



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

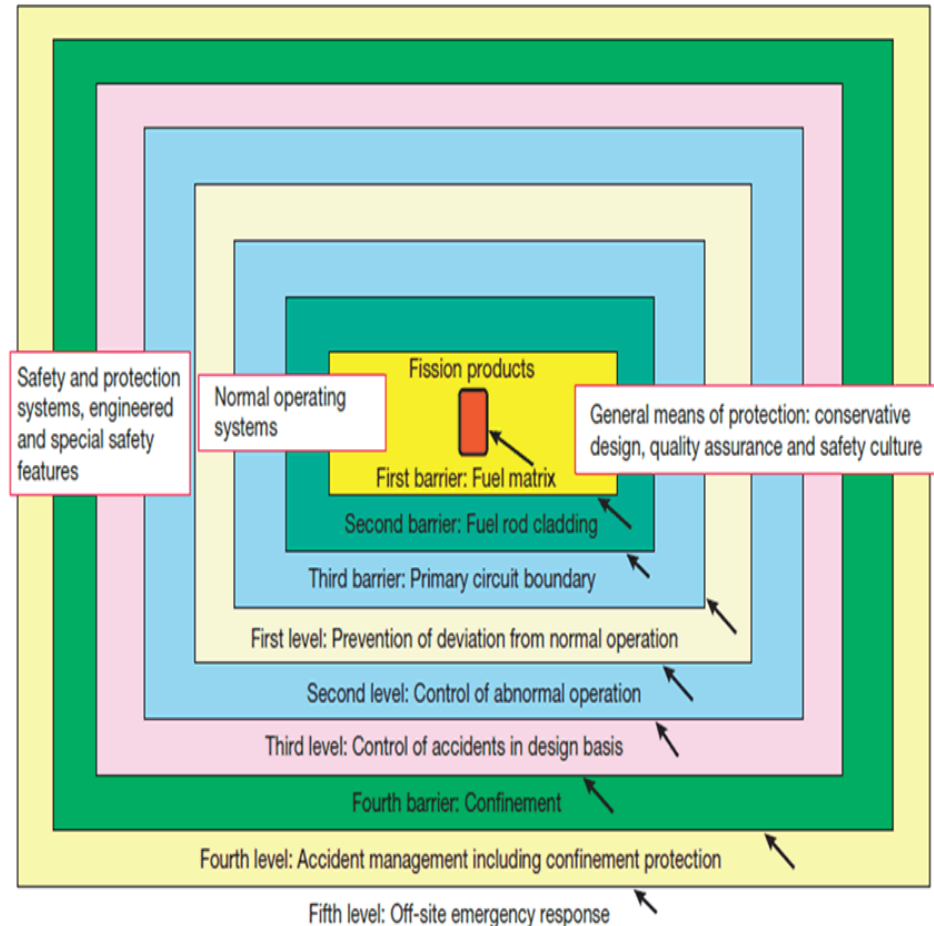
Knowledge Loss Risk Management in the Nuclear Industry

David Drury
Nuclear Knowledge Management
Nuclear Energy
IAEA

Risk Management - what are we trying to protect?

Number 1 !

*Nuclear
Safety
Boundaries
and Barriers*



Risk Management - what are we trying to protect?

Number 2 !

