“The Integrated Regulatory Review Service”

IRRS Highlights

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IAEA
Atoms for Peace: The First Half Century
1957–2007
Content

- Background
- Vision and objectives
- Basis for Regulatory Technical and Policy Issues
- IRRS Structure
- Process
- Outline
- Regulatory Sharing Knowledge Network
Background
Integrated Regulatory Review Service

What It Is?

• International Peer Review against international standards
• An exchange of professional regulatory experiences
• A sharing of lessons learned and good practices

What It Is Not?

• Individual Judgments or Opinions
• Regulatory Inspections
• Licensees Review
Vision and Objectives
“Effective and Sustainable Regulatory Bodies that apply IAEA safety standards, share regulatory experiences, knowledge and lessons learned among Regulators”
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Objectives:

• Promote sharing of experience and exchange of lessons learnt among senior regulators;

• Contribute to the harmonization of regulatory approaches among Member States;
Objectives:

- Provide requesting Member States with an **objective review** (Technical and Policy issues) of their nuclear and radiation regulatory practices with respect to **international safety standards**;

- Provide the host country with **recommendations and suggestions** for improvements;

- Provide other Member States with **good practices** identified in the course of the review;
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Objectives:

• Provide reviewers from States and the IAEA staff with opportunities of mutual learning process; and

• Provide real opportunities to IAEA staff to get direct feedback from the application of international standards.
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Basis for Regulatory Technical and Policy Issues
IAEA SAFETY STANDARDS

- International Reference Point for High Levels of Safety.
- High Technical Quality
- Global Consensus among Experts and Member States
- Reference Basis for Safety Requirements
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Basis for technical regulatory issues

GS-R-1: **LEGAL AND GOVERNMENTAL INFRASTRUCTURE FOR NUCLEAR, RADIATION, RADIOACTIVE WASTE AND TRANSPORT SAFETY**

1. Legislative and governmental responsibilities
2. Responsibilities and functions of the regulatory body
3. Organization of the regulatory body
4. Activities of the regulatory body
5. Special thematic infrastructure
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Basis for technical regulatory issues (cont’d)

- **GS-R-1**: Legal & Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety
- **GS-R-3**: Management System for Facilities and Activities
- **Safety Series 115**: International Basic Safety Standards
- **NS-R-1**: Safety Requirements of Nuclear Power Plants: Design
- **NS-R-2**: Safety Requirements of Nuclear Power Plants: Operation
- **NS-R-4**: Safety Requirements of Research Reactors
- **Draft**: Safety Requirements of and Fuel Cycle Facilities
Basis for technical regulatory issues (cont’d)

TS-R-1: Regulations for the Safe Transport of Radioactive Material TS-R-1
WS-R-1: Near Surface Disposal of Radioactive Waste Safety Requirements;
WS-R-2: Predisposal Management of Radioactive Waste, including Decommissioning;
WS-R-3: Remediation of Areas Contaminated by Past Activities and Accidents;
WS-R-4: Geological Disposal of Radioactive Waste;
GS-R-2: Preparedness and Response for Nuclear and Radiological Emergencies Requirements
Basis for technical regulatory issues (cont’d)

- The Code of Conduct for Radiation Safety and the Security of Radioactive Sources 2004 and Guidance on the Import and Export of Radioactive Sources 2005; and
## IRRS Matrix

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Policy Issues:

Reference material:

• Safety Fundamentals;
• Results from the Convention on Nuclear Safety;
• Results from the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management;
• IAEA regulatory and safety conferences and other relevant international meetings and forum;
• IAEA reports on safety issues and trends;
• Results from IAEA review missions;
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Regulatory Technical and Policy Issues

• Enhancing the Regulatory Effectiveness and Competence;
• Transparency and Openness (Stakeholders inv.);
• Independence (“de jure” & “de facto”);
• Leadership and Management of Safety;
• Regulatory aspects on Operating Experience Feedback;
• Long Term Operation and Ageing of Nuclear Facilities;
Regulatory Technical and Policy Issues

- Licensing New Built – New Technologies;
- Regulatory Approaches balance between Deterministic and Probabilistic. Performance based versus Prescriptive;
- International Participation and Legal and non-binding international instruments;
- Harmonization between Nuclear and Radiation Regulations; and
- Human Resources and Knowledge Management
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IRRS Guidelines

