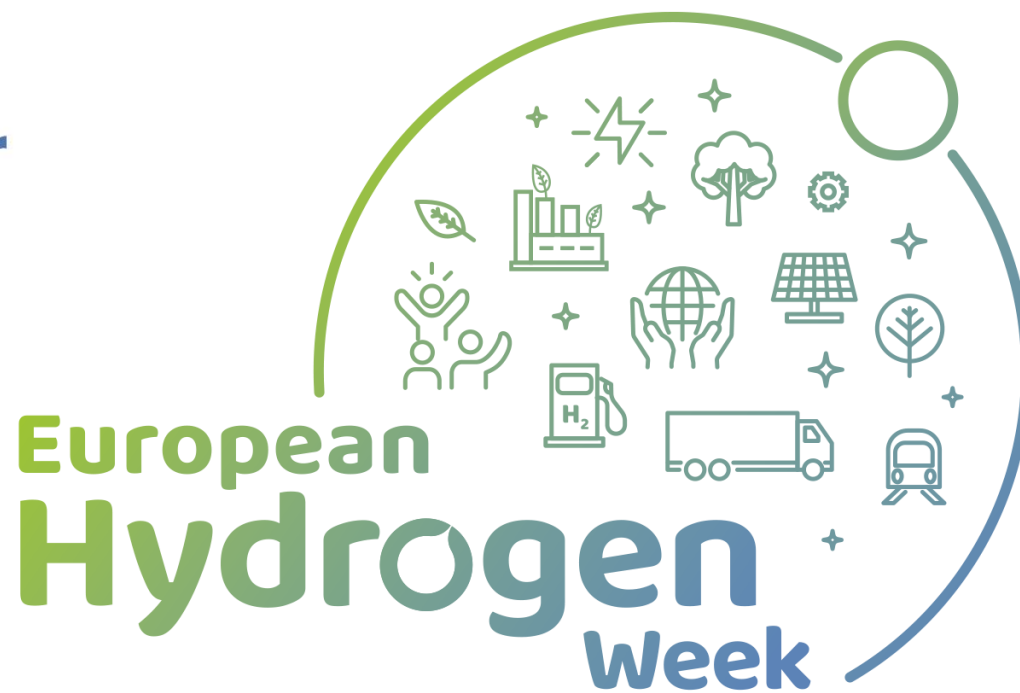


ACRONYM: HyRESPONDER

TITLE: European Hydrogen Train the Trainer Programme for Responders



Síle Brennan  
Ulster University

<https://hyresponder.eu/>  
[sl.brennan@ulster.ac.uk](mailto:sl.brennan@ulster.ac.uk)