*Operational
and
Commercial
Capacity*



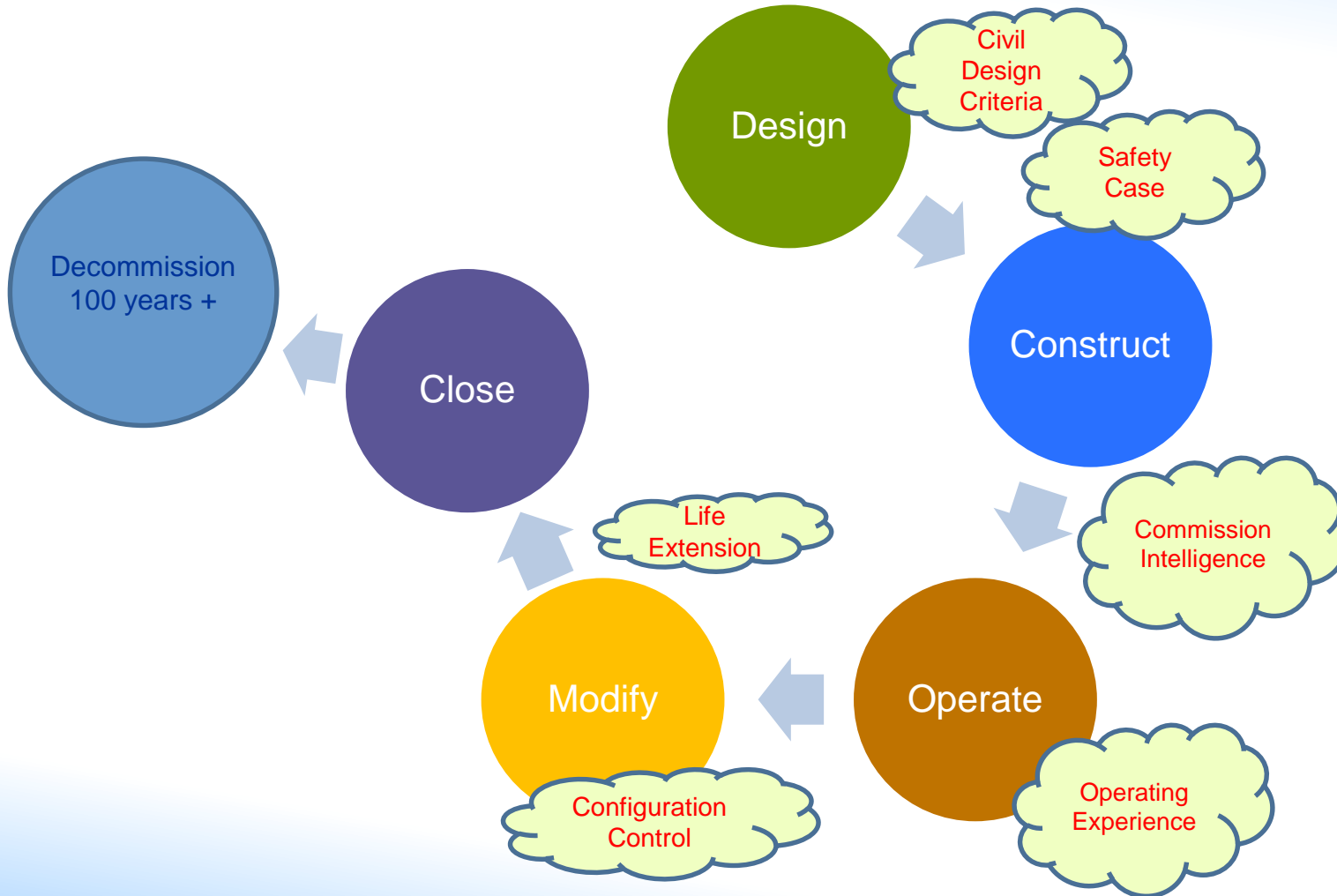
Lets consider what is *'at Risk'*

- Critical Knowledge v/s Important Knowledge?
- Actual Risk or Perceived Risk?
- Existing processes and activities that are already in place protecting the organization?
 - education and training
 - procedures and work instructions
 - configuration management controls
 - Integrated management systems
- 'Movement of Knowledge' cycles through an organization?