• Provide guidance: prep, execution, reporting, follow-ups
• Provide a consistent and systematic methodology for:
  • Conducting the review of regulatory technical and policy issues;
  • Consistent evaluation of the status of development of the national regulatory infrastructure;
  • The identification of areas for improvements to meet international safety standards and best practices and to face regulatory challenges;
  • Making recommendations and suggestions; and
  • Establishment or improvements on an action plan
IRRS Structure & Process
IRRS - Roles and responsibilities

- IRRS Team Leader.
- IRRS Deputy Team Leader.
- IAEA Team Coordinator.
- IAEA Deputy Team Coordinator.
- IAEA Review Team Coordinator(s).
- Expert Reviewer - team member.
- Liaison officer in regulatory body.
- Counterparts in regulatory body.
Conduct of IRRS

Three methods used:

• Review of Written Material
  • prior to start of IRRS mission; and
  • throughout IRRS mission

• Interviews with counterparts and other personnel

• Direct observations of organization, practices & activities (regulatory body, government departments & nuclear facilities and activities)
Evaluation and Reporting

IRRS team members / experts will:

• Collect information in topical areas and make detailed, daily notes of each visit/ interview/ meeting or review conducted;
• Record all relevant information (confidentiality is maintained);
• Summarize regulatory technical and policy observations;
• Analyze and evaluate observations to identify strengths and areas for improvement; and
• Discuss observations, insights and evaluation in IRRS team meetings (daily).
Observations, analysis and evaluation may result in:

- Conclusions (Findings)
- Recommendations
- Suggestions and/or
- Good Practices
IRRS SCHEDULE

- Overall Mission schedule
- Opening IRRS team briefing
- IRRS Entrance Meeting
- Daily Programme
- Team Co-ordination Meetings
- IRRS Exit Meeting
IRRS Mission – Daily Team Meetings

• Summarize day’s key observations by each member;
• Share insights and observations regarding potential implications in other review areas;
• Analyze and evaluate observations and identify concerns or positive features; these will form the basis for recommendations, suggestions and good practices;
• Inform the team of major findings in review areas;
• Identify areas for which further information is needed;
• Exchange views, ideas and results of evaluation in each area;
• Ensure consistency and consensus of conclusions, recommendations, suggestions and good practices;
• Consolidate team views and formulate the way in which their findings should be reported; and
• Determine the status of each team member’s written input to draft IRRS report;
IRRS Mission - Exit Meeting

Attended by

- Senior personnel of regulatory body;
- Senior representative of the IAEA;
- Representatives from other organizations involved in IRRS;
- Counterparts;
- IRRS team;
- Team leader summarizes the main results of IRRS mission; and

- Draft report is provided to host country
Outline
Countries with Nuclear Installations

- Romania, January 2006 (Follow-up IRRT and RaSSIA)
- UK, March 2006 (1st Phase)
- France, November 2006 (Full Scope)
- Australia, Japan, June 2007
- Spain, Pakistan, Germany, UK (2nd Phase), Peru, 2008
- Russia, Canada, France (Follow-up), Ukraine, 2009
- United States of America, China, 2010
- Sweden, Netherlands, South Africa, Statements of Intent
Countries requested IRRS for sources:

- Algeria, Angola, Cameroon, Gabon, Kenya, Mauritius, Mongolia, Niger, Palau, Qatar, Uzbekistan. 2007

- Botswana, Burundi, Central African Republic, Cote d’Ivoire, DR Congo, Guatemala, Haiti, Lebanon, Madagascar, Mozambique, Namibia, Oman, Paraguay, Saudi Arabia, Uganda, Venezuela, and Zimbabwe. Statements of intent
Regulatory Sharing Knowledge Network
Regulatory Sharing Knowledge Network

- To develop a regulatory network including
  
  - Establish a web-based platform to share regulatory information;
  
  - Collect and disseminate regulatory information, actions, challenges, initiatives and lessons learned;
  
  - Analyze and formulate regulatory issues and trends;
  
  - Disseminate the IRRS findings;
  
  - Identify the needs for regulatory assistance, activities or missions to MS;
  
  - Promote the exchange of regulatory staff among MS
Regulatory Sharing Knowledge Network

- **Key Elements**
  - IRRS database
  - Regulatory Knowledge
  - Regulatory experiences
  - Main Challenges to be used later as new policy issues
  - Issues coming from legal–binding (Conventions) and non-binding international Instruments (Code of Conducts)
  - Regulatory Issues and Trends
International Atomic Energy Agency

...Thank you for your attention......IRRS Team