



MultHyFuel

Deliverable D5.1

Communication, Dissemination and Exploitation Plan

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Acronyms

CEN / CENELEC	European Committee for Standardization (Comité Européen de Normalisation)
HRS	Hydrogen Refuelling Station
IEC	International Electrotechnical Commission
ISO	International Standards Organisation
JTC	Joint Technical Committee
TC	Technical Committee
WP	Work Package (within the MultHyFuel project)

Executive Summary

Clean Hydrogen and Fuel Cell Electric Vehicles (FCEV) have developed significantly in the past years in order to respond appropriately to the challenges associated with the transition to a net-zero carbon economy.

Associated infrastructure, in particular, Hydrogen Refuelling Stations (HRS), have also developed to respond to the increasing needs for Hydrogen in the mobility sector. The need to mainstream Hydrogen in the mobility sector requires higher levels of accessibility of HRS in the public environment.

In response to these challenges, the MultHyFuel project proposes to study how hydrogen refuelling stations can be relevantly and safely integrated in close proximity, alongside other conventional and alternative fuels for the mobility.

In Deliverable 5.1, the communication, dissemination and exploitation plan, details the measures by which:

- the MultHyFuel project will engage with key stakeholders outside of the consortium;
- the work and findings of the MultHyFuel project will be disseminated outside of the consortium.

It identifies particular target audiences and the methods of engagement to be taken to maximise the effect of the work in the project, and to exploit the project findings.

1 Dissemination and exploitation of results

1.1 General

To ensure the successful and wide reaching dissemination and exploitation of the findings and results, the MultHyFuel project has set up a project **website** (www.multhyfuel.eu)¹, developed a project corporate identity (a branding logo, see header of document) and developed a contact information list in order to inform interested stakeholders by email of project activities, results and events. As and when is appropriate, additional information disseminated externally will be in the form of a **short newsletter** or **webinars**.

Numerous activities will be held at appropriate times over the course of the project, where findings regarding State Of The Art, the methodology to be followed in the project, plus assumptions, and results, where confidentiality allows, will be shared. This will be a mixture of interactive / in person workshops, and dissemination activities in the form of webinars – the approach to be taken may evolve as the situation regarding Covid-19 develops. These are split between the generally specific, targeted activities of WP4 (see 1.2 for context), and those broader activities of WP5 (see 1.3), open to all stakeholders interested in the project.

In order to facilitate early and wide-ranging stakeholder engagement, an open invite to the **Project Launch online event**, held on the 29th April 2021, was sent to anyone likely to have an interest in the safety of hydrogen refuelling stations – over 500 stakeholders attended the launch event.

1.2 Engagement with key stakeholders (WP4)

One of MultHyFuel's goals is to achieve an interactive relationship with key stakeholders that can help with gap identification and validation of the solutions proposed, to facilitate evidence-based policy-making. For this reason, an entire WP will be devoted to the active engagement with these stakeholders, which fit into the following categories:

- HRS operators;
- Component manufacturers;
- Public authorities;
- Standards developing organisations.

The goal is to ensure a bi-directional line of communication where the stakeholders are informed of the status of the project and its results while also being able to give their input, enabling a co-creation synergy. To achieve this, workshops with the targeted stakeholders are planned at strategic stages of the project. The format for input collection will depend on the nature of each workshop, but some examples include surveys, round tables, bilateral exchanges, etc.

Those key stakeholders identified at the time were invited to the Launch Event, in order to ensure that they will have a good understanding of the project and their role in it, as well as the benefits

¹ Note: At the time of writing this plan, only the temporary landing page is live, with the complete website to follow anticipated mid-May 2021

they can take from being involved in the process. An explanation will also be available on the website, giving other industry players who were not identified by the project team to manifest their wish to join the stakeholder community.

The planned workshops will follow the Launch Event (see Chapter 2 for the approximate timings):

- WS #1: State of the art and case study models
- WS #2: Refined case study models and WP2 methodology
- WS #3: Results from WP2 and WP3
- WS #4: Development of best practice guide

A final meeting will then be held at the end of the project to discuss and adopt the best practice guidance developed under WP3.

