leaves 9 Member States that have not hosted such a review, although 5 of them have planned one in the coming years, the Directive's requirement being to host an international review at least every ten years[6].

[6] The deadline for the 10 years should start for each Member State from the date of adoption of the transposition measures. Given that the transposition deadline was 22 July 2011, a review mission should be hosted at the latest by 22 July 2021.

## 3. NUCLEAR SAFETY GOVERNANCE

Today, the EU has the largest number of nuclear power reactors in the world and a number of Member States are planning investments in this sector. Member States already using nuclear energy and those launching a nuclear programme need to have the following in place:

- a well-organised legislative, regulatory and organisational framework for nuclear safety, including a clear allocation of responsibilities;
- an independent competent regulatory authority endowed with adequate powers and resources;
- effective public information procedures, and
- a regular peer review of the whole system.

### 3.1. Legislative, regulatory and organisational framework (Article 4)

All Member States reported that they had a national legislative, regulatory and organisational framework in place to carry out the activities covered by the Directive (Article 4(1)). The national frameworks, which include laws and implementing regulations, have been developed in very different ways, depending on the countries' nuclear profiles and national administrative systems. For instance, some non-nuclear countries address such issues through general legislation on health, environment or civil protection.

However, the allocation of responsibilities (issuing licences, monitoring, imposing penalties) between the competent public bodies, as presented in some national reports, is not entirely clear. Although the allocation of responsibilities depends on the national legal systems and practices, this is more complex when there are several administrative levels or several bodies contributing to decision-making. It is indeed important that where several authorities have responsibilities for nuclear safety, the clear allocation of responsibilities and the effective coordination of the regulatory functions should be ensured to avoid any omissions or undue duplications as well as conflicting requirements.

Article 4(2) of the Directive requires Member States to maintain and improve the national framework, taking into account operating experience, insights gained from safety analyses for operating nuclear installations, development of technology and results of safety research. Several national reports do not state how these elements are used to maintain and improve the national framework.

### 3.2. Competent regulatory authority (Article 5)

All Member States reported that they had established a regulatory authority to monitor the activities covered by the Directive (Article 5(1)).

The legal status of these authorities differs from one country to another. In some Member States, the regulatory authorities are ministerial departments; in others, they are structurally independent from the government. In other cases, there is a system of authorities within and outside the governmental structure.

In some countries, reorganisation has happened recently or is currently under way. One approach is for bodies subordinated to different ministries to be brought together in one

legally independent authority. All that the Directive requires on this point is that the regulatory authority is functionally separate from any other body or organisation concerned with the promotion of nuclear energy (Article 5(2)).

However, challenges in the implementation of the Directive have been identified as regards the regulatory authority's legal powers and human and financial resources (Article 5(3)). From the Commission's perspective, such situations may jeopardise the necessary independence of the regulatory authority. This matter will require special attention by national authorities.

In many cases, the regulatory authority relies on a technical support organisation (TSO) to review and assess files submitted by licence holders. However, it is not always completely clear how conflicts of interest are avoided within TSOs, especially when they themselves are operating nuclear installations (e.g. research reactors) or are, at least partially, working for licence holders.

### 3.3. Information to the public (Article 8)

Member States handle the question of transparency in different ways and to differing extents. The most common practices include information release through the regulatory authority's website, press releases, media interaction and annual reports. Some countries stated that regulatory decisions are published in an official journal.

The types of actions that have been reported include:

- the regulatory authority defined a communication strategy or policy;
- specific communication tools were put in place for use in nuclear crisis situations;
- inspection follow-up letters were published on the regulatory authority's website;
- a consultative body on transparency was set up, bringing together members of parliament, civil society representatives, recognised experts and industrial and institutional stakeholders.

Going beyond the obligation of transparency required by Article 8 of the Directive, some Member States reported on public involvement activities, corresponding to an obligation under the amended Directive.

### 3.4. International peer review of the national framework (Article 9(3))

Pursuant to the Directive, all Member States are obliged to host an international peer review to assess their national framework and competent regulatory authorities at least every ten years.

By the end of 2015, all EU Member States operating nuclear power plants will have hosted, over the required 10-year period, an international peer review team to evaluate their national regulatory infrastructure for nuclear safety and radiation protection. Five Member States not producing nuclear energy will also have hosted a review mission by 2015. Some reviews cover the whole scope of nuclear safety, while others had a reduced scope.

