

Knowledge Maintenance and Transfer for Assuring High Nuclear Safety Standards

L. Hahn

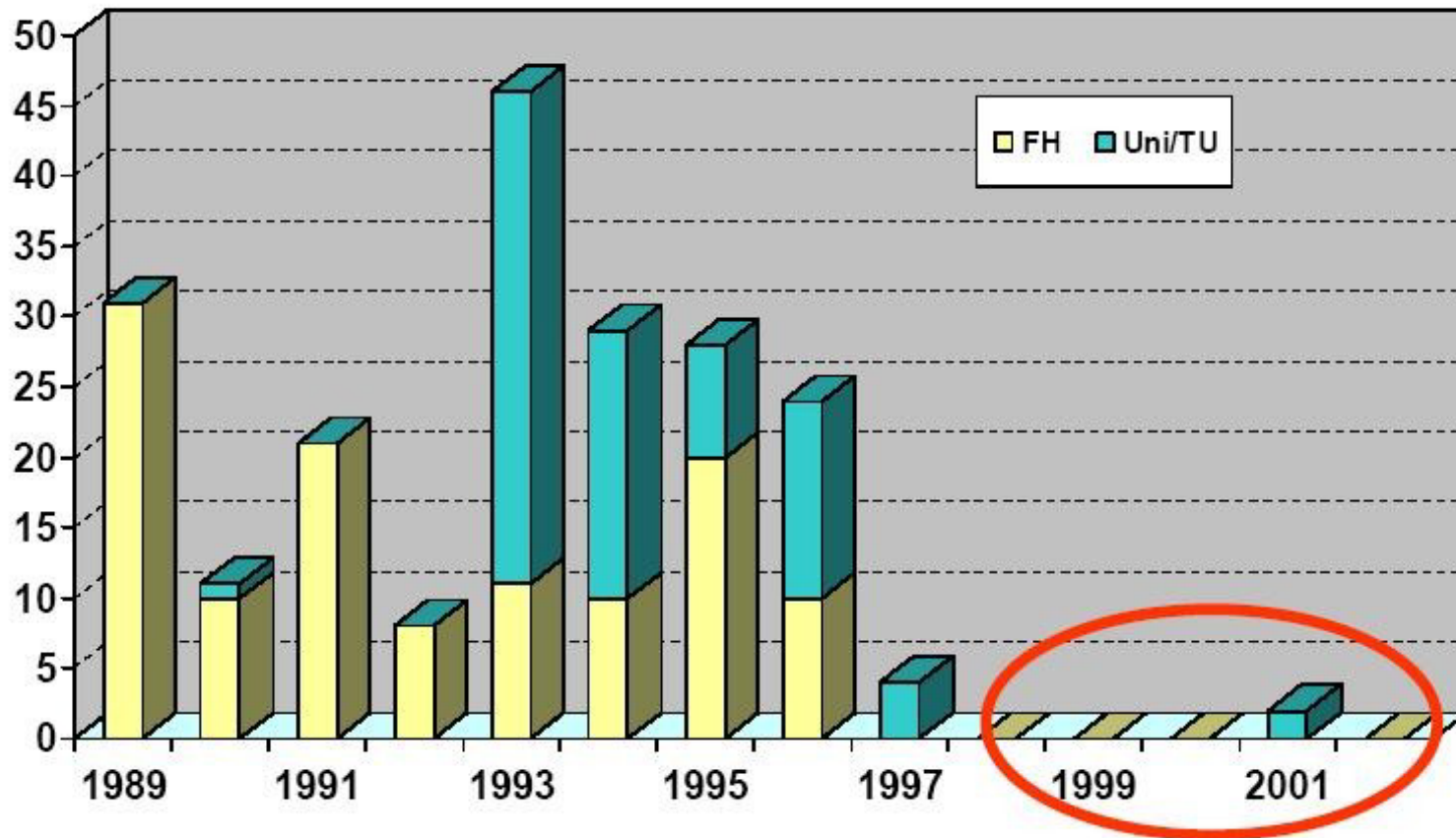
International Conference on Nuclear Knowledge Management:
Strategies, Information Management and Human Resource
Development