1.3 Dissemination and Communication (WP5)

At appropriate times during the course of the project, and the end of the project, activities will be organized in an effort to disseminate the project results and recommendations to all interested stakeholders. The types of activity / methods of communication that are most appropriate to different stakeholders are explained in more detail below.

1.3.1 General Dissemination

One of the key tools for passing on information from the project to all those with an interest in the safety of hydrogen refuelling stations is the project website (www.multhyfuel.eu). Public deliverables, including slides and where appropriate, recordings, from the workshops and webinars will be made available via the website. Additionally, news items of interest to stakeholders in general will be added to the website, in addition to details explaining how to get in touch with the project consortium – via the email address info@multhyfuel.eu.

Additionally, the European Commission makes details available through a dedicated page in the Cordis website <https://cordis.europa.eu/project/id/101006794>.

1.3.2 Dissemination to Standards Organizations

The project itself is geared towards generating recommendations and proposals designed for dissemination. It will focus on generating applied examples of risk assessment for a selected set of variations of hydrogen refuelling stations considered as typical generic options, and providing, where needed, the supporting evidence for the approaches taken. It is anticipated that enough testing and verification work can be delivered in this project that the methods can be verified and published in scientific literature for peer review.

The data and results generated in this project will be made available to a standardization body, most likely ISO/IEC and or CEN/CENELEC for their open and transparent nature, with the aim to contribute towards / produce an industrial standard(s) where applicable, and it is anticipated that any non-confidential data and results will be published on the project website.

The reports, data and results generated in this project (WP2 & 3) will be disseminated as appropriate to a standardization body(ies) in order to provide relevant input to future industrial standards. Currently the standardisation bodies that are expected to be of most value to engage with are:

1. ISO TC 197
 - a. with relevance to ISO 19880-1 (Gaseous hydrogen – Fuelling Stations – General Requirements);
 - b. also, with relevance to the component standards relating to hydrogen fuelling stations and potentially hydrogen vehicles, e.g. ISO 17268 (Gaseous hydrogen land vehicle refuelling connection devices), ISO 19881 (Gaseous hydrogen - Land vehicle fuel containers), etc., where applicable.
2. CEN TC 268 – potentially affecting EN 17127 (Outdoor hydrogen refuelling points dispensing gaseous hydrogen and incorporating filling protocols)
3. CEN/CLC JTC6
 - a. With potential relevance to the work item of WG3 on safety of hydrogen systems in confined spaces
 - b. With a view to preparing any documents that fill gaps in CEN/CLC JTC 6 if there isn't a suitable home at ISO or IEC level, or other CEN/CLC TCs

The consortium has a strong representation in these groups already, to take forward proposals, disseminate results, and to ensure that the most appropriate input is sought during the project.

ISO TC197 has recently published ISO 19880-1 covering the general requirements for gaseous hydrogen refuelling stations. This is anticipated to be a suitable target for the results and findings of the MultHyFuel project, along with input into other relevant ISO TC 197 or potentially CEN TC 268, and CEN/CLC JTC6 documents where applicable.

An expression of interest has been made to CEN/CLC JTC6 (at the plenary meeting on the 13/04/2021) to bring relevant findings from the MultHyFuel project to JTC6 to develop into either standards or technical reports / specifications as appropriate, which was agreeably received.

This will be an important basis for further consensus building, which is expected to then take place as part of the normal development process towards globally harmonized standards and regulations within the concerned bodies.

Other relevant standardisation bodies will be identified wherever possible over the course of the project. Examples include EIGA and the Energy Institute, in addition to national groupings developing guidance, or helping shape regulations (e.g. BCGA, NOW, etc.....)

1.3.3 Dissemination to the Research Community

In addition to dissemination of the results to the members of international standards and regulations development, where Covid-19 permits, we will disseminate the results to the research and scientific community. We will create links to the scientific community during the course of the project through:

- publications in scientific journals, ensuring the open access requirement,
- presentations and posters when participating at conferences and workshops, and
- links to publications, presentations and public technical reports will be created on the project website.

