Joint Research Centre (JRC)

The JRC D&WM Programme

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http://www.jrc.ec.europa.eu/

ISPRA D&WM Programme

JRC - Robust Science for Policy Making

As a Directorate-General of the European Commission, the JRC provides customer-driven scientific and technical support to Community policy making

Supporting citizen's security, health
and environmental protection, safety of food and chemicals,
alternative energies, nuclear safety, econometrics, prospective technologies…

JRC Structure: 7 Institutes in 5 Member States

IRMM - *Geel, Belgium*
Institute for Reference Materials and Measurements

ITU - *Karlsruhe, Germany*
Institute for Transuranium Elements

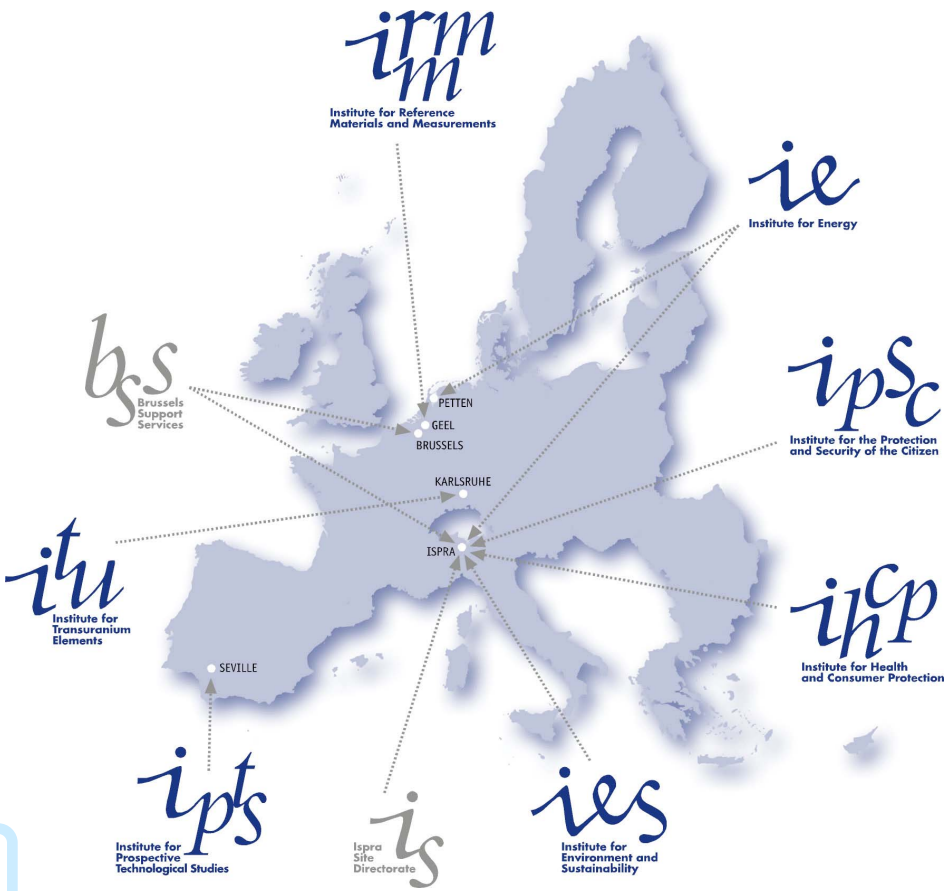
IE - *Petten, The Netherlands – Ispra, Italy*
Institute for Energy

IPSC - *Ispra, Italy*
Institute for the Protection and Security of the Citizen

IES - *Ispra, Italy*
Institute for Environment and Sustainability

IHCP - *Ispra, Italy*
Institute for Health and Consumer Protection

IPTS - *Seville, Spain*
Institute for Prospective Technological Studies



~ 2750 staff
~ 330 M€/y budget (+ 40 M€/y competitive income)

The Ispra Site

Set up as an Italian nuclear research centre in late 50's.

Currently hosting 3 scientific institutes.

Some features of the Ispra site:

~1850 Commission staff (core and visiting staff)
~ 340 staff from external organisations
~ 200 daily visitors

