

Independent, Transparent and Effective Regulator

The Role of the International Atomic Energy Agency's Integrated Regulatory Review Service



International Framework for Nuclear Energy Cooperation
and Nuclear Energy Agency's
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IAEA

International Atomic Energy Agency

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Globalization of Nuclear Safety

Global Nuclear Safety Framework

- Develop sustainable, broadly acceptable policies for safety, security and radioactive waste
- Harmonize regulations and industry standards
 - Minimum international safety requirements
 - Standardized reactor designs
- Ensure stakeholders involvement

International Instruments

- Legal instruments
 - Convention on Nuclear Safety
 - Code of conducts
- Safety Review Services (SRS)
- Expert missions
- IAEA Safety Standards



NSNI Safety Review Services

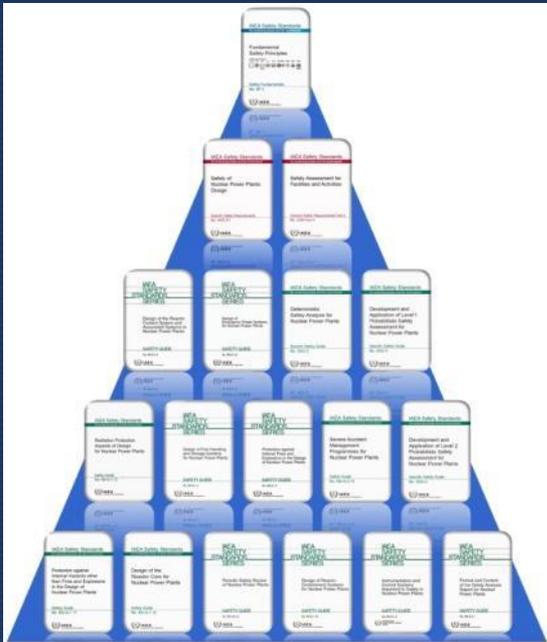
Peer Review Services



- Integrated Regulatory Review Service (IRRS)
- Site and External Events Design (SEED)
- Operational Safety Review Service (OSART)
- Integrated Safety Assessment of Research Reactor (INSARR)
- Safety Evaluation during Operation of fuel Cycle facilities (SEDO)
- Safety Aspects of Long Term Operation (SALTO)
- Technical Safety Review (TSR) Services

NSNI Safety Review Services

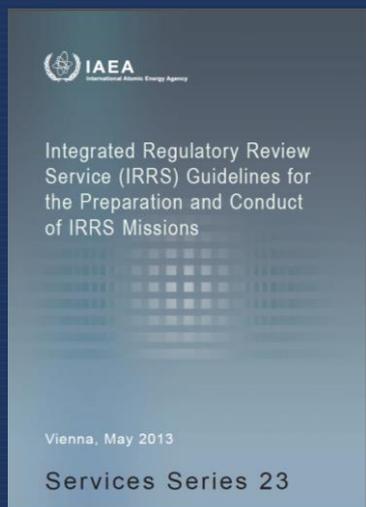
Core Features



- SRS conducted by IAEA staff and international experts
 - IAEA Safety Standards form the basis for SRS
- SRS contribute to sharing knowledge and good practices
 - Identify opportunities for improvement in safety of nuclear installations
- Governments, regulators, operators and technical support organizations benefit from SRS

Integrated Regulatory Review Service

Main Facts



Key objective(s)

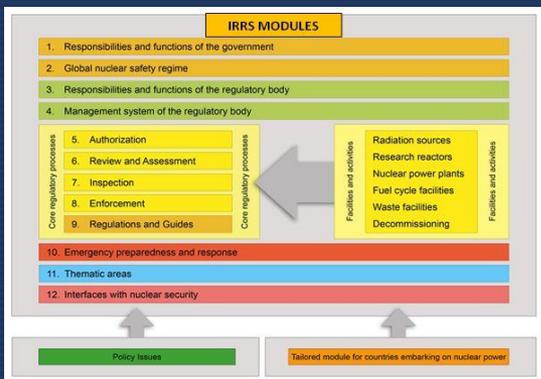
- To strengthen and enhance the effectiveness of national regulatory infrastructure for nuclear, radiation, radioactive waste and transport safety and the security of radioactive sources
- To assess the status of national regulatory infrastructure against IAEA safety standards.
- To enhance nuclear and radiation safety and regulatory effectiveness

