

SHARE

H2020 NFRP-2018 CSA: Coordination and Support Action

Grant Agreement n° 847626

D5.8: Workshop “on identified gaps”

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|----------------------------------|------------------|
| Deliverable nature | Other |
| Dissemination level | Public |
| Contractual delivery date | 31 December 2021 |
| Actual delivery | 14.04.2021 |
| Version | V1 |

Version history

| Version | Date | Editors | Description |
|---------|------------|---------------------------|---|
| V1 | 08.04.2021 | Romain Tricon-Duez [IEIC] | Structuration of the deliverable Introduction of the outputs of the workshop |
| V2 | 12.04.2021 | Christine Georges [CEA] | Contribution |
| V3 | 13.04.2021 | Istvan Szoke [IFE] | Contribution |

Abstract

This deliverable presents the main elements of the workshop on identified gaps, which took place March 23rd, 2021 as part of DigiDecom D2021 web-event. The deliverable includes the agenda of the workshop, the presentations given by the speakers (excluding the unpublished content and project draft data), as well as the summary of the elements discussed during the workshop.

Despite COVID situation leading to online workshop, many inputs were collected from break-out sessions, including through interactive polls using “SLIDO” tool. Thus, attendees were asked to give their feedback on actions proposed to fill the gaps identified by the consortium after investigation of needs, challenges and opportunities already presented during the last two workshops and after reviews of existing solutions and on-going international initiatives.

Deliverable content

| | |
|---|---|
| Version history..... | 2 |
| Abstract..... | 3 |
| Deliverable content | 4 |
| 1. Introduction and objective | 5 |
| 2. Organisation of the workshop | 6 |
| 2.1. Conference DigiDecom 2021..... | 6 |
| 2.2. Preparation of the session “SHARE” at DigiDecom 2021 | 7 |
| 2.3. Agenda of the session “SHARE” at DigiDecom 2021 | 8 |
| 3. Participants to the workshop..... | 9 |
| 4. Outcomes of the Workshop..... | 9 |

1. Introduction and objective

SHARE consortium has been working since June 2019 to gather the needs of the decommissioning stakeholder's community as well as the existing solutions to answer those needs. Those actions have been carried out by the sending of a dedicated questionnaire and the review of existing literature. However, the wish of the SHARE consortium is to produce the most inclusive roadmap and strategic Research Agenda as possible. Therefore, from the beginning the SHARE consortium has been looking for community engagement.

The first public workshop on best practices initially planned in June 2020 as a side event of DigiDecom 2020 could not take place due to the COVID-19 situation. With the evolution of pandemic, following postponement of DigiDecom 2020, this workshop was rescheduled in October 2020.

As a consequence, joint Workshop WP2 & WP3 (MS6) scheduled initially Month 17 took place on-line beginning of month 19, 1-3 December 2020, allowing one month to benefit from feedback from October Workshop, particularly to find ways to federate a bigger audience, providing more inputs to the project (more investigations on real needs and more information on existing solutions and on-going international initiative, better coordination with other on-going initiatives, etc.)

This third public workshop "on identified gaps", initially planned in December 2021, was organised online as well, as a specific session of DigiDecom 2021 March 23-25th, 2021, giving the consortium less than 3 months to analyse outputs from December Workshop and to propose actions to fill the gaps.

The objective of this workshop was to get feedback from the decommissioning stakeholder's community on these actions, to be able to provide, by the end of 2021, a strategic research agenda and a road map for potential future collaborative projects (R&D-I, Methodologies, Standardisation in technical and non-technical areas).

2. Organisation of the workshop

2.1. Conference DigiDecom 2021

IFE being member of the consortium since the origin of discussions on SHARE project in 2016, participation in the 4th edition of DigiDecom was a must.

Indeed, DigiDecom is an international conference organized annually since 2016 by IFE, focusing on digital transformation, robotics and other game changing trends in nuclear decommissioning, and waste management. It brings together a multidisciplinary international community for discussing experience from earlier applications, as well as opportunities for future applications of innovative technologies and methods in nuclear decommissioning, dismantling and waste management. From 2021, DigiDecom events are organised within the program related to IFE's designation as an IAEA International Collaborating Centre.

The synergy between SHARE and DigiDecom took the shape of a complete session dedicated to SHARE project on the first day of DigiDecom 2021, with registration of 212 people.

