Interreg CENTRAL EUROPE

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LOCALIENCE

D.3.3.1 – Report on peer-review visits to study, supervise and cross-reference pilot actions

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I. Introduction

This Peer-Review Summary Report compiles the outcomes and insights gathered during the peer-review activities conducted within the LOCALIENCE project. Peer-reviews are a core knowledge exchange mechanism, designed to foster collaboration, mutual learning, and the transfer of good practices among participating regions. These sessions provide partners with the opportunity to engage deeply with specific challenges, explore innovative solutions, and strengthen their capacities by learning from one another's experiences.

The peer-review process not only benefits visiting partners—who gain exposure to practical solutions and best practices relevant to their local contexts—but also enhances the hosting partners' ability to reflect on their pilot actions and consider their applicability in other regions. Moreover, these exchanges contribute to building trust and long-term cooperation among partners and stakeholders, ensuring that the lessons learned extend beyond individual visits to support policy improvements and project objectives across the partnership.

This report aims to document the key findings, conclusions, and recommendations emerging from the peer-reviews. It serves as a reference for all partners to consolidate knowledge and assess the effectiveness of the visits.

The peer-reviews were conducted through a structured methodology outlined in the Peer-Review Methodology Guide. A total of 5 peer-review visits were organized across five partner regions, between October 2024 and June 2025. Each national team hosted at least one review and participated in two visits to other pilot sites.

The visits were designed as interactive, solution-oriented sessions incorporating various exchange formats such as group discussions, action learning sets, future dialogues, and thematic workshops. Key stakeholders—including local authorities, experts, and associated partners—were actively engaged throughout the process to ensure that regional perspectives and practical considerations were fully integrated.

Each visit resulted in a dedicated peer-review report collaboratively prepared by hosting and visiting partners. These individual reports provide detailed accounts of the discussions, conclusions, and lessons learned during the visits. The present summary synthesizes these insights, offering a consolidated view of the main findings and highlighting opportunities for further collaboration and policy development.

By capturing the essence of these exchanges, the Peer-Review Summary Report serves as a reference document for project partners, policymakers, and stakeholders committed to advancing interregional cooperation and sustainable regional development.

II. Summary of the peer-review visits

1.1. Austrian peer-review

1.1.1. General information

- Date: 15 May 2025
- Venue: Heimschuh, Austria (Sulm catchment area)
- Visited locations:
  - New axial pump installations (3 × 800 l/s) on the Sulm catchment
  - Local fire station
- Participants:
  - Hosting Partner(s): PP5 SWM
  - Visiting Partner(s): PP4 AWM, PP8 ARSO, PP9 LJFB, PP10 FU, PP11 CBK PAN

1.1.2. Main points of discussion

One of the most significant findings was the decisive importance of close cooperation with local authorities and first responders. The experience from the August 2023 flood event clearly demonstrated that well-established collaboration between the municipality, volunteer fire brigades, technical experts, and other emergency services can drastically improve the efficiency of response operations. This cooperation ensured that resources could be mobilised quickly, responsibilities were clearly assigned, and communication flowed directly between those who needed to act. Local actors not only played a central role in operational measures but also contributed valuable situational knowledge that helped shape decision-making during critical moments.

A second major conclusion concerned the effectiveness of early warning systems that are based on hydrodynamic modelling. In the Austrian pilot, advanced modelling tools were integrated with meteorological forecasts to predict water levels, identify areas at risk, and determine the timing of potential flood impacts. This allowed warnings to be issued earlier, giving residents and services more time to prepare and mitigate potential damage. While the specific technical setup is tailored to the conditions in Heimschuh, the underlying approach—combining hydrological modelling, weather data, and rapid communication with stakeholders—was recognised as highly transferable to other contexts.

The third conclusion was the essential role of stakeholder engagement in both the design and the acceptance of flood protection measures. By involving community members, local businesses, civil protection organisations, and municipal representatives from the early stages, the Austrian pilot ensured that the system reflected the real needs and expectations of those it was meant to protect. This participatory process fostered a sense of ownership, increasing the likelihood of effective public response when early warnings are issued.

