Safety Standards Committee TRANSSC
INF - 18

38th Meeting, 26 – 28 June, 2019

Agenda Item 4.9.1

Proposed development of Technical Basis Document (TBD)

Transport Safety Unit
Division of Radiation, Transport & Waste Safety
Department of Nuclear Safety and Security
Status of Technical Basis Document

Version: June 2017

http://www-ns.iaea.org/committees/transsc/default.asp?fd=1676&dt=0

- Most of technical basis for SSR-6 (2012 Ed.) has been explored, summarized and documented.
- Most of literature cited or referred in TBD has been collected.
- It is a good textbook to be read by regulators and operators in the Member States to learn the technical background of the Regulations.
- A stage to search for the past seems almost completed.
Why TBD?

Excerpts from Terms of References for TM-38950:

After 50 years, over 10 revisions of the Regulations have been published. These revisions have been taking into account the experiences, new issues, new technologies and demand for safer transport and harmonization. Problems, challenges and demand for improvements drive the transport community continuously to periodically review, and, if justified, revise the Regulations.

The scientific and technical heritage of several decades of development in transport safety needs to be collated, assessed, and this valuable knowledge needs to be preserved for future use.

Generally every requirement was developed based on the technical basis exists in a decentralized manner in many Member States with mature nuclear programmes. Access to existing technical basis could lead to a better understand of the Regulations, and sharing and pooling this knowledge can contribute to improvement in the development and innovation in the future review and revision of the transport safety regulations.

Status of TBD

- IAEA technical document below Safety Standards Series documents (e.g. TECDOC, Safety Report).
  - Out of SPESS control
- A rolling document published(?) electronically on the web, and will be revised with revisions of the Regulations.
  - Linked to the database of background literature
- As an IAEA document, it should be reviewed and approved somehow by someone in order to be authorized. E.g.;
  - Current edition to be approved by TRANSSCC and issued as Rev.0.
  - After completion of 2015 initiated cycle, Revi.0 would be revised (it will take 1 -2 years), and submitted as Draft Rev.1 to TRANSSCC for review and comment (for 3 -4 months?).
  - With considerations to MS comments, amended Draft Rev.1 would be submitted to TRANSSCC for approval, then published on the web only.
  - Is there any IAEA publication rule to authorize such process?
Proposal for Future Structure of TBD

Part 1:
- Current TBD, good book to read and learn the technical background of the Regulations.

Part 2:
- Explanatory Material
- Historical or explanatory text in current SSG-26 will be moved here.

Part 3:
- Records of each revision cycle
- MS proposals and comments, and how they were addressed.
TBD Part 2?

Old days

In 1996

Tomorrow

Day after tomorrow

SS No.37
Advisory Material

TS-G-1.1 (ST-2)
Advisory Material

SSG-26 2018 Ed.
Advisory Material

Advisory + Explanatory = How? and Why?

SSG-26 20XX Ed.
Advisory Material
(How document)

Part 2

TBD Part 2
(Why document)
What will be the Process?

Working Document 1

Subject to the next review/revision cycle

WD2 should be prepared before Initiation of the next review cycle (i.e., by the end of 2019)

Collection of how text

Collection of why text

Working Document 2

Working Document 3

SSG-26 20XX Ed. Advisory Material

SSG-26 2018 Ed. Advisory Material

Coming soon!

Later …

TBD Part 2

Collection of why text

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Appendices?

- App. I: Q system
  - (why)
- App. II: Q system
  - (why)
- App. III: Segregation Distances
  - (how)
- App. IV: Package Retention
  - (how)
- App. V: Brittle Fracture
  - (how/why)
- App. VI: Criticality Assessments
  - (how/why)
- App. VII: SCO-III
  - (how)

TECDOC

All about Q System

SSG-26 20XX Ed. Advisory Material

How appendices basically go to SSG-26

TECDOC

Notes on Certain Aspects of the Regulations

Some of, or part of appendices may be moved to a technical document.
(future consideration)

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TBD Part 3?

- TBD Part 3 will be a kind of relational database between SSR-6 para. numbers, MS proposals on that para. and resolutions on that proposal in related meetings.
- Part 3 helps MSs to find what were proposed, discussed and concluded on each para. of SSR-6 in previous review/revision cycles.
- 2015 initiated revision cycle for the first step?

Resolution Record Table

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- Other data, such as draft for each step, tables of changes, can be included.
- Topical items can be summarized in a short report.
## Resolution Record Table

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- Identified as problem
- Approved
- Approved as amended
- No change
- Rejected

Each proposal ID No. and symbol are linked to related meeting resolution table.
Time Frame and …

• To initiate works to develop TBD Part 2 and Part 3, TRANSSC consensus to move towards this direction will be required.

• For Part 2, in order to prepare Working Documents for the next review cycle (expected to be open in January 2020), we have to decide which directions to go in this TRANSSC meeting.
  – Consultancy to prepare Working Documents may be required.

• For Part 3, it is preferable to have it before MS comments collecting period (i.e., before January 2020). However, required work load seems enormous.
  – Since 1996, six revision cycles have been experienced.
  – Though not in a well organized manner, all the data to explore revision histories are available.
  – Document format may be improved to facilitate subsequent work for data collection and for linking.

• It may be another burden to MS experts and Secretariat.
TRANSSC Decision?

- Do we move to develop Part 2 and Part 3 of TBD?
Thank you!

IAEA
60 Years
Atoms for Peace and Development

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