This table shows all the international peer reviews (full or reduced scope missions) carried out within the Member States since the deadline for the transposition of the Directive elapsed in

2011.

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| **Austria** | | | | | |
| **Belgium** | | | Full-Scope Mission | | |
| **Bulgaria** | | | Full-Scope Mission | | |
| **Croatia** | | | | | Full-Scope Mission |
| **Cyprus** | | | | | |
| **Czech Republic** | | | Full-Scope Mission | | |
| **Denmark** | | | | | |
| **Estonia** | | | | | |
| **Finland** | | Reduced-Scope Mission | | | |
| **France** | | | | Full-Scope Mission | |
| **Germany** [7] | | | | | |
| **Greece** | | Reduced-Scope Mission | | | |
| **Hungary** | | | | | Full-Scope Mission |
| **Ireland** | | | | | Full-Scope Mission |
| **Italy** | | | | | |
| **Latvia** | | | | | |
| **Lithuania** | | | | | |
| **Luxembourg** | | | | | |
| **Malta** | | | | | Full-Scope Mission |
| **Netherlands** | | | | Full-Scope Mission | |
| **Poland** | | | Full-Scope Mission | | |
| **Portugal** | | | | | |
| **Romania** | Full-Scope Mission | | | | |
| **Slovak Republic** | | Full-Scope Mission | | | |
| **Slovenia** | Full-Scope Mission | | | | |
| **Spain**[8] | | | | | |
| **Sweden** | | Full-Scope Mission | | | |
| **United Kingdom**[9] | | | | | |

7 Germany hosted an international peer review (IRRS mission) in 2008 and a follow-up mission in 2011.
8 Spain hosted an international peer review (IRRS mission) in 2008 and a follow-up mission in 2011.
9 The UK has invited modular international peer reviews (IRRS missions) in 2006 and 2009 and a follow-up

In general, the peer review teams' reports are posted online by Member States. However, not all Member States systematically reported the outcomes of the peer review directly to the Commission, even though this is required under Article 9(3) of the Directive. The Commission reminded the Member States of their obligations in this respect. Most of the reports have now been obtained.

To support the process, between 2011 and 2015, the Commission provided EUR 1.8 million for the IAEA's Integrated Regulatory Review Service (IRRS) missions programme. The Commission's aim was to assist Member States in complying with this requirement of the Directive. Staff from the Commission's Joint Research Centre took part as observers in such missions. The Commission will continue to provide assistance beyond 2015.

Some Member States also reported that they had hosted international reviews of installations, although this goes beyond the scope of the Directive. IAEA OSART[10] missions to evaluate the safety of operating nuclear power reactors take place several times a year in the EU. Under the amended Directive, the peer review obligation is extended to technical issues through a new system of European topical peer reviews. The first of these will start in 2017.

### 3.5. Recommendations to Member States and further Commission action

In light of the above, special attention should be paid by members of the Euratom Community to the following challenges:

- Member States should ensure a clear allocation of responsibilities and coordination between relevant state bodies, especially when several administrative levels or several bodies contribute to decision-making.

  *The Commission will pay special attention to this matter when monitoring the transposition of the amended Directive.*

- When developing the legal framework, Member States should systematically take into account lessons learned from operating experience, the development of technology and safety research.

  *To supplement the steps taken to this end at national level, the Commission will closely monitor any new developments in this field and enhance coordination among Member States.*

- Member States should ensure an effective independence of their competent regulatory authorities from undue influence in their regulatory decision-making and guarantee that they are provided with the appropriate means and competencies to properly carry out the responsibilities assigned to them. For this purpose, Member States should ensure that the regulatory authority has human and financial resources commensurate with the country's current nuclear profile, nuclear power development projects and decommissioning plans. In addition, they should guard against possible conflicts of interest in the regulatory authorities' technical support organisations.

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mission in 2013.

[10] Operational Safety Review Team.

*The Commission will pay special attention to the independence of the regulatory authority when monitoring the implementation of the amended Directive. It will encourage an effective cooperation among Member States in order to ensure added value from existing resources.*

- Member States should systematically report the outcomes of any international peer review to the Member States and the Commission, as required in Article 9(3) of the Directive.

