

Three Key Steps

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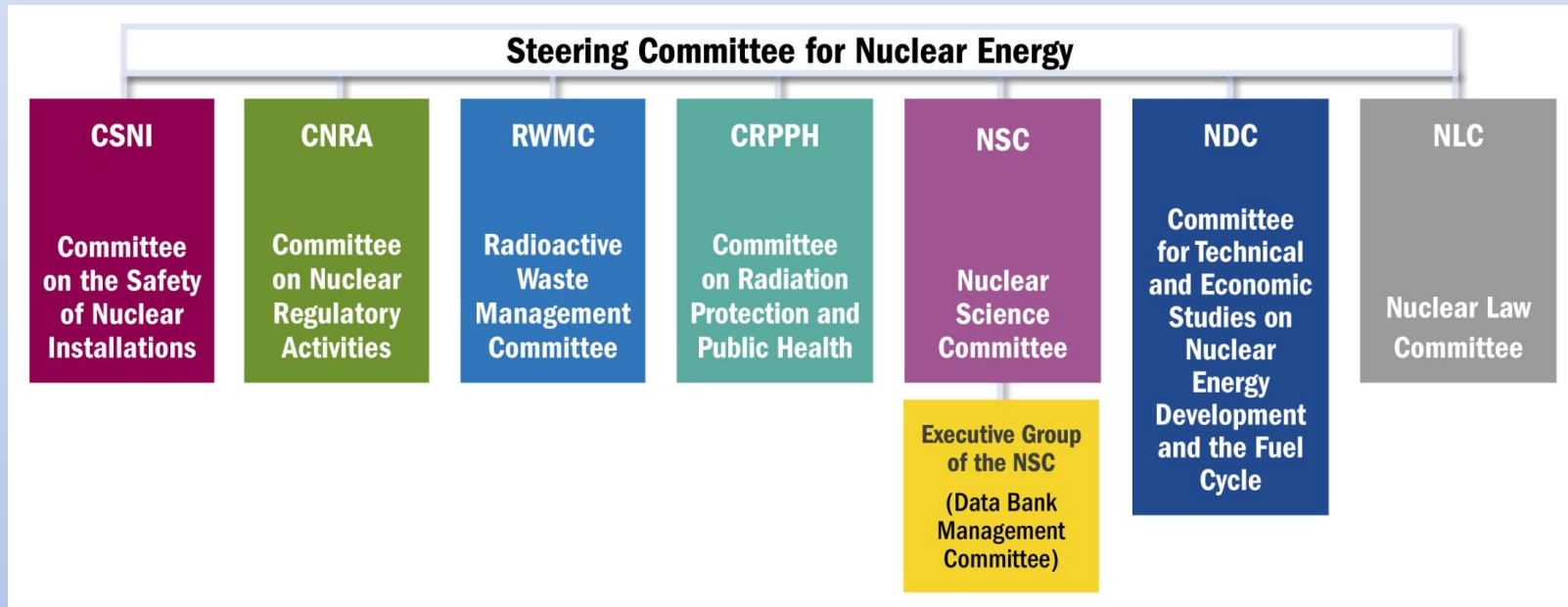
JAIF Conference, Tokyo, 13 April 2015

The NEA: A Forum for Cooperation

- Founded in 1958
- 31 member countries
- 7 standing technical committees
- 78 working parties and expert groups
- 21 international joint projects



NEA Committee Structure



The NEA's Committees bring together top governmental officials and technical specialists from NEA member countries and strategic partners to solve difficult problems, establish best practices, and to promote international collaboration

Major NEA Separately Funded Activities

Major Joint Projects

- Nuclear safety research and experimental data (thermal-hydraulics, fuel behaviour, severe accidents).
- Nuclear safety databases (fire, common-cause failures).
- Nuclear science (thermodynamics of advanced fuels).
- Radioactive waste management (thermochemical database).
- Radiological protection (occupational exposure).

