Purpose of Forum

- Identify, understand and address key regulatory challenges that may emerge in future small modular reactor (SMR) regulatory discussions
Members

• Canada
• China
• Finland
• France
• Korea
• Russia
• United Kingdom
• United States
Objectives

• Share regulatory experience amongst forum members preparing to license SMRs
• Capture good practices and methods
• Interact with key stakeholders
• Propose changes, if necessary to requirements and regulatory practices
Structure for Pilot Project

• Steering Committee
• Working Groups
  – Graded Approach
  – Defence-in-Depth
  – Emergency Planning Zone Size
Graded Approach Working Group

• Developed a detailed survey for forum members on national approaches
• Analyzed survey results and discussed common positions
• Reviewed IAEA documents and considered recommendations
Graded Approach – Main Findings

• Graded approach can enhance regulatory efficiency without compromising safety
• Starting point for SMRs should be requirements for Nuclear Power Plants (NPPs)
• Need to determine what is necessary to demonstrate “proven-ness”
• IAEA should lead development of technical guidance on graded approach for NPPs
Defence-In-Depth Working Group

• Identified key regulatory challenges with respect to DiD that may emerge in future SMR regulatory activities.
• Also developed a detailed survey on national approaches
• Analyzed survey results and unique features of SMRs
Defence-in-Depth – Main Findings

• Defence-in-depth (DiD) concept should be fundamental for design and safety demonstration of SMRs
• SMRs raise questions regarding application of DiD in several areas
• Further guidance to help safety assessment of DiD applied to SMRs is needed
EPZ Size Working Group

• Established an understanding of each member’s regulatory views on EPZ size
• Shared technical basis for EPZ size decision
• Discussed what evidence SMRs would need to present to regulators to justify smaller EPZs
EPZ – Main Findings

• EPZ is required but may be scalable
  – Novel features and technology
• IAEA safety requirements and methodology for EPZ size are applicable
• Same SMR design may result in different EPZ size in different countries
  – Dose criteria
  – Policy factors
  – Public acceptance
Pilot Project Report

• Summarize accomplishments of the Forum
  – Common positions
  – Working Group reports
  – Recommendations for future activities

• Will be published as IAEA report in 2017
Next Steps

• Updating Terms of Reference for Forum
  – Purpose and objectives largely unchanged
  – Deciding on issues for new working groups
  – Open to new members that are able to contribute in a meaningful manner to the working groups

• Next Steering Committee Meeting
  – 14-17 November 2017
Want to learn more?

Thank you for your attention!