

Regional Cooperation in the Development of Nuclear Infrastructure

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Presentation Outline

- Milestones and Infrastructure Issues
- Regional Cooperation Fora
- Alternative Contracting and Ownership
- Common Issues and Conclusions

IAEA Milestones Approach: Milestones



The Milestones Approach is phased and comprehensive.

IAEA Milestones Approach: Infrastructure Issues



National Position



Nuclear safety



Management



Funding and Financing



Legislative Framework



Safeguards



Radiation protection



Regulatory Framework



Electric grid



Human resources development



Stakeholder involvement



Site and supporting facilities



Environmental protection



Emergency planning



Security and physical protection



Nuclear fuel cycle



Radioactive waste



Industrial involvement



Procurement

The Milestones Approach is holistic and considers 19 specific infrastructure issues.

Regional Cooperation on Infrastructure

- IAEA supports three regional nuclear infrastructure projects:
 - European Regional
 - African Regional
 - Asian Regional



European Regional Objectives

- Share **best practices/lessons learned** related to the 19 infrastructure issues.
- Identify and discuss **common issues and challenges** related to the development or expansion of nuclear power programmes.
- Provide an opportunity for Member States to **update** each other on nuclear energy planning.
- Discuss **issues of topical interest** that are specific to the regions.
- Create opportunities for **networking and cooperation** between “newcomer” countries and those countries with more developed nuclear energy programmes.

African Regional Objectives

- **Train and assist in energy planning** at regional or sub-regional level through using IAEA tools such as MEAD, MESSAGE, etc.
- Assist in the **development of nuclear safety infrastructure** by providing education and training on IAEA standards and guidance.

Energy Planning: What is the correct energy mix?

Current demand/ current resources

Economic, environmental and policy goals in 20/30 years, forecast scenarios

Asian Regional Objectives

- Provide fundamental support to assist Member States in **making a “knowledgeable decision”** about nuclear power.
- Support both Phase 1 and Phase 2 countries through a variety of related activities:
 - National Position
 - Electrical Grid
 - Supply Chain and Procurement
 - Local Participation and Industrial Involvement

Alternative Contracting and Ownership

- Recent IAEA TECDOC “Alternative Contracting and Ownership Approaches for New Nuclear Power Plants.”
- Includes regional approach case studies:
 - Cernavoda Units 3 and 4: equity approach
 - Krsko Nuclear Power Plant: history and lessons learned
 - Visaginas Nuclear Power Plant: regional approach

<http://www-pub.iaea.org/books/IAEABooks/10733/Alternative-Contracting-and-Ownership-Approaches-for-New-Nuclear-Power-Plants>

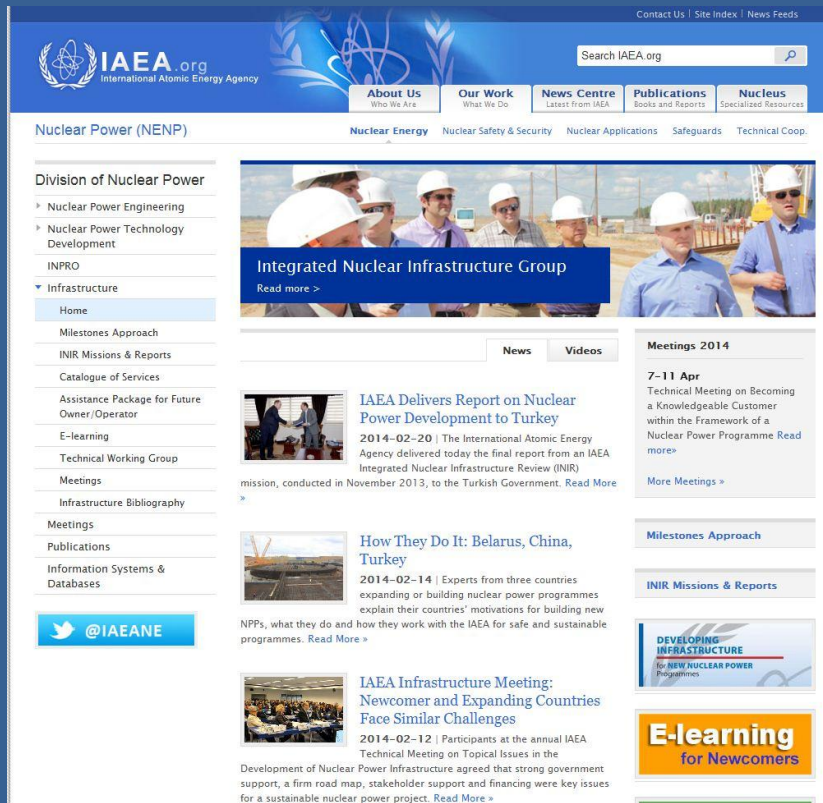
Conclusions

- The IAEA continues to recognize the value of regional cooperation in the area of nuclear infrastructure development.
- These activities allow Member States to address common challenges and share best practices.
- As the infrastructure evolves, the IAEA will look for more ways to explore opportunities for cooperation.

Additional Information

Website: IAEA and Newcomers

<http://www.iaea.org/NuclearPower/Infrastructure>



The screenshot shows the IAEA Nuclear Power (NENP) website interface. At the top, there is a navigation bar with links for 'Contact Us', 'Site Index', and 'News Feeds'. Below this is a search bar and a menu with categories: 'About Us', 'Our Work', 'News Centre', 'Publications', and 'Nucleus'. The main content area is titled 'Nuclear Power (NENP)' and includes a sub-menu for 'Nuclear Energy', 'Nuclear Safety & Security', 'Nuclear Applications', 'Safeguards', and 'Technical Coop.'. A large banner image features a group of men in hard hats, with the text 'Integrated Nuclear Infrastructure Group' and a 'Read more >' link. Below the banner, there are sections for 'News' and 'Videos'. The 'News' section contains three articles: 'IAEA Delivers Report on Nuclear Power Development to Turkey' (dated 2014-02-20), 'How They Do It: Belarus, China, Turkey' (dated 2014-02-14), and 'IAEA Infrastructure Meeting: Newcomer and Expanding Countries Face Similar Challenges' (dated 2014-02-12). The 'Videos' section includes 'Meetings 2014' with a video titled '7-11 Apr Technical Meeting on Becoming a Knowledgeable Customer within the Framework of a Nuclear Power Programme' and 'Milestones Approach'. There are also links for 'INIR Missions & Reports' and 'E-learning for Newcomers'.

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