



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

Communication and dissemination strategy

Authors : Pr. Sandro PACI (UNIFI), Dr Luis.E Herranz (CIEMAT)

MUSA - Contract Number: 847441

Project officer: Roberto PASSALACQUA

Document title	Communication and dissemination strategy
Author(s)	Pr. Sandro PACI, Dr Luis.E Herranz (CIEMAT)
Number of pages	13
Document type	Deliverable
Work Package	WP7
Document number	D7.1
Issued by	UNIPI
Date of completion	2019-10-25 17:14:01
Dissemination level	Public

Summary

This Communication and Dissemination (C&D) strategy plan has been developed in sub-WP7.1 "MUSA Public Communication" by UNIPI with the support of the MUSA Coordinator and LGI at the beginning of the project and it will be submitted to the MUSA End Users Group (EUG) for comments and integration, above all on its goals. This C&D plan will be updated throughout the project, based on the evaluation of its impacts. The first action in this WP7.1 task has been to determine the needs of the MUSA project and to identify the goals to be reached by C&D and how to achieve them. In doing that, insights from the EUG will be quickly collected in order to gather feedback on the most efficient actions and channels to reach the target audiences. The C&D strategy plan include: A detailed planning of all communication actions, their goals and timing; Key messages and defined target audiences; an event and publications management plan; Identification of C&D key performance indicators for the goals to be reached, as the number of international journal papers, the number of website views or the engagement on social media.

Approval

Date	By
2019-10-25 17:18:13	Pr. Sandro PACI (UNIPI)
2019-10-26 15:25:38	Dr. Luis e. HERRANZ (CIEMAT)

D7.1- Communication and dissemination strategy plan

Sandro Paci (UNIFI), L.E Herranz (CIEMAT)

Version 1.0 – 23/10/2019



Document type	Deliverable
Document number	D7.1 version 1.0
Document title	Communication and dissemination strategy plan
Authors	S. Paci (UNIFI), L.E. Herranz (CIEMAT)
Release date	23/10/2019
Contributing partners	LGI
Dissemination level	Public / Restricted to MUSA Consortium

Restricted to MUSA Consortium

Version	Short description	Main author	WP leader	Coordinator
#1.0	First release	S. Paci (UNIFI) 23/10/2019	S. Paci (UNIFI)	L. E. Herranz (CIEMAT)

Summary

This Communication and Dissemination (C&D) strategy plan has been developed in sub-WP7.1 “MUSA Public Communication” by UNIFI with the support of the MUSA Coordinator and LGI at the beginning of the project and it will be submitted to the MUSA End Users Group (EUG) for comments and integration, above all on its goals. This C&D plan will be updated throughout the project, based on the evaluation of its impacts.

The first action in this WP7.1 task has been to determine the needs of the MUSA project and to identify the goals to be reached by C&D and how to achieve them. In doing that, insights from the EUG will be quickly collected in order to gather feedback on the most efficient actions and channels to reach the target audiences.

The C&D strategy plan include:

- A detailed planning of all communication actions, their goals and timing.
- Key messages and defined target audiences.
- An event and publications management plan.
- Identification of C&D key performance indicators for the goals to be reached, as the number of international journal papers, the number of website views or the engagement on social media.

TABLE OF CONTENTS

TABLE OF CONTENTS	3
1 INTRODUCTION	4
2 OBJECTIVES AND MAIN LINES OF THE PLAN	4
2.1 Objectives	4
2.2 Main action lines	5
3 DESCRIPTION OF THE MAIN ACTION LINES	5
3.1 Public communication	5
3.2 MUSA Web site	7
3.2.1 Content	8
3.2.2 Development plan	8
3.3 Internal dissemination	9
3.4 External dissemination	9
3.4.1 Conferences and Workshops	10
3.4.2 Publications in Scientific journals	11
3.5 Partners' activity reports	11
3.6 Education and training	12
3.6.1 Learning modules	12
REFERENCES	13

1 INTRODUCTION

In the context of raising public participation and awareness on the MUSA network, a realistic and consistent Communication and Dissemination (C&D) strategy plan is defined for implementation during the lifetime of the project. This C&D plan has been established in the first 3 months of the project by UNIFI with the support of the coordinator and LGI, and it will be periodically updated when necessary.

