

EURAD Strategic Research Agenda and its Future Development

Contribution of TSOs College



IGD-TP Exchange Forum 8

Berlin 3-4 December 2018

SITEX_Network

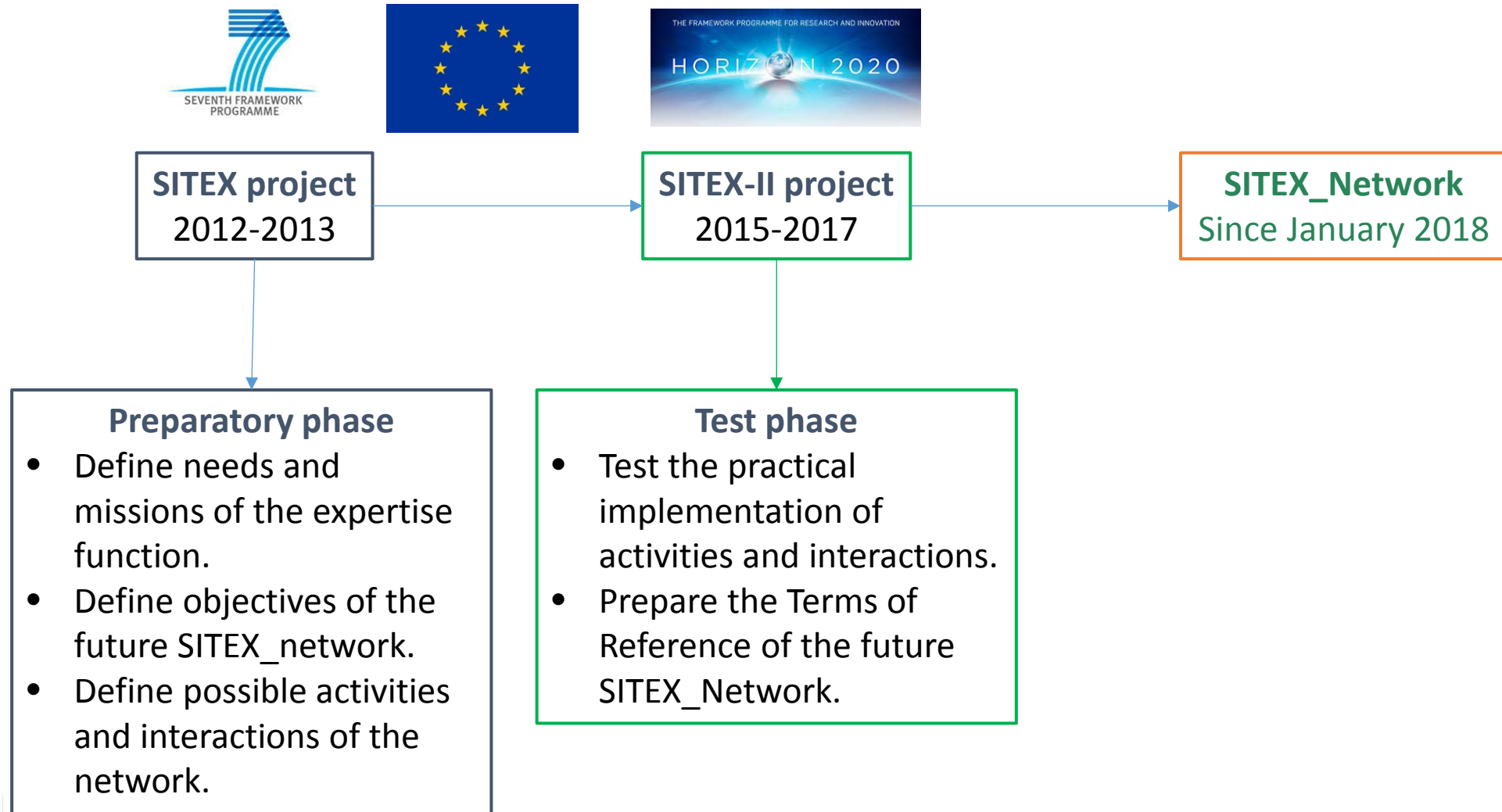


- Sustainable network for Independent Technical Expertise of radioactive waste disposal
- General objective: fostering at the international level a high quality and independent *expertise function* in the safety of radioactive waste management and disposal.
- *Expertise function* provides the technical and scientific basis for notably supporting the decisions made within the regulatory function.
- Expertise function is fulfilled by TSOs and some REs or NRAs.



