NUSSC 40, item 1.9
RASSC 39 - WASSC 40, item RW2.1
TRANSSC 31, item 3.5.2
NSGC 8, item 2.4
EPRoSC 1

Progress report on the development of an IT platform for the future review, revision and publication of the safety standards and nuclear security series publications

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OBJECTIVES

The objectives of the system are:
• To ensure that the review and revision of the publication in the SS and NSS Series is based on a systematic feedback collection and analysis process
• To ensure that any revision of the publications or part of the publications is justified by the above mentioned feedback process, therefore also ensuring stability of the parts of the standards and guidelines that remain valid
• To maintain the technical consistency among the publication through a management as a complete collection rather than by individual management of individual publications
• To enhance semantic consistency through systematic use of harmonized terminology
• To ensure the completeness of the collection through a systematic top-down development approach complemented by topical gap analyses
• To support harmonized use and application of the safety standards and nuclear security series publications by enhancing their user-friendliness and by providing tools for the users to easily navigate within the whole collection.
Components

• A content management system to manage the whole collection, the feedback mechanism, the content of the publications and their relationships

• An On-line User Interface (NSS-OUI) that facilitates access to the content of the publications and greatly enables in depth navigation through the collection

• An electronically supported review, revision and approval process management system (step 0 at this stage)
Introducing the current set of publications
Establishing their topical and hierarchical relationships
Links to the glossary

Producing web e-versions
Having advanced search and navigation capabilities

User interface for collecting and extracting feedback on the current set of publications
Links to the glossary

Preparing DPPs and drafts
Supporting the review and approval process (user interface)

Project 2015
22 October 2015
Content and relationship management through metadata and through explicit relationship information

Note:

Top Down development results in Bottom-up references whereby the guides refer to requirements or recommendations but not the reverse \(\Rightarrow\) Need to re-establish top-down reading

Also in horizontal relationship, a req or rec can only refer to existing other req or rec. \(\Rightarrow\) Need to update cross-references
Ontologies (metadata)

Governmental framework
GSR Part 1

National framework

Decommissioning
GSR Part 6

Government

Reg. Body

Operator Licensee

Employee

Waste Management
GSR Part 5

Comissioning

Operation

Decommissioning

Framework for decommissioning

NPPs
RRs
FCFs

Planned Exp. Sit.
Existing Exp. Sit.
Emergency Exp. Sit.
Explicit vs implicit relationship

• Similar tagging → there is a topical relationship

• If it is necessary to read the related publication or part of the publication: establish an explicit relationship (example SSR-2/2 req 12 and SSG-25)

• Mechanism: tip note together with the text to provide information on which other document or part of another document is related to that text

• Other relationships are implicit (example paragraphs on site evaluation in SSG 6) but would need to be looked at when revising NS-R-3
Note:
This will look like SSR-5 for SSR-3 and SSR-4
Metadata allocation

• Description for each document (to be displayed in the Browse by publication mode and in the search results)

• Topical and contextual tagging at the document level (for topical guides)

• General relationship at the document level (for relations documents to documents)

• Name and description for each module/part of a document (to make cross-references between publications and to be displayed in a search result)

• Topical and contextual tagging for each module/part of a document (for facility or activity specific guides like SSG-6, SSG-14, SSG29, DS447, …). When an explicit relationship is established, then we have at least to also allocate the same tagging

• Relationship at each module/part of a document (for relations content to document or content to content). For example SSR-2/2 req. 12 to SSG-25 or SSR-5 req. 21 to SSG-31 or SSR-5 req. 21 to SSG-29 para. 7.1 to 7.5
DEMONSTRATION

• Navigation: Two browse modes with search capabilities to quickly find any relevant publication and its explicit relationship with other publications – Browse by publication or Browse by OR

• Search: advanced search for identifying both the explicit and implicit relationships
  • By topical area (search using the ontology) → 1 topic (for future revision of that topic if covered in several pub.)
  • By document (called relationship search) → all topics covered in that document (for future revision of that document) and all documents covering at least one common topic

• Responsive design: works for desktop, tablets, smartphones – works will all browsers (IE, Chrome, Safari, …)

• Systematic Feedback mechanisms
The Central Role of METADATA

Feedback

Need to allocate to topical areas

Identify to what the feedback applies

METADATA

Ability to identify in the standards what relates to a specific topical area and what feedback

Consistent revision

Revision process

Consistent updates

Consistent publication on web pages on specific topical areas

Facilitate SEARCH and feedback collection

Feedback process

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Feedback information

Distribution by topical area

Central database

Management of topical, hierarchical and semantic relationship

Revised publications: Standards, services guidelines, ...

Revised web pages for Users friendliness

Consistent updates for a set of topical areas

IT supported feedback analysis, review, revision and approval processes

FEEDBACK MECHANISM

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NEXT STEPS

• Input of the Glossary and integration with PoolParty for semi-automatic tagging

• Advanced feedback collection and retrieval system

• Step by step input of existing standards and NSS publications

• Need for « overall recommendations for SSR-6 and for the NSS Recommendations for user friendliness (use of the Browse by OR function)