This C&D Plan will be submitted to the MUSA End Users Group (EUG) very early in the project for comments and integration, particularly on its goals.

A summary of the corresponding activities, together with their impact, will be elaborated at the end of the project and included in the final deliverable D7.3.

2 OBJECTIVES AND MAIN LINES OF THE PLAN

One of the objectives of the MUSA project is to efficiently articulate the C&D activities so that technical outcomes of MUSA reach as many stakeholders as possible and the resulting enhancement of nuclear safety reaches the general public.

The MUSA results are expected to be profusely disseminated and exploited since their outcomes are relevant for very large communities: Severe Accident (SA) researchers, Probabilistic Safety Analysis (PSA) level 2 analysts, proposers of Severe Accident Management (SAM) measures, regulators, environmental impact modellers and "emergency and preparedness" people, but also from an educational point of view. A particular attention will be also paid to report to other Bodies closely involved in nuclear safety, like OECD/CSNI (WGAMA) and IAEA (Coordinated Research Projects CRPs ongoing).

Special attention in the dissemination of the MUSA outcomes is indeed given to facilitate such transfer towards the young researchers in the SAs field and the Masters/PhD students of European technical universities where dedicated nuclear technology and nuclear safety courses are offered.

2.1 Objectives

The general objectives of the MUSA C&D actions are:

- Drawing the attention of national governments, regional authorities and other public and private funding sources to the needs of research on SA uncertainties and management, highlighting its possible benefits in terms of risk assessment and reduction of the environmental impact, studying the impact of SAM actions on Source Term (ST) estimates.
- Attracting the interest of potential new partners for the project itself;
- Encouraging talented European students and young scientists to join the partner organisations and/or improve their nuclear culture and their knowledge in the field of SA researches;
- Enhancing the reputation of the consortium participants in the field of the safety of nuclear power plants at local, national and international level;
- Helping the search for future financial backers (end-users of the MUSA researches);
- Giving the right information to the stakeholders and to the generic public on the safety of nuclear power plants;
- Transferring and sharing knowledge in relation with the project outcomes.

2.2 Main action lines

The present C&D plan involves 6 main action lines, which are either part of the work programme already defined in the Annex I Part B of the Grant Agreement (so-called "Description of Actions") [1], or new actions. These six C&D action lines are listed in the following Table 1 and detailed in Section 3.

Action	Comment
Public communication	Actions to be initiated mainly by the Coordinator and LGI, with the support of the WP7 participants and the Executive Board (EB)
Web site	Main channel for external communication, aiming to reach all audiences, including the general public, this task will be supported by the Coordinator and LGI
Internal dissemination	Actions to be initiated by the EB and the Coordinator for presentations on progress of work
External dissemination	Actions already presented in the Grant Agreement; it is monitored by the Coordinator with the support of the EB and the WP7 members
Partners' activity reports	Actions based on contributions from all the partners in the frame of their own communication plans
Education and training	Actions focused on Masters and PhD students but they will be open also to young researchers in the SA field

Table 1: Main C&D action lines.

3 DESCRIPTION OF THE MAIN ACTION LINES

The six main C&D action lines are described in the following paragraphs.

3.1 Public communication

All the outcomes from MUSA will be communicated as widely as possible within both the European Community and beyond. A series of communication tools and actions will be implemented with the support of LGI:

- A project brand (logo¹ and visual identity) will be designed very early in the project, including standard presentation slides, posters and document templates to ensure the MUSA project's visibility among all relevant stakeholders.
- Communication support materials, as a roll-up, general MUSA posters/presentations and a leaflet/factsheet presenting the project will be produced and updated in WP7 to communicate on the project at conferences, workshops and online.
- A public website will be designed and updated regularly, to serve as the main communication channel towards the project's stakeholders and the target audiences. To promote this website, it will be always highlighted in presentations and publications in which key information of the MUSA project will be included, during public events like NUGENIA Forum, National Nuclear Conferences, National Nuclear Technological Platforms, National Nuclear Societies or in scientific and technical publications.

