





### SITEX-II

(Contract Number: 662152) Deliverable n°D6.1

### Presentation of the project

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Date: 16/05/18

Date of issue of this report:

30.11.2016

Report number of pages:

29

Start date of project:

01/06/2015

**Duration: 30 Months** 

Project co-funded by the European Commission under the Euratom Research and Training Programme on Nuclear Energy within the Horizon 2020 Framework Programme						
	Dissemination Level					
PU	Public	Х				
PP	Restricted to other programme participants (including the Commission Services)					
RE	Restricted to a group specified by the partners of the SITEX-II project					
со	Confidential, only for partners of the SITEX-II project					

The coordination and support action SITEX-II was initiated in 2015 within the EC programme Horizon 2020 with a view to further developing the independent Expertise Function network in the field of deep geological disposal safety. This network is expected to ensure a sustainable capability for developing and coordinating, at the international level, joint and harmonized activities, related to the Expertise Function. SITEX-II brings together representatives from 18 organisations involving regulatory authorities, technical support organisations, research organisations, specialists in risk governance and interaction with general public, including NGOs and an education institute. It is aimed at practical implementation of the activities defined by the former EURATOM FP7 SITEX project (2012-2013), using the interaction modes identified by that project. SITEX-II, coordinated by IRSN, is implemented through 6 Work Packages (WP).

WP1 - Programming R&D (lead by Bel V). The general objective of WP1 is to further define the Expertise Function's R&D programme necessary to ensure independent scientific and technical capabilities for reviewing a safety case for geological disposal. In this perspective WP1 will develop a Strategic Research Agenda (SRA) and define the Terms of Reference (ToR) for its implementation accounting for the preparatory work to be carried out in the framework of the JOPRAD project for construction of a Joint Programming of research for geological disposal.

WP2 - Developing a joint review framework (lead by FANC). The key objective of WP2 is to further develop and document in position papers and technical guides a common understanding of the interpretation and proper implementation of safety requirements in the safety case for the six phases of facility development (conceptualization, siting, reference design, construction, operational, post-closure).

WP3 - Training and tutoring for reviewing the safety case (lead by LEI). WP3 aims to provide a practical demonstration of training services that may be provided by the foreseen SITEX network. A pilot training will focus on the development of training modules at a generalist level, with emphasis on the technical review of the safety case, based on national experiences, practices and prospective views. The training modules will integrate the outcomes from WP1, WP2 and WP4 and support harmonisation of the technical review processes across Europe.

WP4 - Interactions with Civil Society (lead by Mutadis). WP4 is devoted to the elaboration of the conditions and means for developing interactions with Civil Society (CS) in the framework of the foreseen SITEX network, in view of transparency of the decision-making process. The future SITEX network is expected to support development of these interactions at different levels of governance and at different steps of the decision-making process. Three thematic tasks, namely R&D, safety culture/review governance will be addressed by institutional experts and representatives of CS within SITEX-II as well as externally through workshops with other CS organisations.

WP5 - Integration and dissemination of project results (lead by CV REZ). The overall objective of WP5 is to produce a synthesis of the results achieved within all the WPs of SITEX-II together with an Action Plan that will set out the content and practical modalities of the future Expertise Function network. WP5 will also foster the interactions of SITEX-II with external entities and projects, as well as the dissemination of SITEX-II results so as to allow possible considerations from outside the project in the process of developing the future SITEX network.

**WP6 - Management and coordination** (lead by IRSN).

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Further details on the SITEX-II project and its outcomes are available at www.sitexproject.eu

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#### **ABSTRACT**

The SITEX-II Project (2015-2017), a EURATOM Horizon2020 Coordination Action, is aimed at practical implementation of the activities defined by the former EURATOM FP7 SITEX project (2012–2013), using the interaction modes developed by that project and with a view to further developing the Expertise Function network. SITEX-II brings together representatives from 18 organisations involving regulatory authorities, technical support organisations, research organisations, specialists in risk governance and interaction with general public, including NGOs and an education institute. The network is expected to ensure a sustainable capability for developing and coordinating, at the international level, joint and harmonized activities, necessary for the technical review of a safety case for deep geological disposal of radioactive waste. SITEX-II tasks are:

- -to further define the Expertise Function's R&D programme necessary to ensure independent scientific and technical capabilities for reviewing a safety case for geological disposal. In this perspective SITEX-II will develop a Strategic Research Agenda (SRA) and define the Terms of Reference (ToR) for the implementation of specific topics of this SRA, accounting for the preparatory work to be carried out in the framework of the EC (Horizon 2020) JOPRAD project for construction at the European level of a Joint Programming (JP) of research for geological disposal;
- -to further elaborate a joint review framework, by developing and documenting in position papers and technical guides a common understanding of the interpretation and proper implementation of safety requirements - addressed by an EU directive and international standards and recommendations (IAEA, ICRP, WENRA, etc) - in the safety case for the successive phases of facility development (conceptualization, siting, reference design, construction, operational, post-closure);
- -to practically demonstrate training services that may be provided by the foreseen SITEX network. Training modules at a generalist level will be developed, with emphasis on the technical review of the safety case, based on national experiences, practices and prospective views. The training modules will integrate the outcomes from the other SITEX-II tasks and support harmonisation of the technical review processes across Europe. A pilot training programme will be organised and evaluated;
- -to elaborate the conditions and means for developing interactions with Civil Society (SC) in the framework of the foreseen SITEX network, in view of transparency of the decision-making process. The future SITEX network is expected to support development of these interactions at different levels of governance and at different steps of the decision-making process. Three thematic tasks, namely R&D, safety culture/review and governance will be addressed by technical experts and representatives of CS within SITEX-II as well as externally through workshops with other CS organisations;
- -to set out an Action Plan related to the content and practical modalities of the future Expertise Function network.

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#### 1 Context

The European Council Directive 2011/70/EURATOM of 19 July 2011 establishes a Community framework for the responsible and safe management of spent fuel and radioactive waste. This Directive reaffirms the principle of prime responsibility of the license holder with regards to safety and reinforces the role and independence of the competent regulatory authority. It also states that it is broadly accepted at the technical level that, at this time, deep geological disposal represents the safest and most sustainable option as the end point of the management of high-level waste and spent fuel considered as waste.

In line with this Directive and in consistency with international high level safety standards issued by IAEA and WENRA, and with international approaches developed within the NEA/RWMC activities, waste management organisations (WMOs) are developing a safety case for presenting the technical and organisational arguments that support the development of the national geological repository concept. For this purpose, WMOs in Europe decided to coordinate their efforts to be able, at horizon 2025, to implement the first geological disposal and launched in 2009 the Implementing Geological Disposal of Radioactive Waste Technology Platform (IGD-TP) under the aegis of the EC. This coordination is established through a common vision and strategic research agenda that foster exchanges and joint works about the scientific challenges that remain to be addressed before 2025.

As safety cases develop, the safety case review by regulatory bodies in the framework of the decision making process develops as well. In that context, organisations in charge of reviewing the safety case must in particular evaluate whether the elements of safety, and in particular that supported by scientific and technological results, are sufficiently convincing to be accepted by the regulatory authority as a basis for proceeding with the decision making process. The assessment of the scientific and technical issues developed by the WMOs requires specific skills from the assessor in order to evaluate whether they allow compliance with the safety requirements issued by the regulatory authority.