  *The Commission will require a systematic reporting of the outcomes of these international peer review missions in the future.*

- All Member States should host international peer review missions to review the legal and regulatory framework, since the Directive requires these missions to be carried out on a 10-year basis. Member States should consider in particular hosting 'full scope' rather than 'limited scope' missions in which the country chooses to leave some issues out.

  *The Commission will continue to check that such review missions are organised in the Member States at least every 10 years, in the setting of the memorandum of understanding between the Community and the IAEA, and provide support to the IAEA in the implementation of the programme of the IRRS missions in the EU Member States.*

## 4. SAFETY OF NUCLEAR INSTALLATIONS (ARTICLES 6 AND 7)

This section addresses the steps taken by Member States to address the two complementary pillars of nuclear safety: human factor and technical safety. Although the Directive does not include technical criteria to ensure the safety of nuclear installations, it obliges Member States to maintain a national framework setting out the licence holders' main obligations as defined in the Directive. Such provisions are complemented by those on nuclear safety education and training.

In the case of several countries operating both nuclear power plants and other nuclear installations, the national reports focus almost entirely on power plants. Very little information is available for the other types of installation covered by Article 3 of the Directive.

### 4.1. Obligations of licence holders (Article 6)

Almost all Member States with nuclear installations reported that their legislation explicitly assigns primary responsibility for the nuclear safety of nuclear installations to the licence holder, thus complying with Article 6(1). However, the issue of the control over contractors and sub-contractors remains a challenge. To cope with this, some national systems impose a limit on the cascade of contractors, allowing, for example, a maximum of two contractors on a specific task. The amended Directive explicitly makes licence holders responsible for the actions of contractors and sub-contractors.

All Member States with nuclear installations have programmes to conduct regular safety assessments of their installations under the supervision of the regulatory authority (as provided for in Article 6(2)), although the methodology for such reviews varies between

countries. Under the amended Directive, such reviews have to be conducted at least every 10 years.

Member States reported extensively on arrangements in place to mitigate a nuclear accident and on emergency measures (Article 6(3)). Emergency procedures, however, vary across Member States, which highlights the need for coordination. Some countries have included in their legislation a requirement for a nuclear power plant licence holder to implement plant-specific emergency operating procedures (EOPs) and severe accident management guidelines (SAMGs).

National reports refer widely to management systems focusing on safety and quality control procedures, as provided for in Article 6(4) of the Directive. Sometimes, the regulatory authority's annual inspection plan provides for inspections focusing on the licence holder's quality assurance or management system.

Member States reported that the obligation in Article 6(5), i.e. that the national framework requires licence holders to maintain adequate human and financial resources to fulfil their obligations, is usually met in practice. However, Member States did not always report that this obligation is explicitly stated in their legislation. Moreover, it is not always clear whether financial resources cover the entire lifetime of the installation, including decommissioning. In addition, the question of how to check that licence holders have adequate financial resources has not been settled: for instance, whether all nuclear authorities have the capabilities to assess licence holders' financial resources.

Overall, major improvements have already been made on the ground as a result of the post-Fukushima stress tests. Such improvements are detailed in the national action plans submitted to a second European peer review in April 2015 (see section 4.3 below). As nuclear safety can be ensured only through continuous development, future nuclear installations will be subject to the stringent obligations arising from the amended Directive. These include requirements that nuclear installations be designed, sited, constructed, commissioned, operated and decommissioned with the objective of preventing accidents and mitigating the consequences should an accident occur.

### 4.2. Expertise and skills in nuclear safety (Article 7)

As recalled in recital 19 of the Directive, a strong safety culture is one of the fundamental safety management principles necessary for achieving safe operation of nuclear installations. Likewise, the 2014 Review Meeting of Contracting Parties to the Convention on Nuclear Safety acknowledged that major accidents in the nuclear and other high hazard industries most frequently derive from organisational and human factors. This view is restated more firmly in the amended Directive.

Responsibilities for expertise and skills in nuclear safety lie both with the regulatory authority and the licence holders. In this sense, many regulatory authorities have already made 'safety culture' a subject in its own right in nuclear safety supervision. Likewise, initiatives to ensure or promote adequate training for regulatory authorities or utilities staff have been put in place in several Member States.

