NEWSLETTER

June 2025

From simulating hazardous conditions to refining firefighting techniques, VR's immersive nature promises to revolutionize firefighter training, ensuring responders are adept at handling emergencies confidently. Through SAFAR commitment to innovation, these advancements aim to raise the standard of firefighter education across Europe, enhancing public safety and bolstering emergency response capabilities.

This project is funded by the Erasmus+ programme. It unites 6 partner organisations with various background from European countries: Czech Republic, Slovakia, Lithuania, Germany, the Netherlands and Cyprus.

Review meetings – Exploring 360° - Innovations

Exploring 360° in Lithuania

The Firefighters' Training School of the Republic of Lithuania (https://ugm.lrv.lt/lt/) has created a suicide situation analysis scenario for the use of 360° technology. The scenario is designed in a way so that a firefighter, choosing different options in 360°, can negotiate with a person experiencing a suicide risk. During the scenario, the participating firefighter can observe and choose not only what the suicide victim does but also make choices about what his team members should do during the negotiations.

The aim of the scenario is to prepare firefighter for possible dialogues with a suicidal person and improve better choices on what to say or what not to say for a successful end of the operation. Such a scenario will be very useful in preparing firefighters who are at risk of encountering such situations in their work and especially preparing firefighters working at height.

Innovations in Slovakia

The Faculty of Security Engineering at the University of Žilina (https://www.uniza.sk) focuses its scenario development efforts on creating highly practical and immersive training tools within the SAFAR project. A key initiative is the programmable CBRN-e scenario developed in Unity 3D, designed for VR/MR headsets such as the Meta Quest 3.

The scenario simulates the detection and preliminary identification of hazardous substances in CBRN-e incidents. It features two modes: Editor Mode, where trainers configure one of five contamination types, and Student Mode, where the contamination is no longer visible and must be identified using the ChemPro 100i detector, acoustic signals, and visual cues. Students' progress through tasks such as:

- Selecting appropriate PPE based on simulated briefings,
- Using a detection device to locate and classify the contaminant,
- Reporting findings using the METHANE system in a structured manner.

In parallel, FSE UNIZA also implements 360° video-based scenarios via the WARP-VR platform. These have been integrated into final theses by students. One such scenario trains forklift safety in an automotive factory; another, less immersive but instructional, teaches the basics of emergency evacuation kits within civil protection courses.

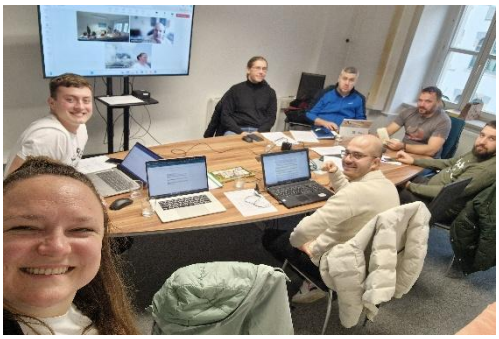
Additionally, HoloLens 2 headsets are used to deliver two further training formats:

- Remote Assist for real-time first-aid scenarios involving chemical exposure, guided through shared data and safety sheets,
- Guides, used for step-by-step evacuation drills within the faculty's premises.

These diverse XR methods form a robust training ecosystem blending realism, adaptability, and interactivity in the context of crisis and civil protection education.

Progress review meetings

Germany



7.-8.11.2024 met for next meeting, this time in Dresden, Germany. Main topics for presentations and discussions were:

- Digital transformation roadmap
- Training guidebook
- Digital twin development

Meeting was hosted by SBG Dresden https://www.sbg-dresden.de/.

Project SAFAR team would like to express our special gratitude to Jens Hofman for the energy he invested in the project and for the knowledge he shared. We wish him luck and success in his future career paths.

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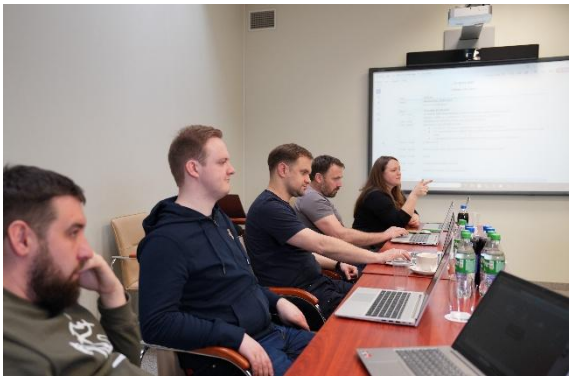
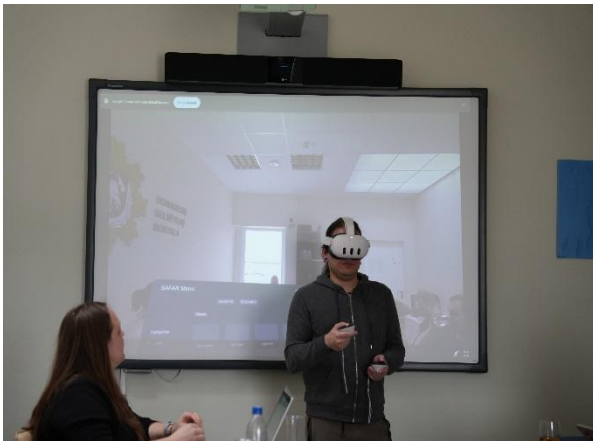
Lithuania



27.-28.03.2025 SAFAR partners gathered for meeting in Vilnius, Lithuania. Event was hosted by Firefighters' Training School of the Republic of Lithuania (https://ugm.lrv.lt/lt/). During the meeting project's partners reviewed progress and had discussions on topics such as:

- Digital twin
- 360^{o} videos development
- Training guidebook and course development.



Demetris Tsartsalis demonstrating software development progress

On top of all discussions partners had first opportunity to try out extinguisher training software developed by one of the SAFAR partner organisations S.C.P SERV LIMITED (https://www.scp.ac.cy/).

After demonstrations partners discussed development roadmap and shared ideas on content and functionalities.

Visit SAFAR Website

A valuable resource if you're interested in how AR/VR can empower safer, smarter, and more effective training in firefighting or crisis management. It's especially relevant for educators, trainers, and digital transformation advocates.

Podcast: On Fire With XR

Meet the expert team behind project SAFAR and more.

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