

Constructing a Model for Safe Nuclear Energy

General Conference Event to Focus on Innovative Cross-cutting Approach to Nuclear Safety

Two innovative IAEA Extra-Budgetary Programmes, supporting safe nuclear energy in Bulgaria and Romania, passed their one-year milestone in 2010. Funded by the Norwegian government, these programmes are unique in that they cover separate but cross-cutting issues related to nuclear safety, including safety culture, safety assessments, risk management and resource management.

According to the IAEA's Mike Modro, Acting Head of the Safety Assessment Section, the programmes represent a model for providing similar support to other Member States.

"We expect these programmes to be instrumental in developing the IAEA's capacity to assist other Member States in achieving a high level of safety in their new or existing nuclear power programmes," he says.

Programmes

In 2009, the Norwegian Government, in cooperation with the Romanian and Bulgarian Governments, turned to the IAEA Nuclear Safety Department with a concern for building a model for safe nuclear energy in Member States.

Improving the safe conduct of nuclear power programmes in countries with existing nuclear power programmes seemed an ideal objective for the country's extra-budgetary funding in the nuclear safety field.

"The Norwegian Foreign Ministry decided that the best way to help the Agency's programme was to provide the means for setting up pilot projects in diverse nuclear safety areas to serve as model structures for future programmes in IAEA Member States," says Ole Reistad, Section Head in the Norwegian Radiation Protection Authority, Department for Radiation Protection and Nuclear Safety.

"In Bulgaria and Romania we found the perfect starting points - with existing nuclear plants, at different stages of development, and with stated needs for improving their regulatory and operating activities and a strong support for the IAEA's role and further development.

The three governments hatched the plan, channelled funding through the Norwegian grant organization Innovation Norway, and asked the Agency to proceed with implementation."

The two programmes were launched by the Nuclear Safety Department and Innovation Norway in autumn of 2009 with an expected completion date of April 2011.

The Norwegian Radiation Protection Authority plays the role of technical Norwegian counterpart, and the regulatory bodies of Bulgaria, the Bulgarian Nuclear Regulatory Agency (BNRA), and Romania, the National Commission for Nuclear Activities Control (CNCAN), are what Innovation Norway calls the programme promoters. As such, they oversee the programmes in each country, and have nuclear power plants operators - Cernavoda in Romania and Kozloduy in Bulgaria - as partners.

Pete Wells, IAEA Technical Programme Manager, explains that the two programmes aim to develop both the regulator and operator to a level of sustainable excellence that will be recognized as a model for others to follow.

"These nuclear safety programmes are well-designed, tailored to the needs of the two Member States, and include projects for both the regulators and the operators," he says.

"For example, in safety culture, the regulator will focus on improving skills and tools for assessing safety at the plant, and in turn the operator will improve skills in safety culture self-assessment. The same thing is true for emergency preparedness and planning, for integrated management systems. The concept is to get both the regulator and operator to partner in efforts to provide safe nuclear energy."

Lucian Biro, Director General of CNCAN, offered the unequivocal support of his regulatory team.

"We are strongly committed to this Norwegian-funded programme and expect that it will bring sustainable results for both CNCAN and SNN. Even in a time of budgetary cutbacks, the Romanian team realizes how important these issues are and strives to give its maximum to obtain positive results for the programme," he says.

The Bulgarian authorities also expressed appreciation for the collaborative spirit of the project.

"Following discussions we were able to identify the core activities needed in Bulgaria in the areas of safety culture and emergency preparedness and response and are making progress in implementing those activities," says Alex Rogatchev from the Bulgarian Nuclear Regulatory Agency.

"We didn't all see the needs in the same light so we were pleased that Innovation Norway and the IAEA teams maintained a certain degree of flexibility."

About the Programmes

The Safe Nuclear Energy-Regional Excellence Programme in Romania and Safe Nuclear Energy-Regional Excellence Programme in Bulgaria are managed by the IAEA Safety Assessment Section (SAS) in the Nuclear Safety Installation Division (NSNI). They focus on five technical project areas:

- Safety assessment;
- Safety culture;
- Capacity building and knowledge management;
- Emergency preparedness and response; and
- Integrated management systems and risk management.

Measurable improvements in these areas, as well as improved tools and methodologies developed by the IAEA for use by other Member States, are the expected outcomes of the projects. An additional outcome of the programme will be an integrated, bi-lateral emergency response exercise involving both Romania and Bulgaria.

-- By Giovanni Verlini, IAEA Division of Public Information
