INSPIRE-ETN

INSPIRING PRESSURE GAIN COMBUSTION INTEGRATION RESEARCH, AND EDUCATION

DELIVERABLE D 7.3 PUBLIC DISSEMINATION AND COMMUNICATION PLAN

GRANT AGREEMENT NUMBER:	956803
PROJECT ACRONYM:	INSPIRE
PROJECT TITLE:	INSPIRING PRESSURE GAIN COMBUSTION INTEGRATION, RESEARCH AND EDUCATION
START DATE OF THE PROJECT:	1st January, 2021
DURATION OF THE PROJECT:	48 MONTHS
WORKPACKAGE:	WP1
LEAD BENEFICIARY:	UNIFI
DELIVERABLE LEADER:	UNIFI
DELIVERABLE AUTHORS	A. Andreini
DISSEMINATION LEVEL:	PU - Public
DELIVERABLE TYPE:	Report
DUE DATE OF DELIVERABLE:	M12
ACTUAL SUBMISSION DATE:	M14
REFERENCE:	INSPIRE_ 03-2022_D7.3_Rev0.1

Abstract :

This document **describes the dissemination, exploitation and communication strategy for the INSPIRE project**, by covering all communication and dissemination activities targeted over the duration of the project. Criteria and rules internal to the consortium regarding the dissemination process are also outlined.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

GLOSSARY

Acronym	Description
ESR	Early Stage Researcher
PGC	Pressure Gain Combustion
GT	Gas Turbine
PC	Project Coordinator

Table 1 : List of acronyms

1. EXECUTIVE SUMMARY

This document describes the dissemination, exploitation and communication strategy for the INSPIRE project, by covering all communication and dissemination activities targeted over the duration of the project.

In a first introductive part, the dissemination objectives and the targeted audience will be presented. Then, the dissemination actions will be described. According to the Grant Agreement, this list will be updated every 6 months by the PC to take into account evolutions in the project as well as opportunities to optimize the impact of the INSPIRE project.

2. OBJECTIVES AND TARGET AUDIENCE OF INSPIRE DISSEMINATION

The dissemination actions planned for the INSPIRE project will target different audiences with different expectations. A summary is reported in

Targeted audience	Expectations
Gas turbine community	Promote the results of the project and developing collaborations on a larger basis outside the consortium.
Broad industrial community	Find new applications in other domains than those considered in the project, especially for numerical models developed and for innovative sensors and diagnostic techniques
Research organizations	Develop new reliable numerical and experimental tools that will be further used by both academic (students, researchers) and industrial partners. Eventually trigger further investigations on PGC concepts
Public and media	Create awareness on INSPIRE research activities and results and their contribution in the development of knowledge and technologies for the implementation of PGC concept in gas turbines.

Table 2 - Targeted audiences for INSPIRE dissemination actions

3. LIST OF DISSEMINATION ACTIONS

3.1. Media relation

As reported in Del. 7.2, starting from November 2020 an official public website for the project INSPIRE is active. The website can be reached at the following URL:

www.inspire-etn.eu

The website is hosted and maintained on CERFACS servers (inspire.cerfacs.fr).

3.1.1. INSPIRE visual logo

To improve the identity of the INSPIRE project and consortium team, a set of visual logos has been created. The baseline logo is as follows:

Figure 1 - INSPIRE visual logo

The logo is available also in different color schemes and will be used in any official document/report produced during project execution. The logo is also in used as thumbnail in the project website.

3.1.2. Information on EU funding

As reported in the GA (see Article 29.4 pa. 26), any dissemination of results (in any form, including electronic) must:

a) display the following EU emblem:

b) include the following text:

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 956803

3.2. Scientific publications and presentations

3.2.1. Scope and provisional list of candidates

One of the most significant dissemination actions of the INSPIRE project is the publication of scientific papers on qualified journals or their presentation to international conferences and exhibitions. This will address the dissemination to broad industrial community and research organizations, according to Table 2.

According to what already described in the DoA, the list of possible journals for scientific paper publication is as follows:

- Combustion and Flame
- Proceedings of the Combustion Institute
- Combustion Science and Technology
- AIAA Journal
- ASME Journal of Eng. for Gas Turbines and Power
- Combustion Theory and Modelling
- Experiments in Fluids
- Flow Turbulence and Combustion
- Int. J. Turbomachinery Propulsion and Power
- Progress in Energy and Combustion Science
- Applied Thermal Engineering

- Applied Energy

A list of possible International events (Conferences, Expositions) is reported in the Annex.

