



## **PUBLIC HEALTH PROTECTION IN THE FUTURE**

***Mrs. Suzanne FRIGREN***

**Director of Nuclear Safety and Civil Protection, DGXI European Commission**

---

I think that nobody will contradict me if I say that the future of nuclear energy depends not only on technical and economical considerations, but also and not least, on the absence of any major nuclear safety problems whether near or far. After the Chernobil catastrophe in 1986, public perception of nuclear safety has become a very hot issue when considering the future development of energy systems in many countries. And at the same time we have today a much stronger role for local institutions and the public in relation to decisions on mayor industrial projects with potential environmental effects.

After the Chernobil accident there was increasing public and political preoccupation in the West about Eastern countries operating nuclear installations that were considered not to meet internationally accepted safety standards and possibly also sufficient safety practices.

So the international community responded by adopting a nuclear safety strategy at the G7 summit meeting in Munich in 1992. Reactors of soviet design were classified and this was done in two categories: those that could be upgraded at reasonable cost and those that could not and therefore should be shut down. An important technical assistance programme was launched aiming above all at short term safety improvements where such were justified. International assistance was provided bilaterally through programmes and multilaterally through the nuclear safety account.

The EU has since the beginning been the largest single contributor, apart from what has been provided by individual member states directly. An EU strategy for improving nuclear safety in Central Europe and former Soviet Union was adopted based on the G7 strategy and reflecting also the IAEA's classification of design and operation risks regarding nuclear reactors. Two complementary tracks were laid out. In the short term, the most urgent problems had to be addressed and also independent and competency safety authorities had to be set up and nuclear plants had to be made safe through both technical upgrading and better operation and maintenance. In the longer term, greater emphasis would be placed on making sustainable improvements in safety by replacing, less safe reactors with alternatives, by improving energy efficiency, by modernising the so-called upgradeable reactors and by strengthening legislative and regulatory frameworks.

The assistance from the EU has above all been provided through the PHARE nuclear safety programme for Central Europe and the TACIS nuclear safety programme for the former Soviet Union. Within these programmes around 840 million Euro were made available during the period 1991-98 and there is more to be spent in the years to come. In addition the EU has opened the possibility to get Euratom loans and there has been a number of small grant programmes and support through research has been provided.

Since a few years now, as you know, the prospect of a number of Central and Eastern European countries joining the EU, several of them with nuclear power generation, has emphasised the need to consider the possible effects of enlargement on nuclear safety.

In July 1997, the Commission published its report Agenda 2000 for a stronger and wider union, which among other things places the issue of nuclear safety in the candidate countries of Central and Eastern Europe in a very political prospective.

When the negotiations now come closer, there are some factors to keep in mind in order to understand the situation: within the area of nuclear safety, the community's so-called legal Archie either we talk of the Euratom Treaty itself or derived legislation, carries mainly radiation protection. Safety of nuclear installations and safe management of radioactive waste and spent nuclear fuel are national responsibilities. Nevertheless, the Council, as early as July 1975, in the resolution of technological problems on nuclear safety asked the Commission to co-operate with member states for the progressive harmonisation of safety requirements and criteria. And later on, a resolution on the same subject in 1992 requests the Commission to co-operate with the other European countries, specially those of the Central and Eastern Europe and the newly independent states, to bring their nuclear installations up to the safety levels equivalent to those in practice in the Community.

So co-operation has been going on in these fields for 25 years now, producing many important technical reports developing common approaches to many problems and relevant promoting harmonisation of practices and criteria.

There are a number of expert groups and also later on groups designed specifically to facilitate involvement on Eastern countries or support the assistance programming. Let me add also that the community has supported research and development in the field of nuclear safety through successive framework programmes for many years, including lately the safety of Soviet designed nuclear reactors. In the current framework programme, the applicant states have been invited to participate.

I would like to stress in this context how important it is to open our traditional export co-operation within the Union to the regulators and operators in the East. The opportunity to meet with colleagues and create professional networks will help to build confidence that permits better profit from exchange of experience and promoting good practices.

So in this period, representatives from African countries are being now invited to participate in our traditional EU co-operation. Furthermore, an *ad hoc* meeting between the Commission's services and representatives of regulators in the candidate countries was held at the end of last year. The objective was, to set the basis for collaboration, aiming at the improving communication and flow of information to define the best common approach to enlargement preparations. This is especially important as the lack of well-defined community standards for nuclear safety makes it difficult to perform assessments and set targets for future achievements. In this context and following Council's conclusions of end 1998, the Commission is at present preparing a proposal on a method that can be used to asses the nuclear safety status of candidate states, in a fair an objective fashion as an input to the community's negotiation positions.

So in summary, in preparing for enlargement the challenge exposed by nuclear safety in the applicant countries are being addressed through, both technical assistance, co-operation activities and the progressive involvement of representatives from those countries in community activities. Even in areas where there is no legal community

Archie, these factors together with the general interest from candidate countries to show their readiness to respond to requests made in the negotiation process will push in favour of better nuclear safety. Here I could also recall the decisions taken last autumn of three candidate countries to set dates for closing reactors pointed out earlier by the EU as non upgradeable.

The strategy with regard to the newly independent states of the former Soviet Union has to differ from the strategy for Central Europe for two major reasons: one is that these countries are not candidate for EU membership and therefore the EU has less political leverage. The second factor is that the newly independent states and their economies are facing enormous difficulties. For instance, with regard to improving nuclear safety, their utilities are often not able to recover the value of electricity source. So there are few resources available for improving safety or making new investments. With regard to the large problem with waste management, other major investment needs compete at a national level.