General overview of SITEX_Network

From SITEX projects to SITEX_Network – The timeline



General overview of SITEX_Network

The SITEX_Network

- Founded as a French non-profit association on January 9, 2018, IRSN, Paris, France.
- Constitutive General Assembly in January 2018. 14 founding members, from 9 countries:
 - Expertise function: Bel V, EIMV, FANC, GI-BAS, IRSN, PSI, SURO, TS Enercon, VTT



Constitutive GA of SITEX_Network
January 2018



- Civil Society function: Energiaklub, MKG, Mutadis, NTW, SYMLOG



General overview of SITEX_Network

The SITEX_Network

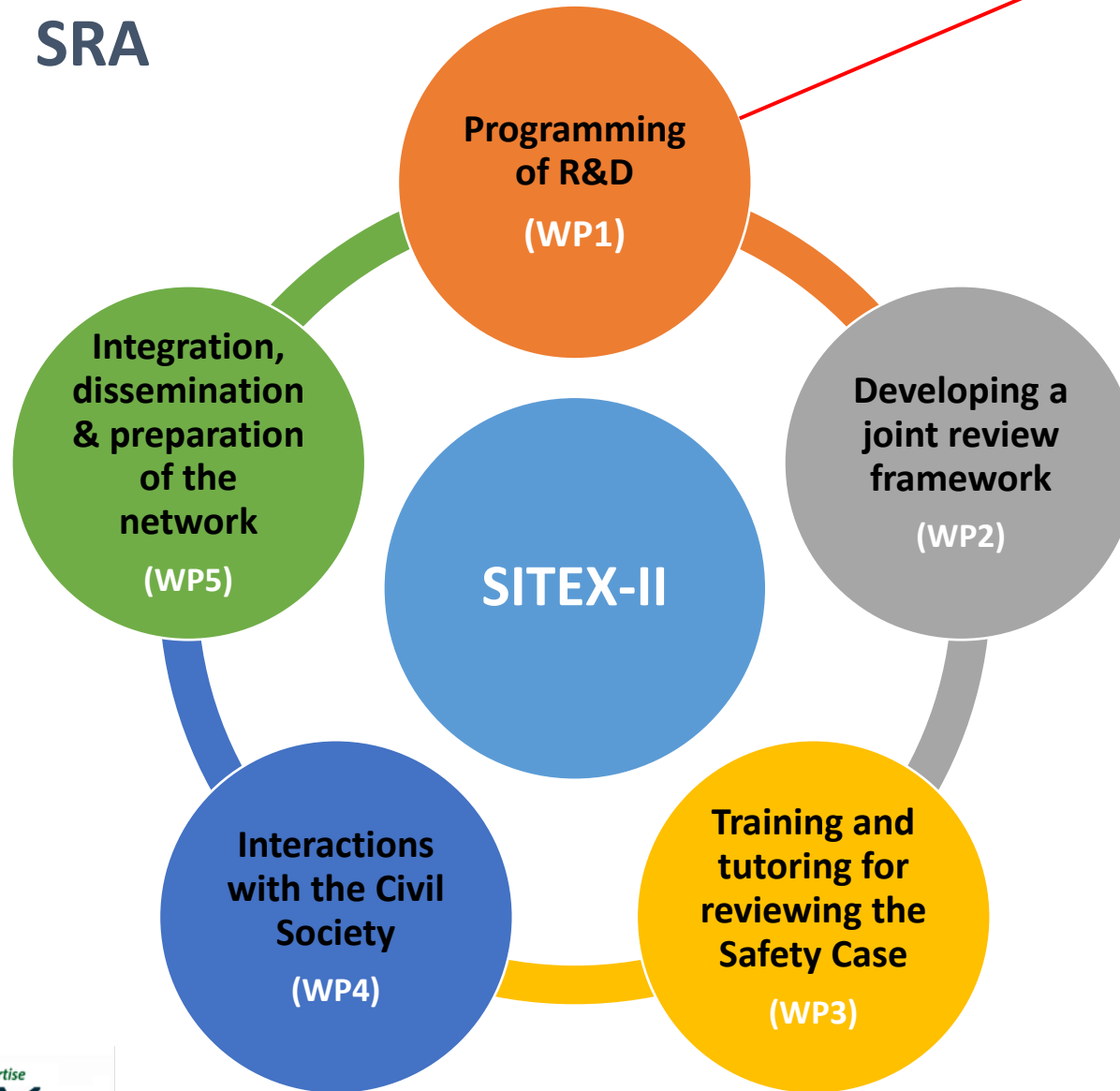


Constitutive GA of SITEX_Network
January 2018

- With as purpose
« Enhance and foster cooperation at international level in order to achieve a high quality expertise function, independent from organizations responsible for the implementation of waste management programmes, aiming at supporting the Nuclear Regulatory Authorities, as well as the Civil Society, in the field of safety of radioactive waste management. »
- Achieved through a close cooperation between its members with a plurality of actors and views: NRAs, TSOs, REs with an expertise function and Civil Society Organizations.
- This plurality of actors and views is seen as an added value of the network, compared to other existing networks.

SITEX involved in preparation of EJP1- EURAD

SITEX-II SRA



SRA: 36 Topics distributed in 7 Main Topics

Main topic 1: Waste inventory and source term.

Main topic 2: Transient THMBC conditions in the near-field.

Main topic 3: Evolution of EBS material properties.

Main topic 4: Radionuclide behaviour in disturbed EBS and HR.

Main topic 5: Safety-relevant operational aspects.

Main topic 6: Managing uncertainties and the safety assessment.

Main topic 7: Lifecycle of a disposal programme and its safety case.

In the SRA the following information is systematically given for each main topic:

- Importance of the main topic to safety
- Rationale for developing joint activities