In that context, there is a **need at the international level for developing and coordinating activities associated to the regulatory review process of deep geological disposal**. For that purpose, a number of initiatives, projects and groups of experts at international and European level have been launched as for example ENSREG, WENRA, NEA/RWMC/Regulator Forum, IAEA/GEOSAF and GEOSAF2. In 2012, the **EURATOM FP7 SITEX project** was launched in order to complement the above mentioned initiatives with the view to characterize at national level the Expertise function activity devoted to the scientific review of the safety case with respect to the safety of the geological disposal. SITEX was a 24 months FP7 EURATOM coordinated action (2012-2013) bringing together 15 organisations representing Technical Safety Organisations (TSOs) and safety authorities, as well as Civil Society (CS) outreach specialists involved in the regulatory review process of the safety case of geological disposal. This specific Expertise function was characterized as the set of scientific and organisational activities developed in support to regulatory body to review the safety case.

An important challenge for the SITEX project (2012-2013) was to propose approaches for closer interactions with CS and implementers necessary to enhance mutual understanding on safety key expectations. In particular, SITEX and IGD-TP initiated exchanges in order to learn the opportunities

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for better coordinating at European level the research activities performed by the WMOs and the TSOs within their respective duty without jeopardizing the conditions required for developing and maintaining independent skills, competencies and analytical tools for the review process.

The SITEX project (2012-2013) highlighted different **needs and missions of the national Expertise function along the decision making process**, in relation to: safety case Regulatory Review, Implementation of Research in Safety, Training of Experts in charge of regulatory review and Interaction with Civil Society. Regarding these different tasks, SITEX (2012-2013) identified the potential areas of cooperation, exchanges or sharing of resources that could be developed by a future SITEX network. For that purpose, the sources and issues listed below were considered by the SITEX project (2012-2013):

- international and national standards and guides (defining the expectations of regulators),
- an inventory of the Expertise function in SITEX partner countries and an overview of the needs of expertise as part of technical support and inspection for national regulators,
- an overview of the methodologies used in the context of a safety case review and an inventory of the needs of harmonization of these methodologies and of specific training required to implement the safety case review,
- an inventory of Research & Development (R&D) programs implemented, facilities operated and modelling carried out by organisations involved in SITEX, with the view to prepare the development and the implementation of a strategic research agenda (SRA) specific to the Expertise function,
- an overview of the expectations of the other stakeholders in terms of interaction with the Expertise function (notably on the basis of the results of a Workshop organised with CS representatives), and the exchanges organised with WMOs in the framework of IGD-TP regarding the coordination of research programing at European level.

The above studies allowed identifying a set of organisational and technical opportunities that could be implemented in practice by the future SITEX network.

The different services provided by the SITEX network to the SITEX members relate to **Training and tutoring**, **Reviewing the safety case**, **Developing a research strategy and workforce** at national and international level (and notably the definition and implementation of a SRA) and **Interacting with the Civil Society**.

Though the considerable preparatory work carried out within SITEX (2012-2013), some of the above outcomes and key concepts of a future SITEX network require being further developed and/or tested in practice before to validate orientations stated in the former SITEX project and launch the network. There is also a need to reinforce the links between the Expertise function and the CS regarding its engagement in the decision making process and in particular in the identification of research topics relevant for CS that would be integrated in the definition of the strategic research agenda. Considering the above comments, former SITEX participants and a number of non-governmental organisations (NGOs) and R&D entities decided to build a follow-up of SITEX project.

This step ahead toward a SITEX network is the purpose of the present coordinated action

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#### SITEX-II.

This proposal for a SITEX-II project relates to the work programme NFRP-05-2014 "Supporting the licensing of geological repositories". The specific challenge of that topic is to favour "Interaction between regulatory authorities, their TSO and national radioactive waste management organisations", which is "essential in the context of the licensing process of underground repositories", to "develop a common understanding on reviews of license applications" as well as to "identify and develop the necessary scientific competence for actors in this field to fulfil their respective roles". The scope is to further deepen these interactions, "while recognising independence and distinct responsibilities of the various actors above mentioned", notably by an "exchange on criteria and guidance on the review of licence application and the interpretation of standards for the identification of research priorities".

## This project has received funding from the *Euratom research and training programme 2014–2018* under grant agreement No 662152.

The SITEX-II project intends to address the Expertise function in the field of geological disposal, which includes both tasks mentioned in the challenge and scope of the work programme, i.e. safety case review and R&D developments in support of the review process. Following on from the former SITEX project (2012-2013) and as explained in the introductive part of the present proposal, it involves objectives and activities that are fully in line with the targeted work programme, among which:

- developing a common understanding on the interpretation of existing safety requirements at
  national and international levels and guidance for the safety case review; this specific
  objective is part of the work intended to be done in the task related to the building of a joint
  review framework,
- defining and prioritizing the scientific and technical topics of interest for the Expertise function into a SRA, as well as identifying those which would worth being shared within programmes in the framework of a potential EJP;
- promoting interactions between the concerned stakeholders to produce consolidated outcomes, either by bringing them together within the SITEX-II project (regulatory bodies, TSOs, research entities and CS organisations), or by fostering close links with existing or potential platforms/projects (WMOs with notably the IGD-TP and the JOPRAD project under submission), without any prejudice to the independency required between these actors; it is in particular intended to continue the exchanges initiated between SITEX and IGD-TP, notably during the annual IGD-TP Exchange Forum;
- disseminating and communicating SITEX-II outcomes, and more generally the concepts and approaches for the foreseen SITEX network, to national and international entities.

The objectives of this project, the organisation of the consortium and interaction with external entities to reach these objectives as well as the description of the tasks are further detailed in the following sections of the present document.

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### 2 Objectives

The overall objective of the proposed coordinated action is the **practical implementation** of the sets of activities along with the **interaction** modes issued by the FP7 program SITEX project (2012-2013), in view of developing at European and international level the Expertise function **network**. This network is expected to ensure a sustainable capability of developing and coordinating joint and harmonized activities related to the **independent technical expertise** in the field of safety of geological disposal of radioactive waste.

For this purpose, regulatory organisations, TSOs, research groups as well as organisations representing the CS propose a second phase of SITEX as a new 30 month coordination action called SITEX-II, which stands for "Sustainable network for Independent Technical Expertise of Radioactive Waste Disposal – Interactions and Implementation". **The step beyond SITEX (2012-2013) would include**:

- The definition of the Strategic Research Agenda (SRA) based on the common R&D orientations defined by SITEX (2012-2013), the definition of the Terms of Reference (ToR) for the implementation of specific topics from the SRA, and the interaction with IGD-TP and other external entities mandated to implement research on radioactive waste disposal regarding the potential setting up of a European Joint Programming (EJP) on radioactive waste disposal;
- The production of a guidance on the technical review of the safety case at its different phases of development, fostering a common understanding on the interpretation and proper implementation of safety requirements for developing, operating and closing a geological repository and on the verification of compliance with these requirements;
- The development of a training module for generalist experts involved in the safety case review process, including the implementation a pilot training session;
- The commitment of CS in the definition of the SRA mentioned above, considering the expectations and technical questions to be considered when developing R&D for the purpose of Expertise function. Close interactions between experts conducting the review work will allow enhancing the safety culture of CS and more globally, proposing governance patterns with CS in the framework of geological disposal;
- The preparation of the "administrative" framework for a sustainable network, by addressing the legal, organisational and management aspects.

In addition, the challenges associated to the establishment of an independent Expertise function network will be communicated to leading international entities.

### 3 Approach

#### 3.1 MODES OF INTERACTIONS OF THE SITEX NETWORK

The present proposal for SITEX-II is built along with the ToR of the SITEX network issued by SITEX (2012-2013), which present a framework for programming, implementing and harmonising at

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international level where needed the tasks required by national Expertise function to support regulatory review. These ToR describe the functions, modes of interactions and operating opportunities of the potential network with three different modes of interaction and four sets of services & activities that the future network could provide to its members.