The review also underlined the benefits of strong inter-agency collaboration. The Austrian approach demonstrated how technical agencies—such as hydrology and meteorology services—can work seamlessly with operational responders like fire brigades and civil protection units. The legal disaster management framework in Styria provides clearly defined roles, responsibilities, and lines of authority, which help

avoid confusion and ensure a coordinated reaction during emergencies. Regular joint exercises and information exchanges further strengthen preparedness.

Another key outcome was the recognition that the principles demonstrated in Austria—particularly the early warning methodology, integration of hydrodynamic models, and strong cooperation between institutions and communities—are scalable and adaptable to other regions, including the pilot areas in Poland and Slovenia. Even when the physical environment differs, the core elements of the approach remain relevant and applicable, offering a blueprint for improving resilience in diverse settings.

Finally, the peer-review identified certain areas where additional work would be beneficial. These include the development of comprehensive long-term maintenance strategies for prevention measures and a more detailed design for the distribution mechanisms of early warning messages. Ensuring that alerts reach all segments of the population, including those in rural or digitally underserved areas, remains an important challenge. Addressing these aspects would further enhance the long-term sustainability and effectiveness of the system.

1.1.3. Key lessons learned

1) **Community-based resilience depends on close stakeholder engagement**: Early involvement of municipal authorities, emergency services, and local residents ensures that measures reflect real needs, increase public trust, and improve response effectiveness.
2) **Hydrodynamic modelling is essential for accurate flood warnings:** Combining modelling with meteorological forecasts allows precise prediction of flood impacts, enabling earlier and better-targeted protective actions.
3) **Rapid infrastructure rehabilitation strengthens protection:** Quick repair and upgrading of defences after the 2023 flood, such as installing high-capacity pumps, reduced vulnerability and boosted public confidence.
4) **Austrian practices, especially early warning coordination, are transferable:** Technical integration of modelling and forecasts, clear communication protocols, and strong authority-responder cooperation can be adapted to other regions.
5) **Operational gaps remain in maintenance and alert distribution:** Long-term upkeep of measures and improved public warning reach—particularly for rural and digitally underserved areas—require further development.

1.1.4. Evaluation results

After the visit, each participant filled out the evaluation form to rate the experience.

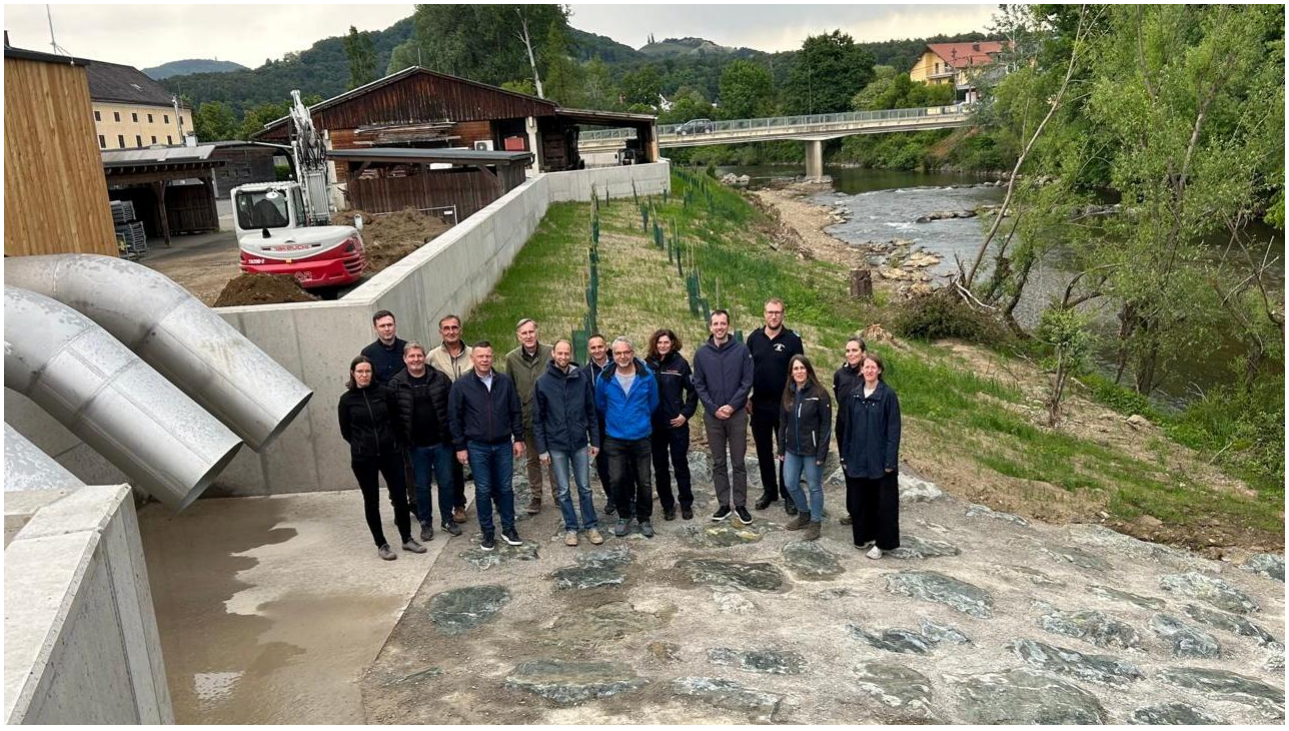
Topic	Score (1-10)
Usefulness of presentations	9
Quality of speeches	9,8
Opportunities for discussion	10
Organisation and logistics	9,8
Venue and arrangements	9,8