- Research and/or horizontal activities of common interest

SITEX involved in preparation of EJP1- EURAD



SITEX II SRA

■ interactions with JOPRAD

- JOPRAD: “Towards a Joint Programming Project on Radioactive Waste Disposal”.
- Keys objectives of JOPRAD :
 - Identified the R&D actors in the field of RWMD
 - Engage them in the process of developing a shared vision and a shared SRA.
- The SITEX-II SRA is an input to the JOPRAD project as it contributes to identify the R&D needs of TSOs. The TSO group of JOPRAD has worked in close collaboration with the SITEX-II project.
- Similar SRAs were developed by WMOs and REs.
- Based on these SRA’s, assessments of commonalities among WMOs, REs and TSOs needs in R&D were done.
- A **programme document** presenting these commonalities was elaborated within JOPRAD.

■ EURAD SRA

- Elaborated on the base of JOPRAD programme document

SITEX involved in proposal development phase of EJP1- EURAD

SITEX-Network coordinated the TSOs reviews of work packages

Two reviews organized (jan-feb 2018 and May 2018)

→ Each time SITEX coordinated :

- Internal review by the organisations currently mandated as TSOs
- External review by other Sitex_Network members (other than CSOs)
- External review by CSOs

First review of the description of the Work Packages currently developed within the EJP1 on RWMD proposal development phase.

Synthesis of results from the:

- internal review by the organisations currently mandated as TSOs;
- external review by other SITEX_Network members (other than CSOs);
- external review by CSOs.

Prepared by SITEX_Network, based on the individual inputs received in the framework of the organized reviews.

Version 1: 27.02.2018

First review of the description of the WP currently developed within the EJP1 on RWMD proposal
Date of issue of this report: 27/02/2018 1

Second review of the description of the Work Packages currently developed within the EJP1 on RWMD proposal development phase.

