

Opening speech by the Administrator General of the CEA

International Conference on "Nuclear Knowledge Management: strategies, information management and development of human resources". Saclay, France, September 7 to 10, 2004

High Commissioner and Chairman of the Conference,
Deputy General Director, representing the International Atomic Energy Agency,
Ladies and Gentlemen, Speakers and Participants,

In my capacity as the deputy Administrator General, and on behalf of Mr. Alain Bugat, Administrator General of the French Atomic Energy Commissariat and representative of the French government, who apologises for not being present this morning, I would like to thank you for accepting the invitation that you received from the International Atomic Energy Agency and the French Atomic Energy Commissariat.

I would also like to thank the IAEA for organising this conference, and the European Commission, the OECD Nuclear Energy Agency, the European Atomic Forum (FORATOM), the Japan Atomic Industrial Forum (JAIF), the World Council of Nuclear Workers (WONUC), the World Nuclear University (WNU), and the European Association of Information Services (EUSIDIC) for their help and support.

Ladies and Gentlemen,

I am delighted to welcome you to the INSTN here on the French Atomic Energy Commissariat's site in Saclay for this international conference on "Nuclear Knowledge Management: strategies, information management and development of human resources".

I can already announce one success: the presence of almost 300 experts and decision-makers from the nuclear energy community specialised in knowledge management and information technology is a demonstration of the growing interest amongst the international nuclear community in this issue that is fundamental to the future of our activity.

A strategic target was set at the Lisbon Summit in 2000: to turn the European Union into an economic space whose performance and competitiveness is based on knowledge as a force to create jobs and cement social cohesion.

This target, which enjoys the full support of the French authorities, is especially important in the nuclear industry.

As Europe expands to embrace 25 nations in which nuclear energy accounts for 32% of electricity and as our host, France, relies on 59 nuclear reactors for 80% of its electricity, the issues of the production, dissemination and use of knowledge in the nuclear sector have never been more important.

We have to develop new methods to recruit, train and keep staff, especially in the field of nuclear safety, in order to maintain a critical mass of skills and know-how both within the industry and the regulatory authorities.

In order to maintain and strengthen the nuclear knowledge and the qualified staff that are essential for the continued development of the use of all nuclear technologies, the nuclear industry must take up a number of challenges related to the management of knowledge that are already facing, to varying degrees, a number of scientific and technical fields.

First, our legacy must be preserved. We have accumulated a colossal volume of information and finding knowledge in that information is not easy. We are faced with a serious risk of information overload.

Second, knowledge must be shared and passed on from one generation to the next. Knowledge management must create meaning and provide the answers to real problems, knowledge must be perceived as something useful, with a real purpose that obeys the logic of memory. By way of example, how can existing knowledge be identified, formalised and made useful and how can the wealth of experience in project management be preserved, as vast numbers of colleagues prepare to go into retirement, or how can we make the best possible use of past experience gained in the management of other projects?

Finally, we must continue our efforts to create new knowledge. The nuclear industry must remain a driving force behind technological innovation.

So you can all see, Ladies and Gentlemen, that our challenge takes many forms and is particularly complex.

The French Atomic Energy Commissariat has been a player of national standing in knowledge management for several decades and knowledge management has been part of the CEA's quality charter for almost 10 years now. Numerous successful knowledge management projects have resulted in the creation of "Knowledge Basics" or "Knowledge Books".

At the same time, the continuous R&D efforts applying to methods and tools used in knowledge management have been strengthened and structured here at the CEA, as the various partnership agreements signed with enterprises demonstrate.

Institutions involved in both initial and continuing vocational training must encourage newcomers to choose nuclear disciplines and help to raise awareness of the importance of managing nuclear knowledge. Here in France, this role is played by the "Institut des Sciences et Techniques Nucléaires" (INSTN), whose primary mission is the transmission of knowledge and know-how from, not only the CEA, but also other players on the French nuclear stage, such as EDF, AREVA and the IRSN.

It is France's ambition to play a leading role in the construction of Europe; an ambition that involves rising to the difficult challenge of reconciling the need for openness and for the distribution of knowledge with the need to maintain the competitive edge of partner enterprises, nations and of Europe itself.

As part of the EURATOM initiative in the 5th EU Framework Programme for Research and Technological Development, France took part in the ENEN project that, at the end of 2003, saw the birth of ENEN, the European Nuclear Education Network.

Training courses open to students from the entire European Union and beyond should be available by the start of the next academic year as part of the NEPTUNO project, a coordination initiative in the 6th FPRD that started at the beginning of 2004 as the continuation of the ENEN programme.

The INSTN is also actively working with the Joseph Fourier University in Grenoble in an effort to open up the Master's qualification in engineering, traceability and sustainable development to the rest of Europe. This course includes a module specialising in the dismantling of nuclear facilities and another covering the management of radioactive waste.

Finally, a project to develop a European Master's degree has just been accepted by the European Commission as part of the ERASMUS programme. The project brings together the Joseph Fourier University in Grenoble, the INSTN, the Pavia and Rome-La Sapienza Universities in Italy, Kaunas University in Lithuania, the UHI Millennium Institute in the UK and industrial partners from each of these

countries.

The importance of this issue has resulted in the launching of a multitude of initiatives in all countries.

The OECD Nuclear Energy Agency has been focussing on identifying the resources required to maintain competency at the required level in the future. The measures taken by the Agency are designed to pool both the specialist skills and the available R&D infrastructure between the member countries as part of a drive to launch new international research projects into safety, along the lines of the CABRI initiative here in France, that covers high burn-up nuclear fuel.

We should also mention the essential role played by the International Atomic Energy Agency that has fully grasped the importance of this issue, as demonstrated by the various events, meetings and symposia that have been organised since 2002 as a prelude to this conference here in Saclay.

The Agency has elevated knowledge management to a central position and has launched or supports a number of initiatives, such as the Asian Nuclear Safety Network (ANSN), whose mission is to develop tools used to share reference frameworks for knowledge about safety and to enable countries to manage their own additional reference knowledge corpus.

The IAEA is also one of the driving forces behind the foundation of the World Nuclear University, together with the OECD Nuclear Energy Agency, the World Association of Nuclear Operators (WANO) and the World Nuclear Association, which was set up in London one year ago.

Finally, the management of knowledge and information are also covered by the INIS International Nuclear Information System, an organisation that plays a leading role in this kind of issue and is in the process of redefining its mission in an effort to become the tool that is used to manage nuclear knowledge in the Agency's member states.

France shares the IAEA's preoccupation with the development and transfer of nuclear techniques with a long-term view to managing both skills and knowledge.

France has been working in this direction for a long time already and is closely following the action taken by the Agency to define a global strategy in this field.

Rest assured that my country will continue to provide active, substantial and concrete support to the IAEA in this field, which is essential for the future of the nuclear industry.

Ladies and Gentlemen,

On behalf of the Administrator General, and also personally, I would like to welcome you and we hope that this conference will bear useful fruit. I am sure that the wealth of your debates and speeches will bear testimony to the good health of the nuclear community and will demonstrate that the entire community is committed to developing the skills and specialist staff that it will need in the 21st century.

Thank you for listening.