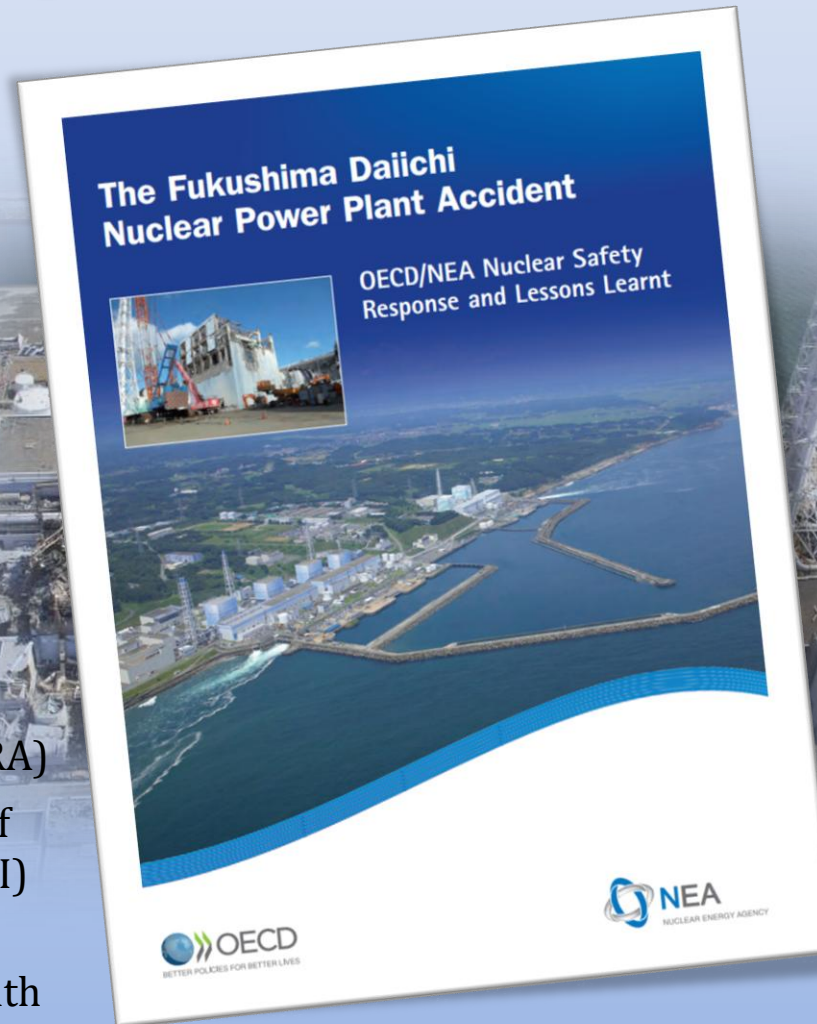
Technical Secretariat

- **Generation IV International Forum**—with the goal to improve sustainability (including effective fuel utilisation and minimisation of waste), economics, safety and reliability, proliferation resistance and physical protection.
- **Multinational Design Evaluation Programme**—Initiative by national safety authorities to leverage their resources and knowledge for new reactor design reviews.
- **International Framework for Nuclear Energy Cooperation (*Proposed and under Consideration*)**—forum for international discussion on wide array of nuclear topics involving both developed and emerging economies.

