

## **The role of Euratom in European Energy Policies**

Ladies and gentlemen,

### **Energy is one of the main pillars of the EU construction.**

Two of the three founding Treaties – the Treaty establishing the European Coal and Steel Community which expired on 24 July 2002, and the Treaty establishing the European Atomic Energy Community- Euratom – were focused on energy.

The Euratom Treaty, signed in 1957, aimed originally at promoting the development of nuclear energy as an alternative safe energy source within Europe.

In the 1950s, the perception of the scarcity of conventional energy sources in Europe was high. Coal production was at a peak and seemed to have hardly any possibility for growth. Hydropower had its geographical limitations and the 1956 Suez crisis had brought into focus the risk of an ever-increasing dependence on oil sources outside Europe.

It was also clear that massive investment would be required to fund the development of a complete nuclear fuel cycle, well beyond the financial means of individual European States. In this context, the six founding States joined together to form the European Atomic Energy Community.

Since 1958 much has happened. The European nuclear industry has developed into one of the most prominent in the world. At the same time, new Member States have joined the European Communities through five waves of accession. Some of them have little or no interest in nuclear energy. And, some Member States, which previously made the choice for nuclear energy for electricity generation, then decided on moratoria or phase-out of nuclear energy.

However, the perception of nuclear energy has changed in the recent years. The debate about security of energy supply in the European Union and the issue of greenhouse gases emissions have given rise to a new interest in nuclear energy.

The current levels of crude oil prices (more than 68 \$/barrel) and of fossil fuels in general provide an additional reason for keeping the nuclear option open.

Whatever the choices of Member States, their decisions to abandon nuclear energy (Belgium and Germany) or to give a new impetus to their programmes, like in Finland and in France, the production of nuclear electricity has never been so high (32 % of consumption in 2003, to compared with 2,4 % of the electricity produced by windmills).

Moreover, without nuclear energy, the Union would not be in a position to respect its commitments to decrease greenhouse gases emissions in the framework of the Kyoto Protocol.

Euratom played a significant role in the development of a civil nuclear industry in Europe and still has a major contribution to make to European Energy policies, especially in two main fields:

- **the protection of European citizens;**
- **the diversification of energy supplies.**

### **I. Euratom and the protection of European citizens**

Let me first recall the aim of the European Atomic Energy Community - to contribute, by the development of nuclear energy, to the rise in the standard of living in the Member States and to the development of trade with other countries.

If the Preamble of the Euratom Treaty now seems somewhat antiquated in its active promotion of this energy source, it must be remembered that implementation of the Treaty has enabled binding control of nuclear activities in the areas of radiological protection, supply of nuclear fissile materials and nuclear safeguards.

In this respect, one of the main achievements of Euratom is the protection of the European population from the risks linked to the use of nuclear energy and, more generally, the use of nuclear materials for civil applications. Protection of European citizens has always been one of the core objectives of the Euratom Treaty.

It is not my intention to give an overall presentation of the Euratom Treaty. I will concentrate on the Euratom policies which have contributed, since the signing of the Treaty, to the protection of European citizens by means of:

- **Research;**
- **Nuclear safeguards - non-proliferation;**
- **Health protection**

- **Research (Chapter 1)**

The aim of the Euratom Treaty is to promote within the Community the development of an alternative energy supply source by developing knowledge and the means needed to exploit nuclear energy for civilian purposes. To this end, it gives the Community the tasks of developing research and ensuring the dissemination of technical knowledge.

Most of the nuclear research at Community level is undertaken as part of the Euratom Framework Programme. The guidelines for research have varied over time. Today, they concentrate mainly on environmental concerns, notably waste management, radiation protection and nuclear safety.

Thus, under the sixth Research Framework Programme for 2000-2006 the European Union is committed to supporting nuclear research and especially to improving nuclear safety and waste management.

- **Nuclear Safeguards (Chapter 7)**

Nuclear safeguards are a set of measures performed by the controlling authority to verify that nuclear materials are not diverted from their intended uses.

Since 1958, the European Commission has been engaged in nuclear safeguards controls in nuclear installations throughout the European Union. The basis for these controls lays in Chapter 7 of the Euratom Treaty. This Chapter sets up a comprehensive, very stringent system for safeguarding nuclear materials that is unique in the world.

The body of Euratom inspectors contributes to ensuring that EU Member States comply with their international obligations under the regime of nuclear safeguards. Nuclear safeguards represent the most intensive field of co-operation between the Community and the International Atomic Energy Agency.

The high level of expertise accumulated by the Commission in the field of nuclear safeguards has contributed to a climate of confidence not only among the Member States of the European Union but also with our partners throughout the world. Euratom safeguards therefore have largely contributed to ensuring the security of supply of nuclear materials to the Member States by giving firm guarantees concerning civilian use of nuclear materials in the Community.

- **Health protection (Chapter 3 )**

The Community plays an important role in protecting European citizens against ionizing radiation. Since the signing of the Treaty in 1957 the Community has adopted a wide range of legislation, covering the protection of workers (in the nuclear industry, hospitals, research, other industries), the general public (from discharges of nuclear installations, fall-out from Chernobyl) and patients.