The three graded **modes of interactions** of the SITEX network are the following: the first mode of interactions ("**Programming**") aims at identifying specific needs and developing diagnostic and specific programmes and products by sharing national experiences, practices and prospective **views** and by auditing appropriate stakeholders. The second mode ("**Implementing**") aims at implementing in practice within the SITEX network the programmes and products identified in the first mode of interaction by developing joint work and sharing resources. The third mode of interactions ("**Harmonizing, linking with external entities**") aims at building the collective opinions of the network with the view to reach harmonization where appropriate, as well as promoting and diffusing the SITEX network products and at developing interactions and partnerships with external entities.

The different services of the SITEX network to the SITEX members relate to Training and tutoring, Reviewing the safety case, Developing a research strategy and workforce at national and international level and Interacting with the Civil Society.

Further, the long duration of the licensing process (possibly several tens of years) in the stages of siting, conceptualisation, design, construction, operation and post-closure of deep geological disposal facilities requires proposing a sustainable framework contributing to the long term governance of waste management disposal.

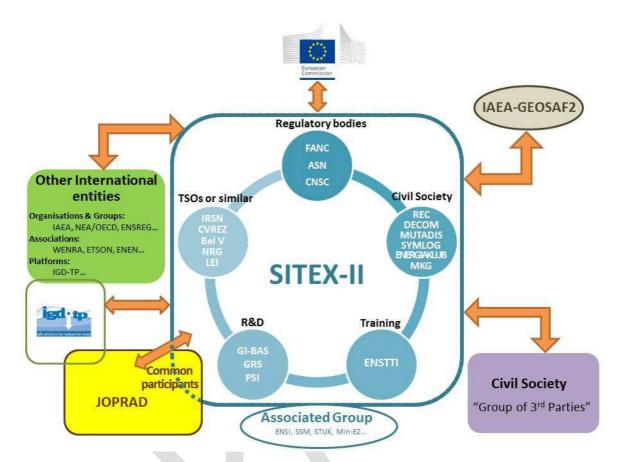
These networking activities don't intent to substitute the national regulatory activities under the responsibility of the member states but provide services to national bodies in order to increase national skills and competencies, seeking mutual understanding of key concept of regulatory review and fostering harmonization or common position where needed in order to enhance confidence in the national decision making process.

The proposed SITEX-II project aiming at further preparing the launching of this foreseen SITEX network intends to adopt the method described in the previous sections "1.1 Objectives" and "1.2 Relation to the work programme". Accordingly, the project will implement in practice interaction modes and services given above. This involves programming interactions (SRA, guidance), implementing interactions (pilot training session) and harmonizing interactions with external entities. In order to efficiently implement the programme of work of the SITEX-II project, the proposed consortium will be composed of regulatory bodies, technical experts from TSOs and research institutes, as well as organisations that have experience in CS participation. In particular, the integration of CS organisations and CS outreach specialists within SITEX-II, together with SITEX-II workshop with enlarged CS representation, will reinforce the programming interactions so as to fully integrate the CS expectations with regard to the Expertise function. Close cooperation with implementers (via the IGD-TP) will also be a key tool for ensuring success of this coordinated action. Actually, the implementation of the SITEX SRA should be coordinated, where needed, with the R&D programme carried out by the WMO's at European level, in line with the orientations regarding the establishment of an EJP by the European Commission. The Figure 1 illustrates the foreseen composition of the SITEX-II project as well as the external entities of interest with regards to SITEX-II, with which interactions are foreseen.

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**Figure 1:** SITEX-II composition and interactions with external entities

#### 3.2 MEASURES TO MAXIMISE IMPACT

#### 3.2.1 Dissemination and exploitation of the results

The <u>dissemination</u> of the SITEX-II project's results is planned through several exchange meetings and workshops organised during the project, which will be the room for spreading of the SITEX-II results and exchanges. This involves:

- three workshops with representatives of the CS which are not SITEX-II beneficiaries,
- one workshop with representatives of international entities such as NEA/RWMC, IGSC, IAEA etc.,
- exchanges with WMOs by participation to the IGD-TP Exchange forum as well as through the potential JOPRAD project.

In addition, an associated group of regulatory bodies from the Netherlands, Sweden, Finland and Switzerland would assist and participate to several meetings, including the SITEX-II Plenary meetings.

Finally, the setting up of a 1 week-pilot training session will correspond to a first step of dissemination

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of knowledge from the SITEX-II group.

SITEX-II plans to issue position papers reflective the collective opinion of participants on key safety principles as identified during the former SITEX project.

The exploitation of SITEX-II results will mainly consists in:

- assessing the opportunity for an EJP on the basis of the SITEX SRA,
- contributing to the preparation of the peer-review process as requested by the European Directive related to waste management, by providing a methodological support derived from SITEX-II reviewing guidance,
- spreading the Expertise function culture, via the planned pilot training session,
- implementing in practice the Aarhus convention regarding the participation of the public in the decision making process,
- facilitating the creation of the Expertise function network, especially by developing the foreseen Action Plan which will gather the main SITEX-II outcomes.

#### 3.2.2 Communication activities

As SITEX-II gathers several members from others projects or established groups, it will be possible to communicate with RWMC plenary, IGSC, FSC<sup>1</sup> and RF<sup>2</sup> meetings from NEA, IAEA project on waste management (e.g. HIDRA), ENSREG, etc. In addition, the coordinator will arrange periodical exchanges with the ETSON "waste management group".

The knowledge gained in the course of the SITEX-II project will be made available to broad auditorium in a number of ways. The SITEX-II results will be made available to the public through the publication of the deliverables on the public web site. The SITEX Website will be maintained for at least 5 years subsequent to the project.

As far as possible, any other relevant conference or meeting during the project will be regarded. In particular, communication will also occur by publishing articles in international journals and presenting corresponding papers in conferences or seminars such as Eurosafe, Euradwaste, etc. Additional information on dissemination is provided in section "3.1.3 Description of work packages, Table 3.1 a WP5".

For more details visit the project website www.sitexproject.eu

#### 3.3 CONSORTIUM AS A WHOLE

#### 3.3.1 Description of the consortium

SITEX-II is coordinated by D. Pellegrini (IRSN; delphine.pellegrini@irsn.fr); the Technical Secretary is M. Rocher (IRSN; muriel.rocher@irsn.fr).

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<sup>&</sup>lt;sup>1</sup> RWMC-FSC: Forum on Stakeholder confidence

<sup>&</sup>lt;sup>2</sup> RWMC-RF: Regulators' Forum



SITEX-II brings together representatives from 18 organisations involving regulatory authorities (FANC, ASN, CNSC), technical support organisations (Bel V, CVREZ, IRSN, NRG, GRS, DECOM), research organisations (GI-BAS, PSI<sup>3</sup>, LEI), specialists in risk governance and interaction with general public, including NGOs (MUTADIS, ENERGIAKLUB, MKG, REC, SYMLOG) and the education institute (ENSTTI). Thus SITEX-II forms an equilibrated consortium in terms of type of organisations required to achieve the designed objectives. The CS organisations (or similar) are in somewhat greater numbers, as their integration in such a coordination action is new and of key importance for the issues dealt with. Each of these types of organisations is represented in Work Package 1 to 5; attention has also been paid to share the lead of work packages and tasks by various types of organisations. This should help enhancing the interactions between these types of organisations and facilitate mutual understanding. One Education Institute (ENSTTI) is also part of the consortium to support the specific goal of implementing a pilot training module.