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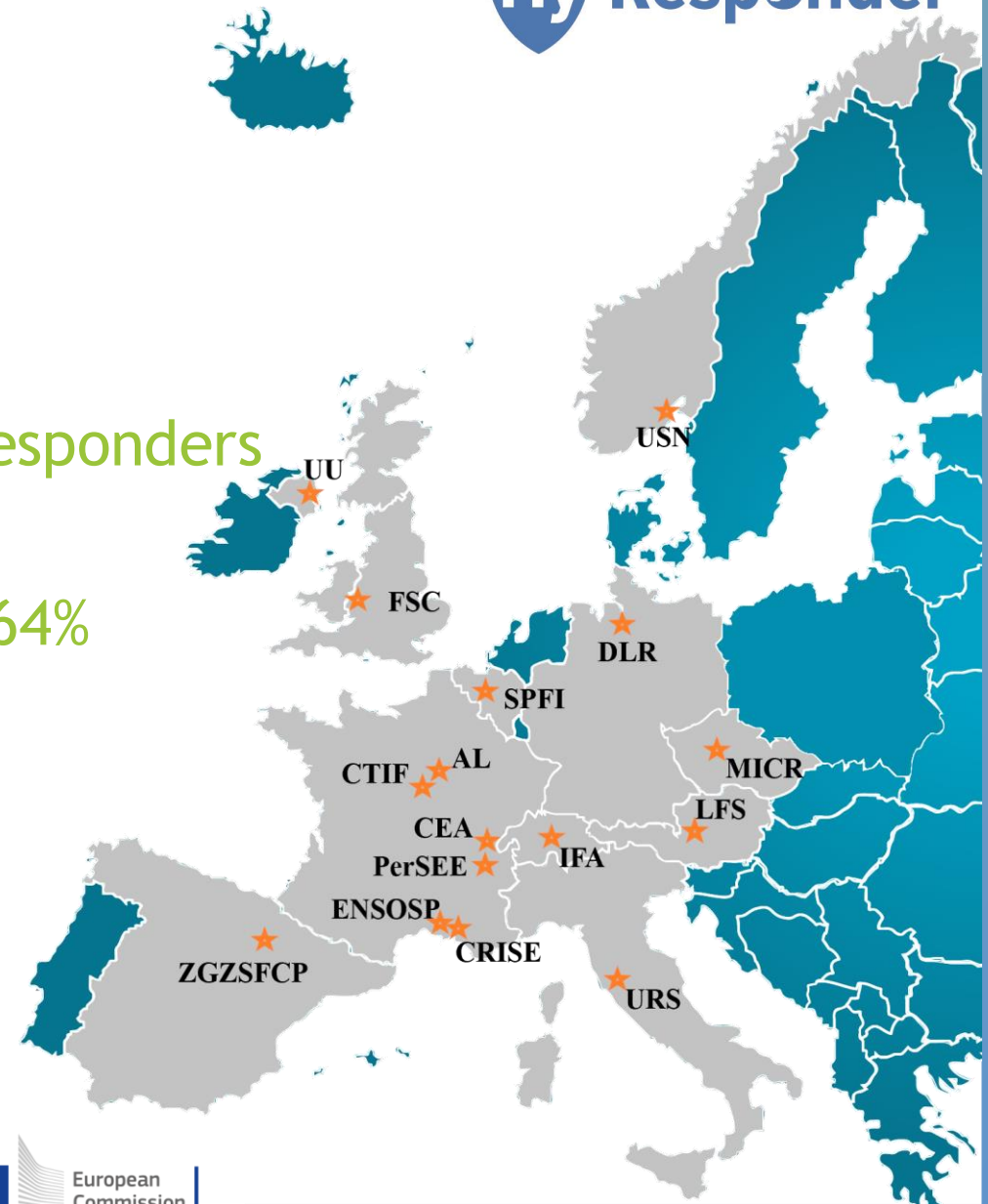