The main provisions are laid down in Basic Safety Standards, first established in 1959 and regularly updated in the light of scientific knowledge and operational experience. The scope of the Standards has evolved with time and now covers, for instance, natural radiation sources (radon, exposure of air crew to cosmic radiation, etc.).

The Euratom Treaty also confers important powers upon the Commission with regard to levels of radioactivity in the environment. Member States are obliged to monitor levels of radioactivity and to report to the Commission. They also have to report on any planned release of radioactive waste.

The Commission has long held the view that health protection encompasses the concepts of radiation protection and nuclear safety. This was confirmed by a ruling of the European Court of Justice in 2002.

In this particular field, the Commission has proposed two major legal initiatives in the revised “nuclear package” adopted on 8 September

2004. These two initiatives aim to endow the European Union with legally binding legislation to ensure that Member States maintain high levels of safety in nuclear facilities and in the management of radioactive waste. Such rules will enable the Community to ensure a high level of nuclear safety within the enlarged European Union for the benefit of Europeans citizens. Unfortunately, it has not yet been possible to reach the qualified majority in Council necessary to adopt these two proposals.

However, the Commission still hopes that these proposals will be adopted in the near future. Nuclear safety and radioactive waste management are two major issues which require appropriate solutions, irrespective of national policies on nuclear energy.

## **II. Euratom's contribution to the diversification of energy supplies**

Europe has long been dependent on imported energy but the recent decline in both domestic gas and coal production has led to a significant increase in import dependence. Some of this increase is unavoidable. However, dependence on external countries heightens the risks to the European economy from the energy sector.

A number of policy responses are required, focusing on action on the demand side and on managing the risks associated with external supply. One of the policy responses lies in the development of our

internal sources of energy, such as nuclear and renewables. Europe's future prosperity will depend on its ability to diversify its energy sources.

Today nuclear energy provides more than a third of EU electricity. It is a stable source of energy independent of price fluctuations such as have recently affected the oil and gas markets. Nuclear energy is also free from CO<sub>2</sub> emissions. It prevents the emission of about 300 M tonnes CO<sub>2</sub> annually, equivalent to about half of the emissions produced by the Community car fleet.

With its Green Paper "Towards a European strategy for the security of energy supply", published in November 2000, the Commission has encouraged a healthy debate about the role of nuclear energy in serving Europe's needs.

However, the option of using nuclear energy to generate electricity is a matter for national governments within the EU. The European Union does not rule out any choices among energy sources.

In this respect, the Euratom Treaty provides a valuable framework for the controlled use of nuclear energy in Europe, thus contributing to the acceptability of the nuclear option in the public.

Euratom also plays a major role in encouraging research and development on new technologies and on nuclear reactors for the future. One of the main objectives of the Euratom Framework programme is to increase security of supply of energy by greater

diversification of sources, keeping the nuclear option open for all those Member States who wish to use it.

The major resources of the 6th Research Framework Programme (2002-2006) are allocated to the fusion programme which will form a very important contribution towards the International Thermonuclear Experimental Reactor (ITER). This experimental reactor will be built on the French site of Cadarache which was the European Union's candidate site. Thermonuclear fusion presents almost limitless possibilities for the longer term, but several obstacles still stand in its way to being a new energy source.

The European Union is now envisaging the adoption of new initiatives linked to the security of energy supply. Since 2000, the political and economic context has changed substantially in Europe and worldwide. The climate agenda has gained in importance, thanks, in particular, to the European Union greenhouse gas trading scheme, which was adopted to help EU Member States meet their commitments under the Kyoto Protocol.

Nuclear energy undoubtedly will continue to play a role in fighting the growth in greenhouse gas emissions, provided that safety and security is ensured.

## **CONCLUSION: What future for the Euratom treaty?**

By way of conclusion, let me address the question of the future of the Euratom Treaty. The core provisions of the Euratom Treaty have remained unchanged since 1958 and have not been modified by the last Intergovernmental Conference.

The only amendments which would be made to the Euratom Treaty by the draft Constitutional Treaty are adaptations to new rules which would be established by the Constitution, particularly in the institutional and financial fields. More important, it was decided that Euratom should remain a separate Community.

This situation is not seen as very satisfying by some of the EU Member States and parts of public opinion. The future of the Euratom Treaty has been openly questioned; in this context, some would favour the idea of convening an Intergovernmental Conference to revise the Euratom Treaty.

This point of view was not shared by the Intergovernmental Conference in 2004. An isolated revision was not considered as appropriate, the Euratom Treaty being part of the European project as a whole and of European energy policies in particular.

Contrary to a common misperception, it should be noted, the Euratom Treaty is well balanced, containing strict provisions restraining, regulating and controlling all civil nuclear activities, whether linked to energy generation, industrial or medical use. Member States which are

not in favour of nuclear power nevertheless recognise the merits of the Treaty.

Euratom Agreements with third countries and international organisations extend the Community's responsibility in the non-proliferation field. The Community can take pride in having the world's best control and non-proliferation systems.

Negotiations for the 2004 enlargement have demonstrated that the nuclear question is as important as ever. The Accession Treaties contained specific provisions regarding nuclear safety and commitments to close eight nuclear reactors which were then in service in three of the new Member States.

Thank you for your attention.

*"The opinions expressed in this speech are those of the author and do not engage the official point of view of the European Commission"*

*Nina Commeau-Yannoussis*