

The European Commission's science and knowledge service

Joint Research Centre



Joint initiative on development of harmonised set of data and tool for reporting of SF/RW inventories

Vaidas MATUZAS

European Commission Joint Research Centre

Directorate G – Nuclear Safety & Security

In coordination with DG ENER

EGIRM Workshop, OECD NEA, 28/02/ - 01/3/2018

Outline

- Joint Research Centre and DG ENER
- Spent fuel and radioactive waste management
- Harmonized inventory reporting data-set
- Common inventory reporting tool
- Status of the activities

The JRC within the Commission



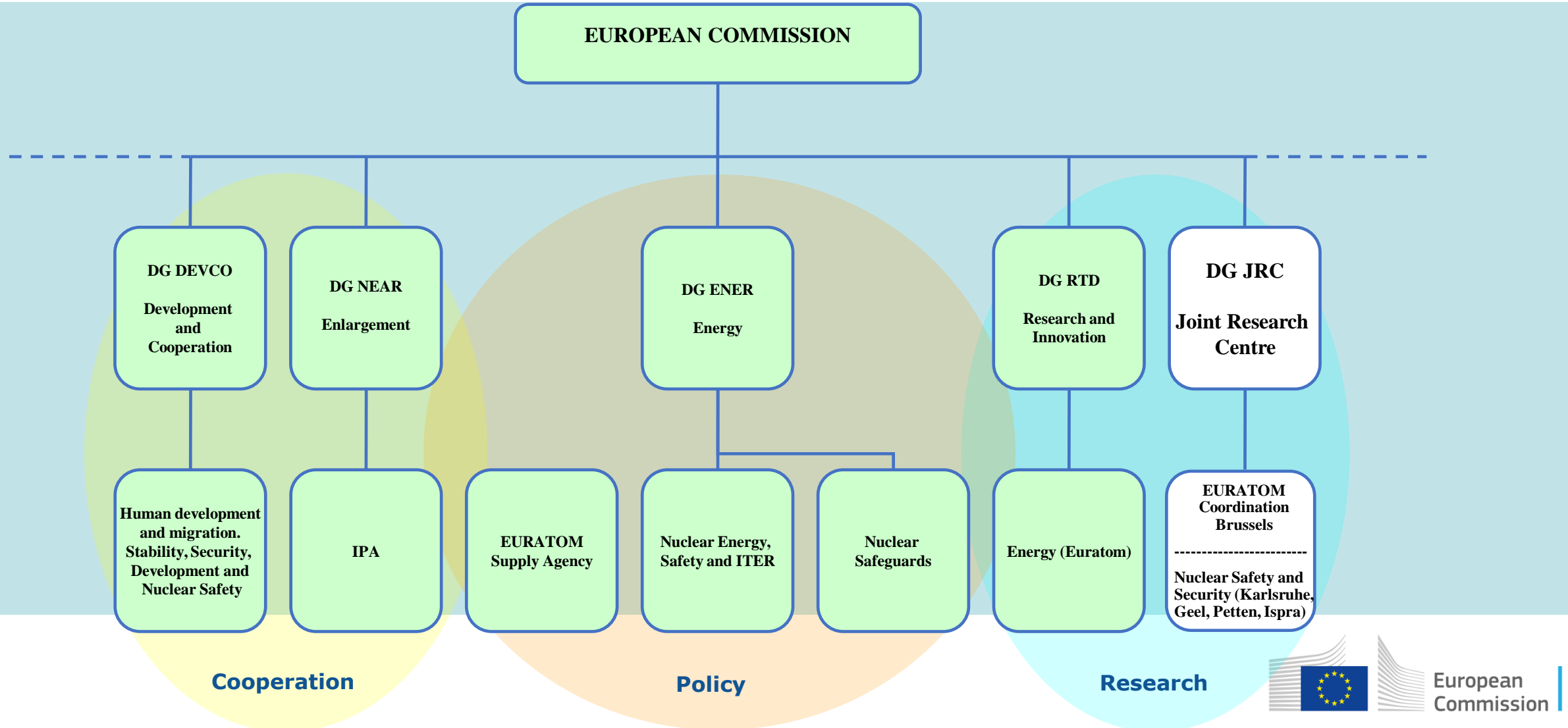
JRC sites

Headquarters in Brussels
and research facilities located
in **5 Member States:**

- Belgium (Geel)
- Germany (Karlsruhe)
- Italy (Ispra)
- The Netherlands (Petten)
- Spain (Seville)