3.2.2. Authorization for public communication and dissemination

Despite the INSPIRE project has accepted the OPT IN regarding the adoption of Open Access for any related publication, each partner must follow a set of agreed rules before any publication or communication related to the INSPIRE project, according to the process established in the Grant Agreement (Article 29) and the Consortium Agreement. In particular, the following general rules apply:

- Prior notice of any planned publication shall be given to the other Parties at least 15 calendar days before the publication of the final version of the submission or presentation. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the Party or Parties proposing the dissemination within 20 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.
- Once the text will be approved, its final version will be stored in the INSPIRE Cloud system

3.2.2.1. Open Access

As recalled above, the INSPIRE project requires, as for any other H2020 program, to adopt the Open Access for any scientific publication related to the project. It is considered "scientific publication" any paper which subjected to a peer review process. According to general H2020 rules (see Article 29 of the GA for more details) two Open Access solutions are possible

- **Gold Open Access**
  - Open Access journals and the Open Access option now available by the majority of the most relevant journals, requires the payment of a fee for the publication of the paper (costs range from 1000€ to 3000€). This option fully addresses the requirements of the GA and the associated costs can be claimed as Other Goods and Services costs of the project.
- **Green Open Access**
  - This option, which is allowed with different characteristics by the majority of most relevant journals, permits to address the open access obligations by storing the paper on a public repository (institutional websites or repositories or open repositories – further details are reported in Del 7.1 – Data Management Plan). The consent to realize this public self-storage of the paper, is usually released by the journal editor only if the paper is stored in a raw format, not using the original journal layout pre-print format). Some journals permit the green open access only after a period of embargo: a maximum delay of 6 months is allowed in the GA.
    - In case of embargo periods of more than 6 months (not allowed by GA) specific agreement can be signed with publisher
      - http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/oa-pilot/h2020-oa-guide-model-for-publishing-a_en.pdf
    - Details about Green Access Policies of most important journals

- http://www.sherpa.ac.uk/romeo/index.php?la=en&fIDnum=|&mode=advanced

It is also worth to be recalled that the **mandatory OPT IN** regarding the adoption of **Open Research Data**, implies that **ALL** the data related to a specific scientific paper (numerical or experimental results) MUST be publicly store in a repository. Details regarding the storage of INSPIRE open data are reported in Del 7.1 – Data Management Plan.

A schematic summary of the rules related to Open Access is reported in Figure 2

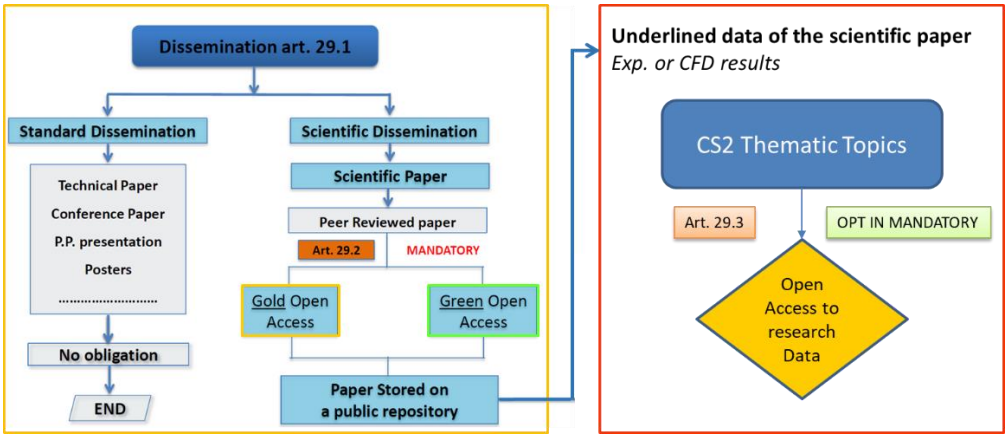

Figure 2 - Scheme describing the processes related to dissemination

Beyond the general authorization process described above, the following actions must be considered regarding the Open Access for any scientific publication related to INSPIRE results:

- Communicate to PC the type of Open Access option selected
- In case of Green Open Access
  - Verify the requirements and the presence of an eventual embargo
  - Communicate to PC the repository to be used for the public self-storage of the paper
    - As described in Del 7.1, a dedicated area for INSPIRE will be available on a public repository where ALL the scientific publication, also those published with Gold Open Access, will be stored
- Once the publication process is completed and the open access to the paper in place, collect all the date related to the published results and store it in the INSPIRE public repository (or ask to PC)

3.2.3. Provisional list of scientific papers

In the tables included in the Annex of this document, a list of the foreseen scientific publications is reported. **This table will be update by the PC every three months.**

3.3. Public workshops

As reported in the DoA two public dissemination workshops will be organized during the INSPIRE project.