1.1.5. Participant's feedback

According to the participants, the most interesting parts were:

- Field visit to pumping station.
- Hydrological and hydrodynamic model presentations.
- Insights into protection & rescue system organization.
- Strong service cooperation and community involvement.
- Fire brigade and planning bureau presentations.

The least interesting part was the quite detailed meteorological model presentation, they might me too much at once. Next time, when similar event happens it should be reduced in details.



Participants at the site visit to the dams during the Austrian peer-review visit.

Photo by PP5 SWM

1.2. Czech peer-review

1.2.1. General information

- Date: 25 February 2025
- Venue: Ministry of the Interior – Directorate General of the Fire Rescue Service of the Czech Republic
- Visited locations:
  - National Operational and Information Centre
- Participants:
  - Hosting Partner(s): PP6 CFS
  - Visiting Partner(s): PP10 FU, PP11 CBK PAN, PP4 AWM, PP5 SWM

1.2.2. Main points of discussion

The meeting underlined the importance of linking meteorological expertise with operational crisis management. In the Czech system, CHMI works closely with DG FRS CR and NOPIS to ensure that hazard forecasts are rapidly transformed into clear, actionable information for municipal crisis staff, reducing reaction times and improving coordination.

The Czech pilot mobile app, fully integrated with the Common Alerting Protocol (CAP), enables automatic, location-specific alerts and provides step-by-step checklists for different hazards. This digital tool standardises local responses, supports decision-making, and helps municipal leaders act quickly even under pressure.

By offering offline access, multilingual options, and an intuitive interface, the app ensures that mayors and crisis teams can continue operations during network disruptions. Structured content—detailed guidance plus concise checklists—helps communities respond effectively to floods, storms, droughts, fires, and other emergencies.

Poland and Austria identified several components suitable for adoption, including CAP-based alert dissemination, hazard-specific checklists, and local contact management. These elements can be adapted to national contexts, enabling cross-border knowledge exchange and harmonised preparedness practices.

1.2.3. Key lessons learned

1) **Value of feedback:** The Czech hosts considered the peer review feedback essential for improving the usability, clarity, and adaptability of the mobile application for an international audience. They acknowledged the importance of testing the app with partner countries before a wider rollout, ensuring it can accommodate different legal frameworks, hazard profiles, and local needs.
2) **Importance of a well-detailed checklist:** The Polish team valued the structured hazard-specific checklists, which guide mayors through each step of an emergency response. These were recognised to standardise actions and avoid confusion during high-pressure situations.
3) **The offline functionality:** The availability of the app was seen as a major strength, ensuring continuity of guidance even in the event of network outages, which are common during extreme weather events.