The participation in the project has been organised based on an expression of interest by the participants and strictly linked to the available competences of the single participants. Each participant has already an extensive experience in performing complex multi-partner projects dealing with research, doctrine or coordinated actions and has already been involved in European Commission funded projects as coordinators or participants (PAMINA, COWAM-IP, FORGE ...) and is, therefore, well familiar with the funding and reporting regulation. Moreover, the participants are already involved in the international groups of interest for SITEX-II (NEA RWMC/RF/FSC/IGSC, IAEA GEOSAF2, ENSREG, ETSON, EPS, SITEX 2012-2013...); that situation will make easier the transfer of knowledge as well as possible the organisation of exchanges where appropriate. It is worth noting that most of the individuals composing the consortium have already collaborated together, in particular in the SITEX project in 2012-2013, or are still working together in the different frameworks mentioned above. It is also an important aspect for the success of the SITEX-II collaborative work.

#### 3.3.2 Other countries

The SITEX-II project intend to involve a country that is not automatically eligible for EU funding, as well as eligible countries that wish to have limited contribution as an associated group. Further, consultations of a group of third parties which will enlarge the representation of CS as well as of international entities are foreseen (see section 4.2).

#### Participant to SITEX-II

**CNSC** (**regulatory body, Canada**), which is not automatically eligible for funding by EU, would spend manpower (6 person/months) within the SITEX-II project (WP1, WP2, WP3, WP4) without requesting EC fund, but financial support for travels (11.2 k€, see section 3.4 for details on travels).

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<sup>&</sup>lt;sup>3</sup>PSI would participate with an associated country status, according to the EC document "Swiss participation in Horizon 2020 (Situation on 12 September 2014)".

It should be noticed that PSI carries out research programs for the Swiss WMO in the field of geological disposal geochemistry and is a partner of the IGD-TP platform. However, PSI also performs independent research programs. Thus, PSI would contribute to the WP1 of SITEX-II devoted to R&D issues, based on its skills and feedback in developing research programs, in particular in assessing the realism of research objectives/program identified by TSOs, for both pre- and post-closure phases of a geological disposal facility.



Indeed, their participation is deemed essential for carrying out the action because CNSC provides outstanding competence or expertise on:

- Integration of CS in the technical review. CNSC has his own public outreach program, which includes a hearing process. Experience feedback from such functioning is necessary for the WP1 on the ways to interact with CS along the development of experts' R&D and more generally for the WP4 on the governance of nuclear waste management and more specifically regarding the decision making process of geological disposal;
- For WP2, CNSC has developed guidance on its own interpretation and implementation of international safety requirements (Task 2.1). CNSC has also experience to share on the technical review of the safety case (Task 2.2);
- In addition, CSNC plans to participate to the Task 3.1 by sharing its national experience on training and tutoring, including competence building for various stakeholders, as well as its national experience on management of human resources and carrier management.

Finally, CNSC already actively participated to SITEX project in 2012-2013, above the level of manpower initially planned.

On a more general point of view, there is a real added value to collaborate with non-European countries in the perspective to enlarge the SITEX-II vision of Expertise function and fostering harmonisation of practices at the international level.

#### Associated group

Four regulatory body organisations have fully expressed their interest to participate to SITEX-II as associated organisations: STUK (Finland), SSM (Sweden), ENSI (Switzerland), Min-EZ (The Netherlands).

These organisations come from countries with advanced geological programmes and thus significant experience to share: Sweden and Finland are involved in licencing process and Switzerland reviews the siting phase. This context of on-going reviews explains the impossibility for these organisations to allow enough time for contributions as full participants to the SITEX-II project. Therefore, the possibility for associating them (in a more formal way as associated organisation) once the project would officially be launched is foreseen.

Their participation to SITEX-II meetings and notably the Plenary Meetings would allow SITEX-II to take benefit of their point of view. Because these associated members correspond to regulatory bodies, they would also be invited to participate in the discussions of WP2 about interpretation and implementation of safety requirements, in the frame of Task 2.1 (for financial support, see in the next section 3.4, "External experts"). Further, the review of SITEX-II milestones or deliverables by this associated group would be of added value for the project.

The Consortium agreement will account for the possibility of integrating such an associated group, with the role and responsibilities of each part (the consortium and the associated organisations).

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### 4 Description of Work packages

#### 4.1 WP1: PROGRAMMING R&D (LEAD BY BEL V)

The general objective of WP1 is to further define the Expertise Function's R&D programme necessary to ensure independent scientific and technical capabilities for reviewing a safety case for geological disposal. In this perspective WP1 will develop a Strategic Research Agenda (SRA) and define the Terms of Reference (ToR) for its implementation accounting for the preparatory work to be carried out in the framework of the JOPRAD project for construction of the European Joint Programming (EJP) of research for geological disposal.

#### **Description of work**

#### Task 1.1: Setting a Strategic Research Agenda (SRA)

The purpose of this task is to proceed with the work carried out within the SITEX project (2012-2013) so as to issue a SRA of the Expertise function. The SITEX project has developed a common view on the key safety issues regarding geological disposal and the associated scientific and technical areas of concerns, for different disposal design/ host rocks and different phases (conceptualization, siting, design...) (see particularly SITEX Deliverables D3.1 and D6.1). The next step will be for the SITEX-II project) to identify for each of these areas the specific R&D topics, which are not addressed to date or not sufficiently with regards to safety or societal concerns and would need a coordinated effort from the Expertise function at an international level. These R&D topics will be prioritized in time, accounting notably for the foreseen agenda of safety case reviews and for the expected gain in the expertise capacity.

**Bel V** will coordinate the development of the SRA by **all the WP1 participants** (among which the other WP Leaders) with specific **interaction with WP4** (representatives of WP4 will participate in WP1 meetings). The SRA will be reviewed by WP4 (in the framework of WP4) and presented during one of the workshops planned with CS organisations outside SITEX-II (see **WP5**), as well as to the **SITEX-II participants** during a Plenary Meeting so as to collect potential comments.

The SRA issued by SITEX-II will be an input to the foreseen **JOPRAD project** (in preparation for the topic NFRP-04 of the new EURATOM call) if successfully agreed by EC.

#### Task 1.2: Setting the Terms of Reference (ToR) for the SRA implementation

This task will contribute to the development of the ToR for preparing the practical implementation of the SRA developed in Task 1.1.

#### Important remark:

This task foresees several interactions with the **JOPRAD project** in which four SITEX-II participants (Bel V, CVREZ, IRSN and Mutadis) would participate. As detailed below, the objective of Subtasks 1.2.1 and 1.2.2 of SITEX-II is to allow the SITEX-II participants who will not participate in JOPRAD to exchange with Bel V, CVREZ, IRSN and Mutadis in order to build common SITEX-II positions for input into the

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#### JOPRAD project.

Practically, for these 2 subtasks, only the WP1 participants who will not participate in JOPRAD will be funded through SITEX-II. Bel V, CVREZ, IRSN and Mutadis would be funded through JOPRAD. Moreover, JOPRAD would fund the organisation of 3 of the foreseen meetings for these 2 Subtasks.

If the JOPRAD proposal is not accepted by the EC, the scope of Task 1.2 would be limited to that of Subtask 1.2.3, i.e. identification of SRA topics that will be investigated inside the future SITEX network and definition of the ToR for their implementation.