- **Mid-program Industry/Academia Workshop – International Constant Volume and Detonation Combustion Workshop.** This dissemination event will be held in conjunction with the ICVDCW meeting to be hosted at TUB. Experts in the fields of constant volume and

pressure gain combustion from across the globe, representing industry, government, and academia will meeting in Berlin for this multi-day meeting. During the event, ESRs will present their completed and planned work to experts during a special poster session. This session will be structured with the workshop attendees to encourage a critical discuss and ESRs will receive feedback from the community. ESRs will learn to present and discuss their work, while interacting with experts in the field.

- The event is currently scheduled in August 2022

- **Capstone Symposium.** At the completion of the training program, ESRs will present their final results during this capstone symposium to the community. Representatives from a range of internal and external partners in industry and academia will be invited to attend. Invited experts will give plenary talks, and a portion of the symposium will be open to the public, with the intention of communicating the activities of the network.
  - This event will be hosted by ENSMA in 2024

4. EXPLOITATION AND IPR

The fundamental exploitation of the knowledge and results generated by INSPIRE will be towards the consortium partners. Besides the targeted results related to the objectives of the topic, the specific knowledge acquired by each participant will bring an improvement in his scientific and technical competences enabling the opportunities to exploit it in different research activities. Thanks to well established collaborations that the different partners have with the most important aeroengine and gas turbine manufacturers at European level, and thanks to the optimal geographical spread of the consortium, the exploitation of INSPIRE results will efficiently reach a wide potential range of users.

4.1. IPR and data protection

The rules regarding dissemination and data open access do not affect the decision to exploit research results commercially, e.g. through patenting. The decision on whether to publish through open access must come after the more general decision on whether to publish directly or to first seek protection. A schematic representation of the overall decision process is reported in

Figure 3.

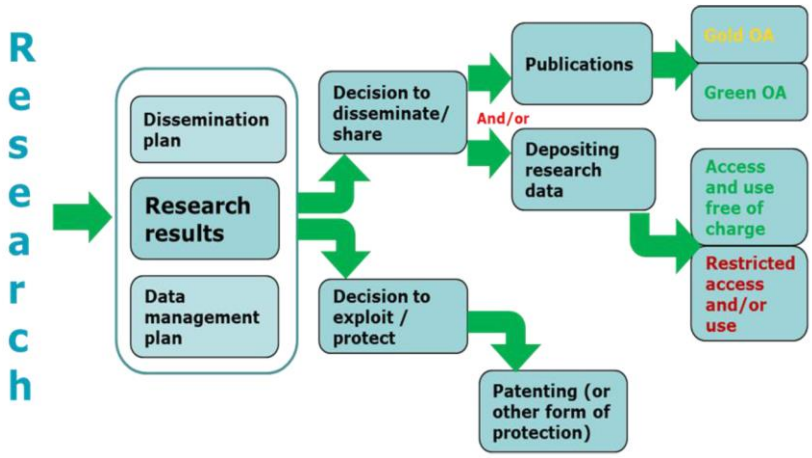

Figure 3 - Description of the decision process regarding dissemination or protection of research results

The legal basis related to the IPR provisions are reported in the Grant Agreement and in the Consortium Agreement, where the access, sharing and dissemination of the IPs generated during INSPIRE, as well as the IP owned by each partner, will be regulated. A detailed description and assessment of the background knowledge of each participant will be carried as foreseen in the signed Consortium Agreement.

5. ANNEX

In the following appendix, all the tables relative to the scientific publications, dissemination and communication activities, patent registration and exploitation. As reference, is also reported the table to be used for the description of each dataset reduced by the project and stored on the selected public repository as described in D7.1.

LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS AND TECHNICAL PAPERS										
No.	Title	Main author	Title of the periodical or the series or the event	Number, date or frequency (N/A for events)	Publisher or organiser	Place of publication or event venue	Year of publication or event	Relevant pages or event session	Permanent identifiers[1] (if available)	Is/Will open access[2] provided to this publication?
1	Numerical Characterization of a Supersonic Nozzle coupled with a Constant Volume Combustor	Panagiotis Gallis	European Turbomachinery Conference	N/A	Euroturbo	Budapest	2023			Yes
2	Numerical Redesign of the Transition Duct and of the High-Pressure Nozzle for a CVC-equipped Gas Turbine	Panagiotis Gallis	ASME Turbo Expo	N/A	ASME	Boston, Massachusetts, USA	2023			Yes
3	Experimental and Numerical Characterization of the CVC/HPV Coupling for Pressure-Gain Combustion	Panagiotis Gallis	ASME Journal of Turbomachinery	Monthly	ASME		2023			Yes
4	Numerical Redesign of a High-Pressure Turbine Stage to cope with a Rotating Detonation Combustor	Panagiotis Gallis	ASME Turbo Expo	N/A	ASME	London, UK	2024			Yes
5	Numerical Characterization of an Annular Row of Vanes subject to Supersonic Flows	Panagiotis Gallis	ASME Journal of Turbomachinery	Monthly	ASME		2024			Yes

