

News Briefs

European Atomic Energy Community

Adoption of the Nuclear Illustrative Programme (PINIC)

Following a favourable opinion of the Economic and Social Committee, the European Commission adopted the Communication of a Nuclear Illustrative Programme (PINIC) on 4 October 2007.

PINIC reviews the investments in nuclear energy over the last 10 years, providing a description of the economics of nuclear power generation, its impact on the overall EU energy mix as well as its conditions for public and political acceptance.

The main aspects of PINIC are the following:

- It is for each Member State to decide whether or not to rely on nuclear power for the generation of electricity. Decisions to expand nuclear energy were recently taken in Finland and in France. Other EU countries, including the Netherlands, Poland, Sweden, Czech Republic, Lithuania, Estonia, Latvia, Slovakia, the United Kingdom, Bulgaria and Romania have re-launched a debate on their nuclear energy policy.
- With 152 reactors spread over the EU 27, nuclear power contributes 30% of Europe's electricity today – however, if the planned phase-out policy within some EU Member States continues, this share will be significantly reduced. To meet the expected energy demand and to reduce European dependency on imports, decisions could be made on new investments or on the life extension of some plants.
- Reinforcing nuclear power generation could also represent one option for reducing CO₂ emissions and play a major role in addressing global climate change. Nuclear power is essentially carbon emissions-free and forms part of the Commission's carbon reduction scenario including the objective of reducing CO₂ emissions. This could also feature as an important consideration when discussing future emissions trading schemes.
- The most crucial factor affecting the prospect of growth of nuclear power is its underlying economics as a nuclear plant involves an up front investment ranging from 2 euros (EUR) to EUR 3 billion. Nuclear energy generation incurs higher construction costs in comparison to fossil fuels, yet operating costs are significantly lower following the initial investments. Furthermore, nuclear power generation is largely immune to changes in the cost of raw material supplies, as a modest amount of uranium, which comes largely from stable regions of the world, can keep a reactor running for decades. Therefore, in most industrialised countries new nuclear power plants offer an economic way to generate base-load electricity.
- The nuclear industry has made considerable investments since 1997. The EU recognises the importance of maintaining a technological lead in the field of nuclear power and supports the further development of the most advanced framework for nuclear energy, including non-proliferation, waste management and decommissioning. Since the establishment of the Euratom Treaty, nuclear safety and the radiological protection of the

public have been one of the main concerns of the European Community and are issues that have gained further importance in view of the past and the present enlargement.

- At EU level, the role should be to develop further the most advanced framework for nuclear energy in those Member States that choose nuclear power, in conformity with the highest standards of safety, security and non-proliferation as required by the Euratom Treaty. This should include nuclear waste management and decommissioning.

Establishment of the High Level Group – Council Conclusions on Nuclear Safety and Safe Management of Spent Nuclear Fuel and Radioactive Waste (2007)

The High Level Group on Nuclear Safety and Waste Management (HLG) was established by Commission Decision of 17 July 2007 [2007/530/Euratom] and held its first meeting on 12 October 2007. It comprises senior officials from national regulatory or nuclear safety authorities from the 27 Member States. The first meeting was opened by EU Energy Commissioner Andris Piebalgs, followed by discussions on the working method and the purpose of the HLG.

According to the Commission Decision, the HLG shall assist the EU institutions in progressively developing common understandings and eventually additional European rules in the fields of the safety of nuclear installations and the safe management of spent fuel and radioactive waste. The HLG may set up working groups or subgroups to study specific subjects and every two years it shall submit a report of its activities to the Commission, the European Parliament and the Council.

The Council Conclusions of 8 May 2007 on Nuclear Safety and Safe Management of Spent Nuclear Fuel and Radioactive Waste¹ paved the way for the creation of the HLG. The Conclusions were adopted based on the results of the Council's ad hoc Working Party on Nuclear Safety, which submitted its final report to the Council in December 2006. They set out a list of possible actions, acknowledging that any new initiative at the EU level should be assessed against their potential contribution to the whole system of existing efforts. The actions concern the safety of nuclear installations, the safe management of spent fuel and radioactive waste as well as the financing of both the decommissioning of nuclear installations, and the safe management of spent fuel and radioactive waste.

With its actions the HLG is to optimise the efforts and results which Euratom and its Member States achieve, *inter alia*, at the International Atomic Energy Agency and the OECD Nuclear Energy Agency. In principle, the Group will convene several times a year to discuss and follow up the agreed work programme.

Seminar on the Transposition of Council Directive 2006/117/Euratom on the Supervision and Control of Shipments of Radioactive Waste and Spent Fuel (2007)

On 28 September 2007, the European Commission organised a seminar in Luxembourg on the transposition of Council Directive 2006/117/Euratom (see *Nuclear Law Bulletin* No. 79). The seminar aimed to establish a harmonised approach and facilitate a timely transposition of the Shipment Directive into national legislation by providing a forum for information exchange on transposition difficulties experienced, encountered or expected by Member States, focusing on individual provisions of the Directive and possible different transposition approaches.