## Subtask 1.2.1: Conditions for implementing Joint Programming with other research platforms and entities

The JOPRAD project in preparation (see task 3.6 of the JOPRAD project) will discuss the conditions for building an **EJP** between organisations fulfilling an Expertise function and other research entities and platforms such as the IGD-TP, without any prejudice to the independency required between these actors. In this JOPRAD project SITEX-II participants will be represented by 4 organisations (Bel V, CVREZ, IRSN and *Mutadis*). This specific Subtask 1.2.1 of SITEX-II will allow WP1 participants to exchange with these 4 organisations, within SITEX-II, in order to develop common views of the Expertise function and the CS on the conditions for building joint R&D programmes, without any prejudice to independency of the Expertise function.

**Bel V** will lead this subtask in which **all the WP1 participants** will be involved. Regular meetings between Bel V, CVREZ, Mutadis, IRSN and the other organisations participating in WP1 will be organised for this subtask (3 of these meetings will be funded by the JOPRAD project). These WP1 meetings will also be attended by **WP4 representatives.** Moreover, the outcomes of this subtask will be presented during a SITEX-II plenary meeting in order to collect possible comments from other SITEX-II participants before finalizing the JOPRAD deliverable.

#### Subtask 1.2.2: Defining the SRA topics that may be included into an EJP

Based on the SRA issued by SITEX-II (Task 1.1) and the conditions for implementing an EJP (Task 1.2.1), a distinction will be made between the R&D topics of the SRA for which projects may be initiated in the framework of an EJP bringing together all types of actors and those which will be strictly investigated inside the future SITEX network. This work will be performed within the framework of task 3.2 of the JOPRAD project, in which 3 SITEX-II participants will represent the Expertise function (Bel V, CVREZ and IRSN). The objective of this specific SITEX-II subtask is to allow SITEX-II WP1 participants who are not involved in JOPRAD to exchange with these 3 participants in order to develop common views of the Expertise function on SRA topics that may be included in an EJP.

**Bel V** will lead this subtask, with the same participants (**all WP1 participants, WP4 representatives**) and modes of work than those of Subtask 1.2.1.

## Subtask 1.2.3: Defining the ToR for the implementation of the SRA topics that will not be included into an EJP

Based on the SRA developed in Task 1.1 and on the identification of the SRA topics with high priority

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for which projects should be initiated inside the future SITEX network (see Subtask 1.2.2), the ToR for implementing these R&D topics will developed. Basically, these ToR will present for each SRA topic the interested participants, the modes of collaboration, the available and needed resources (based on EC-FP7-SITEX deliverable D3.2) and a planning. In addition, the modalities for interacting with the CS at the various stages of these future R&D projects will be discussed and included into the ToR.

**IRSN** will lead this subtask involving **all the WP1 participants** and **WP4 representatives** as in the previous subtasks.

#### **Deliverables**

#### D1.1 – Setting a Strategic Research Agenda (T0+12)

This deliverable will present a Strategic Research Agenda (SRA) prioritizing the R&D topics that the Expertise function should investigate at the European level in order to strengthen their expertise in reviewing safety cases for geological disposal facilities.

#### D1.2 – Setting the Terms of References for the SRA implementation (T0+27)

This deliverable will present how SITEX-II plans to implement the topics of the SRA presented in D1.1. The document will refer to JOPRAD deliverables for the identification of topics that may be included into an  $\mathrm{EJP}^4$  and will detail the ToR of the topics that will be covered inside the future SITEX network.

#### **Milestones**

Nb	Description	Lead	Means of verification	Month
M1.1	Draft version of the SRA, as input to the	Bel V	Draft D1.1	T0+6
	JOPRAD project, to Workshop WS5.1 with CS			
	and to initiate Task 1.2			
M1.2	List of conditions and topics for an EJP, for the	Bel V	List sent out	T0+12
	JOPRAD project (JOPRAD midterm WS) and for			
	WS5.2 with CS			
M1.3	List of SRA topics not for an EJP, as input to	Bel V	List sent out	T0+17
	Workshop WS5.3 with CS			
M1.4	Draft version of the ToR for the SRA	IRSN	Draft D1.2	T0+22
	implementation, as input for the Pilot Training			
	Session (WS3) and for Workshop WS5.4 with			
	international entities			

#### 4.2 WP2: DEVELOPING A JOINT REVIEW FRAMEWORK (LEAD BY FANC)

High-level safety requirements and regulatory expectations for the safety case at different phases of geological disposal facility development (conceptualization, siting, reference design, construction,

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<sup>&</sup>lt;sup>4</sup> The outputs of subtasks 1.2.1 and 1.2.2 will be documented in the JOPRAD deliverables D3.2 and D3.4, respectively.



operational, post-closure) are addressed by the EU directive and international standards and recommendations (IAEA, ICRP, WENRA, etc). The key objective of WP2 is to further develop a common understanding of the interpretation and proper implementation of safety requirements in the safety case for the six phases of disposal facility development based on SITEX-I outcomes as well as on the verification of compliance with these requirements.

The positions papers on the selected topics and technical guide related to the review of a safety case will be elaborated. The work will account for existing and planned initiatives at the international level.

#### **Description of work**

## Task 2.1: Developing a common understanding on the interpretation and implementation of safety requirements

This task will aim to share national experiences and prospective views on the interpretation and implementation of safety requirements and/or recommendations. The topics that will be discussed will be identified according to the priorities set up in the former SITEX project (deliverables D2.1 and D2.2 of SITEX 2012-2013) and D2.2. Examples of priority topics are radiological protection principles applied to geological disposal, programme for site characterisation, normal and anticipated operational conditions, the need to discuss the pre-licensing process...

Four topics will be selected from these priorities at the start of the project. For each topic, participants will exchange their interpretation and experience on how to implement in practice high-level international requirements related to the selected topics. Conclusions of the discussion will be gathered in position papers. The objective is that the position papers could provide a reference to national regulatory bodies when they are developing their own technical guides and as guidance to WMOs when developing the safety case during the various phases.

**FANC** will lead this task. **ASN, CVREZ, IRSN and CNSC** will be each responsible for drafting and finalising a position paper related to one of the selected topic.

The outcomes of this task will be discussed with WMOs (notably via the IGD-TP exchange meetings), international entities (workshop foreseen with IAEA, NEA, ICRP, etc.) and CS (WP4 representatives in WP2 meetings and enlarged workshops) within WP4. Interactions are also envisaged with WENRA (possible meeting) regarding the interpretation of specific "Safety Requirement Levels" (SRL) and with GEOSAF2 IAEA project (workshop WS2) regarding operational issues. Dialog will allow exchange and feed-back on the content of the position papers as well as on the experience on the application of the international safety requirements (difficulties encountered, possible gaps in international recommendations or technical guides...).

#### Task 2.2: Developing guidance on reviewing the safety case

This task will first be aimed at completing the exchange of feedback on the regulatory review process throughout the six key phases of the development of the safety case, with specific emphasis on practices implemented to verify that safety requirements are effectively and properly implemented. The construction of analysis grids for guiding the review of the safety cases for geological disposal

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facilities, as tested for the siting phase review during the SITEX project (2012-1013), will be pursued to the other phases of the lifecycle of a repository. The opportunities to involve the CS in the different steps of the review process will be examined as well.

**FANC** will lead this task. Other contributors for writing the guide will be **Bel V, CVREZ, IRSN and NRG**. The same interactions with WMOs, international entities and CS than in Task 2.1 are foreseen.

#### **Deliverables**

D2.1 – Interpretation and implementation of safety requirements (T0+27)

This document issued by Task 2.1 will summarize the followed methodology and the results of the discussions including the position papers for each of the 4 selected topics in appendix.