¹ The MUSA logo has been immediately chosen at the very beginning of the project in July 2019 by CIEMAT, LGI and UNIP. The logo design, utilized also in this deliverable, contains a female statue, the muse called URANIA (daughter of Zeus), the ninth muse, the muse of science, and she is doing a step forward in the U of the project acronym (MUSA). It is blue in order to represent celestial vault and on her hand, she carries a globe, as it is the intention of MUSA to make an effect all over the world, not just in those countries hosting MUSA partners. Colors are the same blue and yellow colors as the EU emblem.

D7.1 version 1.0 – Communication and dissemination strategy plan

- A social network account (LinkedIn and/or other social networks) and group will be created and managed (in collaboration with EB members) in order to communicate on MUSA, promote its results, and advertise the workshops and learning modules, as well as the mobility opportunities, permitting also a two-way dialogue with the target groups.
- Participation in the European Researchers’ Night events will be planned (in Pisa and/or other partners’ cities) to engage with the public and raise awareness of nuclear in general and of the MUSA project more specifically.

Written information on relevant events will be also communicated to the international and national media, also for a generic public audience. These events could be for instance the half-time of the network, i.e. around autumn 2021, and the MUSA final meeting in 2023. These events and press releases will be also notified in the public websites of the MUSA partners.

For these major events, the edition of an article oriented to a generic public will be requested directly through contacts with journalists or indirectly through press invitation to the events, also involving the press officers of the partners. Other generic publications could be envisaged, such as papers in EC periodic reports or scientific dissemination journals (i.e., the Italian “*XXI Secolo*” and “*Le Scienze*” or European “*Euro Scientist*”).

The possibility to release information through the communication means of the NUGENIA/SNETP platform and newsletters will be also pursued.

Public communication activities will be closely linked to the dissemination objectives. These activities will include various means and channels at different levels and will be aimed at diverse audiences. The **target groups for C&D** are identified in the following Table 2, together with the targeted key messages.

Target group	Targeted message
SA analyst	Possibility to assess the use of uncertainties methodologies in SA analysis to improve the confidence on code results
Scientific community	Foster the activities related to uncertainties evaluation methodologies
Regulators	Relevance of BEPU methodology, widely utilized for DBA, to inform on risks associated to SA
NPP Owners	Possible reduction of the environment impact through a more insightful assessment of the effect of SAM actions at a given time
SAMGs community	Uncertainties should be accounted for when proposing SAMs
Emergency Preparedness (EP) people	A more sound basis for possible reduction of the environment impact through SAM actions
Vendors	Possible reduction of the environment impact through SAM actions and increasing of public acceptance for a nuclear plant A better assessment of how significant for NPP safety is any plant upgrade or new design with a new safety system
Code developers	Foster the development and assessment of UM integrated tools in SA codes
Master and PhD Students	Relevance of SA studies in the area of nuclear researches
General public	Resulting enhancement of nuclear safety

Table 2: Target groups for C&D and targeted key messages.

The targeted messages for each group will be used to boost their engagement with the MUSA project.

The following Table 3 summarizes the communication tools and actions that are planned to be implemented during the project, with identified audience, timing and indicators of success.