Main scope

- All regulated facilities and activities

Integrated Regulatory Review Service

Main Facts



Areas of work

- Responsibilities and functions of the government
- Global nuclear safety regime
- Responsibilities of the regulatory body
- Management system of the regulatory body
- Authorization
- Review and assessment
- Inspection
- Enforcement
- Development of regulations and guides
- Emergency preparedness and response (regulatory aspects)
- Additional Areas
- Interfaces with Nuclear Security
- Tailored module for countries embarking on nuclear power

Integrated Regulatory Review Service

Key Figures



IRRS Missions from 2006 to 2015



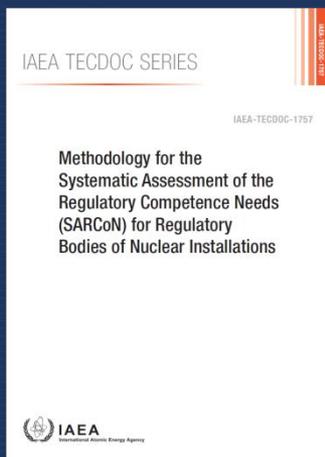
IRRS Missions between 2006-2015

	MSs w/ NIs	MSs w/ NPP	Total Missions (include. No NIs)
Initial Missions	39	28	56
Follow-up Missions	14	14	16
Total Missions	53		72

IRRS Tailored module for embarking countries, based on the IAEA Safety Guide : **Establishment of Safety Infrastructure for a Nuclear Power Programme**

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1507_Web.pdf

Financing in a stable environment - Government's Role

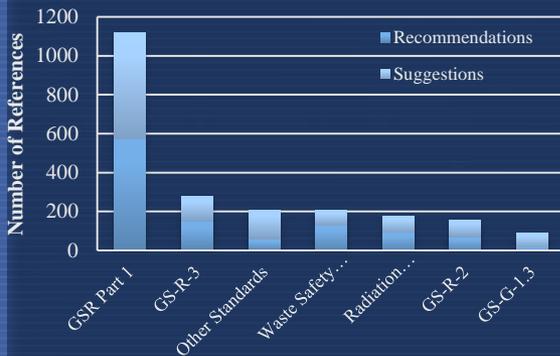


- Adherence to legal binding instruments
Assessment of needs and development of realistic estimates
- Analysis of options and decisions taken at a governmental and/ or regulatory level
- Consideration of financial aspects of the NPP programme for its entire duration
- Financial aspects for education and training, research and nuclear regulation
- Basic decisions on establishing funding mechanisms for waste and spent fuel management and decommissioning in early stages

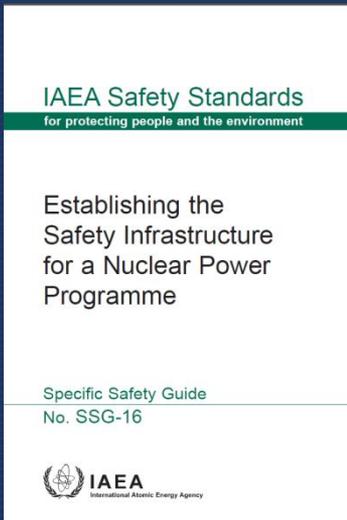
Financing in a stable environment – Regulatory Certainty



- Legal authority
- Absence of undue pressure from interested parties
- Competence – technical and managerial
- Resources – financial and human for regulatory control of facilities and activities
- Ethical behaviour and strong safety culture
- Consistency in implementation of regulatory processes and in making decisions
- Transparency and openness in communicating with stakeholders
- Peer and international recognition