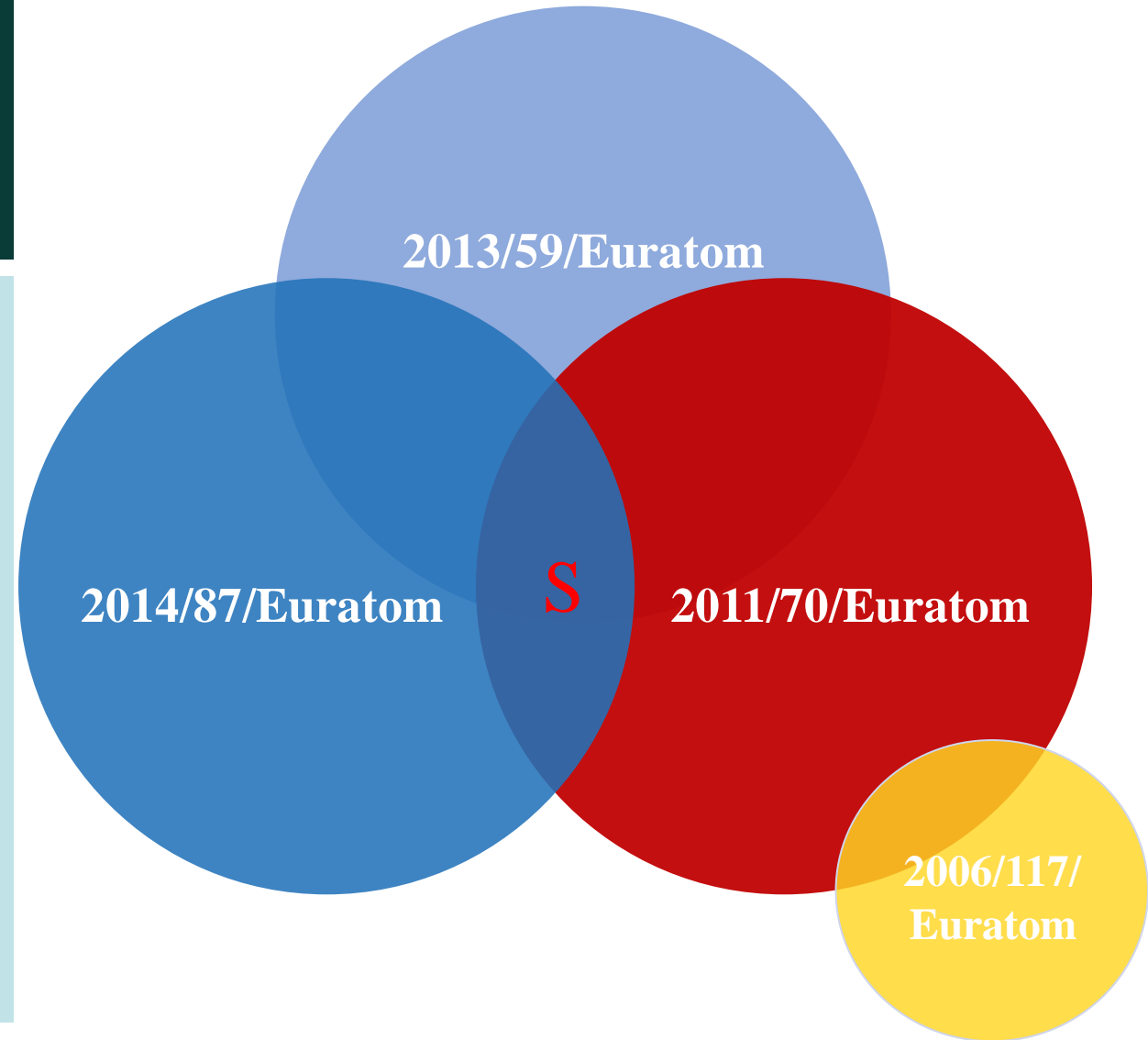


The JRC and DG ENER within the Commission



Spent fuel and radioactive waste management - policy and legal basis

- Directive 2013/59/Euratom
Basic Safety Standards
- Directive 2014/87/Euratom
Nuclear Safety
- Directive 2011/70/Euratom
Safe and Responsible SF and RAW
management
- Directive 2006/117/Euratom
Supervision and control of SF and
RAW shipments