The EU strategy for assistance also has to reflect the considerable differences among these countries themselves, in terms of size, political regime, industrial capability and so on. As far as nuclear safety is concerned, the Russian Federation is particularly important. Russia is the only state of the former Soviet Union involved in all aspects of nuclear power from uranium mining to plant design, power generation, spent fuel reprocessing and waste management. Naturally, a substantive part of the TACIS's nuclear safety programme has since the beginning gone to assistance projects in Russia.

The other major recipient of EU assistance is the Ukraine, and especially projects related to Chernobyl. A package of measures was included in the memorandum of understanding between Ukraine and the G7 countries in late 1995. The major undertaking by Ukraine was to close the Chernobyl plant by the year 2000. This commitment is still only partly met and the present situation is unsatisfactory. Furthermore, urgent action is required to bring the shelter of the so-called sarcophagus covering the unit, which exploded in 1996, to an environmentally stable condition. To this purpose, the EU participates in a multidisciplinary project, which is referred to as the shelter implementation plan and is financed from a special fund. Again, the EU is by far the largest contributor.

In addition to these assistance projects, the Commission has been active in helping to draw up a plan for the decommissioning of the Chernobyl units, for site remediation work, radioactive waste management planning.

The implementation of these programmes has met with difficulties in different ways. For instance, in some cases, beneficiary countries have been reluctant to co-operate with the EU under the international community's strategy. For example, differences of opinion remained on the need for early closure of the oldest generation reactors and also on the current plans to extend their upgrading life.

The new TACIS's regulation, which will cover the period 2000-2006 identifies three priorities, namely:

- a) Promotion of the transfer of safety culture.
- b) Contribution to international efforts, like the assistance from the IAEA and the G7 countries.

c) Improvement of radioactive waste management, notably in Northwest Russia.

Let me knot onto an area, which should be of specific interest from a local democracy point of view. I said already in the beginning that the influence of local institutions and the public today is important and has to be taken fully into account in all mayor industrial developments. The strong instrument available within the EU to support this is the Directive on Environmental Impact Assessments, which is a part of the EU legal Archie and not restricted to the nuclear sector. The assessment of the effects of those public and private projects, which are likely to have a significant impact on the environment, is a step towards social development of the more sustainable kind.

However, this is not always sufficient in the current social context, where the improvements of democracy and adequate political responses to public concerns are strong demands. It must be complemented with intensive dialog, transparency and access to information. Getting local governments really involved in this kind of decision making is a declared goal pursued both in the present community and in the process of enlargement.

The Commission carries out a considerable amount of consultations with relevant interested groups in relation to plans, programmes and new policies. This has long been recognised as good administrative practice and will now be enshrine in legislation with the ratification of the Community adhesion to the so-called "ORHUS convention", whose three pillars are access to information, public participation in environmental decision making and access to justice. The environmental impact assessment can be used as one vehicle for effective communication with the public in this context.

Other useful vehicles are of course public hearings, community advisory committees, not to mention other general methods, which are today being launched for involving local interest in the information generating analysis and priority setting phases of development planning. And I think that the local safety committees that many of you here today represent obviously are very important focal points in this process.

One example of the implementation of the environmental impact assessments and public participation in environmental decision making is the selection of sites for disposal of radioactive waste. Within the Commission, studies have been conducted in order to seek further harmonisation of procedural arrangements. These studies have also included the candidate countries, most of which have today introduced relevant legislation in this area. Significant discrepancies are however noted concerning public participation, in particular, the need to develop interactive methods for participation has been less emphasised there than in present EU member states.

I could add that in the framework of the V Euratom Research Programme decision has just been taken to finance one project on comparison of decision making processes at local and regional community level in waste facilities' sighting and another on enhancing transparency and public participation in nuclear waste management.

Briefly also about in the non acceding countries of the newly independent states of Former Soviet Union, the EU legal Archie is of course non relevant. Other methods to transfer the practice of environmental assessment and public participation will have to be used.

I would like to mention the project concerning the completion and modernisation of two BBR 1000 nuclear power units under construction in Ukraine, the so-called "Rovanoknadisky Project". And environment assessment *à la EU* and the satisfactory implementation of an environmental action plan, including environmental management to be applied during operation of the plant, are some of the conditions that have been set by the Euratom and the European Bank for Reconstruction and Development for giving loans to the projects. And as a part of these requirements a public consultation process was carried out in the project. Distribution of documentation, public meetings, collection of questions and comments and provision for answers were conducted. This, to my knowledge, was the first public consultation held in the newly independent state countries and also the first one to be organised through modern communication methods, such as Internet, to permit widest participation and largest transparency.

So let me conclude by the following points: I am convinced that the role of nuclear energy in the future will depend on how nuclear safety is developing and also on how it is perceived. Worries about insufficient safety in Eastern and Central European Countries have led to a substantial assistance programme where the EU and its member states still are the largest contributors. For those countries that have applied for EU membership, nuclear safety will be one of the crucial issues and all kind of assistance and co-operation efforts are made to facilitate the process. At the same time, public awareness of both prospects and problems with nuclear is developing quickly, also outside of the EU. And so are methods and processes to involve local institutions and the public in decision making. What this will mean for the future role of nuclear energy in summary is impossible to say. It will depend on how convincing politicians, industry and experts will be in the eyes of the public, and how that works out in the democratic process.

**NEXT PAGE(S)  
left BLANK**