1. Adopted at the 2798th meeting of the Council of the European Union (Economic and Financial Affairs).

European Nuclear Energy Forum Inaugurated in Bratislava (2007)

On 26/27 November 2007, the first European Nuclear Energy Forum (ENEF) was held in Bratislava, Republic of Slovakia. ENEF was initiated by the European Commission in order to create a discussion forum on energy that would allow all the stakeholders to hold an open and transparent debate on nuclear energy. The European Council supported the proposal suggesting that a broad discussion takes place among all relevant stakeholders on the opportunities and risks of nuclear energy.

European Commission President José Manuel Barroso's speech stressed the role which nuclear energy can have in meeting growing concerns about security of supply and CO₂ emission reduction. He reiterated the willingness of the Commission to help launch a transparent debate on nuclear energy and to ensure that the public receives relevant and reliable information on the different options available. Commissioner for Energy Andris Piebalgs also referred to public acceptance as the second important pillar after a high level of safety, security and non-proliferation which he described as the absolute condition for the use of nuclear energy.

ENEF is co-hosted by two countries – the Republic of Slovakia and the Czech Republic – and will meet twice a year.²

European Parliament Report on Assessing Euratom – 50 Years of European Nuclear Energy Policy

The European Parliament's "Report on Assessing Euratom – 50 Years of European Nuclear Energy Policy" was drafted by the Parliament's Committee on Industry, Research and Energy and adopted on 4 April 2007.³ According to the Report, the European Atomic Energy Community (Euratom) Treaty, which was signed 50 years ago on 25 March 1957, continues to provide a sound legal framework to govern the supervision of the use of nuclear energy in the European Union (No. 7 of the Report).

The Report states that the provisions laid out in the Euratom Treaty are still applicable, are continually enriched as legislation is adopted on the basis of the Euratom Treaty, and make an important contribution to the safe operation of nuclear facilities in Europe (No. 5 of the Report).

However, the European Parliament also expresses regret about the "unacceptable democratic deficit" of the Euratom Treaty and that the Parliament is almost completely excluded from the Euratom legislative process (No. 28 of the Report). It further regrets the absence of a legislative corpus on harmonised standards with real added value, particularly in comparison with the existing international framework for nuclear safety, the management of radioactive waste and the decommissioning of nuclear plants (No. 31 of the Report).

The European Parliament Report formulates guidelines for the future, highlighting areas that need to be somewhat reformed, calling especially for a rejuvenation of the decision-making procedures which would enable the Parliament to be closely involved in legislative procedures. In one statement, the legislative body considers "that the absence of the legal framework provided by the Euratom Treaty would lead to the renationalisation of nuclear policy in Europe, which would be a

2. This information is partly taken from Press Release IP/07/1767 of 26 November 2007, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/1767&format=HTML&aged=0&language=EN&guiLanguage=en>.

3. Rapporteur E. Maldeikis, final A6-0129/2007.

setback for the *acquis communautaire*, and would give rise to a risk of legal uncertainty for all the 27 Member States” (No. 37 of the Report).

G8 Heiligendamm Statement on Non-Proliferation and G8 Report of the Nuclear Safety and Security Group

The annual summit of the Group of Eight Leading Industrialised Nations (G8) was held in Heiligendamm, Germany from 6 to 8 June 2007. The key issues addressed were climate change and Africa policies. The heads of state and government also agreed on a statement on non-proliferation which reiterates their resolute commitment to counter the global proliferation challenge and to the multilateral treaty system which provides the normative basis for all non-proliferation efforts (Treaty on the Non-Proliferation of Nuclear Weapons, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention). It also addresses regional proliferation challenges, assuring G8 commitment to resolve the proliferation concerns posed by Iran’s nuclear programme and continue to support the Six-party Talks regarding the Korean Peninsula.

The Report of the G8 Nuclear Safety and Security Group (NSSG) to the G8 Summit 2007 in Heiligendamm covers the areas:

- nuclear regulatory infrastructure;
- national nuclear safety and security infrastructure and partnerships;
- Chernobyl commitments;
- nuclear safety of the nuclear power plant Medzamor, Armenia;
- safety and security of radioactive sources;
- global nuclear safety network; and
- nuclear and radiological emergency response.

The NSSG was established after the G8 Kananaskis Summit in 2002. According to its mandate, the NSSG shall provide technically informed, strategic policy advice on issues that could impact safety and security in the peaceful use of nuclear energy, in close co-operation with multilateral organisations.

Global Nuclear Energy Partnership

Sixteen governments signed the Global Nuclear Energy Partnership Statement of Principles during the second ministerial meeting, held on 16 September 2007 in Vienna.