Tool	Purpose	Audience	When	Indicators
Public website	Main channel for information, aiming to reach all audiences. The website will be relayed on other websites, including partners' ones	All target groups	M3	At least 5,000 views
Visual identity, logo and templates	To ensure the MUSA project's visibility among all relevant stakeholders	All target groups	M3	-
Communication support materials	Posters, roll-up and a leaflet/factsheet presenting the project released at conferences, workshops and online	All target groups	M6	No. of events where of distribution
e-newsletters	Annual e-newsletter issued to report on latest activities and news	All target groups	M12-M48	No. of subscribers
Social media (LinkedIn)	A LinkedIn account and a strategy will be designed maximizing undertaken actions and engaging in a two-way dialogue (posts will target several audiences)	All target groups	M1-M24	No. of views, group members etc.
Press relations	Mainstream and specialized media will be targeted and press releases will be distributed when appropriate to promote the project's objectives and results and raise awareness	All target groups	M1-M48	At least 1 mention of the project in the media
Event participation	Speaking or showcasing the project and its results with a stand at specific events	All target groups	M1- M48	Participation in at least 4 events
Public engagement activities	Participation in the European Researchers' Night events is planned to engage with the general public and raise awareness of nuclear in general and MUSA more specifically	General public	M1- M48	Participation in at least 1 event

Table 3: Communication tools, targets and indicators.

A high intensity for communication is expected during the first year in which the project brand identity (logo), the project website will be developed, and the first key messages to target audiences (SNETP, NUGENIA/SARNET communities, NEA/WGAMA, etc.) will be sent out. Beyond this first year, communication activities will mature and the "MUSA presence" in conferences, events and in academic journals is expected to be incrementally profuse.

3.2 MUSA Web site

For communication out of the Consortium, an up-to-date **public website** will be created, dedicated also to the general public. A public website for a project has a fundamental importance in raising the public interest and possibly increasing its participation.

The MUSA website will be the main channel for external communications, aiming to reach all audiences, but also for internal communication (through an online workspace).

The creation of this website is a milestone (MS9) of the project itself.

3.2.1 Content

Public website

This public website should inform about the progress of the MUSA project and its impact, describing - in a comprehensive way even to non-specialists of nuclear safety - the project objectives and, above all, the project findings and results to the "nuclear-concerned" people. Thus, the main results and conclusions of the project should be clearly indicated and their importance underlined. In addition, the structure of the project should be made clear, as well as the partner organisations and the scientific, technological and organisational environment in which it takes place.

In order to achieve these aims, the public website should have a clear, aesthetically nice design and a simple and intuitive navigation. It should also contain:

- A short description of the project and its activities. Links will be given to the web pages of each partner organisation and the site will also have to give insight into their competences used in the project. Other links will refer to relevant multilateral organisations (OCDE/ CSNI, IAEA...), European platforms (NERIS, NUGENIA...) and previous FP7 projects on SA research area (CESAM, PREPARE...);
- Information about the progress achieved during the MUSA project, with for instance the most important documents that can be open to the public, e.g. list of public upcoming events, synthesis or state of the art reports.... These documents should be easily retrievable by storing them in a comprehensive structure and by a full text search;
- The external newsletters issued during the project;
- A dedicated website section for the public learning modules developed in WP7.4 will be included and easily accessible.

This public website will always be referred to in presentations and publications in which key information of the MUSA project progress will be included, such as conference contributions or scientific and technical publications.

As stated in Art.29.4 of the Grant Agreement [2], the public website will display the EU emblem and include the following text "This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 847441".

Online workspace

The communication among partners (inside the MUSA Consortium) will be made easier via an **Extranet collaborative platform**, to share management and technical documents. A more detailed description of the online workspace can be found in deliverable D1.1 "Online Workspace".

3.2.2 Development plan

The address of the public website will be www.musa-h2020.eu. The underlying software for development of the site will be an open-source product, in order to allow easier generation of new content and improvements of the design. As previously said, two kinds of areas will be open: an area accessible to the public and an area with a restricted access for MUSA partners, AB and EUG members (accessible with a login and a password).