Moving Forward after Fukushima



Moving Forward after Fukushima

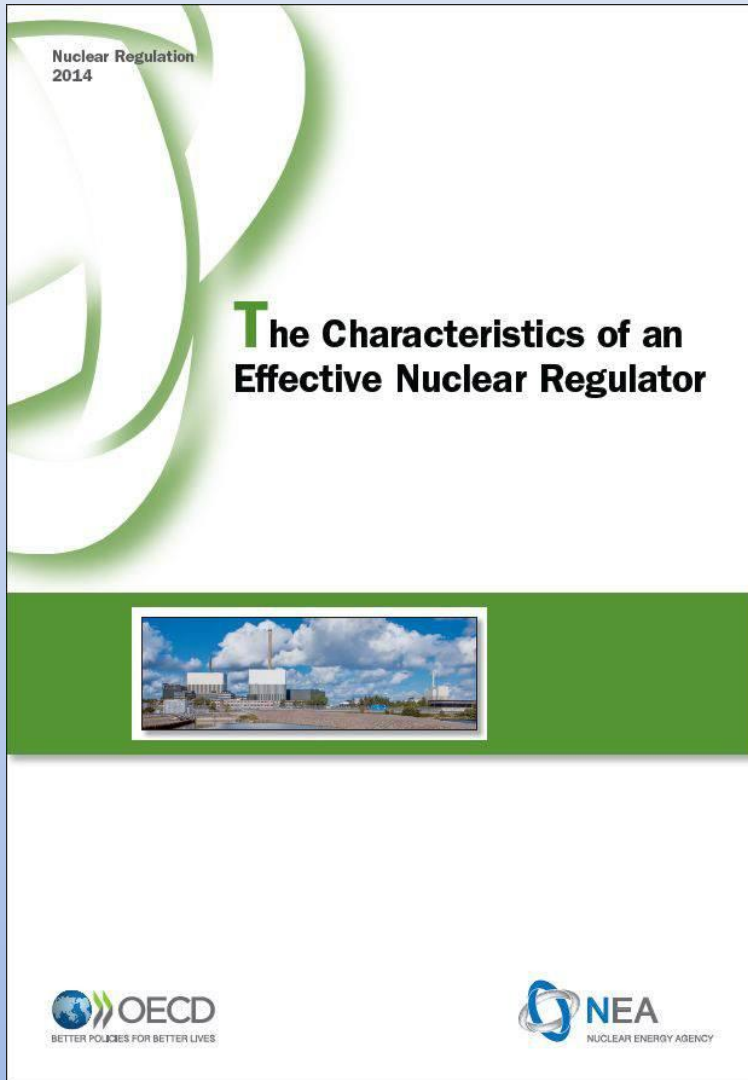


Areas covered:

- Immediate response by NEA member countries, key messages and conclusions;
- NEA actions in follow-up to the Fukushima Daiichi accident;
- Direct support provided to Japan by the NEA.

Involved 3 standing technical committees:

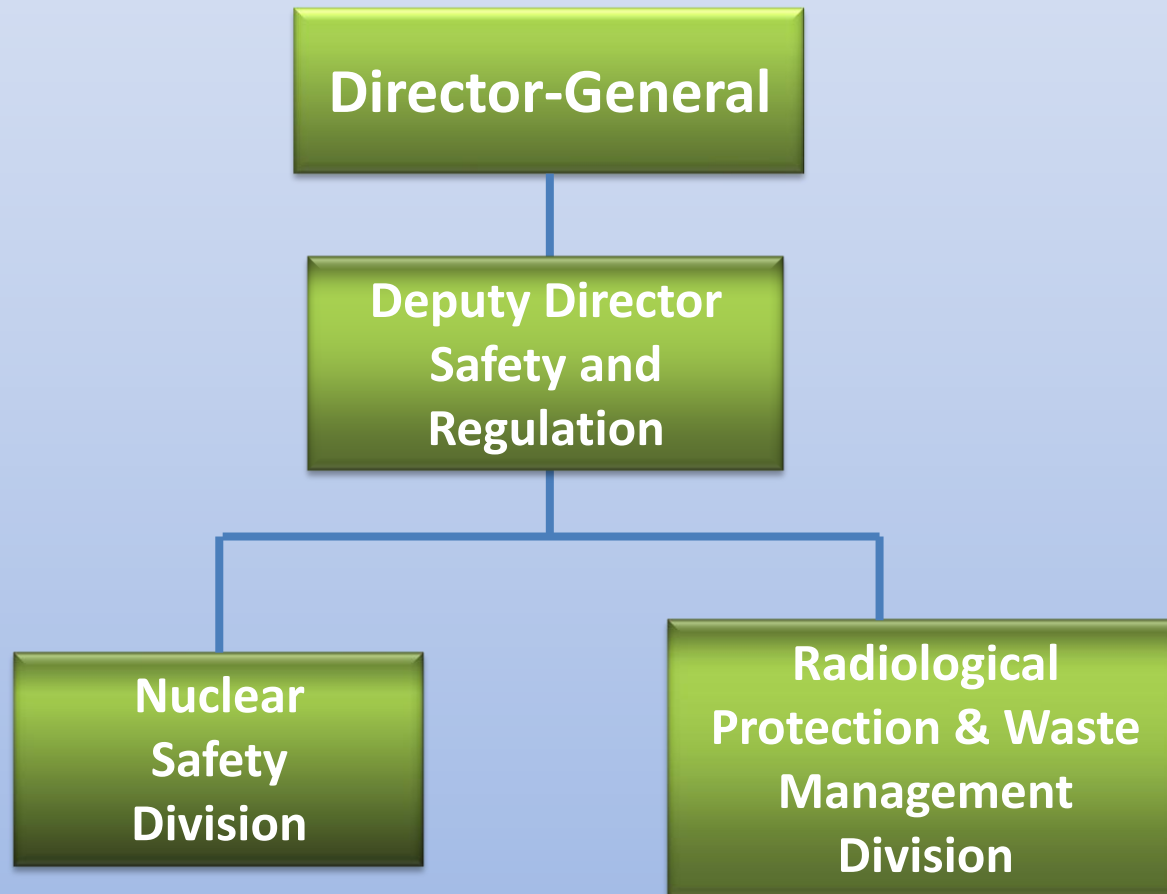
- Committee on Nuclear Regulatory Activities (CNRA)
- Committee on the Safety of Nuclear Installations (CSNI)
- Committee on Radiation Protection and Public Health (CRPPH).



