

Framework for Irradiation Experiments (FIDES): Status and Further Steps

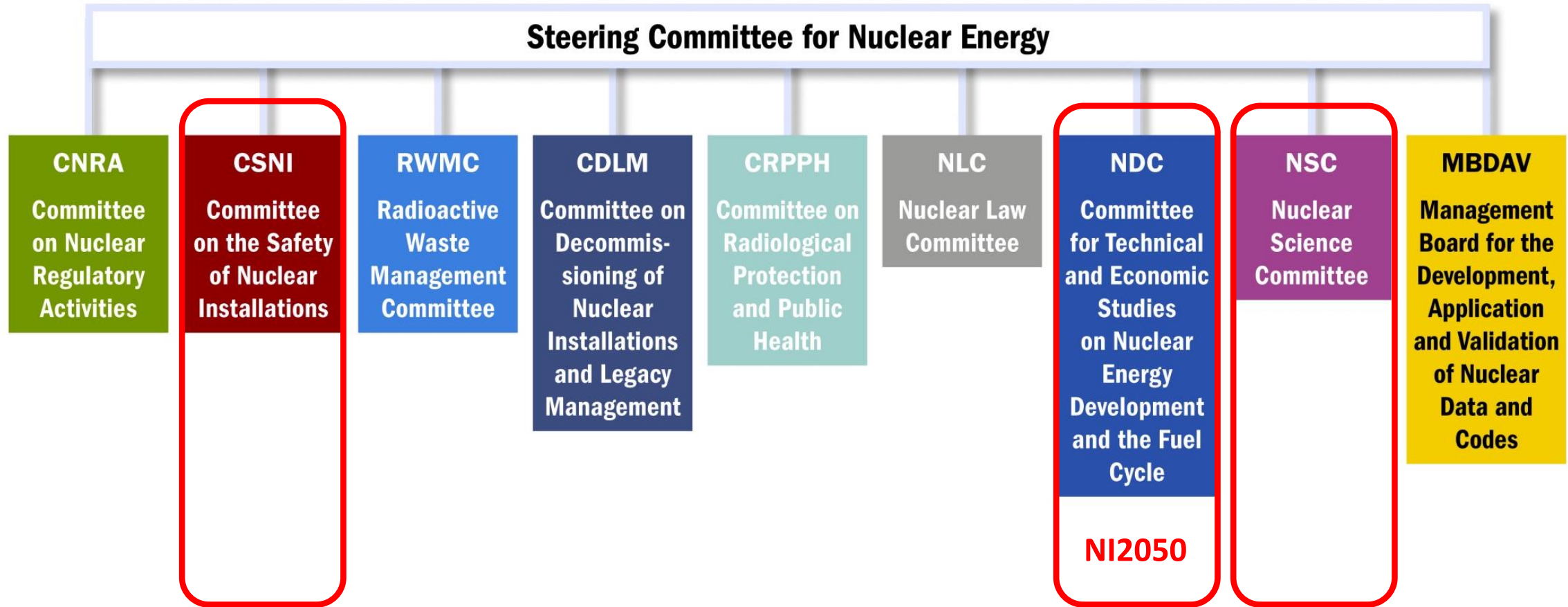
Tatiana Ivanova, Head of Division of Nuclear Science

NDC Meeting
10 July 2019

New Multinational NEA Framework for In-pile Fuel and Material Testing: Motivation

- Strengthen fuel- and material-related experimental capacities for the benefit of industry, safety and science
- Address the post-Halden situation
- Develop a coordinated approach and a new paradigm for experimentation

NEA Standing Technical Committees



Involved NEA Committees

New Multinational NEA Framework for In-pile Fuel and Material Testing: Steps towards establishing the Framework

- Workshops that gathered representatives from vendors, utilities, TSOs/regulators and R&D:
 - January 2018 <https://www.oecd-nea.org/science/workshops/advnucfuel2018/>
 - October 2018 <https://www.oecd-nea.org/science/workshops/fuelmat2018/>
 - March 2019 <https://www.oecd-nea.org/download/science/workshops/neaframework/>
- Workshops' outcomes shared on governmental level, including with the **NEA Steering Committee**
- Work in progress: develop Framework Agreement in parallel to Joint Experimental Programmes (JEEPs) based on the most mature proposals brought to March workshop

FIDES: Proposed Structure & Programmes

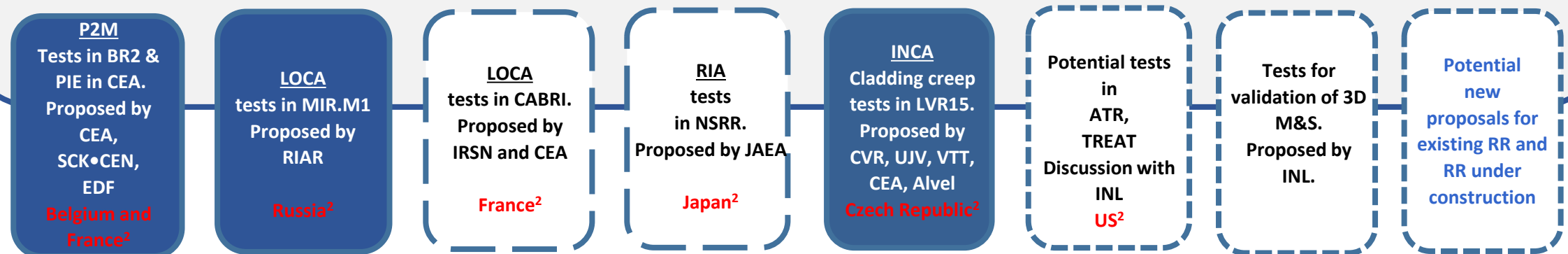
Pursuant to Article 5 of the NEA Statute, the Framework will be established as an international joint undertaking

Framework for IrraDiation ExperimentS – FIDES¹

- Being designed to provide stable, sustainable, reliable platform and an incentive for innovations for fuels and materials testing
- Encompasses **Joint Experimental Programmes** and the **Cross-cutting Activities**

Joint ExpErimental Programmes (JEEPs)

- Enable in-pile experiments in Fuel & Material test reactors and PIE



¹ Fides (Latin: Fidēs) was the goddess of trust and bona fides (good faith)

² Country of the host organisation

Added Value and Cross-cutting Activities

The Framework is currently being established in order to

- provide continuity and sustainability in the strategic field
- build a collective awareness of needs and capabilities
- identify gaps requiring investments and facilitate related implementations
- create opportunities for **cross-cutting activities**
 - State-of-the-art instrumentation and modelling & simulation
 - Preservation and quality management of experimental data
 - Professional development and educational activities
- in collaboration with IAEA, address practical issues of nuclear fuel transport and waste management

Further Steps

Meeting “Preparing the Kick-off of FIDES Joint Experimental Programmes”
3-5 September, 2019, NEA Headquarter in Boulogne-Billancourt

Objectives:

- discuss in detail P2M, LOCA and INCA JEEP Proposals
- discuss legal/financial aspects and cross-cutting activities of FIDES

Organisations interested in contributing to FIDES and sponsoring the JEEPs under discussion are invited

Thank you for your attention



All NEA publications and institutional documentation available at
www.oecd-nea.org