Concerning the public area (updated by the project coordinator and by PMO):

1. In the first step, planned in October 2019, the basic information for the MUSA project, such as a general project description, the logo, the partner organizations, a list of contacts, open posters/leaflets and the main objectives will be available for display. Links with the web sites

D7.1 version 1.0 – Communication and dissemination strategy plan

of partners' organizations will be updated or implemented. The MUSA external newsletters, which contain much actual information on the progress of the project, will be displayed on the website in a suitable format.

2. In a second step, planned to start in June 2020, the development will focus on the documents that describe the progress and results of the network. In general, most documents that are created by the partners will not be public due to the proprietary data (often experimental data) that may be present in these documents, or due to confidentiality issues. However, efforts will be done to implement as much as possible technical general syntheses. Not all papers or articles in conferences or journals could be uploaded in this site in general because of copyright, but their titles and abstracts will be implemented (the number of these "closed" publications has to be reduced pushing the use of open literature by EB).
3. Possible extension of the website according to project unfolding.

Concerning the restricted area (updated by all the MUSA participants):

1. In the first step, planned to start in September 2019, links (EC participant portal...), management documents (templates, lists of AB/EUG members, agendas, list of participants and photos of meetings, financial data, periodic reports, project reviews, upcoming events/actions...) and key technical documents (MUSA proposal, KOM minutes and presentations, deliverables, open publications...) will be available.
2. In a second progressive step, the goal will be to feed the different sections with up-to-date documents and to activate the "sharing space", so that this site becomes a key tool for fast information exchanges among the MUSA members.
3. Periodic review of the site contents with the removal of outdated documents and uploading of updates.

3.3 Internal dissemination

Internal C&D among the project's partners will be facilitated mainly thanks to the **online workspace** described in section 3.2.1.

Information could also be released through the MUSA **internal annual newsletter** to be published by the PMO in between the two public annual newsletters, having a strong link with the EB and all the partners for its contents.

Two short internal workshops on C&D will be also organized by UNIPI in collaboration with LGI to enhance partners' exchanges and discussions, summarizing the project status and achievements by the different WP leaders:

- The first one would be after 12 months from the start of the project, after the identification and quantification phases of uncertainty sources and review of methodologies, i.e., the MUSA "key-elements".
- Before the end of project in order to properly support the conclusion of the whole work and to prepare the final open workshop.

These C&D workshops will also enhance the internal communication and encourage/coordinate the common actions, in particular the preparation of joint technical papers for conferences and journals.

3.4 External dissemination

A significant success factor for the project lies in the capability to reach as many nuclear stakeholders as possible. This part of the C&D plan, mainly addresses the external audiences, highlighting the optimal use of means such as the presentations at conferences and workshops, peer reviewed publications, etc.

D7.1 version 1.0 – Communication and dissemination strategy plan

To achieve the widest possible reach in terms of external dissemination, a relevant cooperation with international bodies like OECD/NEA, IAEA and NUGENIA/SNETP is planned, as with existing initiatives and related projects, to use their communication channels and build on their established visibility. In particular, exchanges will be sought with NUGENIA/TA2, CSNI/WGAMA, NERIS Platform, ENEN and IAEA Global Nuclear Safety and Security Network (GNSSN).

These strong links with other international organisations that might address in specific ventures the same MUSA subject but with different scope will be also useful for possible collaborations, in particular with IAEA.

The main action lines for the **MUSA external dissemination** are reported in the following list:

- **Scientific publications** in peer-reviewed journals and national/international conferences, as discussed in the following.
- Drafting and distributing of an **electronic newsletter**, issued by LGI, with the input of the Coordinator and the EB, at least at the end of each year of the project to inform stakeholders of the project's progress. It will include a word from the MUSA coordinator, a specific highlight per work package, relevant news, relevant workshops, publications and conferences.
- Participation to **relevant public events** - they will be identified by the MUSA EB;
- Preparation and issue of **dissemination paper materials** as flyers, brochures and other with information for the progress and major outcomes of MUSA, intended for free distribution at annual conferences of universities, meetings of national nuclear societies of the partners' countries and other, international conferences and forums, during the site NPPs visits of members of the partners' teams, etc.
- One **final workshop** planned by the end of the project and open to participants outside of the consortium.

