

# New nuclear challenges: the Agency at the forefront



Over the past six months, interest in nuclear energy has continued unabated. Many countries have expressed their intention to launch nuclear programmes; the European Commission has adopted a multibillion euro Plan for New Energy Investment, including the objective that the first prototype of a Generation IV nuclear reactor should be in operation in 2020.

Investments in nuclear installations have to be financed – this could be the main hurdle in the current financial and economic crisis. The question of risk sharing among stakeholders and the role of government are keys, as the just-released publication *The Financing of Nuclear Power Plants* outlines. The article on page 4 summarises its main findings.

Funding decommissioning should be considered at the outset of a nuclear project. Cost estimation for decommissioning has become a requirement in most NEA countries and some good practices can already be identified, as outlined in the article on page 12.

Construction of new reactors also needs a foreseeable regulatory framework. The Multinational Design Evaluation Programme (MDEP), which brings together regulators of the main nuclear countries, aims at facilitating common approaches. As the Technical Secretariat of the MDEP, the NEA organised a major conference in September where the outcomes of MDEP work were shared with vendors, standardisation bodies and non-MDEP members. An overview of current MDEP activities is provided on page 18.

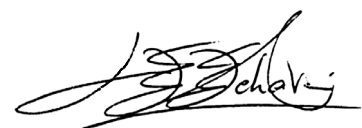
A major step forward has been taken in European Union regulation with the adoption of the “Council Directive establishing a Community framework for the nuclear safety of nuclear installations”. This is a breakthrough considering that the initial project had been circulated in 2003, as the article on page 20 explains along with the innovations contained in this new legislation.

At the crossroad of regulation and operation, radiological protection is still high on the NEA agenda. The NEA issued as far back as 50 years ago the first basic norms for the radiological protection of workers. After the Chernobyl accident, the Agency laid the foundation of the International System on Occupational Exposure (ISOE). The new report on *Work Management to Optimise Occupational Radiological Protection in the Nuclear Power Industry* and its main lines are described in the article on page 8.

While radiation exposure should be minimised, a recent crisis has reminded us that sources of ionizing radiation can also be vital for human health, notably through medical applications. On page 23, the news brief on the medical radioisotopes shortage explains the situation and provides a summary of the NEA contribution to help resolve this challenge.

While medical radioisotopes have recently sparked specific public concerns, nuclear waste management has certainly been one of the most constantly raised issues over the past decades. The article on page 15 recalls that stakeholder confidence and participation in selecting the right sites are becoming an essential part of the process.

The public is not always widely aware that nuclear technology, for power or medical purposes, contributes to making many of our daily activities possible while also limiting greenhouse gas emissions. The extract of the NEA's *Nuclear Energy Data 2009* on page 25 provides key figures not to be forgotten, especially in the context of the UN Climate Change Conference (COP-15) being held in Copenhagen in December.



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