DigiDecom 2021 [was also a great opportunity for an overview of International landscape in innovation for nuclear decommissioning and waste management, mainly focused on digital transformation and robotics](#). Among others, it supported European [PLEIADES](#) on digital tools or [PREDIS](#) on predisposal waste management and NEA Expert Group on the application of Robotics and Remote-Systems in the nuclear back [EGRRS](#).

Words of István Szőke, IFE, general chair of DigiDecom 2021

DigiDecom events are, without excluding other topics, primarily focusing on application of emerging technologies, and typically include open interactive discussions about earlier experience from pilot deployments, foreseen challenges and needs for further developments. Since the SHARE project also aims at facilitating innovation through providing a gap analysis and an innovation roadmap, DigiDecom offered a good opportunity to disseminate results and gather feedback from the international community by the SHARE consortium. Prior to DigiDecom 2021, the SHARE project has already organized open workshops. However, DigiDecom offered an opportunity to reach out to the DigiDecom community and, hence, gather input from large additional audience and in a different stage of the SHARE project.

Furthermore, DigiDecom 2021 integrated participants and audiences related to important H2020 (PLEIADES, PREDIS) and other projects (LiveDecom, RoboDecom), working (EGRRS of robotics group of NEA) and other groups that are focusing on specific or complementary aspects related to innovation for nuclear decommissioning.

Finally, DigiDecom 2021 also included a comprehensive presentation on aspects related to digitalisation and robotics-based innovation in the oil and gas industry, providing a good opportunity for cross-industry knowledge exchange.

2.2. Preparation of the session “SHARE” at DigiDecom 2021

The organisation of such on-line workshop took benefit from the two previous on-line SHARE workshops and the “SHARE” session was divided into two parts:

- A first part in plenary to communicate globally on SHARE results at this stage, with additional information on analysis of the survey depending on stakeholder’s profiles
- A second part in 5 parallels break out groups addressing 8 thematic areas (see following figure) to gather endorsement and opinion of the stakeholders on identified actions to fill the gaps.

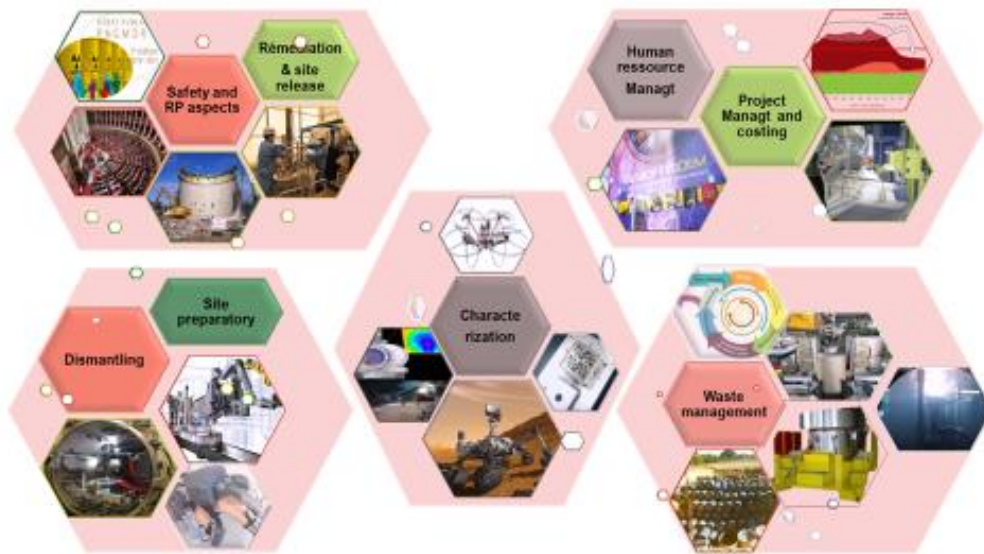


Figure 1: 5 groups addressing 8 sub-thematic areas

This led to several preparatory meetings within the consortium in order:

- To agree on the methodology and on the choice of the interactive tool to be used (SLIDO/ PPT and TEAMS at the same time)
- To allocate tasks to people willing to participate actively in the animation of the break-out sessions
- To get trained to the used to “SLIDO”.