D2.2 – Technical guide on the review of a safety case (T0+27)

#### **Milestones**

Nb	Description	Lead	Means of verification	Month
M2.1	Progress of work in Tasks 2.1 (draft position paper for 2 topics) and Task 2.2, for discussion in the Workshop WS5.2 with CS	FANC	Progress report	T0+12
M2.2	Workshop WS2 with GEOSAF2	FANC	Minutes of the workshop	T0+15
M2.3	Progress of work in Tasks 2.1 and 2.2, including outputs of WS2 and WS5.2, for discussion in the Workshop WS5.3 with CS	FANC	Progress report	T0+17
M2.4	Progress of work in Tasks 2.1 (draft position paper for the 2 other topics) and Task 2.2, for the Pilot Training Session (WS3) and for the Workshop WS5.4 with international entities	FANC	Progress report	T0+22

## 4.3 WP3: TRAINING AND TUTORING FOR REVIEWING THE SAFETY CASE (LEAD BY LEI)

WP3 aims to provide a practical demonstration of training services that may be provided by the foreseen SITEX network. The training will be undertaken within the existing institute for expert training in nuclear safety (the European Nuclear Safety Training and Tutoring Institute, ENSTTI). It will focus on the development of training modules at a generalist level, with emphasis on the technical review of the safety case, based on national experiences, practices and prospective views. The training modules will integrate the outcomes from WP1, WP2 and WP4 and support harmonisation of the technical review processes across Europe. A pilot training programme will be organised and

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evaluated.

#### **Description of work**

#### Task 3.1: Identification of the practices, experiences and prospective views on training and tutoring

A first task will consist in identifying the common practices and points of view as well as the differences between the participants. That requires listing the current national practices on the topics such as: Existing training programs at national levels, Strategies/ management of human resources, Carrier management, Competence building, Existing initiatives on interacting with CS. The experience of participation in the training/tutoring activities in relation to geological disposal on the international level will also be analysed (e.g. IGD-TP - CMET working group, ECVET (European Credit system for Vocational Education and Training), ENEN (European Nuclear Education Network), Petrus project, etc.). This will lead to recommendations developed by WP3 for competence building of technical experts based on the existing good practices.

**LEI** will coordinate the whole task. LEI will elaborate draft questionnaires for the analysis of existing practices, which will be reviewed by WP3 participants, gather the results from **all WP3 participants** and produce a first analysis with recommendations for discussion within WP3 and **WP5** (through the interaction modes with external entities which will be implemented by WP5, such as the workshops).

#### Task 3.2: Development of a training module for generalist experts in geological disposal

The scientific knowledge required for experts is mainly part of the initial knowledge offered by academic learning and is continuously strengthened through the daily work of experts. The outcomes of the former SITEX project (2012-2013) showed that the skills for reviewing the safety case may be developed through a programme of specific training courses, tutoring and companionship.

This programme of training and tutoring should in particular aim at developing:

- A common culture of safety (support for exchange of experience and best practices),
- Awareness on key safety issues,
- Common methods for reviewing the safety case (support for harmonization of practises),
- Awareness of complexity of safety governance considering key social and ethical aspects.

Task 3.2 will correspond to the development of a training module, proposed to all experts engaged in the review process and especially dedicated to "beginners" or to experts not familiar with deep geological disposal (called "module A" in the former SITEX project, see SITEX D4.2). This module could be divided in three thematic sessions:

- Session I Definition of the Expertise function;
- Session II Content of the safety case, detail of different parts and phases of development;
- Session III Different steps of the technical review and exchanges with other stakeholders.

While performing this task the detailed training programme would be developed (duration, topics for each session, lecture's material, exercise material, etc.), accounting for the recommendations issued

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by Task 3.1. Management issues will also be prepared in close connection with the technical development of the training (e.g. main line of the concept, broad inputs and expected outputs, templates, attendees pre-training information, support during the training period, material for lecturers and trainees...). A specific effort will be made to have relevant tools ready for gathering the feedback from trainees, lecturers and managers.

**LEI** will be the lead participant of the whole task. **ENSTTI** will take in charge the training management part. An involvement of LEI in the logistical preparation is also foreseen as the training module could take place in Lithuania (see Task 3.3). LEI and ENSTTI will co-coordinate the technical development of this "common core module" by **WP3 participants**. Due account will be taken of the results or progresses of **WP1, WP2 and WP4** (WP leaders involved in WP3) for the preparation of the training material.

#### Task 3.3: Implementation of a pilot training session for "common core module"

Task 3.3 aims at carrying out a pilot training session based on the training module developed in the framework of Task 3.2. The evaluation of the training module will be based on the feedback from attendees, lecturers and managers. Lessons learnt will be drawn with a focus on required improvements.

**ENSTTI** (training manager) and **LEI** (technical manager) will implement jointly the training module. **WP3 participants** will be the lecturers; talks from other SITEX-II participants are not excluded.

<u>Remark:</u> The attendees for the pilot module will be from SITEX-II participants (e.g. young engineers or researchers) but will not be funded by SITEX-II. The lessons learned from the pilot training module will be part of the communication foreseen within **WP5** on the training service of a future SITEX network, notably to international entities (IAEA, etc.).

#### **Deliverables**

D3.1 – Synthesis of existing practices for training and tutoring of experts in geological disposal safety (T0+13)

This deliverable will present the analysis of the existing practices on expert training and tutoring in the countries of SITEX-II organisations, including recommendations developed based on the existing good practices.

D3.2 – Development of a training module for generalist experts in geological disposal (T0+23)

This deliverable will present the developed training program for the training module for experts in geological disposal, including the objectives, the description of the content (lectures, exercises...), the lecturers' profile, the timetable.

D3.3 – Material for training module for generalist experts in geological disposal (T0+23)

This deliverable will contain the training material for "common core module" for experts in geological disposal safety developed within the frame of SITEX-II project (lecture material, exercise material, etc.). As this deliverable will assemble sets of slides designed for a training framework, it requires adequate oral explanations; thus, this deliverable will not be made

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public.

D3.4 – Lessons learnt from the pilot training module (T0+27)

This deliverable will summarise the feedback gathered from the implementation of the pilot and highlight the main issues to be further considered e.g. in the framework of a SITEX network.

#### **Milestones**

Nb	Description	Lead	Means of verification	Month
M3.1	Draft recommendations based on the existing good practices for training, to initiate Task 3.2	LEI	Draft D3.1	T0+6
M3.2	Progress of work in Tasks 3.1 and 3.2 for discussion in the Workshop WS5.3 with CS and WS 5.4 with international entities	LEI	Progress report	T0+17
M3.3	Pilot training session	LEI	Evaluation sheets by lecturers and attendees	T0+24

#### 4.4 WP4: INTERACTIONS WITH CIVIL SOCIETY (LEAD BY MUTADIS)

Transparency of the decision-making process includes several requirements such as maintaining over time consultation and interaction with interested parties in the decision-making process, in particular with Civil Society (CS). The Future SITEX network is expected to support

development of these interactions at different levels of governance and at different steps of the decision-making process. WP4 will interact with representatives of Civil Society within SITEX-II and externally through workshops with other CS organisations. The workshops will cover three thematic tasks, namely: R&D, safety culture/review and governance. The results will be integrated in one deliverable addressing the conditions and means for developing interactions with CS in the framework of the foreseen SITEX network.