[1] A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).
[2] Open Access is defined as free of charge access for anyone via Internet. Please answer "yes" if the open access to the publication is already established and also if the embargo period for open access is not yet over but you intend to establish open access afterwards.

	from a Rotating Detonation Combustor									
6	LARGE EDDY SIMULATION OF A PISTONLESS CONSTANT VOLUME COMBUSTOR: A NEW CONCEPT OF PRESSURE GAIN COMBUSTION	Nicola Detomaso	ASME Turbo Expo 2022	N/A	ASME		2022			Yes
7	Reduced Order Thermodynamic Modelling for RDE	Provence Barnouin	Combustion and Flame	N/A	Elsevier		by 2022			Yes
8	Experiment of measurement of pressure field in RDC	Hong yi Wei	Combustion and Flame	N/A	Elsevier		by 2022			Yes
9	Assessment of cooling requirements for Rotating Detonation combustors: preliminary design of possible solutions	Shreyas Ramanagar Sridhara, Umberto Sandri	Applied Thermal Engineering	N/A	Elsevier		2022			Yes

Table 3 - List of the scientific publications related to INSPIRE

	LIST OF DISSEMINATION ACTIVITIES								
No.	Type of activities[3]	Main leader	Title	Date/Period	Place	Type of audience[4]	Size of audience	Permanent identifiers ISBN	Countries addressed
1	*Conference*	*TBD*	ASME Turbo Expo (IGTI)	*Annual*		*Scientific and technical (industry) community*	*>2000*	TBD	*Worlwide*
2	*Conference*	TBD	AIAA Scitech	Annual		*Scientific and technical (industry) community*	*>2000*	TBD	*Worlwide*
3	*Conference*	TBD	European Combustion Symposium	Annual		*Scientific and technical (industry) community*	*500*	TBD	*European countries mainly*
4	*Conference*	TBD	*International Combustion Symposium*	Biennial		*Scientific and technical (industry) community*	*>2000*	TBD	*Worlwide*
5	*Conference*	TBD	European Turbomachinery Conference	17-21 April 2023	Budapest (Hungary)	*Scientific and technical (industry) community*	*~500*	TBD	*European countries mainly*
6	*Conference*	TBD							
7	*Conference*	TBD							
8	*Conference*	TBD							

Table 4 - Provisional list of possible major scientific dissemination events

[3] Choose the dissemination activity: Conference publications, workshops presentations, conference presentations, conference exhibitions, conference posters, Other.

[4] Choose the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

LIST OF COMMUNICATION ACTIVITIES								
No.	Type of activities[5]	Main leader	Title/Subject	Date/Period	Place	Type of audience[6]	Size of audience	Countries addressed
1								
2								
3								

Table 5: List of communication activities

[5] Choose the dissemination activity: web, press releases, flyers, articles published in the popular press, videos, media briefings, exhibitions, interviews, films, TV clips, posters, Other.

[6] Choose the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

LIST OF APPLICATIONS FOR PATENTS, TRADEMARKS, REGISTERED DESIGNS, ETC.						
No.	Type of IP Rights[7]:	Confidential YES/NO	Foreseen embargo date dd/mm/yyyy	Application reference(s) (e.g. EP123456)	Subject or title of application	Applicant (s) (as on the application)
1						
2						
3						

Table 6: List of applications for patents, trademarks, registered designs, etc. etc.

[7] Choose the type of IP rights: Patents, Trademarks, Registered designs, Utility models, Others.

POTENTIAL EXPLOITATION ACTIVITIES										
No.	Type of Exploitable Foreground [8]	Nature of Exploitable Foreground[8a]	Description of exploitable foreground	Confidential YES/NO	Foreseen embargo date dd/mm/yyyy	Exploitable product(s) or measure(s)	Sector(s) of application[9]	Timetable, commercial or any other use	Patents or other IPR exploitation (licences)	Owner & Other Beneficiary(s) involved
1										
2										
3										

Table 7: Potential exploitation activities

8 Choose type of foreground: General advancement of knowledge, Commercial exploitation of R&D results, Exploitation of R&D results via standards, exploitation of results through EU policies, exploitation of results through (social) innovation.
8a Choose nature of foreground: Product innovation, Process innovation, New method, Scientific breakthrough
[9] Choose the type sector (NACE nomenclature) : http://ec.europa.eu/competition/mergers/cases/index/nace_all.html