

Joint Programme Actors & Boundary Conditions

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J. Miksova (CV Rez) & F. Lemy (Bel V)



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Outlines

- Joprad project
- Joint programme actors, EJP request for mandate
- Actors involved in the Joprad (WMOs, TSOs, Res, CSOs)
- Scope of activities
- Boundary conditions of specific aspects of EJP
- Conclusions







JOPRAD project

Towards a Joint Programming on Radioactive Waste Disposal (JOPRAD)

Coordination and Support Action, H2020

Start: June 1, 2015; Duration: 30 months; End: November 30, 2017

Key features of the JOPRAD Project:

- The overall aim of the project was to assess the feasibility of setting up of a European RD&D Joint Programming In the field of Radioactive Waste Management and Disposal "
 - ✓ The aspects of R&D activities brought together concern ,at the inception of the project, geological disposal of spent fuel and other high activity long lived radioactive waste, including waste management aspects linked with their disposal and accompanying key activities (Education and Training, as well as Knowledge Management)

Key milestones of the JOPRAD project:

<u>September 2016:</u> Mid-term workshop to present the idea of the Joint Programming to potential participants

April 2017: Programme workshop for the definition of the programme and the activities

November 2017: Final Workshop to decide to move towards a Joint programming







EJP actors

programme owners and programme managers

- nationally mandated actors
- they are financing and operating R&D on radioactive waste management, including geological disposal, in their respective countries
- they are dealing with:
 - ✓ relevant technical resources (research infrastructure,....)
 - ✓ relevant human resources (experienced staff,...)
 - ✓ sufficient financial resources







The programme owners

- national and or regional bodies in charge of the implementation of the EC Directive 2011/70 ("Waste Directive")
- they are responsible for establishing the national programme and the R&D programmes.
- it should be a Ministry, the case for a majority of the countries, but they are in charge extremely diverse: industry, economy, environment, health, research, education...
- in some countries could be a national agency or a safety authority; in ten countries it was not possible to relate this responsibility to a ministry and even it is this case, the ministry is not necessarily in position to decide on the detailed activities of the programme managers.

the domain of activity that could be covered by a Joint Programme is managed in each of the European country in a specific way depending on its disposal programme stage, he possibility for influencing technically or financially the R&D is, most of the time, limited. Consequently, the programme managers often have a better position to define a potential JP.







The programme managers

- actors under the responsibility of Member States
- three categories identified in the national programmes :
 - ✓ (i) Waste Management Organisations (WMOs),
 - √ (ii) Technical Support Organisations (TSOs), and
 - ✓ (iii) nationally funded Research Entities involved in the R&D of radioactive waste management and disposal, (REs).



for EJP -the necessity to be **Mandated Programme Manager** or **linked 3rd parties**







Joprad approach to the actors identification

- All MS Euratom delegates were adressed to identify their programme owners and programme managers
- Subsequently, a specific surveys were carried out to better understand the
 potential involvement of each of the three categories identified initially (WMOs,
 TSOs and REs) and to study in which conditions they could participate in the
 planned activities (stage of technical infrastructure, human and financial
 resources, stage of their Rand D needs depending on stage of their pnational
 programme).
- The conclusion of this survey stressed that the community of the actors of research in radioactive waste management (programme owners and programme managers) is very diverse in terms of state of maturity of the disposal programmes, projects, mission and size. Thus, the work carried out in the JOPRAD project was oriented in order to find a strong common driver for a Joint Programme, in particular given the need expressed by the EC to put forward "mandated actors"







The programme managers - WMOs

- Most of the WMOs have been created for the single purpose of radioactive waste management, they are small or medium size companies with a limited number of scientific staff. Only seven of them have in house scientific staff. This means that the actual R&D is in most case subcontracted to research entities.
- The WMOs from the most advanced programmes have the largest research budget but the main part of it comes from the waste producers directly or indirectly. As a consequence, the European funding represents a very limited part of their research budget which is not the case for less advanced programmes
- The WMO which are contributing to the JOPRAD project are in charge of designing, constructing, operating, closing and monitoring radioactive waste disposals in their respective countries; 17 WMOs have been identified. Among the 17 WMOs, 14 of them are public or state-own companies; 3of them, part of the most advanced are private or partially private..







The programme managers –TSOs/1

- Most of the TSOs are non-profit organisations (public or private); two of them are private profit bodies.
- In particular, the distinction between TSOs and REs in several Member States is somehow artificial as several REs also fulfil an expertise function in their country and therefore meet also the conditions associated with the terms "Technical Support Organisation" and/or "Technical Safety Organisation
- The acronym "TSO" can stand for either "Technical Safety Organization" or Technical (and scientific) Support Organisations". These terms have similar meanings, as used by the IAEA or ETSON.

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The programme managers –TSOs/2

- According to the IAEA definition, Technical (and Scientific) Support
 Organizations comprise experts who deliver technical and scientific
 services to national nuclear regulatory authorities and industry and may
 advise governments to assist them in achieving the highest possible levels
 of safety and security for nuclear, waste management, radiation
 protection, etc.
- To avoid any conflict of interest by providing services to industry and national nuclear regulatory authorities, according to IAEA TECDOC under preparation by the nuclear safety department, a Technical and Scientific Support Organizations is an organization designated or otherwise recognized by a regulatory body and/or a government to provide expertise and services, to support nuclear and radiation safety and all related scientific and technical issues, to the regulatory body.







