European Train the Trainer Programme for Responders

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Report on the Formation of National Training Clusters

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FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

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Disclaimer

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Summary

This deliverable outlines the lead members of the 10 National Training Clusters. There is significant variation in knowledge and experience of FCH technologies across responder training organisations in Europe. The approach to training varies from country to country, in some cases there is a national training programme, in others training is specific to a province or region. Currently a disparate approach is taken to the delivery of hydrogen safety training for responders with responders, academics and industrial experts providing training, depending on the local circumstances. Thus, “National Training Clusters” will be established for 10 countries in Europe (Austria, Belgium, Czech Republic, France, Germany, Italy, Norway, Spain, Switzerland, and the United Kingdom), these incorporate responder training organisations, experts in hydrogen safety, and additional stakeholders such as local industry, national FCH associations etc. where applicable.

Keywords

National Training Clusters, Stakeholders, Fire Schools

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1. Introduction

The train the trainer element of HyResponder is a key component of the project delivery. Responder trainers from 10 regions will undergo training at ENSOSP and will then use this training to deliver national training workshops (within WP4).

There is significant variation in knowledge and experience of FCH technologies across responder training organisations in Europe. The approach to training varies from country to country, in some cases there is a national training programme, in others training is specific to a province or region. Currently a disparate approach is taken to the delivery of hydrogen safety training for responders with responders, academics and industrial experts providing training, depending on the local circumstances. Thus, "National Training Clusters" have been established for 10 countries in Europe (Austria, Belgium, Czech Republic, France, Germany, Italy, Norway, Spain, Switzerland, and the United Kingdom), these will incorporate responder training organisations, experts in hydrogen safety, and additional stakeholders such as local industry, national FCH associations etc. where applicable. Each National Cluster includes at least one partner from the HyResponder consortium. Initial steps were taken at the proposal stage to begin to establish these clusters. UU have built upon this, identifying relevant stakeholders in each region with potential to attend and/or support National Training Cluster Workshops. Each National cluster is also in the process of nominating two trainers from to attend training for trainers at ENSOSP (task 3.2).

Additional stakeholders will be incorporated into the National Training Clusters if deemed relevant over the course of the project.

2. Locations of the National Workshops

The Location of the 10 National Training Workshops and Train the trainer event at ENSOSP are listed in Table 1 and illustrated in Figure 1.

Table 1 Location of National Workshops

	Country	**Location**
1	Austria	Tirol
2	Belgium	Brussels
3	Czech Republic	Brno
4	France	Main training: Aix En Provence, Workshop: Grenoble
5	Germany	Oldenburg
6	Italy	Rome
7	Norway	TBC Porsgrunn
8	Spain	Zaragoza
9	Switzerland	Balsthal
10	United Kingdom	Moreton-in-Marsh