Synthesis of:

- the internal review by the organisations currently mandated as TSOs;
- the external review by other SITEX_Network TSOs and NRA;
- the external review by Civil Society Organizations.

Date of issue of this report: 23.05.2018

Second review of the description of the WP currently developed within the EJP1 on RWMD proposal
Date of issue of this report: 23/05/2018

SITEX_Network work programme 2019



■ Reviewing related activities:

• Benchmark on reviewing approaches :

The selected topic is an intrusion scenario caused by geothermal activities. Every player will have his place as TSO or CS, with or without numerical code. This aims at learning from each other's, testing the review guide and analysis grid developed previously by SITEX as well as identifying good practices.

• State-of-knowledge related to deep borehole disposal :

Some countries investigated deep borehole disposal as an alternative of geological disposal facilities . A bibliographic study will be made by both institutional and non-institutional SITEX.Network members, to summarize what has to be known : What is this design ? What are the outcomes of these works? What's about safety issues, societal concerns, economic matters?

■ R&D related activities

- Organisation of a topical exchange day on recent research in social sciences dealing with waste management or nuclear risk perception

■ Training

- Implementation of training modules on how to review a safety case for geological disposal

■ Interaction with Civil Society

- implement of the serious game developed in the context of the SITEX-II project (the Pathway Evaluation Process or PEP). Two PEP sessions (of two days each) in 2019 will be proposed to participants, internal or external to SITEX.Network.

SITEX_Network in the future EJP1- EURAD

→ SRA updated

EURAD SRA is a living document, to be updated periodically to integrate RD&D results and emerging collaboration needs

- ✓ *Colleges to continue independent development and exchange to enable clear articulation of their consensus view on future priorities (e.g. maintenance of their SRAs)
Each College to recommend own edits/additions to SRA at GA*

→ Sitex_Network agrees this proposal

- in the perspective of the definition of further projects in the framework of the EJP, SITEX.Network members will **revisit its SRA** produced in 2015 and if needed, crystallize evolutions during its next General Assembly in November 2019.

→ to be discussed in the framework of the second wave of EURAD



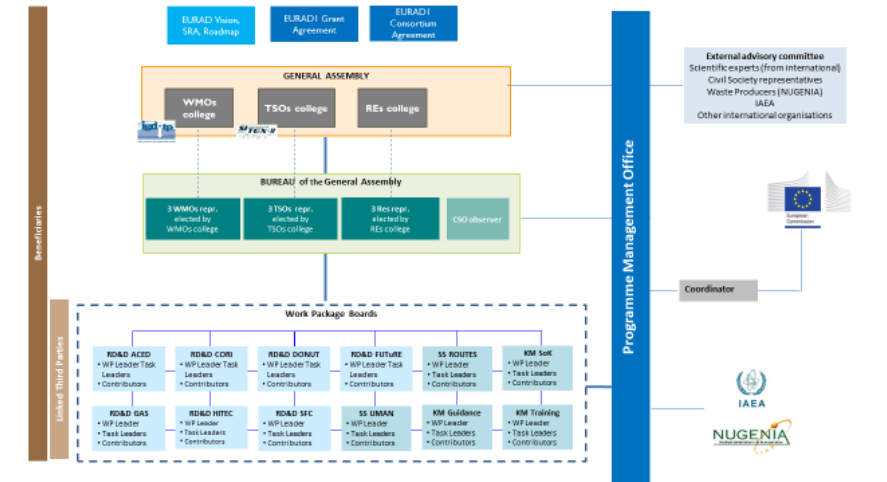
SITEX_Network in the future EJP1- EURAD

EURAD Governance : TSOs college part of the GENERAL ASSEMBLY

SITEX_Network offers to continue to be a « facilitator » in the TSOs community

➔ propose to coordinate the election of the 3 representatives TSOs in the BUREAU of the General Assembly

➔ All TSOs Mandated actors could be elected (SITEX-Network members or not)



Thank you for your attention



More information about SITEX_Network
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