The five original members of the Global Nuclear Energy Partnership (GNEP) the US, France, Russia, Japan and China first convened at a ministerial meeting on 21 May 2007. Prior to the second ministerial meeting, Australia, Bulgaria, Ghana, Hungary, Jordan, Kazakhstan, Lithuania, Poland, Romania, Slovenia and Ukraine became official partners in GNEP.⁴ Another 22 countries attended the meeting as “candidate partners” or “observer countries”.

In the Statement, the signatories recognise “the need for a variety of approaches and technical pathways in achieving a long-term vision of the future global civilian nuclear fuel cycle, which will

4. On 13 November 2007, Italy joined GNEP, becoming the 17th member of the partnership.

help ensure that nuclear energy makes a major contribution to global development in the 21st century consistent with non-proliferation and safety objectives”.

The Statement of Principles points out that co-operation will be carried out under existing and, where appropriate, new bilateral arrangements as well as existing multilateral arrangements such as the Generation IV International Forum.

GNEP is a comprehensive strategy to increase US and global energy security, reduce the risk of nuclear proliferation, encourage clean development around the world and improve the environment (see *Nuclear Law Bulletin* No. 79).

International Nuclear Law Association

2007 Nuclear Inter Jura Biennial Congress in Brussels

The 2007 Nuclear Inter Jura Congress was held in Brussels, Belgium from 1 to 4 October 2007, followed by a technical visit which was organised on 5 October 2007.

The Congress addressed a wide variety of legal issues in the context of the latest political and economic climate as well as the future. After an inaugural session with reputable and interesting speakers, legal issues were presented and discussed in seven sessions:

- Nuclear Safety – New Regulatory Directions.
- Nuclear Liability and Insurance – The Post-revision Agenda.
- Radiological Protection and Radioactive Sources.
- Radioactive Waste Management and Environmental Issues.
- Nuclear Security.
- Euratom Treaty – 50th Anniversary.
- International Nuclear Trade.

The session on the 50th anniversary of Euratom was opened by EU Energy Commissioner *Andris Piebalgs* who addressed the participants on the achievements and the future of nuclear energy in the European Union, highlighting challenges such as the need for investments, public acceptance as a key factor, waste issues and the need for harmonisation in the field of nuclear liability. Keynote speeches were delivered by André-Claude Lacoste, President of the French nuclear safety authority (ASN), Roland Dussart-Desart, Chairman of the OECD/NEA – Nuclear Law Committee, M.L.E. Holm, President of the International Commission on Radiological Protection, Dominique Ristori, European Commission, Deputy Director General DG TREN and Roland Kobia, Member of the Cabinet of EU Energy Commissioner. A special feature of this year’s Congress was the Panel on “New Build” – Questions for the Global Legal Regime – A Hypothetical, in which a panel, together with the audience discussed the steps and challenges in building a new nuclear power plant on the basis of a fictional case.

The Congress was the 18th in a series of biennial meetings of the International Nuclear Law Association (INLA) which was created in 1972 to promote the study of legal issues associated with the peaceful uses of nuclear energy and to encourage the exchange of information in this field. The next Nuclear Inter Jura Congress will be held in Canada in 2009.

World Nuclear University

The third Summer Institute of the World Nuclear University (WNU-SI) took place in *Cheongju, Korea* in July 2007. The aim of the WNU-SI is to provide a unique educational experience aimed at building future global leadership in fields of nuclear science and technology. Apart from a technical tour to nuclear facilities and industries, the 6-week programme focuses on presentations from leading world experts on the full range of topics relevant for the future of nuclear energy. This year's programme was attended by 102 young professionals coming from industry and regulatory authorities from all over the world.

As part of the WNU-SI, the Legal Affairs Offices of the OECD Nuclear Energy Agency and of the International Atomic Energy Agency had jointly prepared a 4-day session focusing on general nuclear law questions, liability and environmental concerns, public participation in decision-making, non-proliferation and safeguards. A case study was also developed to analyse legal issues affecting the construction of a new nuclear power plant.

The next WNU-SI will be held at McMaster University, Canada from 5 July through 15 August 2008.

The WNU also organised its first regional session in Beijing, China in July 2007. This 1-week orientation course aimed to inform an audience of Chinese graduate students and nuclear professionals on the key issues in the nuclear energy sector. The emphasis was placed on such items as the nuclear fuel cycle, design management, project management and financing, nuclear law, nuclear economics, nuclear transport, radiation protection and radioactive waste management. OECD/NEA Legal Affairs participated in this Seminar.

The WNU is a global partnership of leading institutions committed to enhancing education and leadership in the nuclear domain. It is supported by the World Nuclear Association, the OECD Nuclear Energy Agency, the World Association of Nuclear Operators and the International Atomic Energy Agency. Further information is available at the WNU website: www.world-nuclear-university.org.