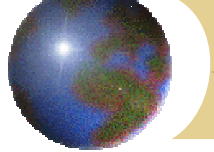


*IAEA International Conference on  
Nuclear Knowledge Management  
7-10 September 2004, Saclay, France*

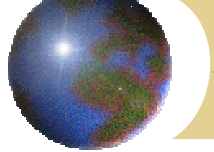
*Closing Statement*

**Conference Rapporteur  
R.B. Grover, India**



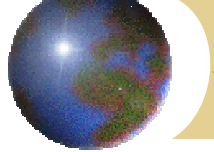
# *The scenario*

1. New builds
  - ❑ Existing designs
  - ❑ Evolutionary concepts
  - ❑ Revolutionary concepts
2. Power upgrades and plant performance improvement
3. Ageing management, life extension (refurbishment), 60 years life
4. Clean-up and decommissioning
5. Reprocessing, recycle and waste management
6. Geological repository
7. Perception management, awareness, nuclear law



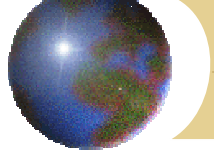
# *The conference – a timely initiative*

- ✿ Keynotes covering all aspects of knowledge management
- ✿ Sessions
  - ✦ Managing and preserving nuclear knowledge
  - ✦ Managing nuclear information
  - ✦ Human resources for the nuclear sector
  - ✦ Networking education and training
  - ✦ Special session on INIS
- ✿ Panels
  - ✦ The young generation in the nuclear sector
  - ✦ Innovation and nuclear knowledge



# *Expectations*

- Preserve knowledge
  - Knowing what we know
  - Nothing should be irretrievably lost
- Strengthen the IAEA information system and commission expert reviews
- Attract young generation to nuclear industry in spite of competing career options



# *Recent initiatives*

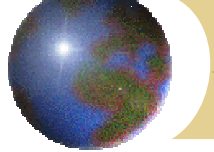
## 1. Higher education in nuclear engineering

### ▣ Capacity building

- New recruitments
- Retraining to tackle obsolescence and for redeployment

### ▣ Methodology

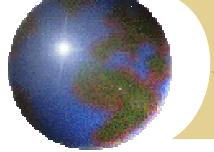
- Networking
- E-learning
- Graduate internship programmes
- Hire and train



# *Recent initiatives*

## 2. Knowledge preservation

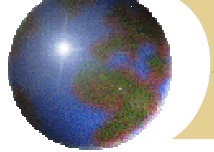
- IAEA fast reactor knowledge portal
- Criticality safety benchmark project
- Experience reports on decommissioning
- Markers for geological repository
- Knowledge manager for every project
- Documentation of communities of practice



## *Recent initiatives*

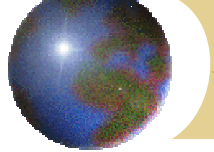
### 3. Capturing of knowledge in codes and guides

- ❑ IAEA codes and guides
- ❑ Codes and standards by national bureau of standards
- ❑ Codes and standards by professional societies (nuclear, mechanical, electrical, civil etc)
- ❑ Documentation submitted to regulatory bodies



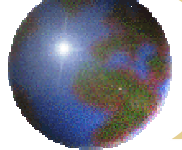
# Insights

- Knowledge management is a process requiring passion, trust and of course a budget
  - Trust is very important for sharing *tacit* knowledge
- R&D and education are to be pursued together
- Sharing tacit safety knowledge is very important
  - “Knowledge management is at the heart of safety culture”
- Continuing education programmes are very important and there is no strict boundary between CEP and regular training
- Labour markets have been able to respond to skill demands of advanced technologies



## *Next steps*

- ➊ Successful initiatives already taken by the IAEA and in Member States can be a basis for developing guidelines by the IAEA
- ➋ Initiate projects similar to the IAEA fast reactor knowledge portal and the Asian Network of Education in Nuclear Technology
- ➌ Identify knowledge management methodologies, tools and practices and make them widely available
- ➍ IAEA and WANO may take up the issue of retrieving tacit safety knowledge available with senior plant operators



## *Next steps*

- ❖ IAEA (INIS) may commission writing of expert reviews (knowledge packages) on selected topics by groups of experts
- ❖ Expand INIS, provide online access to documents, cooperate with nuclear libraries worldwide
- ❖ Closer links between academia, industry and national laboratory system
- ❖ IAEA Secretariat and IAEA Member States must take all possible steps towards nuclear knowledge preservation, dissemination and sharing through effective participation of experts and individuals
- ❖ Development of individuals is central to the process of knowledge management