



IAEA

Atoms for Peace and Development

The Global Nuclear Safety and Security Network (GNSSN)

Steering Committee Meeting

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Vienna International Centre

Status of the Safety Report on Knowledge Management for Safety Regulators

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Introduction

- To perform its functions any regulatory body depends on the availability of nuclear safety knowledge
 - Lesson learnt from Fukushima
 - knowledge management should be part of any future nuclear safety approach
 - The importance of
 - human resources
 - capacity building
 - knowledge and competence managementin the context of RBs
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- highlighted in IAEA SSs
 - GSR Part 1, GSR Part 2 and GSR Part 7
 - all other GSR Parts are of general relevance as well

Introduction

- Member States emphasized the importance of NSKM
 - International Conference on HRD for Nuclear Power Programmes: Building and Sustaining Capacity (2014)
 - IAEA Report on Capacity Building for Nuclear Safety (2015)
 - International Conference on Effective Nuclear Regulatory Systems: Sustaining Improvements Globally (2016)
- Steering Committee on RCB and KM
 - requested the IAEA to develop a guidance publication on knowledge management for RBs and TSOs

Specificities of KM for RBs

- Legally obliged to maintain its own knowledge base
- Knowledge is important to secure RB independence
- Broad scope of areas to be considered
 - legal, regulatory and organizational basis
 - technical disciplines
 - regulatory practices and
 - personal and behavioral competences
- Long timescales
 - full life cycle of all facilities and activities (and even longer)

Specificities of KM for RBs

- Managing its knowledge RB interfaces with others
 - licensees, TSOs, national and international context
- As non-commercial entity, RB should make deliberate efforts to manage its own knowledge resource
- Dual role of RBs
 - as individual organization, the RB uses knowledge management to support its own regulatory functions
 - as regulator over facilities and activities, the RB oversees knowledge management activities of others

Key information

- Safety Report with the title
 - Knowledge Management for Safety Regulators
- Objective and scope
 - to give **practical** advice on **introducing and running** KM programmes in RBs and related TSOs, considering
 - Statutory functions of RBs in nuclear and non-nuclear countries
 - Regulatory processes for facilities and activities, and
 - Functions of RBs in EPR within the national emergency management systems
 - the report complements the existing SRS No. 79
 - Managing Regulatory Body Competence

Approach of guidance

- Step-by-step approach
 - determine "Regulatory Functions"
 - determine "Regulatory Knowledge Domains"
 - assess these knowledge domains for their criticality
 - ask if knowledge at risk?
 - yields: "Critical Knowledge Domains"
 - map the "Critical Knowledge Domains" against the "Regulatory Functions"
 - yields: areas to act on
 - choose corrective knowledge management actions

History and current status

- 20-24 June 2016, Vienna, Austria
 - RAS, NSRW, IEC, NSOC and NE involvement
 - significant change in the structure and content
 - wider scope for covering nuclear and radiation safety, EPR
 - the document was restructured and new chapters added
 - Version 4.0

History and current status

- 3rd International Conference on NKM
 - 7-11 November 2016, Vienna, Austria
 - the SR was presented during a specific session on NKM
 - interest was raised, the draft was requested for review/comments
- 8th Meeting of the Steering Committee on RCB & KM
 - 12-16 December 2016, Vienna, Austria
 - the SR was presented during a specific session on NKM
 - the SR was sent to the participants for review/comments

History and current status

- Providers of Case Studies were contacted with
 - the objective to unify the structure of case studies
 - Case Studies were resubmitted by June 2017
- 27-31 March 2017, Vienna, Austria
 - RAS, NSRW, IEC, NSOC and NE involvement
 - to finalize the SR after the 3rd ICNKM and 8th SC meeting
 - Version 5.0

History and current status

- 16-20 April 2018, Vienna, Austria
 - „final treatment”
 - comparison with the draft Safety Report on Managing Nuclear Safety Knowledge
 - clearly identify the scopes
 - filter out duplications and overlaps

Conclusions

- Knowledge management is important for safe, secure and efficient nuclear activities
- RBs and their TSOs should have a clear and well-defined KM Strategy and KM Plan in place
- KM Strategy and KM Plan is to be developed in consistency with the statutory functions of the RB
- Current status
 - „final treatment”



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Thank you!