Area of 160 hectares
36 km of roads
6 km fencing
140 heated buildings

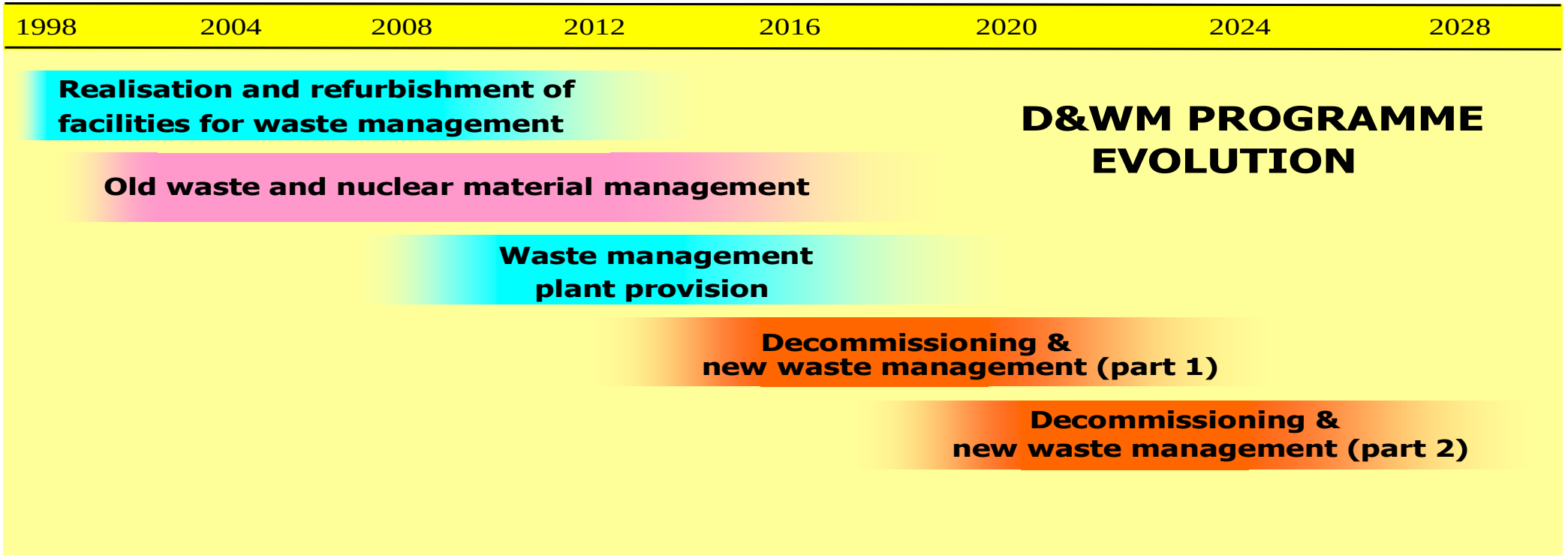
Nuclear installations such as experimental reactors, hot-cells, radiochemical laboratories and waste management facilities are used for nuclear research at JRC Ispra.

Since the 80's, the JRC's mission evolved and has progressively reduced the need for nuclear R&D. Today most nuclear installations are shutdown and kept in state of safe conservation.

The Nuclear Decommissioning Unit is responsible for managing the D&WM Programme of the Ispra Site.

The programme is a long-term project, spanning three decades, at least until 2028.

The D&WM Programme is financed through a dedicated budget line (Ispra budget € 750 million **2008**); latest update reported in COM 2008(903).



Decommissioning of shut-down facilities

Experimental Reactors

Hot-Cells

Radiochemical Laboratories

Waste Management Plants

Decommissioning: future liabilities

Cyclotron

Production of radio-isotopes for nuclear medicine and for radio-toxicology.
Thin Layer Activation for study of materials

Waste Management Station

New Tank Farm Facility

Mgt. of operational & Decom. Waste

Solid waste (and estimated waste from decommissioning)

Metallic waste ~ 20 m3 (680 m3)

Combustible wastes ~ 110 m3 (500 t)

Compactable waste ~ 330 m3 (2000 m3)

Soil, Wood and Asphalt ~ 100 m3

(Demolition wastes : rubble, concrete slabs)

ILLW, Sludge & aqueous effluents

ILLW less than 1 m3

Sludge ~ 60 m3

Decay pools ~ 800 m3

(Aqueous effluents from decommissioning ~ 100 m3)

Roman Pits (15)

350 t – 135 m3

47 TBq

Bituminised Drums (> 6000)

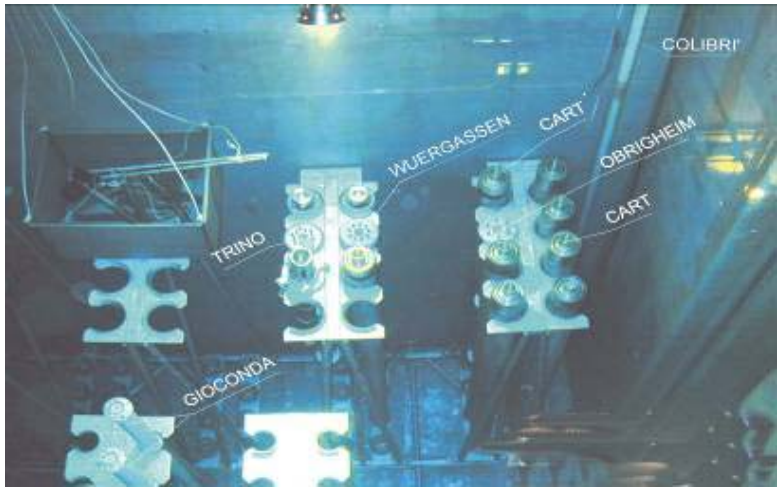
1230 m3

0,5 TBq

Concrete Blocks (237)

1300 t – 570 m3

62 TBq (significant α content)



Irradiated Nuclear Materials

Non-Irradiated Nuclear Materials

In addition to the Ispra site, the JRC D&WM Programme is active on **three others JRC sites:**

The Karlsruhe site: ITU, Institute for Transuranium Elements in Germany

The Petten site: IE, Institute for Energy in the Netherlands

The Geel site: IRMM, Institute for Reference Materials and Measurements in Belgium

Thanks for your attention

http://dwm.jrc.ec.europa.eu