



Horizon 2020
Programme

MUSA

Research and Innovation Action (RIA)

This project has received funding from the European
Union's Horizon 2020 research and innovation programme
under grant agreement No 847441

Start date : 2019-06-01 Duration : 48 Months

Advisory Board recommendations

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MUSA - Contract Number: 847441

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Document title	Advisory Board recommendations
Author(s)	Mrs. Delphine MEYER, Dr. Luis E. Herranz (CIEMAT)
Number of pages	6
Document type	Deliverable
Work Package	WP1
Document number	D1.4
Issued by	LGI
Date of completion	2020-08-03 14:47:46
Dissemination level	Public

Summary

The present Deliverable D1.4 is a synthesis of the MUSA Advisory Board input given in the project kick-off meeting, held during 10-12 of July 2019, and in a survey, which circulated in March 2020. The main points addressed concern: project management, resources distribution among WPs, communication and dissemination, relevance of potential outcomes, alignment with other related international initiatives

Approval

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2020-08-03 14:53:35	Dr. Luis E. HERRANZ (CIEMAT)

D1.4 – Advisory Board recommendations

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Version 01 – 28/07/2020



Document type	Deliverable / Milestone / Minutes / Report
Document number	D1.4 version 01
Document title	Advisory Board recommendations
Authors	L.E. Herranz (CIEMAT), D. Meyer (LGI)
Release date	28/07/2020
Contributing partners	CIEMAT, LGI
Dissemination level	Public / Restricted to MUSA Consortium

Version	Short description	Main author	WP leader	Coordinator
#	First release	L.E. Herranz (CIEMAT) 28/07/2020	L.E. Herranz (CIEMAT) 28/07/2020	L.E. Herranz (CIEMAT) 28/07/2020

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- Project management.
- Resources distribution among WPs.
- Communication and dissemination.
- Relevance of potential outcomes.
- Alignment with other related international initiatives.

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1 Introduction

The Management and Uncertainties of Severe Accident (MUSA) project was launched under the frame of EC H2020 on June 1st 2019. According to the project structure, the Executive Board (ExB) of the project (i.e., the project coordinator and the WP (Work Package) leaders, supported by the PMO) will work in collaboration with the Advisory Board (AB), which consists of six representatives of national and international organizations (Table 1). Their main objective is to provide MUSA with strategic needs and viewpoints of key stakeholders in the nuclear safety community, so that the project output meets them as much as possible. To do so, AB will review the key deliverables produced by the project and provide feedback to enhance their quality, appeal and, most importantly, to ensure that the needs of nuclear stakeholders are met. In order to articulate the communication between ExB and AB, AB members are invited to the General Assembly (GA) annual meetings. In addition, specific surveys might be circulated to collect their views on specific matters related to the project as necessary.

	Organisation	Acronym	Type
AB	Spanish Nuclear Regulatory Body	CSN	Nuclear Regulation
AB	International Atomic Energy Agency	IAEA	International. Body
AB	Nuclear Energy Agency	NEA	International. Body
AB	Nuclear Generation II & III Association	NUGENIA	Nuclear Association
AB	Office for Nuclear Regulators	ONR	Nuclear Regulation
AB	The Nuclear Regulation Authority	NRA	Nuclear Regulation

Table 1: Composition of MUSA Advisory Board

The present document (Deliverable D1.4) is a synthesis of the AB input given in the kick-off meeting, held during 10-12 of July 2019, and in a survey which circulated in March 2020. The main points addressed concern:

- Project management.
- Resources distribution among WPs.
- Communication and dissemination.
- Relevance of potential outcomes.
- Alignment with other related international initiatives.

The participation of AB in the survey was 50% in written form; besides, AB members have formulated suggestions during the MUSA kick-off meeting that have also been embedded in the sections below. It should be emphasized that this deliverable only reflects the comments received from AB and it is not intended to give a thorough overview on how any of the aspects discussed are dealt with in MUSA.

2 Project management

Emergency preparedness strategy in some nuclear countries (i.e., Japan) is a responsibility for local governments. This turns iodine tablets distribution to citizens into one of the most important discussion points. As a consequence, the importance of dissemination of iodine-related uncertainties and other matters of this sort to all stakeholder should be kept in mind when managing the project. In particular, opportunities to inform and collaborate with OECD/NEA Committees, like CSNI (Committee on the Safety of Nuclear Installations) and CNRA (Committee on Nuclear Regulatory Activities), should be exploited as much as feasible. In addition, a follow-up of IAEA activities of similar nature as MUSA is recommended, likewise communication with professional associations that might make use of MUSA results, such as WENRA, ENSREG, ETSO and others.

3 Resources distribution among WPs

It is anticipated that large number of analyses that are to be performed, especially in WP5 and WP6, the resources distribution is therefore considered reasonable.

4 Relevance of potential outcomes

The AB members were given a short-list of potential outcomes to rank from 1 (top-high) to 5 (bottom-low): enhancement/adaptation of UaSA methodologies to SA analysis; systematic application of UQ to SA analysis; characterization of input deck uncertainties; insights into Source Term uncertainties (uncertainty bands & governing factors); identification of remaining issues worth further investigation. As a result of the ranking received, the order from most to less important has been settled to be:

- Insights into Source Term uncertainties (uncertainty bands & governing factors).
- Identification of remaining issues worth further investigation.
- Enhancement/adaptation of UaSA methodologies to SA analysis.
- Systematic application of UQ to SA analysis.
- Characterization of input deck uncertainties.

	AB1	AB2	AB3	Avg
Insights into ST uncertainties	1	1	1	1
Characterization of input deck uncertainties	5	5	2	4
Systematic application of UQ to SA analysis	4	3	3	3.3
Enhancement/adaptation of UaSA methodologies	3	4	5	4
Identification of remaining ST issues	2	2	4	2.7

Table 2: Ranking of potential outcomes by AB members

Despite the limited responses to the survey (3 on 6 AB members), there are some messages clearly stated in Table 2:

- The most valued outcome is the insights into ST uncertainties.
- The second position is for the identification of remaining issues worth further investigation; this result probably comes from the close collaboration of some AB members with research bodies in their respective countries.
- The less valued items are, however, necessary to conduct MUSA.

In addition, it was emphasized that for level 2 PRA (Probabilistic Risk Analysis) application, it is of utmost significance to determine what kind of accident sequences include larger uncertainties on source term; for example, if wet sequences show less uncertainties on source term than dry sequences. Such an insight would help in focusing upcoming research.

5 Coordination with other related international initiatives

Even though the project coordination with other activities in international agencies is well structured, it should be foreseen that COVID-19 crisis will pose difficulties on direct communication. An example is that any Asian participation via internet is not so easy, given the time difference. Thus, remote video meetings should

account for time differences and “no time dependent” via means of communication (i.e., email) should be exploited as much as feasible.

6 Final remarks

The discussion presented in the sections above is of utmost significance for MUSA. There are a number of messages that are worth highlighting:

- MUSA implications with external management measures (given the focus on ST) recommend to keep close contact with international organizations (NEA, IAEA) and nuclear safety related Bodies (WENRA, ENSREG, ETSON, etc.).
- The COVID-19 crisis should not limit the anticipated level of MUSA activities and new means of communications should be brought up and their role in the project strengthened.

Annex

List of acronyms

AB	Advisory Board
ExB	Executive Board
GA	General Assembly
PMO	Program Management Office
SA	Severe Accident
ST	Source Term
TSO	Technical Support Organization
UaSA	Uncertainty and Sensitivity Analyses
UQ	Uncertainty Quantification
PRA	Probabilistic Risk Analysis
WP	Work Package