Update on INES User Manual Revision

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• INES Manual undergoes regular review
• Review of 2008 Manual requested 2016:
  – Member States
    • Biennial Technical Meeting of the INES National Officers (NOs), November 2016
  – INES Advisory Committee (AC)
    • Annual Meeting, November 2016

• Update:
  – Objectives
  – Activities
  – Next Steps
Objectives of review and revision
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- Align terminology with the terminology used in IAEA safety standards, in particular with
  - Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (GSR Part 3)
  - Preparedness and Response for a Nuclear and Radiological Emergency (GSR Part 7)
  - Safety of Nuclear Power Plants: SSR-2/1 (Rev. 1)
- Refine the rating to assess the impact of an event
- Incorporate
  - experience gained since 2008
  - lessons learned from response to the Fukushima Daiichi Accident
Objectives of review and revision

Feedback, experience since 2008:

• Add additional explanations on
  ➢ section on safety layers
  ➢ section on the additional factors
  ➢ rating of events at nuclear waste facilities

• Add chapter on communication

• Add more practical examples
Objectives of review and revision

Feedback, experience since 2008:

• Add additional explanations on
  ➢ section on safety layers
  ➢ section on the additional factors
  ➢ rating of events at nuclear waste facilities

• Add chapter on communication
• Add more practical examples
Activities April 2017- October 2018
2017 Revision

April 2017

• **DPP (Document Preparation Profile) approved by the NS Coordination Committee**

• **Member States requested to**
  - provide feedback on 2008 Manual
  - indicate topics that need to be clarified or further explained
  - propose changes on the structure, specific chapter or rating criteria in general

• **Feedback received from**
  - Argentina, Australia, Bulgaria, Germany, Hungary, India, Netherlands, Nigeria, Pakistan, Peru, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, USA

• **OECD/NEA interested in co-sponsoring**
2017 Secretariat coordination & cooperation

– All relevant IAEA Divisions were consulted throughout the revision process through:
  • Meetings of NS Coordination Committee
  • Bilateral meetings on the specific technical subjects
  • Participation in relevant consultancy meetings
  • Divisional review of the drafts
2017 Consultancy Meetings

1st Meeting April 2017, Vienna

- Subject matter experts, INES Nos discuss
  - document’s structure, key concepts to be addressed and way forward
  - effectiveness of INES as a communication tool
  - rating criteria that need to be refined
  - clarifications and explanations to be provided

2nd Meeting, July 2017, Vienna

- Subject matter experts, INES NOs
  - Continue revision
  - Incorporate lessons learned from application of INES in response to the Fukushima Daiichi Accident
  - Provide further clarifications on rating criteria
2017 INES AC & EPReSC

October 2017, Vienna: INES AC Annual Meeting

• Discussed
  • drafts of chapters 3 to 6
  • comments received from Member States

November 2017, Vienna: EPReSC meeting

• Presented for information
January-April 2018

3rd Consultancy Meeting: January-February, Vienna

- revise chapter on impact to people and environment
- review work done so far on other chapters
- INES AC Annual Meeting

INES AC Annual Meeting, April, Vienna

- Chapter-by-chapter review, all comments addressed

Technical Meeting, April, Vienna

- All Member States, IACRNE invited
- 52 IAEA Member States, 2 International Organizations
- Discussed draft Manual line by line
- Discussions summarized in table for further
April – September 2018

- **June**: All INES NOs requested to provide feedback
- 230 comments received from
  - Austria, Belgium, Canada, France, Germany, Hungary, India, Iran, Thailand and UK
  - Algeria, Mexico, Finland, Russian Federation and Serbia responded that they have no comments
  - Comments also from: FORATOM, ENISS (European Nuclear Installations Safety Standards Initiative)
- **July/August**: 4th Consultancy Meeting:
  - Subject matter experts, INES NO’s review
    - criteria for rating of impact on radiological barriers
    - criteria for controls at facilities
August/September:

- New draft based on consultancy meetings, INES AC, TM, comments received from NOs
- Technical editing by Secretariat
- 7 September-12 October: Comment period
- 324 comments:
  - 19 Member States: Austria, Argentina, Belgium, Canada, France, Germany, Hungary, India, Iran, Italy, Japan, Korea, Nigeria, Pakistan, Poland, Sweden, Switzerland, Thailand, UK,
  - INES Advisory Committee members
  - ENISS/FORATOM
- Resolution ongoing, some revised comments submitted post-deadline
Next Steps
Summary timeline