Member States reported on their efforts to increase skills and competencies in the nuclear sector. Some gave details of measures to link the academic world and the industry in order to ensure shared understanding of key skills priorities for the nuclear sector and how skills demand can be met.

However, recruiting and retaining the most qualified staff in the regulatory authority remains a challenge. Although in many Member States salary levels may be higher for certain categories of personnel in the private sector, some regulatory authorities manage to offer professional advantages that may offset the salary difference.

The examples of action taken to enhance expertise and skills in nuclear safety, as reported by Member States include:

- the establishment of a multi-annual strategy on developing expertise and skills, including safety culture;
- the adoption of legal provisions on human, organisational and social aspects in nuclear safety;
- the drawing-up, by the regulatory authority, of safety indicators to measure how organisational and human aspects of nuclear safety are being taken into account;
- topic-specific inspections by the regulatory authority, focusing on licence holders' quality assurance and management systems;
- checks, by the regulatory authority, that human factors are incorporated into safety aspects when a nuclear installation is designed or modified;
- as regards training:
    - the establishment of a maintenance practice centre, which includes full-scale equipment and training mock-ups;
    - a computer-based training system for the regulatory authority;
    - evaluation of competence in disciplines of importance to the regulatory authority and associated training and recruitment processes;
    - training programmes tailored to each new inspector, with progress monitored by a manager;
    - limiting for a time the administrative power vested in young inspectors.

### 4.3. Recommendations to Member States and further Commission action

- The next national implementation reports should take into account all installations covered by the amended Directive and not only nuclear power plants. Similarly, Member States should ensure appropriate application of the Directive to all such nuclear installations.

  *The Commission will pay special attention to Member States' implementation of the Directive to all nuclear installations in the remit of the Directive and the adequate reporting.*

- Member States should complete the implementation of the recommendations of nuclear stress tests to improve the safety of nuclear installations.

  *Between 20th and 24th April 2015, the Commission organised, with the support of ENSREG, the 2nd National Action Plan Workshop to peer review Member States'*

*progress on technical implementations related to their stress test actions. Members States with a nuclear programme as well as others Member States (Austria, Croatia, Denmark, Ireland, Poland) and non-EU countries (Armenia, Norway, Switzerland, Taiwan, Ukraine, USA) participated in this workshop. This second workshop focused in particular on evaluating the progress in the implementation process, including additional measures undertaken and changes included in the original schedule. Special attention was devoted to the technical basis for the changes proposed as well as the review of studies and analyses identified and completed since the 2013 workshop. The strong and continuous commitment of all participating nuclear operators and regulatory authorities towards the full implementation of all improvement actions identified in their respective national action plans as well as the important number of actions already completed under the oversight of the national safety regulatory authorities were recognised during the workshop. However, it was noted that the status of implementation differs compared to the original deadlines presented in the 1st National Action Plan summary report[11] where major modifications were to be implemented by 2015-2018, and at the latest by 2020. While many nuclear operators have almost completed implementation, and others have clear schedules to complete actions by 2016, some have rescheduled specific actions for later than 2020. The Commission considers that the rate of safety upgrade implementation should be improved. A status report from each participating country on the implementation of the national action plan should be published periodically to ensure a transparent monitoring with the aim of publishing a final report on the implementation which coincides with the new Nuclear Safety Directive coming into effect in 2017.*

*The Commission will continue to closely monitor the progress made in the fulfilment of the national action plans implementing the stress tests results.*

*In addition, in line with the Roadmap for the Energy Union[12], the Commission intends to publish a nuclear illustrative programme (PINC) to provide clarity on the needs for new investment in the nuclear field including safety upgrades of current nuclear installations.*

- The Member States should monitor licence holders' use of contractors and sub-contractors and the possible safety implications. Member States will need to give special consideration to this issue when transposing the amended Directive, which states that the primary responsibility of the licence holder includes responsibility for the activities of contractors and sub-contractors that might affect safety.

  *The Commission will pay special attention to this issue when monitoring the implementation of the amended Directive.*

- The national legal frameworks put in place by Member States should require licence holders to maintain well-qualified human and adequate financial resources during the whole lifecycle of installations.