#### **Description of work**

#### Task 4.1 - CS interacting with R&D

The first SITEX project established that one of the goals of the future SITEX network would be "the integration of societal concerns at different steps of R&D, through the organisation of regular workshops or work programmes with Civil Society" (see SITEX Deliverable D6.2). It also mentioned that "civil society could bring an important feedback for SITEX SRA as Civil Society members can bring different view on key safety issues and different prioritisation of issues that could be constitute an added value to the SITEX SRA".

The first task of WP4 will therefore focus its work on the development of interactions with CS along the development of R&D and more specifically in priority on the CS contribution to the R&D activities

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of the foreseen SITEX network. In this perspective, Task 4.1 will interact with the group of third parties in the frame of the workshops with CS and will:

- review the "R&D orientations for Technical Safety Organisations", Deliverable D3.1 of the first SITEX project (2012-2013) from a CS perspective,
- review the first SITEX Strategic Research Agenda (SRA), to be developed by SITEX-II WP1, as well as, if possible other research agendas (such as for instance the IGD-TP SRA) and develop appropriate processes for CS to interact with experts along R&D development,
- identify the expectations of CS regarding R&D, both on technical and social science issues (safety analysis and criteria, siting criteria, alternative methods, long term governance, preservation of knowledge, ethics, etc.) and formulate R&D key technical and socio-technical issues that CS expects to be developed in R&D programmes,
- investigate the conditions and means for CS to contribute to the framing and follow-up of potential Joint Programming (JP) of R&D in the RWM field, backing European discussions on Joint Programming on potential crosscutting areas.

**MKG** will lead **WP4** participants who will participate to this task. WP4 will collaborate with **WP1** (notably through participation to WP1 meetings) and also with a group of **third parties** composed of representatives of CS organisations and CS experts and managed by **WP5** (Task 5.1, workshops WS5.1, WS5.2 and WS5.3), so as to enlarge the consultation.

#### Task 4.2 - CS contribution to safety culture and safety case review

The second task of the WP4 will be devoted to the identification of the conditions and means for engaging CS with the Expertise function along the safety case review process of geological disposal facilities. It will imply:

- to investigate how the safety culture can be shared through the different stakeholders (regulatory bodies, TSOs, WMOs, CS...),
- the identification of appropriate processes and tools in order to enable experts' interactions with CS along the safety case review activities in the perspective of the Aarhus Convention.

To perform these objectives, the WP4 participants will conduct review of the case studies of interactions between experts and CS described in D5.1 of SITEX project (2012-2013). The Task 4.2 will produce recommendations describing the conditions and means to involve CS along the safety case review process, which will be presented during the three WS with CS.

**FANC** will lead **WP4** participants of this task. WP4 will interact with **WP2** in order to define procedures allowing involvement of CS in the different phases of the safety case review (participation to WP2 meetings). As in the above Task 4.1, interactions will take place in the frame of the CS workshops managed by **WP5**.

#### Task 4.3 – Intergenerational governance of Geological Disposal

The 2012-2013 SITEX project gathered expectations of CS regarding the decision making process of

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geological disposal. Based on these results, the third task of WP4 will review the possible institutional and legal settings for implementing public interactions with the experts on the long term along the foreseen operational phase of geological disposal:

- taking advantage of available experience and processes of CS engagement in the context of RWM at local and national levels, and
- examining these processes of CS engagement in the perspective of the implementation of the Aarhus Convention.

To reach this goal, Task 4.3 will investigate the existing research and on-going reflexions of international entities (WENRA, ENSREG, IAEA, NEA...) as well as from CS organisations. It will also review the D5.2 of the first SITEX project and make interviews of a selected group of stakeholder representatives and independent experts and focus groups with CS along the foreseen CS workshops. Task 4.3 will also take into account **the EU RWM (2011/70) Directive**, notably the existing feed-back on the implementation of the provisions regarding public information and participation provisions in the Member States, taking advantage of the reflections and review of other national or EU organisations and notably the EC review of the implementation of this Directive.

The task 4.3 of WP4 will make recommendations on "Intergenerational patterns of inclusive governance along the operational phase of geological disposal" and more specifically develop rules of governance regarding interaction between the Expertise function (TSO) and CS that will be presented during the three WS with CS.

**REC Slovenia**<sup>5</sup> will lead **WP4 participants** of this task. The CS workshops managed by **WP5** will allow interactions with the enlarged CS group as needed for carrying out this task.

#### **Deliverables**

D4.1 – Conditions and means for developing SITEX interactions with CS (T0+27)

Deliverable D4.1 will encompass the outcomes of the three tasks of the WP4 to present an integrated vision of the results produced by the WP4, i.e.:

- The results of the review of the SITEX SRA as well as the description of appropriate processes for CS to interact with experts along R&D development. It will also formulate R&D expectations of CS regarding radioactive waste management,
- The conditions and means to share a common safety culture and rules of procedures to allow interactions of experts with CS along the safety case review process,

Recommendations on "Intergenerational patterns of inclusive governance along the operational phase of Geological Disposal".

#### Milestones

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<sup>&</sup>lt;sup>5</sup> REC Slovenia is a branch of REC, with a Central Office in Hungary (see section 4.1.16).



Nb	Description	Lead	Means of verification	Month
M4.1	Progress of work in Tasks 4.1, 4.2 & 4.3 for discussion in the Workshop WS5.1 with CS	MKG	Progress report	T0+8
M4.2	Progress of work in Tasks 4.1, 4.2 & 4.3 for discussion in the Workshop WS5.2 with CS	FANC	Progress report	T0+12
M4.3	Progress of work in Tasks 4.1, 4.2 & 4.3 for discussion in the Workshop WS5.3 with CS	REC	Progress report	T0+17
M4.4	Progress of work in Tasks 4.1, 4.2 & 4.3 for the Pilot Training Session (WS3) and the workshop with international entities (WS5.4)	Mutadi s	Progress report	T0+22

## 4.5 WP5: INTEGRATION AND DISSEMINATION OF PROJECT RESULTS (LEAD BY CV REZ)

The overall objectives of WP5 are to produce a synthesis of the results achieved within all the WPs of SITEX-II together with an Action Plan that will set out the content and practical modalities of the future Expertise Function network.

#### **Description of work**

#### Task 5.1: Interactions with the Civil Society

This task essentially consists in organising three successive workshops with a "group of third parties". This group of a dozen of representatives of CS organisations outside SITEX-II, will potentially include representatives of the Working Group on Radioactive Waste Management of the European "Nuclear Transparency Watch" network, and also representatives of Friends of the Earth Europe, Greenpeace and other representatives of national CS organisations such as the German BUND (Friends of the Earth), Finnish Association for Nature Conservation, Schweizerische Energie-Stiftung and others. The "group of third parties" will also include a few independent experts/specialists on radioactive waste issues (e.g. from Ökoinstitut (Germany), Nuclear Waste Advisory associates (United Kingdom), Austrian Ecological Institute and others.

The aims of these workshops are to collect the expectations of CS from the Expertise function and their recommendations for the future SITEX network, on the basis of the works produced by WP1 to 4 of SITEX-II. The addressed topics will typically relate to safety case, R&D and inclusive governance. The main conclusions of these workshops will be presented in the Minutes of the workshops including recommendations for the organisation of the foreseen SITEX network.

**REC**, as lead of this task, will liaise and coordinate the contacts with **CS Organisations and CS experts** and prepare workshops with their representatives, based on **WP1**, **WP2**, **WP3** and **WP4** inputs (leaders of WP1 to 4 are WP5 participants). WP4 participants as well as WP1, WP2 and WP3

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representatives will attend these workshops.