3.4.1 Conferences and Workshops

General MUSA presentations and posters will be initially prepared (and up-dated) for partners in WP1 and WP7, describing the project.

The progress of the activities within the MUSA project will be periodically presented mainly in international scientific conferences² or workshops containing some parts on uncertainties methodologies applications to nuclear safety. These common presentations will address both the general context and the progress of the whole project (in that case they will be managed by the Coordinator and EB with the WP7 help), or some specific technical results (in that case they will be directly managed by the corresponding WP leader).

The plan of future common presentations will be periodically analyzed by the EB and by the WP7 members during the WP meetings. For publications by individual organizations, these will go through the approval of EB.

Furthermore, MUSA workshops will allow for presenting the project and gathering conclusions and outcomes, and even more importantly, all of the discussions on which the main outcomes are based. The EB will investigate the possible organisation of different events:

- Periodic workshops gathering the MUSA Consortium members but open to the SEG and the EUG. The project's final seminar, discussed in the following, will be totally open;
- Side events of NUGENIA/SNETP, ETSO or IAEA workshops or conferences; these meetings may be the opportunities to design specific workshops to ease the communication on the work achieved by the project;

An international workshop, in collaboration with EC/DG-RTD, OECD and IAEA, is planned near the project's end and considered as an "open public" product. Its goal will be the dissemination of

² Examples could be the **BEPU** Conference on "Best estimate Modelling Plus Uncertainties in Safety Analyses" or the "European Review Meetings on Severe Accident Research" **ERMSAR** as well as forums such as the annual NUGENIA Forum, ETSO annual and/or IAEA workshops. However, also general nuclear conference, as **ICONE**, **ENS** or **ANS Meetings** could be a target for MUSA C&D activities or national nuclear society meetings.

D7.1 version 1.0 – Communication and dissemination strategy plan
 the MUSA project results and gathering conclusions and outcomes towards the nuclear European community and even beyond such as IAEA and OECD. It will be organized by LGI in collaboration with UNIP, EB and all the MUSA partners. This final open workshop is a milestone of the project (MS10).

Furthermore, it has to be highlighted that, as both OECD and IAEA representatives will join the MUSA AG, their requests for MUSA contributions to events related with the project objectives will be considered of high priority.

3.4.2 Publications in Scientific journals

In complement to the above common conference presentations, the publication of technical papers will be recommended in scientific journals.

The project, as indicated in the guidelines [3] on open access to scientific peer reviewed publications and research data that beneficiaries have to follow in projects funded or co-funded under Horizon 2020, will aim to release scientific publications in open access journals (both green/gold open access).

These publications will be also deposited in repositories such as Zenodo³ and Open Science Repository⁴, and/or partners' open repositories. This will ensure that the wider research community will also be able to access the project's results.

At least two common journal papers per WP are expected: status of each WP activities after about 2 years and final achievements at the end of the MUSA project. Four common generic papers for WP is however a realistic estimation (one each year), including a general presentation at the beginning of the project. In the diverse technical domains covered by the MUSA project, the rhythm of publication by the different partners will depend of course on the achieved progress and between 10 and 20 scientific/technical papers are expected, individual or involving more than a single organisation.

As stated in the Art.29.4 of [2], unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) will display the EU emblem and include the following text "*This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 847441*".

Furthermore, as stated in the Art. 29.5 "*Disclaimer excluding Commission responsibility*" of [2], any dissemination of results must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

3.5 Partners' activity reports

All the organisations partners of the MUSA project will contribute to the C&D Plan through all the opportunities provided in their own C&D plans. The basic principle will be the mention of their involvement and activities in MUSA in their periodic activity reports and on organisation web-sites.

This C&D action line will be completed by each partner during any major event related to project matters by the distribution of MUSA presentation leaflets or newsletters, the presentation (or mention) of the MUSA objectives and results and some general poster exhibitions.