# Project Overview



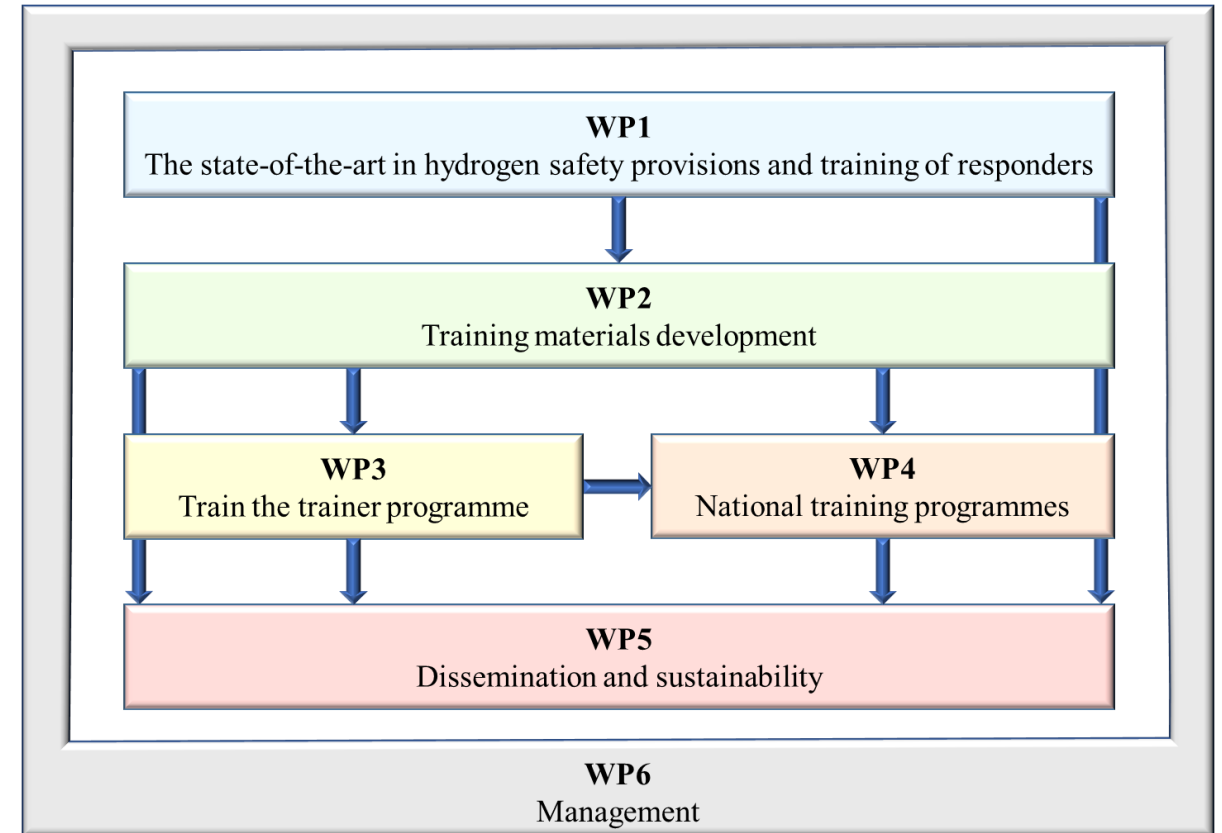
- Call year: 2019
- Call topic: FCH-04-1-2019 - Training of Responders
- Project dates: 1/01/2020 -31/12/22
- % stage of implementation 03/12/2021: 64%
- Total project budget: €1M
- FCH JU max. contribution: €1M
- Other financial contribution: N/A
- Partners: 16 partners from 10 countries

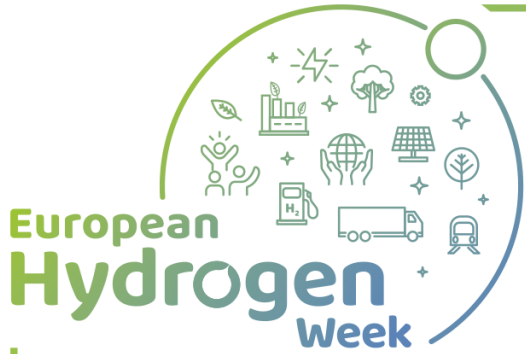


# Project Summary (1/2)

## HyResponder aim and work plan

- Develop and implement a sustainable train the trainer programme in hydrogen safety for responders throughout Europe
- Supporting the commercialisation of FCH technologies by informing the participation of responders in the initial permitting process, improving resilience and preparedness through enhanced emergency planning, and ensuring appropriate accident management and recovery





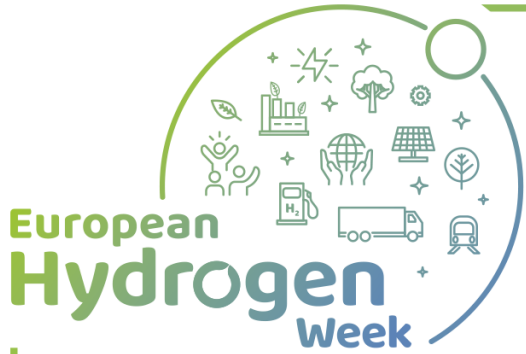
# Project Summary (2/2)

## Main objectives of HyResponder



- Develop clear, updated, **operational, virtual reality**, and **educational training** for trainers of responders to reflect the state-of-the-art in hydrogen safety.
- Establish a Pan-European Network of Responder Trainers
- Train trainers from at least **10 European Countries** in hydrogen safety
- Make teaching materials available in **8 languages**
- Support trainers to deliver regional workshops in **10 countries**
- Ensure **sustainability** of the training programme through the availability of translated materials on an **educational platform**
- Update the **European Emergency Response Guide**
- Establish, an International Forum of Responders in Hydrogen Safety Training