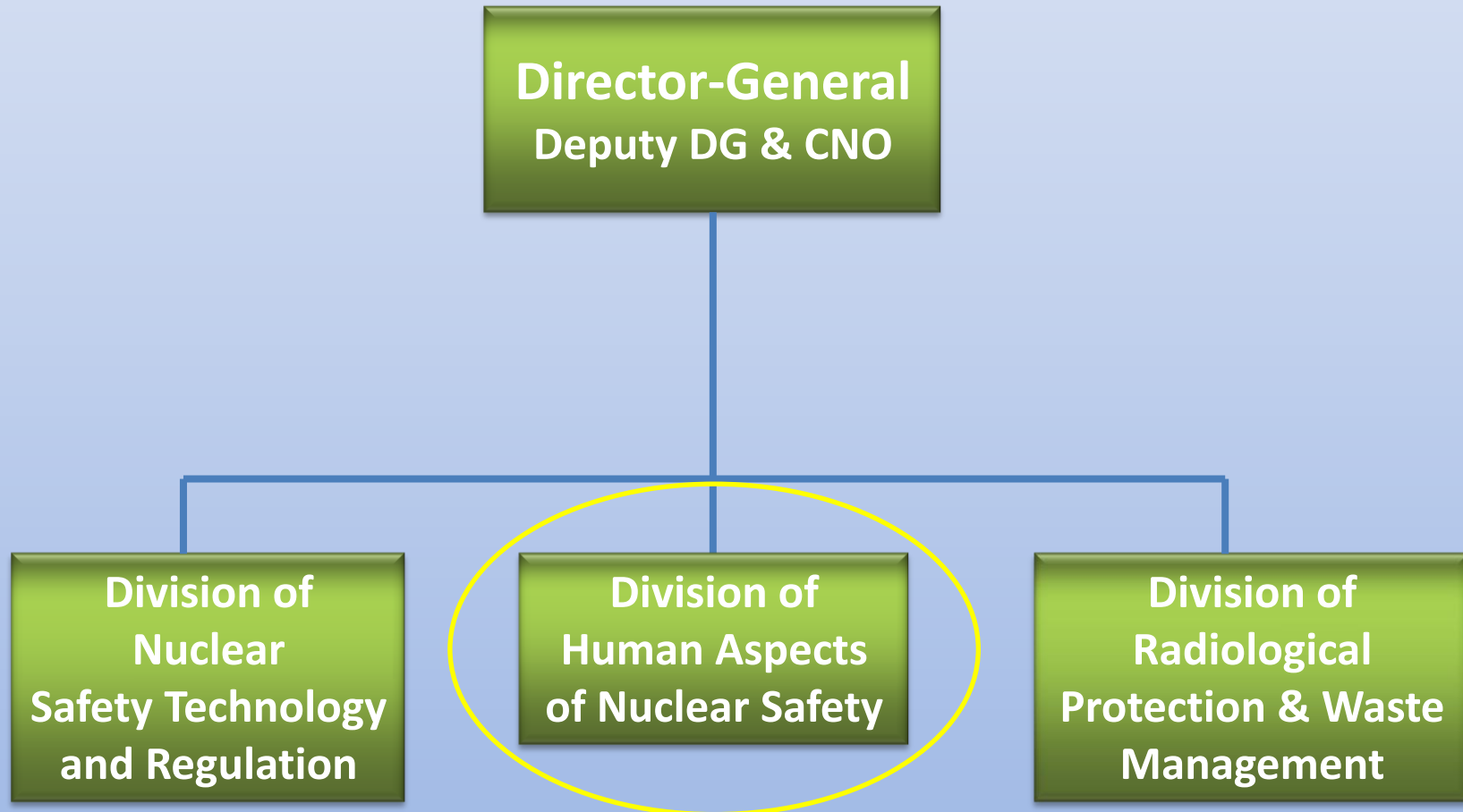
The Characteristics of an Effective Nuclear Regulator

