TRANSSC 28

16-20 June 2014

TRANSSC INDUCTION
Agenda Item 1.1
Overview

• Introduction to IAEA Safety Standards
• Organizational Structure of the Department of Nuclear Safety and Security
• History of Safety Standards Committees (SSC) and Present Status
• Background of the Regulations
• Policy for reviewing and revising the Agency's Regulations
• Review Flow Chart
## Abbreviations

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<th>Abbreviation</th>
<th>Full Form</th>
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<td>Strategies and Processes for the Establishment of IAEA Safety Standards</td>
<td>(SPESS)</td>
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<td>Safety Standards Committees</td>
<td>SSC</td>
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<td>Commission on Safety Standards</td>
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<td>Nuclear Safety Standards Committee</td>
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<td>Basic Safety Standards</td>
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<td>Member States</td>
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IAEA Statute (Article III.A.6) - establishes standards of safety
Adopted in consultation other UN bodies
Harmonized use and application safety standards provide high level of protection for people and the environment worldwide
Strong involvement of MS – global reference
Integrated, comprehensive and consistent set of up-to-date, user friendly and fit-for-purpose
Use and application in MS provides for worldwide, harmonized high level of protection for people and the environment
History of Safety Standards Committees (SSC) and Present Status

1957 inception Secretariat began developing and setting safety standards

- IAEA publication (STI/PUB/1) was Safety Series No. 1 on the safe handling of radioisotopes, published in December 1958.
- Regulations for the safe transport of radioactive material in 1961

- Establishment of four programmes - each with a specific and different review process
  - nuclear installation safety
  - radiation safety
  - waste safety
  - transport safety.
History of Safety Standards Committees (SSC) and Present Status

• Expansion of nuclear power globally-comprehensive set of safety standards for nuclear power plants emerged

• 1974 Nuclear Safety Standards Programme (NUSS).

• 1977 Standing Advisory Group on the Safe Transport of Radioactive Material (SAGSTRAM)

• 1988 Radioactive waste safety (RADWASS) programme
History of Safety Standards Committees (SSC) and Present Status

Until 1996- phase of response
• identified needs MS
• progressive establishment of a specific structure
• review process for each programme in a bottom-up approach
• collecting the experience in safety practices and guides

By 1996
• different processes for preparation and review
• resulted in a lack of compatibility

January 1996 Department of Nuclear Safety
• preparation and review standards
• uniform preparation and review process covering all areas
History of Safety Standards Committees (SSC) and Present Status

Created advisory bodies with harmonized terms of reference.
- Advisory Commission for Safety Standards (ACSS)
- Nuclear Safety Standards Advisory Committee (NUSSAC)
- Radiation Safety Standards Advisory Committee (RASSAC)
- Transport Safety Standards Advisory Committee (TRANSSAC)
- Waste Safety Standards Advisory Committee (WASSAC).

The term “advisory” was eliminated.

Commission on Safety Standards (CSS)
Nuclear Safety Standards Committee (NUSSC)
Radiation Safety Standards Committee (RASSC)
Transport Safety Standards Committee (TRANSSC)
Waste Safety Standards Committee (WASSC).
Safety Fundamentals


3 previous independent Safety Fundamentals publications
- nuclear safety
- radiation safety
- waste safety

Unified philosophy of nuclear safety and protection against ionizing radiation with a broad international consensus
HISTORICAL BACKGROUND OF THE REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

1953- Committee of Experts was appointed United Nations Economic and Social Council (ECOSOC)

universal system for transport of dangerous goods

Model Regulations
Classification of dangerous goods

Class 1 – explosives
Class 2 – gases
Class 3 - flammable liquids
Class 4 – flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases
Class 5 – oxidizing substances and organic peroxides
Class 6 – toxic and infectious substances
Class 7 – radioactive material
Class 8 – corrosive substances
Class 9 – miscellaneous dangerous substances and articles.
transport.

IAEA
IAEA – UNOB INTERFACE

- Incorporating SSR-6 into UNOB (Model Regulations)
Carriage of dangerous goods by sea

The International Convention for the Safety of Life at Sea, 1974 (SOLAS)

IMDG Code
- International code for the carriage of dangerous goods by sea
- Mandatory
- Class 7 covering radioactive material

- The International Maritime Organization’s (IMO), Maritime Safety Committee (MSC) is authorized to amend the Code

- Provisions of the IMDG Code, 2010 will be officially in force from 1 January 2012
Carriage of dangerous goods by air

International Civil Aviation Organization (ICAO)

- adopt and amend international standards, measures, practices

Technical Instructions for the Safe Transport of Dangerous Goods by Air is approved, issued and amended in accordance with the procedure established by the ICAO Council

Updated by an ICAO "Dangerous Goods Panel"

- review comments received from States, interested international organizations
- consider any changes in the

Recommendations ECOSOC Committee of Experts and IAEA

IAEA
Land transport is limited to continental traffic- no global convention

Regional agreements

- European Agreement -ADR
- MERCOSUR/MERCOSUL
- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
International Carriage of Dangerous Goods by Inland Waterways (ADN)

Recommendations addressed to the governments of European States with inland waterway networks and to the international River Commissions

Provisions of the ADN aligned with the IAEA Regulations
Requirements

IAEA Safety Standards
for protecting people and the environment

Regulations for the Safe Transport of Radioactive Material
2012 Edition

Specific Safety Requirements
No. SSR-6

IAEA
International Atomic Energy Agency
Policy for reviewing and revising the Agency's Regulations for the Safe Transport of Radioactive Material

• Action Plan “The Secretariat to publish ..... a revised or amended edition of the Regulations, as necessary, every two years ...” and “The Secretariat to continue the current Agency process for the review and, if necessary, revision of the Regulations”.
• In September 2004, the General Conference, in resolution GC (48)/RES/10.C, expressed satisfaction 
  • progress every two years, consistent with UN
Recommendations of TRANSSC on Decision Criteria for revision of IAEA Regulations

- **Principles**
  - Optimisation
  - Efficiency / practicality / regulatory stability
  - Compliance with dose limits
  - Socio-economic considerations
  - Harmonisation
  - Clarification

A detailed review of each change

If a significant safety change to SSR-6 is needed to maintain and assure the safety of transport, then the change is deemed to be “sufficiently important for safety to necessitate publication as soon as possible”.
IAEA Safety Standards
for protecting people and the environment

Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material

Safety Guide
No. TS-G-1.1 (Rev. 1)

IAEA
International Atomic Energy Agency

Planning and Preparing for Emergency Response to Transport Accidents Involving Radioactive Material

SAFETY GUIDE
No. TS-G-1.2 (ST-3)

INTERNATIONAL ATOMIC ENERGY AGENCY VIENNA
TS-G-1.3 and TS-G-1.4

IAEA Safety Standards
for protecting people and the environment

Radiation Protection
Programmes for the
Transport of
Radioactive Material

Safety Guide
No. TS-G-1.3

The Management
System for the
Safe Transport of
Radioactive Material

Safety Guide
No. TS-G-1.4

IAEA
International Atomic Energy Agency
IAEA Safety Standards

for protecting people and the environment

Compliance Assurance for the Safe Transport of Radioactive Material

Safety Guide
No. TS-G-1.5

IAEA
International Atomic Energy Agency


SAFETY GUIDE
TS-G-1.6

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VIENNA
Thank You