# Project Progress (1/6)

## Extended training package for trainers



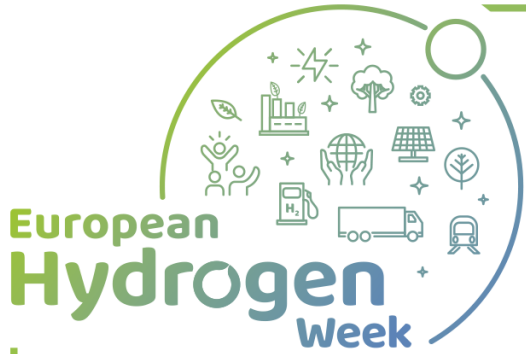
**Threefold** approach with all elements represented on new HyResponder **e-Platform**

1. Operational training (extended to include cryogenic spills)
2. Educational training (lectures revised, stratified and trialed)
3. Virtual Reality training (extended)

Training is underpinned by the revised **European emergency response guide**

A version of all training elements is in place and details are on the beta version of the HyResponder e-Platform





# Project Progress (2/6)

## Stratification of educational training materials

Responder led identification of **four** learning levels across Europe aligned to EQF

Firefighter

Level I

Crew  
commander

Level II

Incident  
commander

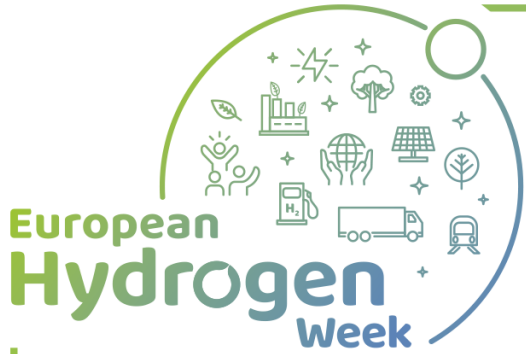
Level III

Specialist

Level IV

- Framework used as a basis to stratify the Lectures into up to 4 levels by responders
- Presentations at level 4
- Goal of developing a standardised training package and gaining recognition of the training





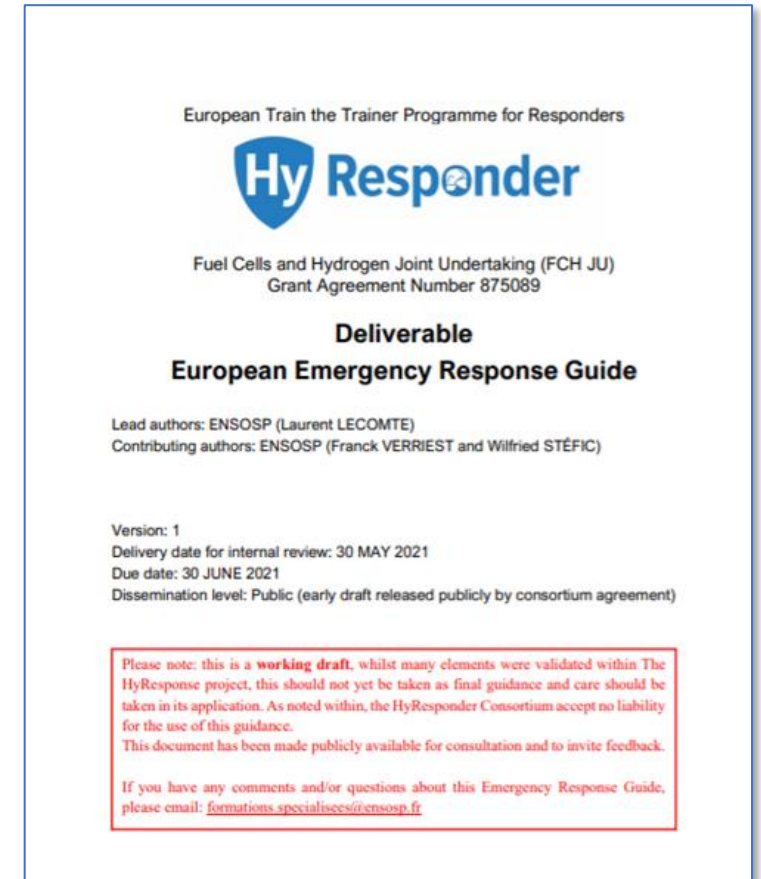
# Project Progress (3/6)