A list of the events at which the aims, and findings & results of the MultHyFuel project have been presented is included at the back of this document².

² To be developed and maintained over the course of the project

1.3.4 Dissemination to General Public

Whilst the majority of activity in the project will be applicable to regulatory bodies and permitting authorities, and industry stakeholders in the form of HRS manufacturers and operators, the project will also output information suitable for the general public, which will be published on the **MultHyFuel website** over the course of the project. The website will include:

- Project information
- Public deliverables
- News
- List of events
- Contacts

The project will not have its own social media account, but instead will disseminate information through consortium members' own social media presence.

1.4 Intellectual property and exploitation

The primary objective of the MultHyFuel project is to generate data to provide a scientific basis for recommendations in support of international Regulations, Codes and Standards (RCS) initiatives. The information in the project is thus intended to be broadly disseminated to standards organizations and the research community. Therefore, limited intellectual property is expected to be developed. Nevertheless, the management of knowledge and intellectual property rights has been established via the Consortium Agreement and includes modalities of communication among the Partners as well as establishes management procedures regarding the results generated by the project.

2 Key Performance Indicators

To evaluate the success of dissemination, the consortium anticipates the following tracking of KPIs:

- Number of visits to the website,
- Number of downloads of the public deliverables,
- Number of newsletters circulated,
- Number of people registered for each MultHyFuel event,
- Number of people attending each event (both hosted by MultHyFuel and events in which the project is mentioned),
- Number of MultHyFuel related posts on partners' social media,
- Number of publications in scientific journals.



3 Dissemination and Communication events

Table 1 - Events at which the objectives and findings / results of the MultHyFuel project have been presented

Event Name	Date	Location	Consortium Member Involved	Level of dissemination
CEN/CLC JTC6	13/04/2021	Online	Nick Hart (ITM)	Verbal mention
MultHyFuel: Project launch	29/04/2021	Online	All	Project workshop (webinar) Open invite to Public Registered: 930 Total attendees: 520
MultHyFuel: WS #1 - State of the Art case study models	(08/06/2021)	Online	All	Project workshop (interactive) Targeted invite to HRS operators and manufacturers Registered: 76 (invited) Total attendees: 41 (invited)



Table 2 - Events at which the objectives and findings/results of the MultHyFuel project are anticipated to be presented, should they occur

Event Name	Date	Location	Consortium Member Involved	Level of dissemination
International Conference on Hydrogen Safety 2021	09/2021	Edinburgh, UK (/online)	TBD	TBD
ISO TC 197 plenary meeting & associated working groups	12/2021	Seoul, Korea (/online)	TBD	TBD
MultHyFuel: WS #2 – Refined case study models and methodology	TBD (12/2021)	Online	All	Project workshop (interactive) Targeted invite to key stakeholders
General update webinar 1	TBD (02/2022)	Online	All	Project workshop (webinar) Open invite to Public
General update webinar 2	TBD (11/2022)	Online	All	Project workshop (webinar) Open invite to Public
MultHyFuel: WS #3 – Presentation of current status	TBD (04/2023)	Online	All	Project workshop (interactive) Targeted invite to key stakeholders
MultHyFuel: WS #4 – Development of best practice guidance	TBD (07/2023)	Online	All	Project workshop (interactive) Targeted invite to key stakeholders
MultHyFuel: Adoption of best practice guidance	TBD (12/2023)	Online	All	Project workshop (interactive) Targeted invite to key stakeholders
General update webinar 3	TBD (12/2023)	Online	All	Project workshop (webinar) Open invite to Public

What is MultHyFuel?

The goal of MultHyFuel is to contribute to the effective deployment of hydrogen as an alternative fuel by developing a common strategy for implementing Hydrogen Refuelling Stations (HRS) in multi-fuel contexts, contributing to the harmonization of existing laws and standards based on practical, theoretical and experimental data as well as on the active and continuous engagement of key stakeholders.

MultHyFuel is a project funded by the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 JU).

Further information can be found under <https://www.multhyfuel.eu>.

For feedback on the MultHyFuel project or the published deliverables, please contact info@multhyfuel.eu.

The MultHyFuel Consortium



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