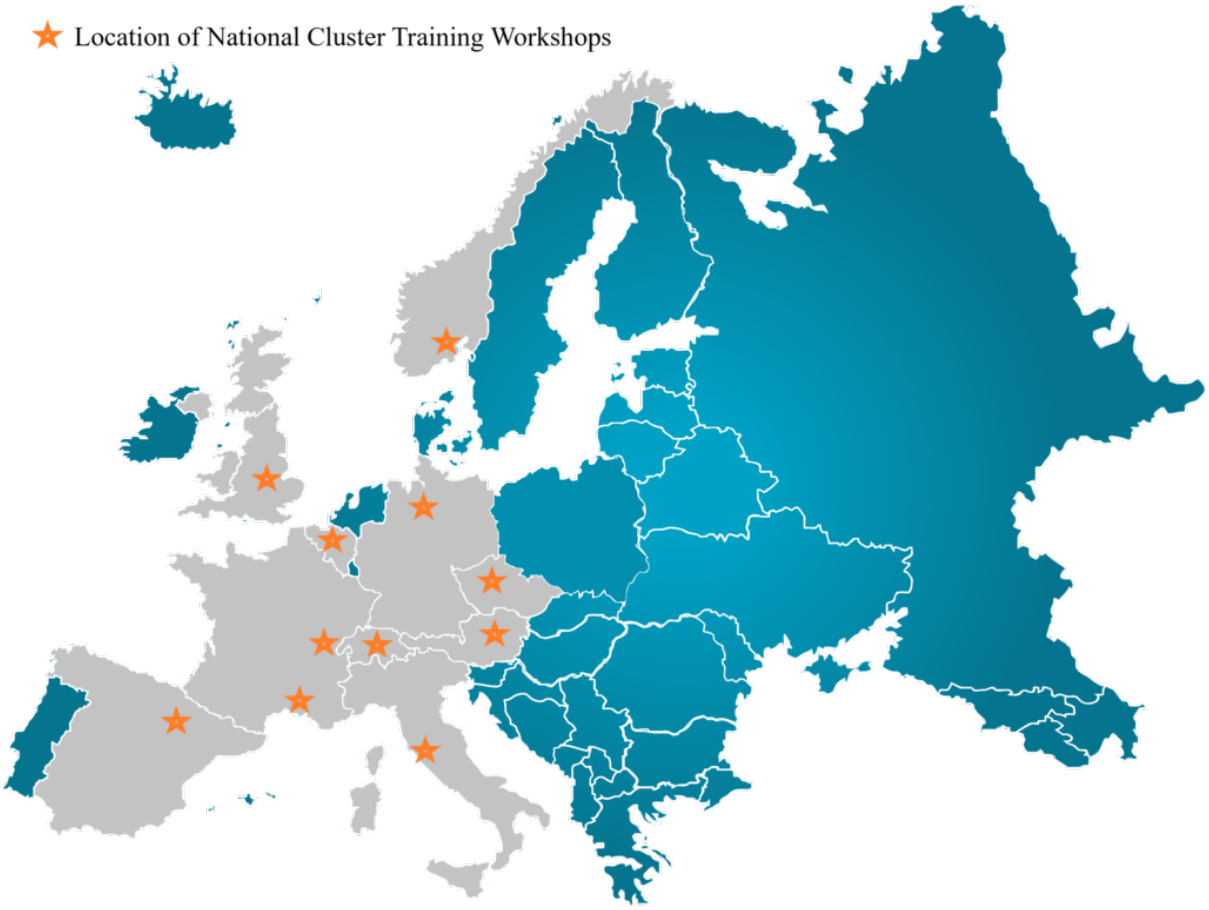

Figure 1 Location of National Workshops

3. National networks and stakeholders

The 10 clusters presented in Table 2 builds on those provisionally identified at the point of proposal submission, and expanded upon in Milestone 3.1. If deemed necessary by the consortium further organisations (local or wider) will be invited to attend the national training workshops. In each region there is a lead partner, further details are given on their specific role.

Table 2 National Training Clusters

	Region	Organisations (Lead in bold)	Categories	Note on lead partner
1	Austria	**Landes-Feuerwehrschule Tirol** *Fire School*	Training provider	Lead Austrian partner, who will coordinate delivery of online training to fire schools across Austria
		Local industry (Hydrolis plant)	Industry	
2	Belgium	**SPFI** *Fire School*	Training provider	Lead Belgian partner, who will host a series of in person workshops for fire schools across Belgium
		Center of Expertise – KCCE - Brussels	Centre of expertise for responders	
		Potential invitation of Hydrogen Europe and European Hydrogen Association due to location of workshop (TBC)	Hydrogen Association	
		Potential involvement of IFV' – Institute for Safety in The Netherlands due to language (TBC)	Public Organisation	
3	Czech Republic	**Fire Rescue Service of the Czech Republic** (National fire school)	Training provider	The lead will organise in person training with oversight for training across Czech fire schools
		Ministry of the Interior of the Czech Republic	Government organisation	
4	France (two regions)	**ENSOSP French National Fire Officers Academy** (National fire school)	Training provider	ENSOSP will lead training of the trainers from all Fire Schools represented within the project. They have existing expertise in hydrogen safety
		CRISE	VR training provider	CRISE have unique VR capability in hydrogen safety and will work alongside ENSOSP to train trainers.
		AREVA	FCH Industry	
		CEA	Research Organisation	
		Fire brigade of Modane	Training provider	
		Persee	FCH Industry	
		Air Liquide	FCH Industry	
		Invitation to AFHYPAC (French Association for Hydrogen and Fuel Cells)	Hydrogen Association	