  *The Commission will pay special attention to this issue when monitoring the implementation of the amended Directive.*

11 http://www.ensreg.eu/node/1343

12 COM(2015)80 final

*The Commission will also assist the Member States in complying with this obligation through the implementation of the Euratom Fission Training Schemes (EFTS), a lifelong learning and mobility programme notably designed to improve expertise and skills of the staff of the licence holders*[13].

- The Member States should better coordinate national approaches to emergency preparedness and response. This issue is being addressed in the relevant international forums and in bilateral cooperation between Member States.

  *The Commission will address the issue at European level in conjunction with the relevant provisions of the Basic Safety Standards Directive,*[14] *which is to be transposed into national law by 2018.*

[13] http://ec.europa.eu/research/energy/euratom/index_en.cfm?pg=fission&section=training

[14] Council Directive 2013/59/EURATOM of 5 December 2013, laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/EURATOM, 90/641/EURATOM, 96/29/EURATOM, 97/43/EURATOM and 2003/122/EURATOM (OJ L 13, 17.1.2014, p. 1–73).

## 5. CONCLUSION

Having reviewed the national reports, the Commission concludes that there is, in general, a good level of compliance with the 2009 Nuclear Safety Directive.

The Directive has proven to be an effective instrument in improving nuclear safety, as most Member States reported that they had upgraded their legal system in order to transpose it into national law.

The basic aim of the Directive is to ensure appropriate national arrangements to achieve a high level of safety. In general, the national reports demonstrate that these arrangements are in place in the EU as regards the legal framework and regulatory authority. However, in some cases it is not certain that such authorities are adequately staffed and funded. Cooperation among Member States should be encouraged in order to ensure an effective use of existing resources, for instance in the case of Long Term Operation of nuclear power plants' or new builds' licencing procedures. Such cooperation would be particularly beneficial for smaller competent regulatory authorities.

International benchmarking has been widely used: by the end of 2015, international counterparts will have reviewed the legal and organisational framework of all Member States operating nuclear power plants, through IAEA Integrated Regulatory Review Service missions. Full-scope missions should be preferred to limited ones.

Safety arrangements imposed on nuclear installations (under the supervision of regulatory authorities), including development of expertise and skills, are largely in place. Wherever appropriate, nuclear plant licence holders tend to establish strong synergies with national or international research and training organisations dedicated to the improvement of reactor safety regulation, technology and culture.

However, although most of Member States reported having national provisions as regards the human and financial resources of the licence holders, it should be clarified whether the regulatory authority has the ability to assess the adequacy of such resources, especially financial ones, and whether these obligations are effectively implemented and enforced. In this respect, it would be worth recalling Article 192 of the Euratom Treaty according to which "Member States shall take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community. They shall facilitate the achievement of the Community's tasks."

As confirmed through the nuclear stress tests and the initial check of Member States' transposition of the Directive, there are differences from country to country over the identification and management of safety issues. This is partly due to the fact that the 2009 Directive only contained broad principles, leaving some leeway to Member States as regards their implementation, and failed to impose some important requirements. The amended Nuclear Safety Directive addressed these deficiencies, by strengthening important obligations on, for instance, the independence of the regulatory authority and interaction with the public. The amended Directive also goes beyond the 2009 Directive's requirements by introducing a common EU safety objective, supplemented by a European peer-review mechanism, with a view to harmonising the EU approach to nuclear safety. As a result, the transposition of the amended Directive represents a new challenge for Member States.

The next national reports on the implementation of the Directive should be sent to the Commission by 22 July 2020. The Commission's report to the Council and Parliament will then follow. By that time, the Commission will have received and analysed the Member States' national provisions transposing the amended Directive.

## References


[1] Directive 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18).

[2] Council Directive 2014/87/EURATOM of 8 July 2014 amending Directive 2009/71/EURATOM establishing a Community framework for the nuclear safety of nuclear installations (OJ L 219, 25.7.2014, p. 42).

[3] ENSREG Guidelines regarding Member States Reports as required under Article 9(1) of Council Directive 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (HLG_p(2012-21)_108).

[4] Summary Report on the Sixth Review Meeting of the Contracting Parties to the Convention on Nuclear Safety, 24 March to 4 April 2014, Vienna (CNS/6RM/2014/11_final).