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## FORATOM's further commentary on PINC 2016

*The European Atomic Forum (FORATOM) is the Brussels-based trade association for the nuclear energy industry in Europe. The membership of FORATOM is made up of 15 national nuclear associations and through these associations, FORATOM represents nearly 800 European companies working in the industry and supporting around 800,000 jobs.*

### Introduction

On 4 April 2016, the European Commission published its draft Communication “Nuclear Illustrative Programme” – PINC” following the requirement of the Euratom Treaty Art. 40 in which “in order to stimulate action by persons and undertakings and to facilitate coordinated development of their investment in the nuclear field, the (European) Commission shall periodically publish illustrative programmes indicating in particular nuclear energy production targets and all the types of investment required for their attainment.”

It is important to note that “The Commission shall obtain the opinion of the Economic and Social Committee on such programmes before their publication”.

### Comments

FORATOM considers that the draft Communication offers a “snapshot” of nuclear energy in Europe and that what is now needed is a vision and strong leadership in order to promote nuclear as part of the solution to climate change, in view of the agreement at the COP21 conference in Paris and the EC’s important role in securing it, as well as to meet the other two pillars of the Energy Union which are to ensure secure energy supply at competitive prices.

The draft Communication PINC underlines many positive aspects of the current situation for nuclear power such as the fact that nuclear energy is part of the energy mix of half of the EU Member States. In those countries that choose to use it, nuclear has a role to play in ensuring the security of electricity supply. With 27% of electricity produced from nuclear energy and 27% from renewable sources, the EU currently generates more than half of their electricity without producing greenhouse gases. It also notes that there are 129 nuclear power reactors in operation in 14 Member States, with a total capacity of 120 GWe and an average age close to 30 years. New build projects are envisaged in 10 Member States, with four reactors already under construction in Finland, France and Slovakia. Other projects in Finland, Hungary and the United Kingdom, are seeking licensing approval, while projects in other Member States (Bulgaria, the Czech Republic, Lithuania, Poland and Romania) are at a preparatory stage. The United Kingdom announced its intention to close all coal-fired power plants by 2025 and to fill the capacity gap mainly with new gas and nuclear power plants. And the recent announcement by the new UK Government to pursue the Hinkley Point C nuclear power project confirms this engagement. Also to note that the Swedish government decided on 10

June 2016 to lift its moratorium on nuclear new build. The replacement of nuclear reactors will be allowed at existing nuclear sites as they reach the end of their operational duration with a maximum of ten reactors. Moreover the government decided to abolish the nuclear tax by 2019, which will allow nuclear companies to invest in nuclear new build and long-term operation.

Furthermore, many countries in Europe and in the rest of the world will rely on nuclear energy to produce part of their electricity for the long term. The EU has the most advanced legally binding and enforceable regional framework for nuclear safety in the world and, despite diverging views among Member States on nuclear electricity, a shared recognition exists of the need to ensure the highest possible standards for the safe and responsible use of nuclear power and the protection of workers and citizens from excess radiation.

The PINC also recognises that the EU nuclear industry has developed into a global technology leader in all nuclear industry segments and directly employs between 400 000 and 500 000 persons, while facilitating around 400 000 additional jobs. Such leadership is an important asset worldwide. Nuclear-related investment in the global market is estimated at around EUR 3 trillion by 2050.

While in the draft Communication the EC predicts a small decline in nuclear generation capacity at EU level up to 2025, this trend is expected to be reversed by 2030 as new reactors are connected to the grid and the life time extensions of others will be pursued.

Also to note that European companies rank among the world's major providers of nuclear fuel enrichment, manufacture and reprocessing.

Maintaining a nuclear generation capacity of between 95 and 105 GWe in the EU until 2050 and beyond will require, as stated in the draft Communication, further investments over the next 35 years. Between EUR 350 and 450 billion will have to be invested in new plants to replace most of the existing nuclear power capacity. Since new nuclear power plants are designed to operate for at least 60 years, these new plants would generate electricity until the end of the century.

The European Commission concludes that “as a low carbon technology and a significant contributor to security of supply and diversification, nuclear energy is expected to remain an important component of the EU’s energy mix in the 2050 horizon.” FORATOM welcomes this clear endorsement of the important role that nuclear energy will continue to fulfil within the EU.

### **Recommendations**

FORATOM considers that, in order to decarbonise Europe’s economy while maintaining security of supply at competitive prices, more has to be done. While the PINC is a start, Europe cannot afford not to have a clear nuclear policy framework for future investments.

FORATOM recommends that the following is taken into consideration when publishing the final version of the PINC Communication which should, we believe, also integrate the proposals presented by the European Economic and Social Committee in its final report adopted on 21 September 2016, in particular to establish a deeper analysis of nuclear’s competitiveness, contribution to security of supply, and a clear analytical process for national decision-making about the role of nuclear power in relation to other energy sources in the energy mix.

FORATOM urges the Commission to publish the final PINC 2016 as soon as possible, and to commit to providing an update at regular intervals.

1. The **new market design** that the European Commission is working on and that should be part of the next package to be published by the end of 2016 should aim to restore confidence among potential investors in power generation projects of all types, but in particular in large scale low carbon generation projects. The following principles are fundamental to an efficient market:

- a. **No discrimination between technologies** that deliver low carbon energy;
- b. **Full transparency of system costs, and market arrangements designed to ensure that system costs** (e.g. cost of maintaining a secure system) **and transmission costs are allocated equitably;**
- c. **Implementation of market-driven instruments including long-term contracts** that can offer revenue stability and are needed if Europe is to meet its goals to decarbonise its power system at an affordable cost while ensuring security of supply;
- d. Urgent need to **free the power bill from unrelated taxes and levies.**

2. **European financial institutions**, including the European Investment Bank, **should ensure that funds are made available for high quality nuclear projects**, including technology demonstration projects; and that Government and EU support is offered via Euratom loans (assuming an increased ceiling), loan guarantees and credit lines. **All applications for funding should be considered on a non-discriminatory basis.**

3. The Commission should make clear the **importance of nuclear power to achieving climate action goals**, in order to build confidence among equity investors in nuclear power projects. The EU should facilitate projects by providing a **stable regulatory framework and by accelerating progress towards achieving an effective CO<sub>2</sub> price** (carbon tax or carbon floor price should be considered in addition to ETS) and **should discourage Member States from penalising existing low-carbon assets through selective taxation.**

4. The Commission should encourage the nuclear regulatory bodies (ENSREG and WENRA) to **carry out a review of the scope for harmonisation of regulatory requirements** in order to reduce the barriers to deployment and costs of nuclear technology technologies in EU Member States. The Roadmap "**Towards European Reactor Design Acceptance**", developed in 2012 by the ENEF WG Risks and adopted at its Plenary session that same year, should be the basis for further exploring the need for that harmonised approach.

5. The EU is a leader in nuclear expertise and can claim some of the best nuclear innovation and research in the world, relying on state of the art skills and infrastructures. This applies to all aspects of nuclear technology. In order to retain this leadership and competitive advantage, and to keep ahead of technology developments in the rest of the world, **EU-based nuclear fission research needs to be strengthened.** It is therefore important that the EC takes a lead in this direction by calling for a **significantly increased level of funding under the EURATOM Fission & Radioprotection Programme.** This could have important benefits, for example in terms of investment in research infrastructure, retention of technical skills and know-how, and the motivation of young scientists and engineers. Maintaining a healthy nuclear research capability is essential for global competitiveness and for ensuring that the industry remains able in future to deliver the safe, secure low carbon energy that the EU needs.