#### Task 5.2: Coordination with international entities and dissemination of project results

For a successfully coordinated action of the Expertise function at an international level, a common understanding of the goals and functions of this foreseen SITEX network is to be reached with leading international institutions, associations, and platforms, such as IAEA, NEA/OECD, WENRA, ETSON, SNETP, IGD-TP, ENSREG, ENEN, etc. This will be achieved through the presentation of project results at events organised by these institutions and by discussing the matter with their representatives at a dedicated workshop organised by SITEX-II.

On the other way, further to publication of project outcomes at international events the results should be presented also to the institutions outside the SITEX-II from EU member states, in particular those planning or just initiating their radioactive waste management programmes. The goal of this knowledge transfer is to harmonise approaches for TSO functioning within the EU and, in this way, to lay down bases for coordinated, cooperative and sustainable efforts in this area at the EU (and potentially international) level in the future. This will be achieved by providing systematic information about the project results to representatives of national programmes and CS via SITEX-II project web pages managed by WPO.

**CVREZ** will lead this task. The leader will liaise and coordinate the contacts with **international institutions** and prepare a workshop with their representatives. This leader will also ensure the transfer of information regarding **WP1-4** outcomes to the national institutions outside SITEX-II from EU member states. Further, WP5 will coordinate the information exchange with the foreseen EU **JOPRAD** project. An updated plan for 'dissemination and exploitation' will be prepared as an input for both the mid-term and final periodic reports managed by **WP0**. This will include a record of activities related to dissemination, communication and exploitation that have been undertaken, and those still planned.

#### Task 5.3: Integration of project results

SITEX-II results will be summed up in a single concise final report containing and sorting project outcomes, achievements, findings, recommendations, and lessons learnt. The WP outcomes will be provided in the form allowing their compilation in this summary report. These results will also be presented in synoptic summary papers designated to publication, e.g. through SITEX-II web site or at conferences.

**IRSN**, lead participant of this task, will manage the final summary report developed in cooperation with **WP5** participants (leaders of WP1 to 4).

#### Task 5.4: Action plan for establishing SITEX platform

EU-SITEX project (2012-2013) identified key issues to be solved prior commencing a sustainable SITEX network and summarized them in a ToR of the network. However, there is a need to further elaborate this material, in particular in areas of (i) legal bases for the network operation, (ii) formal position of interested organisations (incl. CS organisations), (iii) provision and mobilization of resources for its functioning, (iv) specification of working procedures, and (v) coordination of

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activities with other international platforms/initiatives active in the area. Final recommendations of both projects (SITEX and SITEX-II) will be elaborated into an Action plan indicating necessary steps, incl. their sequence and timing, aiming at launching network activities.

**CVREZ** as lead participant of this task will coordinate the development of the Action plan. **WP1-5** will take part in formulating and sorting recommendations for actions to establish the foreseen SITEX network.

#### **Deliverables**

D5.1 – Communication action plan (T0+6)

This deliverable will present the communication strategy

D5.2 – Plan for dissemination and exploitation (T0+14)

This deliverable will include a record of activities related to dissemination and exploitation that have been undertaken, and those still planned both during and after the project, as an input for SITEX-II mid-term periodic report

D5.3 – Plan for dissemination and exploitation - update (T0+27)

This deliverable will update the record of activities related to dissemination and exploitation that have been undertaken, and those still planned, as an input for SITEX-II final periodic report

D5.4 – SITEX-II final project report (T0+29)

This deliverable will be a final document summarizing project outcomes, achievements, findings, and lessons learnt. This document will also contain recommendations for developing the Action plan for establishing SITEX network (D 5.2).

D5.5 – Action plan for establishing SITEX network (T0+30)

The document will contain a proposal of the step-by-step procedure to implement in practice the foreseen SITEX network. It will tentatively include the following key sections:

- Mission and objectives;
- Legislative and administrative conditions for creating and operating the network;
- Formal position of interested organisations;
- Provision and mobilization of resources for SITEX network functioning;
- Specification of working procedures;
- Coordination of activities with other international platforms/initiatives active in the area;

Concrete tasks, their timing and allocation of implementation responsibilities.

#### **Milestones**

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Nb	Description	Lead	Means of verification	Month
M5.1	Workshop with CS (WS5.1)	REC	Minutes of the workshop	T0+11
M5.2	Workshop with CS (WS5.2)	REC	Minutes of the workshop	T0+15
M5.3	Workshop with CS (WS5.3)	REC	Minutes of the workshop	T0+19
M5.4	Workshop with international entities (WS5.4)	REC	Minutes of the workshop	T0+23

#### 4.6 WP6: MANAGEMENT AND COORDINATION (LEAD BY IRSN)

The general objectives of this WP6 are to exercise efficient coordination and management of the project activities in order to assure sound management of contractual and financial issues, project management tools, and reporting to the European Commission.

#### **Description of work**

<u>Remark:</u> WP6 activities are under the responsibility of the administrative coordinator (IRSN) and WP leaders are associated as they are responsible for the progress of their WP. The other project participants will be solicited to contribute to these activities but they don't appear explicitly in the participants of WP6 since their contribution will be limited compared to the technical work they will produce in the different WPs (costs charged under other WPs).

#### Task 6.1: Administrative and financial management

This task will include the followings:

#### Administrative / contractual management

- Coordination of the administrative aspects of the project (accession formalities, administrative/contractual information, etc.)
- Maintenance of the Grant Agreement and Consortium Agreement following the applicable procedures defined in the rules for participation
- Application of the appropriate procedures in case of enlargement of the consortium or any other amendment to the Grant Agreement

#### Financial management

- Administration of the Community financial contribution, by the coordinator (distribution to the participants, record-keeping and reporting on fund transfers)
- Monitoring of the project's and participants' budgets
- Elaboration of the project procedures for financial reporting from all participants
- Providing the cost statements and Certificates on Financial Statements when required

**IRSN** will execute this task.

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#### Task 6.2: Project monitoring and reporting

This task involves:

#### Quality and information management

- Designing and maintaining the "Project Quality Plan" (working procedures for the project, including document management and templates), and monitoring its proper use by the participants, if relevant; this will be decided by the first Steering Committee;
- Maintenance of participants' contact information, including emailing lists
- Creation and maintenance of the project website, for internal and external use
- Monitoring of workflow and information management, ensuring good communication within the consortium

#### Planning control

- Supervision of project deliverables, progress milestones and planning
- Continuous monitoring of participants' achievements and contribution to the objectives
- **Scientific review** of the work and deliverables performed by the participants; this will be achieved by the WP leaders together with the coordinator
- Organisation and minutes of:
  - the project kick-off meeting with all participants
  - the plenary meetings with all participants
  - the meetings of the project's Steering Committee

#### Supervision of:

- the pilot training session (in coordination with WP3)
- the workshops (in coordination with WP2 for the workshop with AIEA-GEOSAF2 and in coordination with WP5 for those with members of CS and that with international entities)

#### Reporting

 Preparation of the periodic reports to be submitted to the EC: two periodic reports (months 1 to 15 and months 16 to 30) will be issued.

**IRSN (project coordinator)** will lead this subtask in which **all the other WP6 participants (WP leaders)** will contribute. **LEI**, which was in charge of the website of the former SITEX project, will create and maintain the website of SITEX-II.

#### **Deliverables**

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### D6.1 – Presentation of the project (T0+3)

#### **Milestones**

Nb	Description	Lead	Means of verification	Month
M6.1	Release of the SITEX-II internal and public website	LEI	Website	T0+3
M6.2	Midterm periodic report	IRSN	Report sent out	T0+15
M6.3	Final periodic report	IRSN	Report sent out	T0+30



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