Consider the Workforce Lifecycle



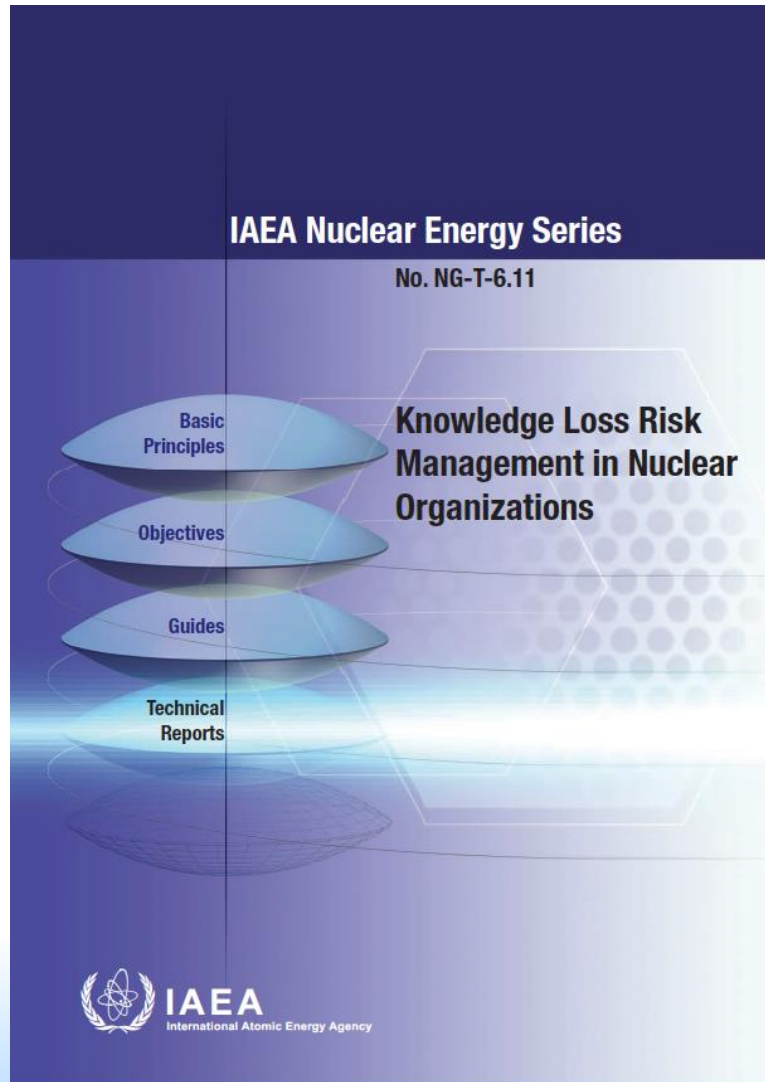
Consider the Organisational Lifecycle



Inputs into a risk assessment model

- Include the full workforce lifecycle and the full organization and/or facility lifecycle
- Future considerations are essential ... 100 years + ?
- Changing role of IT and electronic media
- Understand the significant role played by Educators, Trainers, Managers, Leaders, Co-workers – they all carry some responsibility and role in deploying effective NKM

IAEA Publication No. NG-T-6.11



Knowledge Loss
Risk Management
in Nuclear
Organizations,
Published 2017

NKM Risk Log Categorisation

<i>Knowledge Uniqueness</i>						
<i>Knowledge Criticality</i>		General knowledge that is associated with common knowledge	Documented and held by more than one resource	Not documented but exists in dept. & elsewhere onsite	Not documented, and exist only in dept. However, it's available elsewhere in industry	Not documented, and doesn't exist in dept., site, or industry. Employee is considered an expert.
	Common Knowledge/Skills	Priority D	Priority D	Priority D	Priority D	Priority D
	Non-Mission Critical Knowledge/Skills	Priority D	Priority D	Priority D	Priority D	Priority C
	Important Knowledge/Skills	Priority D	Priority D	Priority D	Priority C	Priority C
	Very significant knowledge/Skills	Priority D	Priority D	Priority C	Priority B	Priority A
	Mission-critical knowledge/skills	Priority D	Priority C	Priority C	Priority A	Priority A

Priority A = Critical; Priority B = Business Important; Priority C= Limited Bench strength; Priority D= Acceptable

What can the IAEA do?'





IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Thank you!