Spent fuel and radioactive waste management

- Directive 2011/70/Euratom
Safe and Responsible long term SF and RAW management
- MSs Transposition of the Directive 2011/70/Euratom
- MSs National Programmes – 25 final programmes to date
- MSs National Reports – all, and every 3 years (next Aug 2018)
- International peer-reviews (ARTEMIS)
- 1st Commission Report to the EP / Council and EU Inventory adopted on 15 May 2017
 - SWD(2017)161 final on EU inventory and MS inventories (2013)

Spent fuel and radioactive waste management (inventories)

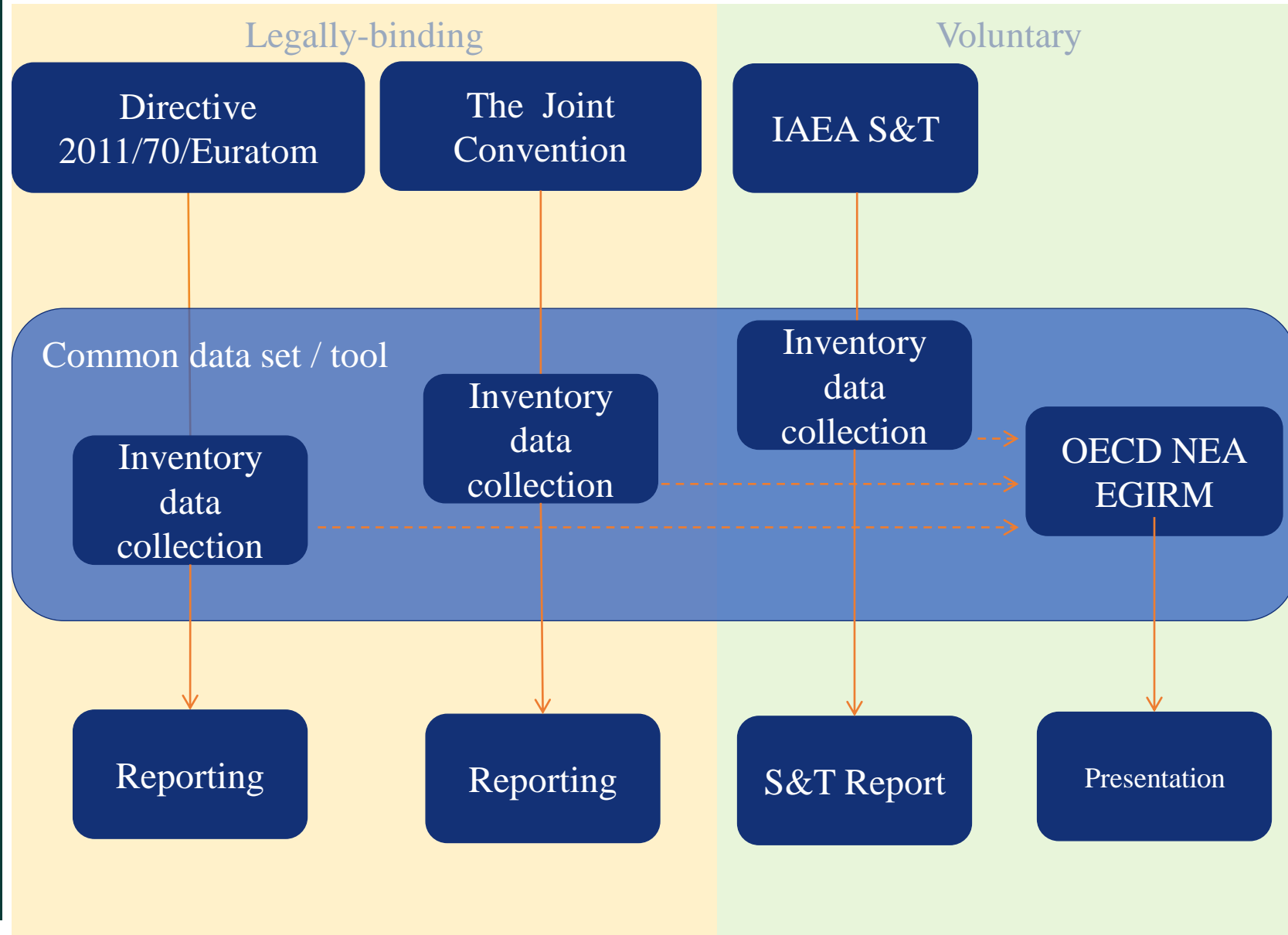
- National programmes - Art. 12.1(c)
The national programmes shall include an **inventory** of all spent fuel and radioactive waste and estimates for future quantities, including those from decommissioning, clearly indicating the location and amount of the radioactive waste and spent fuel in accordance with appropriate classification of the radioactive waste;
- National reports - Art. 14.2(b)
On the basis of the Member States' reports, the Commission shall submit to the European Parliament and the Council an **inventory** of radioactive waste and spent fuel present in the Community's territory and the future prospects.