4) **Combining data and practical guidance:** They saw clear benefits in combining real-time meteorological forecasts with practical operational guidance, ensuring that local authorities not only receive alerts but also know the immediate steps to take. The integration of technical data with clear, action-oriented instructions was considered crucial for bridging the gap between early warning and actual community protection measures.

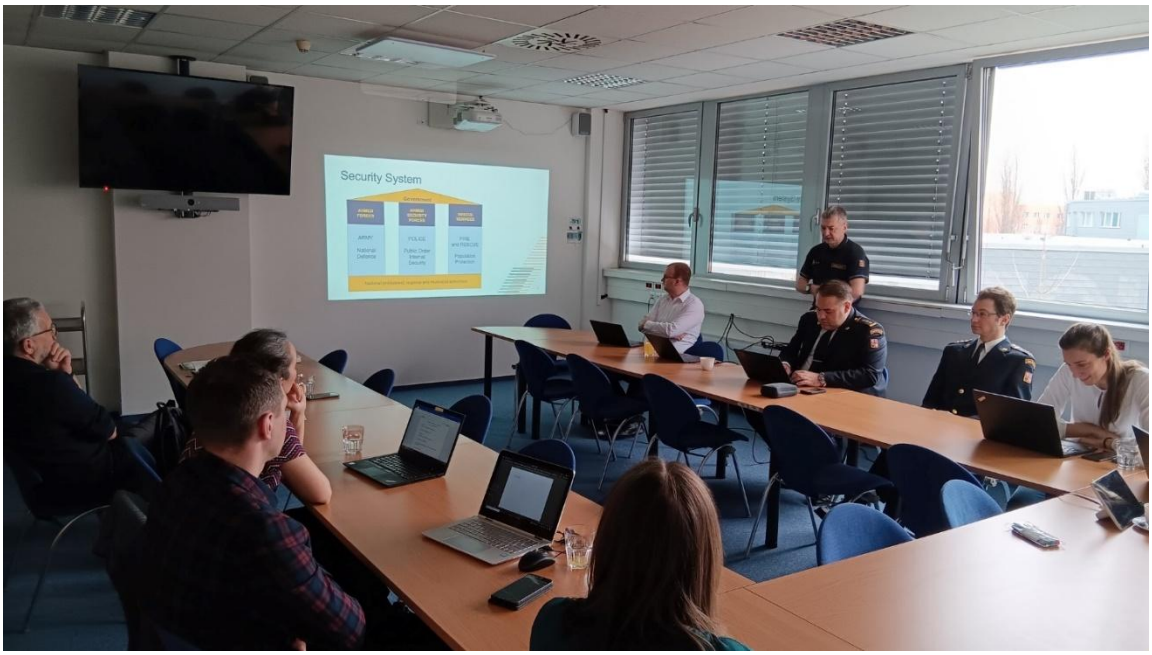
1.2.4. Evaluation results

After the visit, each participant filled out the evaluation form to rate the experience.

Topic	Score (1-10)
Usefulness of presentations	10
Quality of speeches	9,3
Opportunities for discussion	10
Organisation and logistics	10
Venue and arrangements	10

1.2.5. Participant's feedback

Both visiting partners confirmed feasibility and benefit of partially adopting the Czech pilot (especially in local alerting and risk communication). All learning needs were met, with no major input missing. Participants felt confident about where to find answers to remaining questions.



Participants at the pilot presentation organized within the framework of the Czech peer-review.

Photo by PP6 CFS

1.3. Hungarian peer-review

1.3.1. General information

- Date: 19 June 2025
- Venue: Vas County Disaster Management Directorate, Ady Endre square 1, Szombathely, Hungary.
- Visited locations:
  - Western Transdanubian Water Management Directorate,
  - Kőszeg Municipal Fire Department.
- Participants:
  - Hosting Partner(s): PP3 VCDM
  - Visiting Partner(s): LP, PP6 CFS, A01, A03

1.3.2. Main points of discussion

The peer-review demonstrated that regular knowledge exchange, joint training, and coordinated planning significantly increase the readiness of both countries to respond effectively to extreme weather events and other disasters. Cross-border collaboration ensures faster communication, shared resources, and harmonised procedures during emergencies.