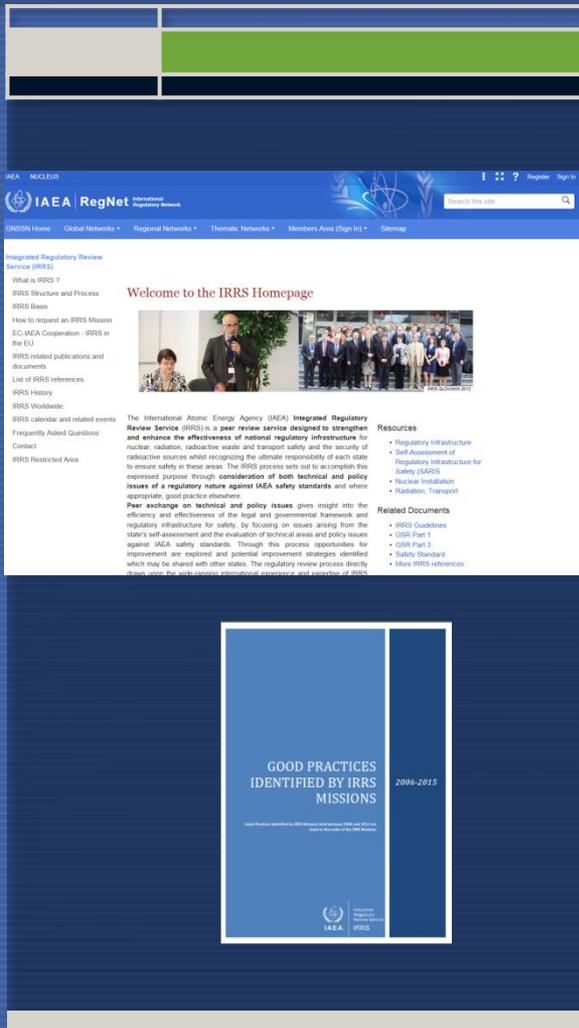
Implementation of IRRS in Embarking Countries



IRRS findings relate to:

- De jure and de facto independence in regulatory decision-making
- Development of policies and strategies
- Coordination of responsibilities for developing a timely comprehensive safety regulatory framework, especially for NPP licensing
- Ensuring adequacy of regulatory resources with the necessary competence
- Defining and formalizing regulatory processes
- Development of integrated management system

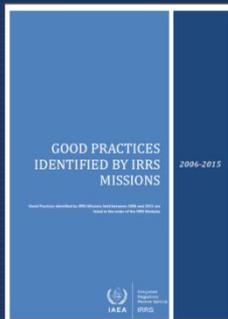
Enhancing Regulatory Effectiveness



- Increasing transparency through sharing IRRS reports and conducting follow-up missions
- Enhancing regulatory effectiveness and safety of nuclear installations through implementation of recommendations and suggestions
- Assuring regulatory certainty through better application of IAEA safety standards and recognition of Self-assessment by regulators

Challenges:

- RBs face difficulties in addressing recommendations and suggestion directed to the government



Strengthening International Cooperation



- Opportunities for mutual learning
 - Sharing best international practices and experience
 - Feedback utilized in the development of IAEA Safety Standards
- Alignment of national frameworks for safety to IAEA Safety Standards
- Active cooperation between IAEA and other bodies to enhance nuclear safety
- Common reporting requirements for IRRS and the Convention on Nuclear Safety

Conclusions



- IRRS programme contributes to continuous improvement in regulation of nuclear installations and in their safety operation
- IRRS missions contribute to enhancing regulatory effectiveness and certainty
- Results of IRRS missions are valuable in the development and implementation of safety infrastructure for a new NPP Programme and may inform financing decisions

<https://gnsn.iaea.org/regnet/irrs/Pages/default.aspx>

Questions?



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