## Revised European Emergency Response Guide



- HyResponse EERG updated
- Guide intended to be used by emergency response personnel, both by front-liners and commanders
- Revisions include events related to LH2
- Multiple contributions from the wide consultation
- Open to public input

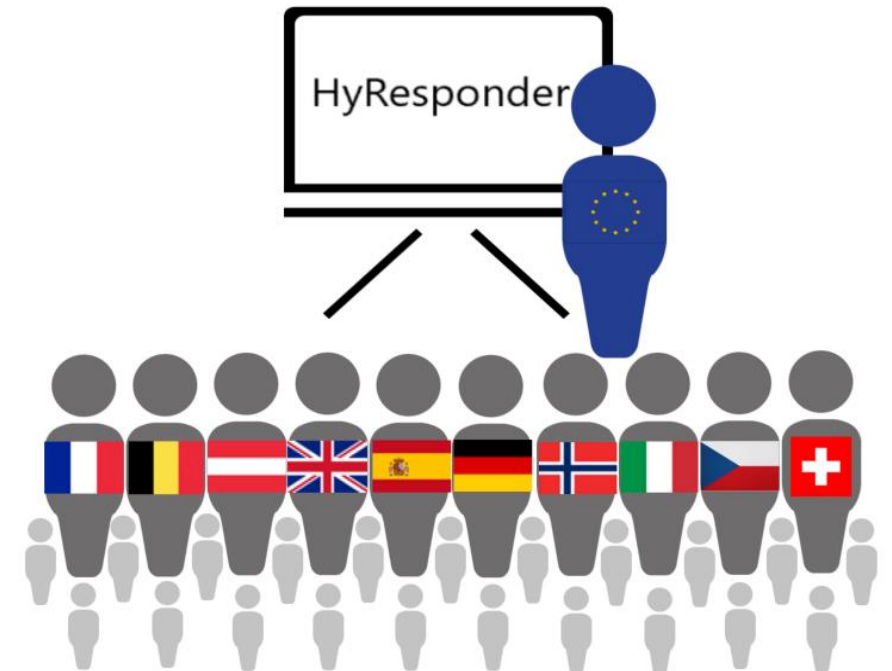
- <https://hyresponder.eu/e-platform/european-emergency-response-guide/>



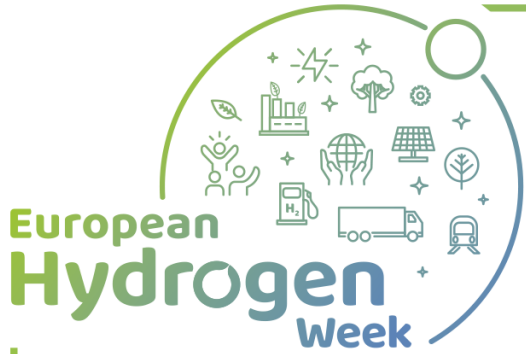
# Project Progress (4/6)

## Train the trainer activities

- Virtual training for trainers from 10 partner countries plus SAB  
June 2021 clear limitations for operational and virtual reality training
- Unique approach to manage online delivery “training sequences”
- Trainers now ready to introduce national training in 2022
- Hands-on training planned for December 2021 at ENSOSP







