

Combining International Best Practices and Local Specifics in Developing National Physical Protection Regulations

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Regulations are key to nuclear security

- ▶ Establish goals
- ▶ Define responsibilities
- ▶ Establish mandatory requirements and provide evaluation criteria
- ▶ Provide guidance to facilitate compliance with mandatory requirements
- ▶ Capture existing best practices
- ▶ Ensure uniformity

IAEA recommendations highlight important role of regulations

- ▶ IAEA's "Milestones..." defines legislative and regulatory frameworks as one of the twelve essential elements for nuclear security
- ▶ Other essential elements need to be codified in national legislation and regulatory documents to be practically implementable
- ▶ Regulatory framework need to be established BEFORE the country is ready to invite bids for the first nuclear power plant

There are multiple examples of international assistance in developing nuclear security regulations

- ▶ IAEA recommendations - model for domestic nuclear security regulations
- ▶ Review of national nuclear security regulations by IAEA IPPAS missions
- ▶ The United States supported Russia, Ukraine and Belarus in developing national nuclear security regulations
- ▶ Russia accompanies all contracts for construction of nuclear power plants abroad with support for development of regulatory infrastructure

International cooperation in regulations development provides valuable lessons

- ▶ Regulatory environment in each country is unique - direct transfer of existing requirements and best practices from other countries or IAEA is not always possible
- ▶ Actual regulation development constitutes formalization of accumulated best practices - clear understanding of regulation content is critical before regulation development starts
- ▶ It is impossible to regulate everything – balance between mandatory requirements and operator's flexibility is important

Regulatory development efforts need to reflect lessons learned

- ▶ Identify key stakeholders and processes
- ▶ Analyze hierarchy and structure of national regulatory basis
- ▶ Determine required regulatory coverage
- ▶ Capture high level physical protection goals, allow implementation flexibility
- ▶ Develop national expertise and capabilities

Identify key stakeholders and processes

- ▶ WHO and HOW are critical for successful regulations development
- ▶ Key stakeholders: managing body, regulatory body, operators
- ▶ Key processes: need identification, drafting, expert and public review, reconciling feedback and developing final draft, enactment and distribution
- ▶ Ensure compliance with general legal requirements – cooperate with lawyers



How does this work in specific country?

Analyze hierarchy and structure of national regulatory basis

- ▶ Hierarchy structure and complexity of national regulatory basis vary from country to country
 - Belarus has 20+ types of regulations – some of them are applicable to PP regulation, some of them do not
 - Russia has special type of documents to establish mandatory nuclear requirements – Federal Norms and Rules (FNP)
 - Ukraine has dedicated law covering physical protection issues
- ▶ Determine what is appropriate and ensure comprehensiveness and consistency

Determine required regulatory coverage

What issues need to be covered by what types of documents with what level of details?

Example of regulatory coverage analysis results

	Law	Mandatory Requirements Established by Regulator	Voluntary Guidelines
Assets subject to PP	Covered	Covered	Need coverage
Responsibility for PP	Covered	Need coverage	Need coverage
PP systems design and operation	Covered	Covered	Need coverage
PP equipment	Covered	Covered	Covered
PP procedures	Covered	Need coverage	Need coverage
PP personnel	Covered	Covered	Need coverage

Capture high level physical protection goals, allow implementation flexibility

- ▶ INFCIRC/225 defines goals of any PP system: prevention, detection, delay and response, and mitigation
- ▶ Different approaches to achieving these goals
- ▶ Imposing specific approach to implementation can be counterproductive
- ▶ Analyze local practices
- ▶ Integrate local and international best practices based on analysis results
- ▶ Performance based vs. prescription regulations

Develop national expertise and capabilities

- ▶ Developing, implementing and enforcing regulation require substantial knowledge and expertise
- ▶ Required knowledge and expertise must be obtained in advance
- ▶ Internationally available opportunities should be used, but national education and training infrastructure must be created starting from certain maturity level

Comments and questions?

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