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## NEED FOR CAPACITY BUILDING AND KNOWLEDGE MANAGEMENT IN NUCLEAR APPLICATIONS, AN IAEA PERSPECTIVE

P. Haug  
European Atomic Forum (FORATOM)

*Email address of main author:* dr.peter.haug@foratom.org

It is a great pleasure for me to welcome you to this conference on behalf of co-organisers FORATOM, the Brussels-based trade association for Europe's nuclear energy sector.

My sincere thanks go to the main organisers, the IAEA and the CEA, for allowing me this opportunity to speak about the European industry perspective on what is a crucial aspect of the sector's current operation and its future.

I would first like to outline FORATOM's relationship to nuclear knowledge management, and then go on to describe what motivates our members in this extremely important field.

Although all the activities of FORATOM involve knowledge in one form or another, it is not involved in knowledge management in the sense that is assumed for this conference. We deal mainly with matters of policy, which means that the knowledge we manage is current and not expected to have a long shelf life.

However, some of our working groups and task forces play a knowledge management role that serves company specialists in particular fields. I refer here, in particular, to:

- \* our Business Excellence Working Group, previously known as the Quality Management Working Group, and
- \* the R&D Working Group.

Through these working groups, our members are given an opportunity to tackle the issues of knowledge preservation and expansion.

It is clear that knowledge management stretches into every facet of the nuclear sector – nuclear plant control rooms, personnel training centres, research labs, company boardrooms and among regulators, national nuclear associations and nuclear societies.

For the nuclear industry, both in Europe and the rest of the world, the overriding priority and preoccupation is safety. And it is in the safety field that knowledge management therefore has its most crucial role to play.

Lapses in safety, due to loss of knowledge, would have severe consequences for the industry, so the importance of maintaining and updating the industry's skills base and know-how should never be under-estimated. It is not only the safety of plant personnel and the public, along with nuclear's public image, that are at stake here. There are also commercial benefits to be derived from implementing effective knowledge management systems in the nuclear safety field.

If operational staff are fully trained, highly skilled and well equipped, nuclear safety can be maintained without much difficulty. Plants that are run safely also operate efficiently and reliably; production is maximised and this should ultimately have a positive effect on company balance sheets. Having said that, of course, safety must always be the top priority.

Another priority area involves making nuclear technology an attractive career option for the nuclear specialists of the future.

One of the great fears is that we have ageing plants, an ageing generation of plant operators and not much to attract what could be called 'new blood' into the industry. But there are, in fact, some very attractive aspects to a career in the nuclear energy sector.

- \* The industry generally offers high-quality, well-paid jobs of a specialised nature.
- \* Even in the event of plant closures, some of the operating staff involved can be retained to prepare installations for decommissioning work. Relocation to other plant sites is a further option.
- \* The industry does have a future if we consider the development and construction of new reactor designs – ranging from the EPR in Finland and France in the near term, to fusion in the much longer term.
- \* In addition, there must inevitably be a nuclear revival, as no real alternatives are available:
  - to generate electricity on a large scale,
  - support security of energy supply, and, at the same time,
  - hold down CO<sub>2</sub> emissions.

Finally, I hope that this conference will make excellent progress towards achieving one of its main objectives, which is the development of new initiatives and concepts for nuclear knowledge management.

Thank you for your attention.