2.3. Agenda of the session “SHARE” at DigiDecom 2021

The agenda of the SHARE session was as follows:

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|---|--|
| <p>Session 2: Presentation of result from the “SHARE” EU project on a roadmap for decommissioning R&D priorities Chairs: Christine Georges (CEA) and Patrick O’Sullivan (IAEA)</p> | |
| 15:10 | <p>Presentation of results from the “SHARE” EU project: a roadmap to enhance collaborative Research activities for Decommissioning <i>Christine Georges – CEA, France</i></p> |
| 15:30 | <p>Analysis of results from stakeholders survey about importance and urgency of needs in Research for decommissioning <i>Gintautas Poškas – LEI, Lithuania and Laura Aldave de las Heras – JRC</i></p> |
| 15:50 | <p>Implementation of gap analysis between needs and existing solutions / international initiatives <i>Anthony Banford- NNL, UK</i></p> |
| <p>Discussion of innovation needs and possible solutions Chairs present of the objectives of the group sessions Breakout into groups: Group moderators shortly present thematic areas and related outcomes from SHARE gap analysis, for discussion and additional proposals.</p> <ul style="list-style-type: none"> • Group 1 Safety / radiological protection aspects, environmental remediation, and site release. Moderators: Réka Szőke (IFE) and Anumaija Leskinen (VTT) • Group 2 Project management, costing and human resource management. Moderators: Fanny Fert (CEA) and Lucas Stephane (IFE) • Group 3 Characterization. Moderators: Laura Aldave de las Heras (JRC) and Kurt van den Dungen (SCK-CEN) • Group 4 Site preparatory activities and Technologies for dismantling operations. Moderators: Junaid Chaudhry (KIT) and Federica Pancotti (SOGIN) • Group 5 Management of materials and waste from decommissioning. Moderators: Anthony Banford (NNL) and Christine Georges (CEA) | |
| 17:10 | <p>Short summaries from the group discussions presented in Plenary by the Moderators (5 min each) & Plenary Discussion Moderators and Session Chairs</p> |
| 17:50 – 18:00 | <p>Final remarks of the Session Chairs <i>Christine Georges and Patrick O’Sullivan</i></p> |

Complete program with presentations made during the 3 days of DIGIDEM 2021 can be seen at <https://ife.no/en/event/DigiDecom2021/>

Presentations given by SHARE consortium are available on SHARE website: Link

3. Participants to the workshop

212 people registered to the SHARE session and around 163 attended the plenary part and 85 the part in break out groups, with an average of 15 to 20 people in each group.