The programme managers - REs

- In total 45 research entities were identified as potentially mandated actors.
- Almost all of them are public bodies involved in multiple areas of research and have national missions on education. Consequently the number of researchers is very large. It is however uneasy to identify which parts or departments of a large structure are involve in R&D and to which extent.
- Various European REs are working to different degrees on the challenges of nuclear waste management including disposal. Today it includes actors of national research centres, research organisations and universities of 17 countries. In some countries, a single well organised large national research organisation may represent many institutes, laboratories Many scientific teams gather the geophysical, hydrological, geochemical, radiochemical, etc.







Civil Society involvement

- The JOPRAD project provides an opportunity for involved Civil Society:
 - ✓ to access information,
 - ✓ to express expectations, concerns and recommendations vis-a-vis the definition and governance of a Joint Programming (JP) of R&D on Radioactive Waste Management (RWM) and Geological Disposal (GD), between national WMOs, TSOs, and REs at the European level.
- "Civil society" is to be understood as the interest expressed by the civil society organisations (CSOs)
- The CSOs in the network do not represent NTW as an organisation but are able to provide a variety of CSO viewpoints.
- 35 organisations coming from 18 countries in Europe, encountering a variety of situations at national level, sometimes very unfavourable for participation.
- the group identified key research areas that it would like to see included into the activities of the joint programme,







Joprad approach to the MS engagement

- Mapping of all relevant actors in Europe, and engaging these actors in the process of joint programming (JP);
- Identifying key RD&D aspects of each category of actors that could be part of a JP;
- Identify the research actors that could participate to a Joint Programming
- Demonstrate the feasibility, the benefits and the added-value of a Joint Programme in RWMD at European level;
- Stimulate the engagement of a large part of the research community in RWMD (22 countries from 20 EU Member-States and 2 associated countries) as well as Civil Society;







Conditions for Implementing a JP

- Preserving the independence of actors
- Scope of activities
- Boundary conditions related to strategic JP objectives
- Boundary conditions related to governance
- Boundary conditions related to the engagement of the Civil Society







Preserving the Independence of Actors

- Article 6 of the 2011/70/EURATOM EC directive: "Member States shall ensure that the competent regulatory authority is functionally separate from any other body or organisation concerned with the management of spent fuel and radioactive waste, in order to ensure effective independence from undue influence on its regulatory function."
- Hence, preserving the independence between the «Expertise function» (TSOs and, in some Member States, REs) and the «Implementing function» (WMOs) is considered by all JOPRAD partners as a key boundary condition for the establishment and functioning of a JP





Preserving the Independence of Actors

Implications:

- Consequences on the breath and nature of the activities that could be put in common
- The research should be accompanied by publications and allow independent interpretation of results
- The plurality of the views needs to be acknowledged
- Measures to preserve independence need to be taken when defining the modes of governance of the JP bringing together TSOs, REs and WMOs (considering arrangements already made at the national level)







Scope of Activities

- Aspects of R&D activities implemented within national research programmes where synergy from JP is identified as well as accompanying horizontal activities
- Radioactive waste management with a particular focus on geological disposal of spent fuel and other high activity or longlived radioactive waste
- The JP could potentially embrace all research-relevant issues and not be restricted to any particular sub-area!
- JP has to address common priorities
 identified by the community described in
 the "Programme Document"

JOPRAD - D4.2 - Programme document DRAFT V0.7







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Deliverable n°4.2

Programme Document – The Scientific and Technical Basis of a Future Joint Programme on Radioactive Waste Management and Disposal

Work Package 4

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Dissemination Level		
PU	Public	X
PU PP RE	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the partners of the JOPRAD project	
CO	Confidential poly for pageage of the IODRAD police	

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BC Linked to Strategic JP Objectives

- Scientific excellence
- Added value, e.g.:
 - ✓ more robust RD&D outputs
 - ✓ improved financial gearing
 - ✓ improved stakeholder acceptance of outputs
- **Equitable financing**
- **Complementary participation**
 - ✓ i.e. Complementary to RD&D activities undertaken nationally or jointly outside the JP where required
- **Tangible results**
 - ✓ i.e. the scope is appropriately prioritised and focused on the objective to achieve tangible results within a reasonable time boundary









BC Linked to Governance

- **Maintenance of Independence**
- **Transparency of decisions & results**
- **Balanced programme / Inclusiveness**
 - ✓ Balance of technical interest of the different actors & (associated) MS
 - ✓ Balance of commitments

Fairness

- ✓ i.e. those who are financing/participating have the possibility to manage. the activity with voting rights function of their contribution
- ✓ ... but decisions regarding the content of the programme would be based on other criteria such as "inclusiveness", "excellent science", "added value",...

Efficiency

- ✓ reasonable percentage of the overall budget dedicated to governance.
- ✓ significant reduction of administrative burden for activity leaders









BC Linked to the Engagement of Civil Society

- CS actors could participate in the three types of activities of the JP (i.e. technical, horizontal and networking)
- CS partners involved in the technical activities would develop in parallel "Knowledge sharing and interpretation (KSI)" activities with other CS partners (as horizontal activities)
- CS actors should also be represented in the governance system







Conclusions (1/2)

- The JOPRAD project enabled different categories of actors (WMOs, TSOs, REs & CSOs) from 22 EU Member States and associated countries to develop and communicate their views on their potential participation in a JP
- This led to the identification of the scope,
 priorities and boundary conditions of a JP
 bringing all relevant actors together
- Added values of JP are acknowledged by all actors









Conclusions (2/2)

- Satisfying these boundary conditions throughout the elaboration and implementation of the future JP is an essential key of success!
- JOPRAD output constitutes one of the bases for Euratom Research and Training Programme (2014-2018), section RWM, call 2018