Furthermore, a template will be prepared by WP1 in which each individual organisation will report on its progress in the different WPs, containing basic information, as the percentage of achievement of what supposed to do in each WP and a brief description (few lines) of the achieved progress.

³ Zenodo is an open-access repository developed under the European OpenAIRE program and operated by CERN at <https://zenodo.org>

⁴ <http://www.open-science-repository.com/>

3.6 Education and training

The support to the development and sustainability of nuclear competences at Union level is one of the EURATOM goal in Horizon 2020, considering the present situation of nuclear energy in Europe asking for a continuing effort in the field of Education and Training, aimed to assure a qualified workforce in the next decades. Therefore, a special attention will be given in MUSA to disseminate the related knowledges towards the young researchers in the SAs field and towards the Masters/PhD students of European technical universities where dedicated nuclear technology and nuclear safety courses are offered.

These education activities will be focused on Masters and PhD students but they will be open also to young researchers in the ST field. The main actions will be:

- Production of **public learning modules** to be published in the MUSA open website, described in the following.
- Production of a **lecture on “Uncertainty Quantification in Severe Accident Analyses”** for the different international Courses that might be given on Severe Accidents (as the future edition of the NUGENIA/TA2 Severe Accident Phenomenological Course in 2021) and/or on "uncertainties". It should be highlighted that a solid collaboration exists with this well-established NUGENIA/TA2 Course on Severe Accident Phenomenology, where MUSA partners have often given the lectures on ST in the several Course editions, so the EB will set contact with NUGENIA/TA2 on this aspect.

A **mobility exchange programme** for young researchers and PhD/Masters students finalized to the secondment in the laboratories or offices of the project partners to enhance the exchanges⁵ and the dissemination of knowledge in the area of SA codes and Uncertainty tools. Additionally, the presence of MUSA young researchers in international conferences, workshops and seminars to disseminate some MUSA results, will be also supported.

The MUSA education and training activities will be carried out in a close collaboration with the European Nuclear Education Network ENEN (UNIPI and other MUSA participants are members of the ENEN Association), with a possible further collaboration in the follow-up (December 2019) of the ANNETTE (Advanced Networking for Nuclear Education and Training and Transfer of Expertise) EURATOM project.

3.6.1 Learning modules

The major outcomes of MUSA will be mainly disseminated to students/young researchers and to a generic audience through e-learning modules that will be available directly from the project website.

At least three learning modules (coordination by UNIPI, with the technical support of LGI for production and communication, open to the technical collaboration of all the MUSA partners for the contents) compiling the major outcomes from MUSA project, will be built.

Presentations and/or mp4 videos of max. 45 minutes each will be realized, addressing the following topics:

- Major sources of uncertainties in SAs, with particular emphasis on ST.
- Methodologies for uncertainty assessment in SAs, with particular emphasis on the ST estimates.
- Assessment of ST Uncertainties in Fukushima-like scenarios.

⁵ These mobility actions could be also useful for the master’s students to achieve the requirements of the European Master of Science in Nuclear Engineering (EMSNE) Certification, delivered by ENEN to certify the highest quality standards of Nuclear Engineering Education and the European dimension pursued achieved by the EMSNE laureate. In particular, in these EMSNE requirements, 20 European Credit Transfer and Accumulation System (ECTS) must be obtained from a “foreign” institution with respect to that in which the student is based, with a specific training period. The MUSA mobility actions could be very useful to promote these training periods in its members’ laboratories and also to economically support these actions in the SA field.

REFERENCES

- [1] Annex 1 Part B "*Description of Work*", May 10th 2019, EC Grant Agreement N°847441, Project MUSA "Management of Uncertainties in Severe Accident".
- [2] "*Term and Conditions*", May 10th 2019, EC Grant Agreement N°847441, Project MUSA "Management of Uncertainties in Severe Accident".
- [3] H2020 Programme "*Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020*", Version 3.2, 21 March 2017.