7-10 September 2004, Saclay, France

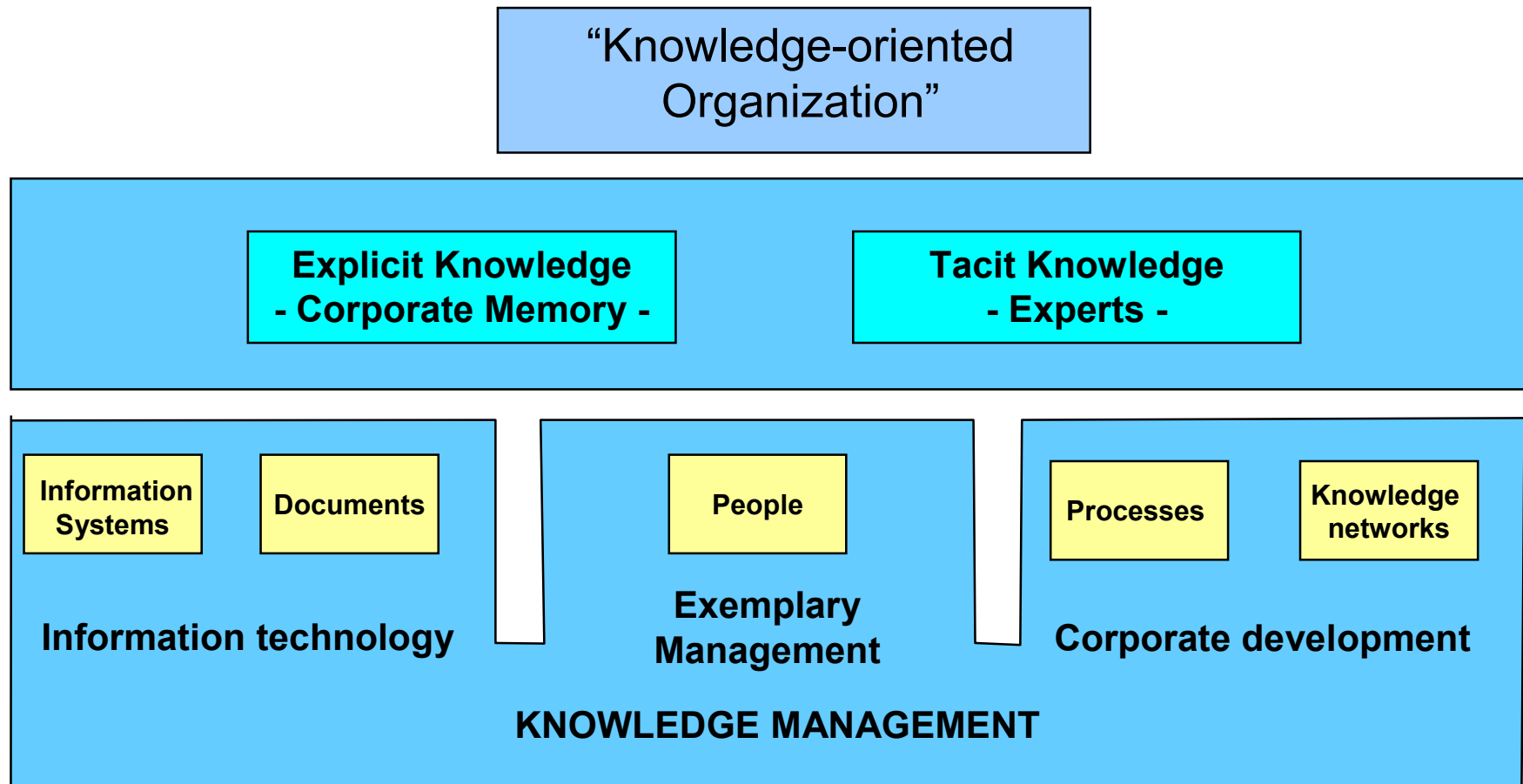
Generation problem in Germany

Generation	Facts	Science	Industry	Authority/Experts
- 1960	First research reactors	Basic research (e. g.Hahn, Heisenberg, Fermi, Juliot-Curie, Kurtchatov)	-	-
1955-1975	First power reactors	Design basis accidents	Development of design and construction knowledge	Special requirements for reactors, first atomic act
1970 - 1990	Industrial size power reactors	Core melt events	Optimisation of design and construction	Development of codes and standards
1985 -. 2004	No new reactors	Detail problems, Reduced funding – reducing capacity	Maintenance and service International cooperation and concentration	Detail problems, Few changes in personnel
2000 -	?	Very reduced capacity	?	Hiring of new personnel required