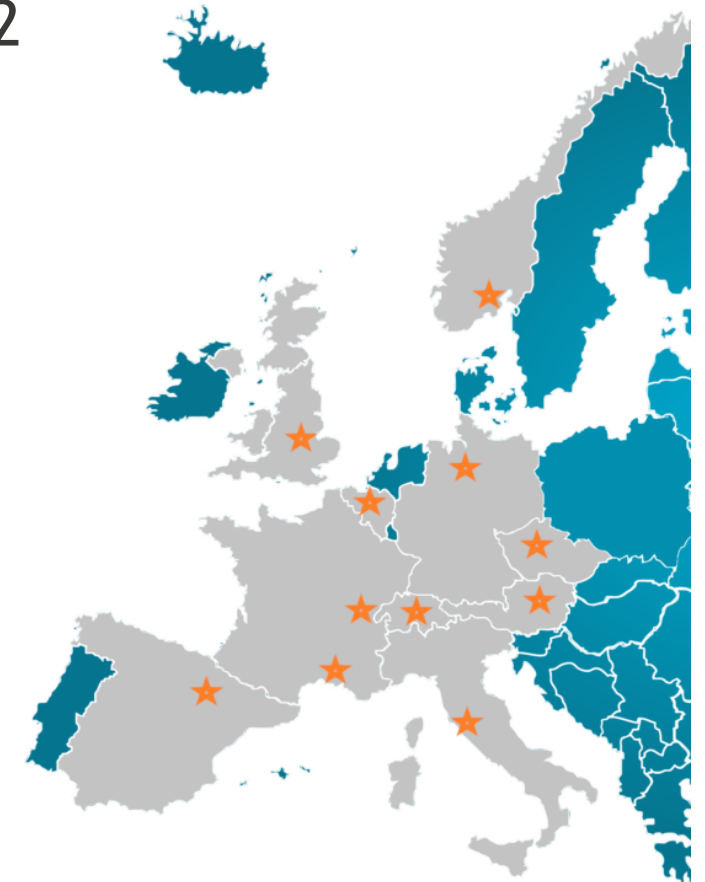
# Project Progress (5/6)

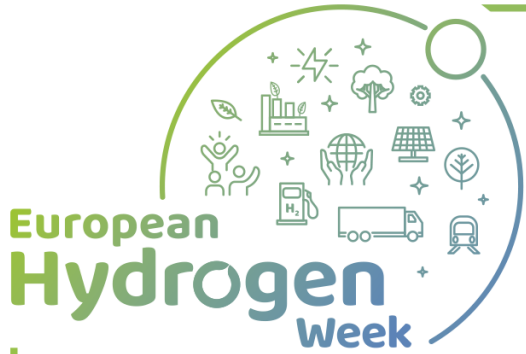
## Plan for National training activities



- Plan in place for training in 10 countries over 2022
- Trainers will introduce the translated training  
Czech, Dutch, English, French,  
German, Italian, Norwegian, & Spanish
- Translated materials will be available in advance of the training
- Contact us to find out more!