Integrating best practices from both countries will enhance response strategies. By combining the proven approaches, technologies, and operational protocols developed in Hungary and the Czech Republic, both sides can strengthen their disaster management systems. This integration allows for more efficient allocation of resources, reduces duplication of effort, and leverages the strengths of each partner.

Volunteer fire brigades and local-level interventions are essential for community resilience. The active involvement of local volunteer organisations not only expands the operational capacity of professional services but also fosters public trust and engagement. Community-based interventions ensure that response measures are tailored to local conditions and that support reaches affected populations more quickly.

Pilot project activities provide a strong strategic basis for disaster risk reduction in Vas County. The Hungarian pilot has laid out a clear, long-term vision for reducing disaster risks, including the development of the Extreme Weather Catalogue and enhanced early warning systems. These initiatives contribute to a more systematic and proactive approach to disaster prevention and response.

The combination of presentations, interactive sessions, and field visits allowed participants to exchange practical experience, identify shared challenges, and co-develop innovative solutions. This dynamic environment strengthened professional networks across sectors and borders.

1.3.3. Key lessons learned

1) **Collaboration is essential:** Effective disaster response depends on strong cooperation between professionals, decision-makers, civilians, and volunteers, with everyone knowing their role and working together.
2) **Knowledge, tools, and communication are key:** Good training, the right equipment, and clear communication channels are all necessary for quick and effective action during emergencies.

3) **Living Lab approach helps build resilience:** Testing solutions in real-life situations with experts, authorities, and local people makes plans more practical and adaptable.
4) **Feedback improves strategies:** Learning from drills, projects, and real events helps improve future response plans and avoid repeating mistakes.
5) **Cross-border cooperation strengthens preparedness:** Sharing knowledge, tools, and methods between countries makes the whole region better prepared for disasters.
6)

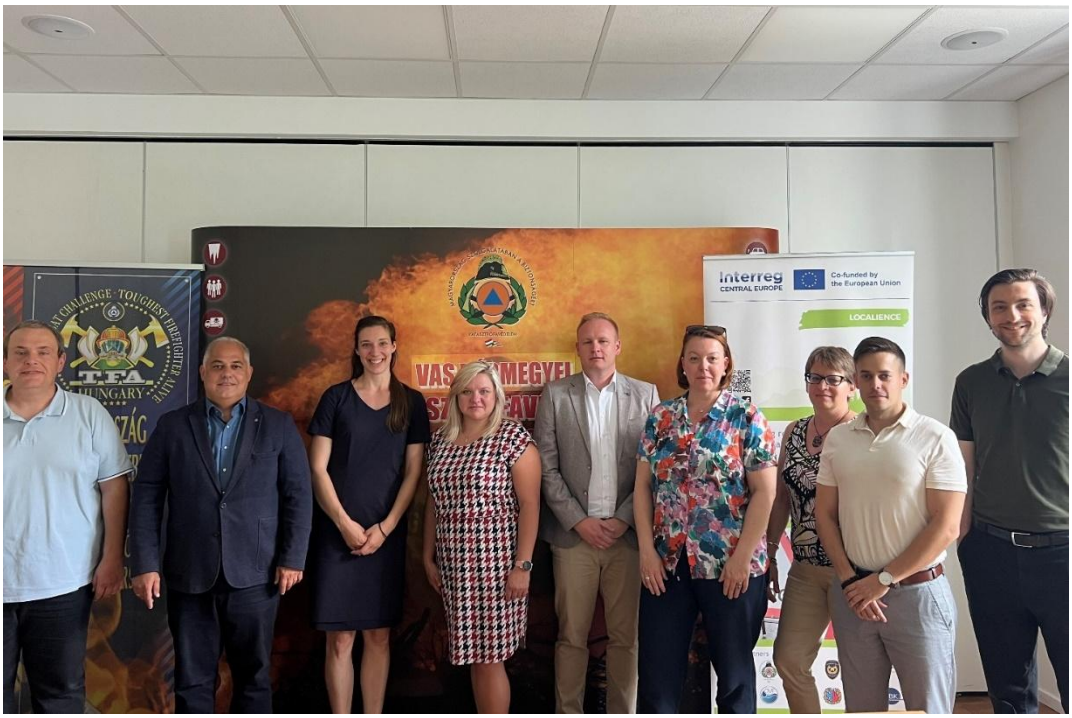
1.3.4. Evaluation results

After the visit, each participant filled out the evaluation form to rate the experience.