NEA Regulatory Guidance Booklets
Volume 16, 2014, NEA/CNRA/R(2014)3

Former Structure of NEA Nuclear Safety Organisations



New Structure: Effective 1 March, 2015



Fukushima Waste Management: A First-of-a-Kind Challenge



2015 NEA/IEA Technology Roadmap



This Roadmap recommends the following actions:

Governmental recognition of value of low-carbon capacity

R&D to support long-term operation

Optimise constructability of Gen III designs

Accelerate development of SMRs

Support development of 1 or 2 Gen IV FBRs

Demonstrate nuclear desalination or hydrogen production

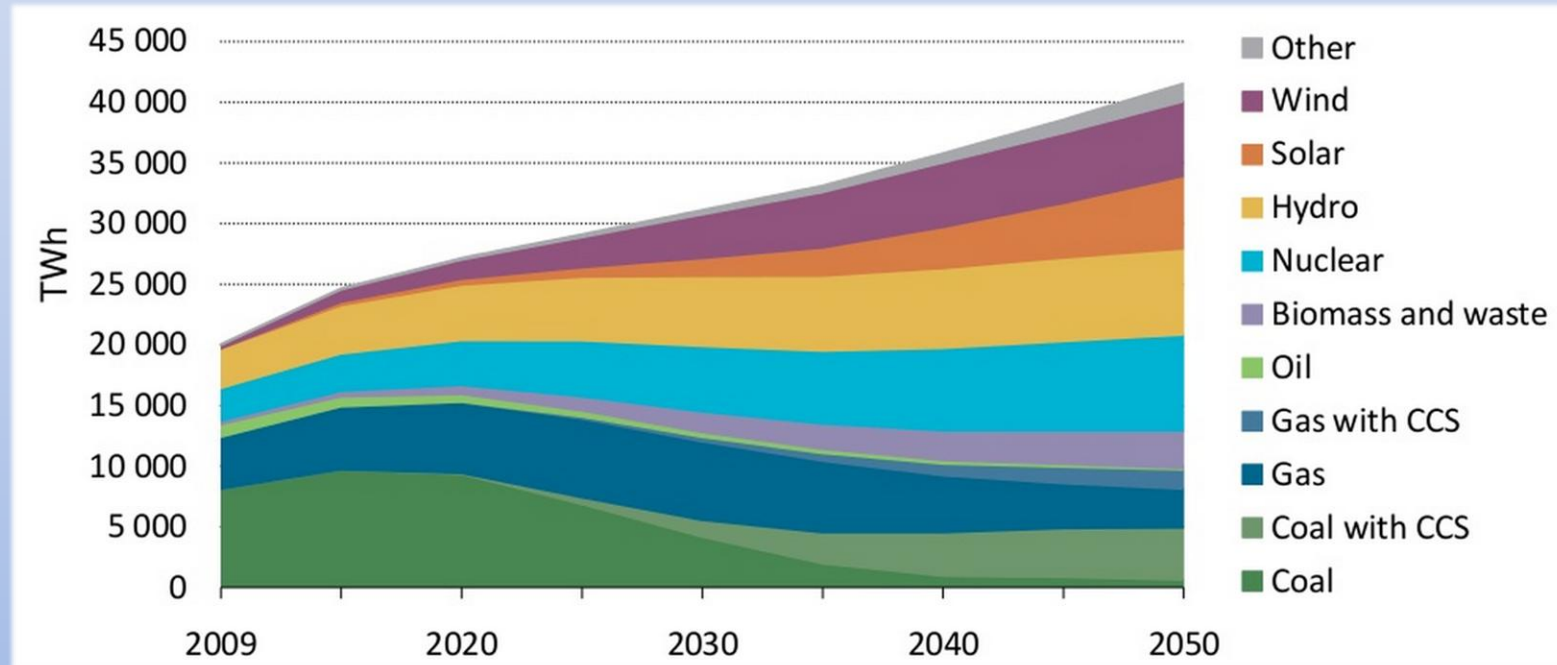
Incorporate feed-back from Gen IV prototypes into FOAK Gen IV commercial plants

Technology Roadmap

Nuclear Energy

2015 edition

IEA 2 Degrees C Scenario: Nuclear Provides the Largest Contribution to Global Electricity in 2050



International Nuclear Innovation Roadmap: Looking Forward



- What technologies will be needed in 30 years? 50 years? 100 years?
- What research and development is needed to make these technologies available?
- Is the global community doing the R&D needed to prepare for the future?

Thank you for your attention



More information @ <http://www.oecd-nea.org/>

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