5	Germany	**DLR** (Research organisation with established links with German Fire Schools)	Research organisation	DLR have a history of delivering training alongside German Fire Schools, they will collaborate with Austrian and Swiss partners in the project to deliver in person German workshops.
		Niedersächsische Akademie für Brand- und Katastrophenschutz	Training provider	
		Invitation to German Hydrogen Association https://www.dwv-info.de/?lang=en	Hydrogen Association	
6	Italy	**URS**	University	URS have an established link with the National Fire Corps in Italy and hence will deliver a joint in person workshop.
		Italian National Fire Corps	Training provider	
7	Norway	**University South Eastern Norway**	University	USN have expertise in hydrogen safety and will partner with a Norwegian Fire School to establish responder training in Norway.
		Norwegian fire academy	Training provider	
		Standards Norway	Standards body	
		Norwegian Research Center on Zero Emission Energy Systems for Transport (Mozees)	Research centre	
8	Spain	**Zaragoza Ayuntamiento** (Fire school)	Training provider	Zaragoza Ayuntamiento are a fire school who will be supported by FHa and the University of Zaragoza who have expertise in hydrogen safety and responder training respectively
		Foundation for the Development of New Hydrogen Technologies in Aragon	Industry	
		University of Zaragoza	University	
		CENTRO ZARAGOZA INSTITUTO DE INVESTIGACIÓN SOBRE VEHÍCULOS, S.A.	Industry	
		KEMLER SEGURIDAD INDUSTRIAL S.L.U.	Industry	
		Técnico	Industry	
		Carburus Group (http://www.carburos.com/Industries/Energy/Hydrogen-Energy.aspx)	Industry	
		ZOILO RIOS GRUPO	Industry	
		Calvera Group (www.calvera.es/lineas-de-negocio/hidrogeno-h2)	Industry	

9	Switzerland	**International Fire Academy**	Training provider	IFA are the leading fire school in Switzerland and have expertise in hydrogen safety. They will lead delivery of in person training
10	United Kingdom	**Fire Service College**	Training provider	FSC are a UK based fire school who will lead delivery of an in person workshop supported by UU
		Ulster University	University	
		London Fire Brigade	Training provider	
		Invitation to be send to the UKHFCA	Hydrogen Association	

4. Wider involvement in National Training Clusters

The focus of this Deliverable is on the identification of relevant stakeholders in the regions where National workshops will be delivered (WP4). However, it should be noted that it is planned that the HyResponder training has reach beyond these regions. Responders from across Europe and beyond are participating in the Stakeholders Advisory Board (SAB). Representatives from additional regions will be invited to the most relevant National Workshop (language etc. dependent). For example a representative of the Dublin Fire Brigade (Ireland) will be invited to the UK event.

5. The next steps

Trainers from each of the 10 regions will attend the HyResponder training event in ENSOSP in June 2021. Following this training the 10 National workshops will be delivered, in the local language over the period July 2021 – December 2022. Outline dates of the National Workshops will be presented in June 2021 in D4.1 (Plan for National Training Programmes) and these will be publicised through the HyResponder website.

6. Conclusion

The 10 HyResponder National Training Clusters have been formed covering Austria, Belgium, Czech Republic, France, Germany, Italy, Norway, Spain, Switzerland, and the United Kingdom. The key stakeholders and lead partner in each region has been listed. It is planned that the clusters will be expanded if deemed necessary to maximise the reach of the HyResponder training, and may include participants from beyond the region e.g. through the SAB.