★ Location of National Cluster Training Workshops



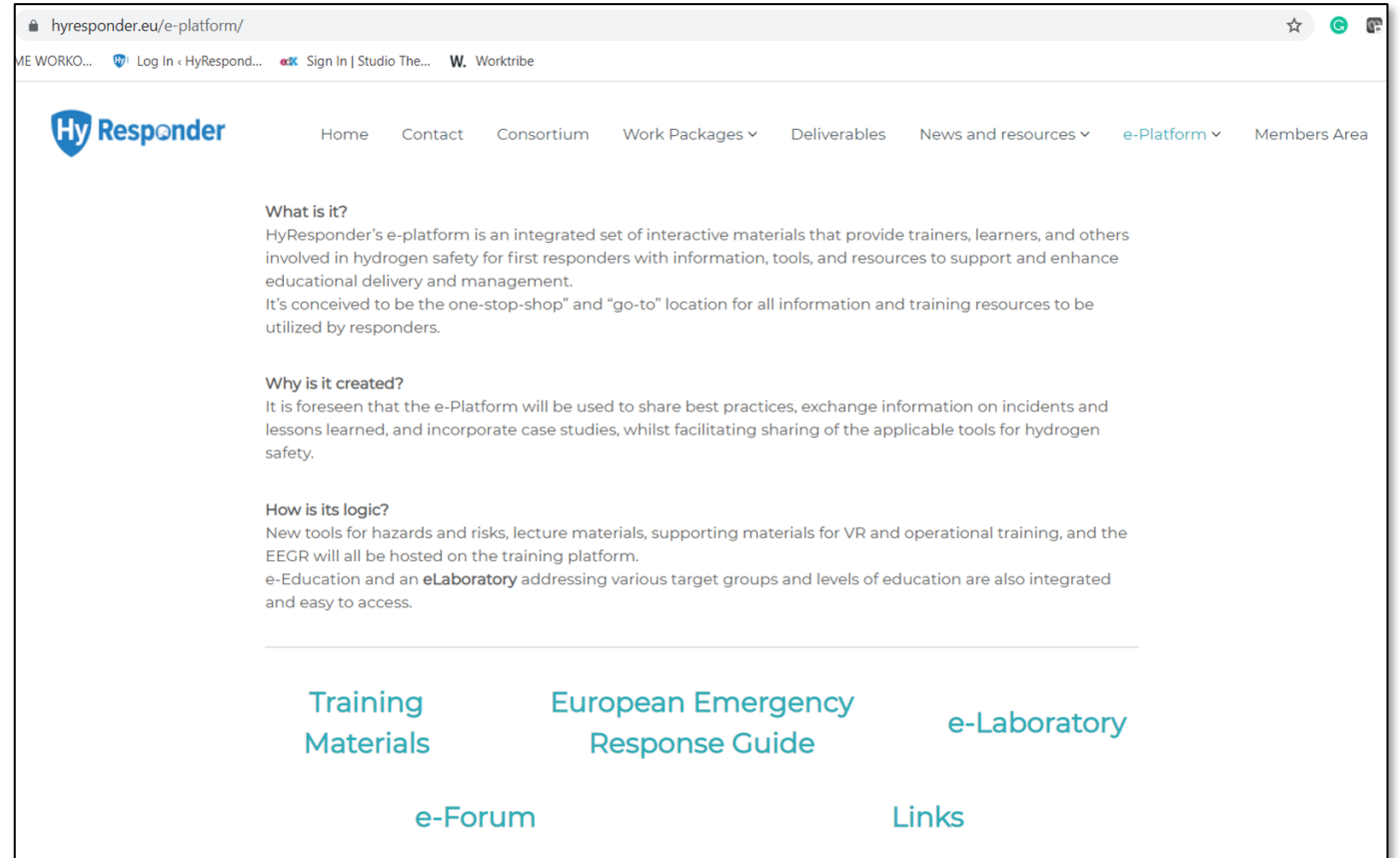


# Project Progress (6/6)

## HyResponder e-Platform



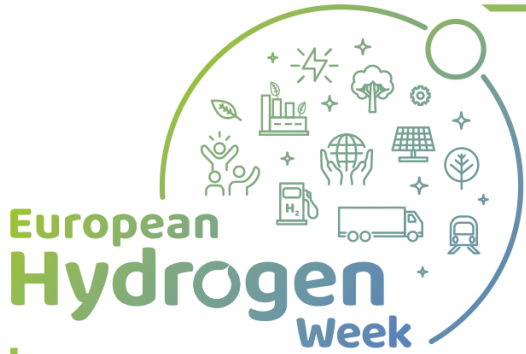
- Beta version
- Materials for trainers beyond HyResponder
- Stratified lectures
- Training sequences with operational videos
- Online tools
- EERG
- Translated materials will be available



<https://hyresponder.eu/e-platform/>

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# Expected impact of HyResponder

- e-Platform available as a “one stop shop” to facilitate access to information
- Unique operational training platform available at ENSOSP
- Online training sequences available to support local training
- Roadmap for standard training package with a defined module at firefighter level
- Stratified training materials available to freely access online across 4 levels
- Translated materials online and freely available in 8 languages
- Trainers from 10 countries trained in Hydrogen Safety
- Responders in 10 regions trained by HyResponder trainers maximizing reach of the training
- Online tools to support training available to all stakeholders
- Revised EERG available for use globally

# Acknowledgements

The project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking (JU) under grant agreement No 875089.

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- United Kingdom
- France
- Austria
- Belgium
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- Czechia
- Switzerland
- Norway.



European  
Hydrogen  
Week



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