Outcomes of the 1st Commission report COM(2017)236

- Estimation and presentation of a reliable EU wide inventory is challenging
- Not sufficient or detailed information - it was not possible for the Commission to forecast future total EU inventories
- The Commission will:
 - further analyse Member States' approaches to the development of national inventories and specifically the classification system used therein – a new study to be launched in 2018
 - In consultation with Member States and the European Nuclear Safety Regulators Group, will continue working together with international organisations (e.g. the IAEA and the OECD Nuclear Energy Agency) on exploring the possibilities for harmonising and facilitating reporting requirements - ongoing work with IAEA and NEA/OECD

Inventory data collection

(Rationale for the set of reporting data under development)



Harmonized reporting data-set

- EC supports development of harmonised reporting data set and tool to facilitate Member States reporting to international organisations
- Discussions with IAEA since 2014
- EC meetings with NEA (since 2016)
- EC/IAEA/NEA prepared draft set of data to be used by MS (2016)
- The data set reflects inventory data expectations of international organisations (JC, Directive 2011/70/Euratom, IAEA, NEA, etc)
- Draft data set and explanatory notes have been sent to ENSREG WG2 for comments (April 2017)

Harmonized reporting data-set

- ENSREG WG2 members feedback (4 May 2017)
- Additional comments from OECD NEA observer (EGIRM)
- Comments cover different aspects of the proposed data set:
 - level of detail
 - definition of location
 - activity and radionuclides
 - reporting of temporary/buffer storages
 - reporting of projections
 - etc.

Harmonized reporting data-set

- EC/IAEA/NEA meeting 4-5 May 2017 (Vienna) to address the WG2 comments
- Common position has been agreed and answers have been prepared
- Meeting with ENSREG WG2 members to discuss open issues from the WG2 comments (31 Aug - 1 Sep, Lux)
- Discussions were aimed at reaching a common understanding on these open issues in order to harmonize the inventory reporting to international organizations

Discussed points

- Reporting of unconditioned waste (e.g. mass or volume, as stored or as conditioned, etc.)
- Reporting of Disused Sealed Radioactive Sources (DSRS)
- How to report storage/disposal capacities
- Inventory projections (e.g. separation of present and projected inventories; dates to be used for projections)
- Locations
- Decommissioning waste reporting
- To improve definitions (e.g. disposable waste, at reactor and away from reactor, etc.)

Development of the Common Reporting Tool

- EC-IAEA Contract to support the development of the tool based on NEWMDB
- Based on agreed set of data
- Support to EU MS and the IAEA S&T project
 - EC support to common reporting tool (flexible, and fit for purpose)
 - IAEA support on national reporting tools
 - **The tool does not substitute the EU MS obligations for official reporting to the Commission**
- Kick-off Meeting – 12 July 2017, Lux
- Work in progress – next meeting 2-6 July 2018, Lux (annual meeting of S&T project)

Development of the Common Reporting Tool

- Preliminary testing expected later this year
(3 EU – Germany, Sweden and Croatia)
- Demonstration of the first beta version expected during next Status & Trends meeting (2-6 July, Luxembourg)
- End of contract December 2018
- **Available, flexible, non-mandatory tool to:**
 - **support MS in developing reports on national inventories**
 - **facilitate reporting on this subject and avoid, where possible, duplications**



Any questions?

You can find me at vaidas.matuzas@ec.europa.eu