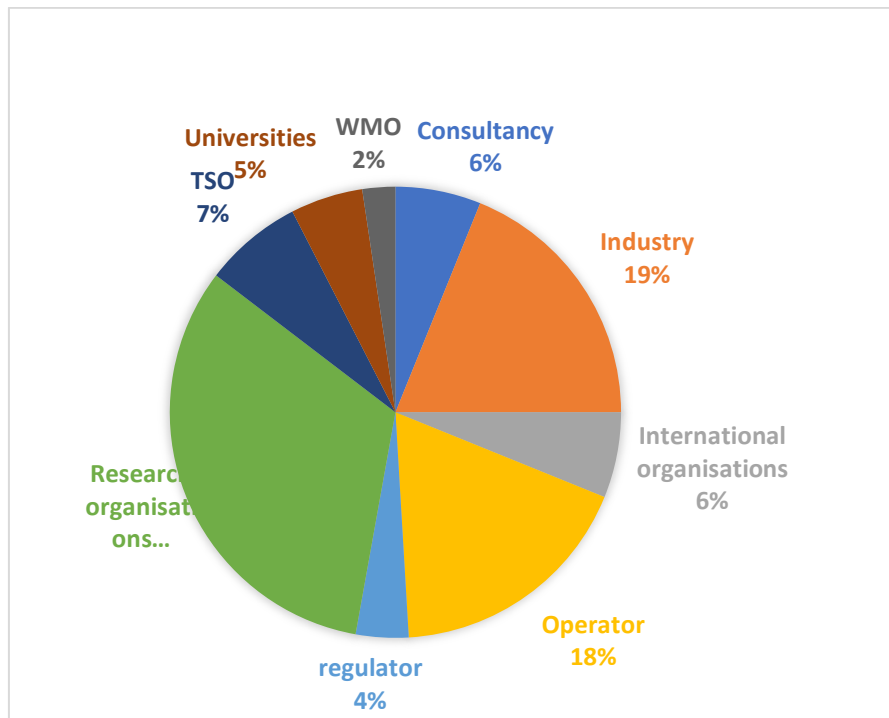


Figure 2: Repartition of stakeholders registered in Session Share at DigiDecom

4. Outcomes of the Workshop

All the results on investigations of needs, challenges, opportunities, etc. from December workshop were compiled by the consortium from December 2020 to March 2021 to highlight gaps between needs and current best practices or on-going developments and to provide a list of actions to fill these gaps in each sub-thematic area.

At DigiDecom 2021, SHARE consortium was mainly focused at presenting these actions, (maximum 4 slides by thematic area) and at getting inputs from participants.

Slido tool was used, integrated into PowerPoint, to create and start polls, with the same question asked after each slide, as shown in the following example related to thematic area “Project management and costing”.

Do you agree with the proposals or can you suggest other actions that would give a step change in these sub-thematic areas?

In my view the most relevant is to provide guidance on methodologies for benchmarking, in combination with standardisation of decom structures

ISDC awareness

Long time data storage

MCDA

Yes

Uncertainty

Yes, I agree, in generality

Yes, I agree

Regulatory aspects D423

No further suggestions

|| (5)

Need to address uncertainty

This workshop fulfilled its initial objective at best for an on-line workshop: We got feedback from a great panel of the decommissioning stakeholder's community on the results of the project at this stage.

Outcomes from the "Slido sessions" will then be analysed by the consortium and the completed list of actions will be further organised, grouped by key Research Topics and prioritized in time in order to provide a Strategic research agenda by the end of 2021 as shown in the following figure.

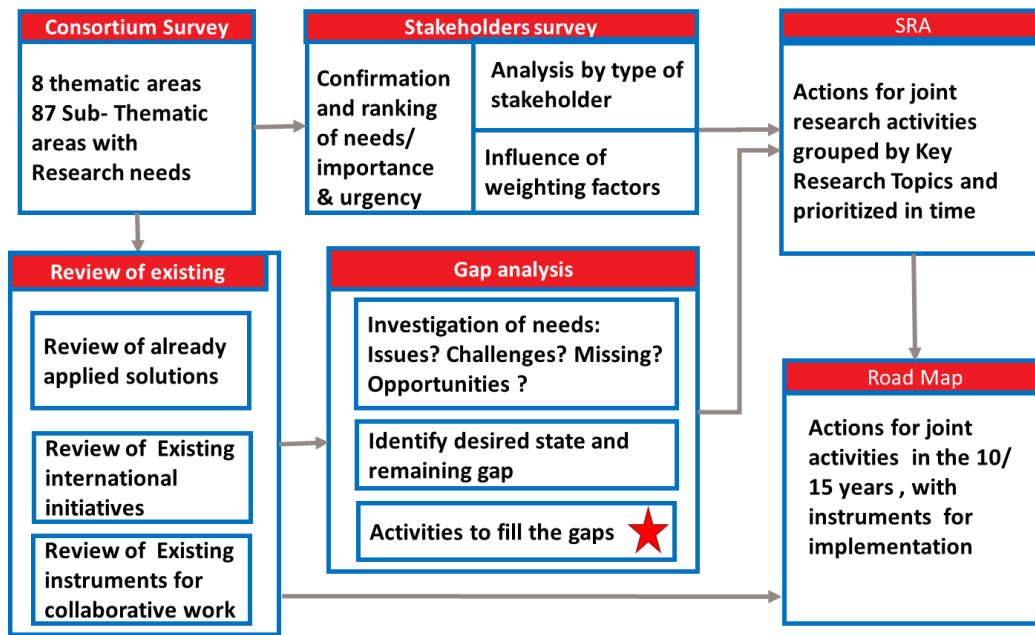


Figure 3: Remaining work towards SHARE Road map

In parallel, review of existing instruments for collaborative work will continue, in order to propose how to conduct the future road map with actions for joint activities in the 10/ 15 years.

In addition, this workshop was an opportunity to increase the Decommissioning community interested by the project (500 to 600 people) as shown in the picture below:



Figure 4: Decommissioning community between 500 and 600 people