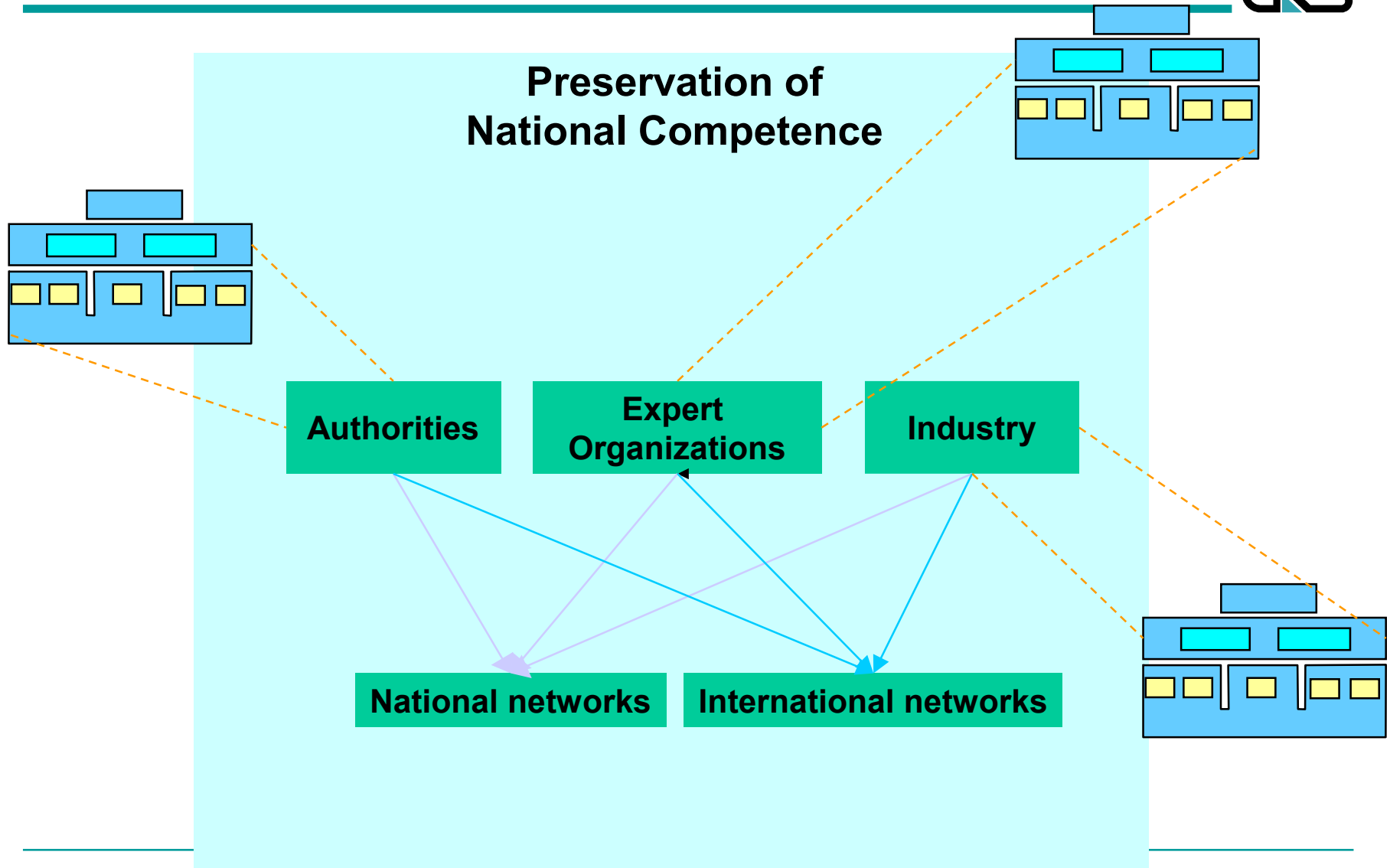
Diplomas in the Fields of Nuclear



Main Organizational Knowledge Elements



Preservation of National Competence



Knowledge Activities related to Standards of Safety

- Sharing of knowledge on relevant safety issues
 - discussions and exchange of information in working groups
 - the exchange of recent knowledge on specific topics
 - definition of requirements for safety assessment methods
 - discussion of cross-cutting issues by multi-disciplinary expert groups (for example the activities on safety margins)
 - the definition of state of art and collective opinions on key safety issues

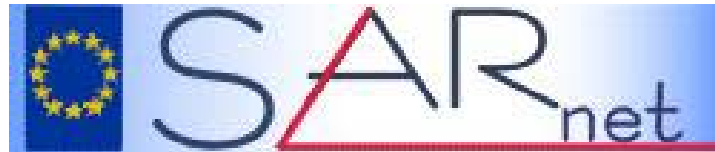
 - Generation of new scientific information
 - specification of primary research areas
 - experimental projects and analytical exercises such as benchmarks and international standards
 - information collection on safety relevant events and their evaluation
-

Knowledge Activities related to Standards of Safety

- Contribution to competence maintenance
 - transfer of information to countries with shrinking resources in nuclear safety research
 - training of young scientific people through involvement in national and international research projects
 - contribution to maintenance of unique experimental facilities and capabilities

 - Archiving and distributing information
 - document management on joint programs
 - management of experimental data
 - conducting seminars and conferences
 - release of reports to the public.
-

ANSN
Asian Nuclear Safety Network



EUROSAFE
BERLIN 2004



8 & 9 NOVEMBER 2004

WESTERN EUROPEAN NUCLEAR REGULATORS' ASSOCIATION