Topic	Score (1-10)
Usefulness of presentations	10
Quality of speeches	10
Opportunities for discussion	9,7
Organisation and logistics	10
Venue and arrangements	10

1.3.5. Participant's feedback

According to the participants, the most interesting parts were getting to know the implementation process of the Hungarian Pilot action & other examples of ongoing projects. Just as much as visiting various fire stations. The least interesting part was not highlighted by the participants.



Participants after the pilot presentation organized within the framework of the Hungarian peer-review.

Photo by PP3 VCDM

1.4. Slovenian peer-review

1.4.1. General information:

- Date: 20-21 March 2025
- Venue: Ljubljana Fire Brigade Headquarters & Slovenian Environment Agency
- Visited locations:
    - Emergency Management Department of the Municipality of Ljubljana (OZR MOL)
    - Local Volunteer Fire Department
    - Flood-risk sites and anti-flood infrastructure
- Participants:
    - Hosting Partner(s): PP8 ARSO & PP9 LJFB
    - Visiting Partner(s):
        - In person: LP, PP2 HWM, PP3 VCDM, PP4 AWM, A01

1.4.2. Main points of discussion

The peer-review visit to Ljubljana underlined several critical conclusions that are highly relevant for disaster risk reduction and emergency preparedness efforts across the consortium.

Strong inter-institutional coordination is indispensable for effective disaster preparedness and response. The cooperation observed between the Ljubljana Fire Brigade, the Slovenian Environment Agency, and the Emergency Management Department of the Municipality of Ljubljana showed how seamless interaction between fire services, emergency management authorities, and meteorological institutions leads to faster decision-making, more accurate situational awareness, and a more efficient allocation of resources during emergencies.

The technology integration is a clear enabler of improved operational capacity. Demonstrations of the automatic notification system and the use of advanced meteorological and hydrological forecasting tools illustrated how technology can provide early warnings, support rapid mobilisation of resources, and facilitate informed, real-time decisions that reduce the impact of extreme weather events.

Community-based resilience remains a vital component of disaster management. The active role of volunteer fire departments, along with other local-level initiatives, was shown to strengthen the overall response system by ensuring that immediate, on-the-ground action can take place even before central services arrive. Such community engagement fosters a culture of preparedness and enhances public trust in emergency services.

Strategic vision and long-term planning are essential for sustainable resilience building. Ljubljana's Program for Protection against Natural and Other Disasters (2023–2030) represents a comprehensive and structured approach to risk reduction, combining policy alignment, infrastructure investment, and capacity-building measures to create a more disaster-resilient city over the next decade.

Finally, knowledge sharing as a driver of innovation emerged as a recurring theme. The interactive workshops, presentations, and field visits provided valuable opportunities for peer-to-peer exchange, enabling participants to learn from each other's experiences, adapt proven practices to their own

contexts, and explore innovative approaches to shared challenges. These exchanges not only inspired new ideas but also reinforced the importance of ongoing cooperation between partners across borders.

1.4.3. Key lessons learned

1) **Value of Skilled Forecasting Teams:** Effective meteorological and hydrological forecasting depends on local expertise, advanced tools, and clear communication protocols. Teams familiar with local conditions can interpret data accurately and provide timely, actionable advice.
2) **Importance of Continuous Feedback:** Regular, structured exchanges between forecasting services and emergency responders improve forecast accuracy and operational readiness, ensuring information is both relevant and practical.
3) **Adoption Potential of Warning Systems:** Slovenia's direct communication model between meteorological services and emergency agencies could be adapted elsewhere, though adjustments may be needed in more centralised systems.
4) **Alignment with Partners' Goals:** The pilot's integration of technology and strong inter-agency cooperation matches the visiting partners' aims to boost real-time response to extreme weather.
5) **Knowledge Exchange Outcomes:** The visit provided deeper insights into structured data sharing as the backbone of disaster management, showing that innovation must be supported by systematic collaboration.

1.4.4. Evaluation results

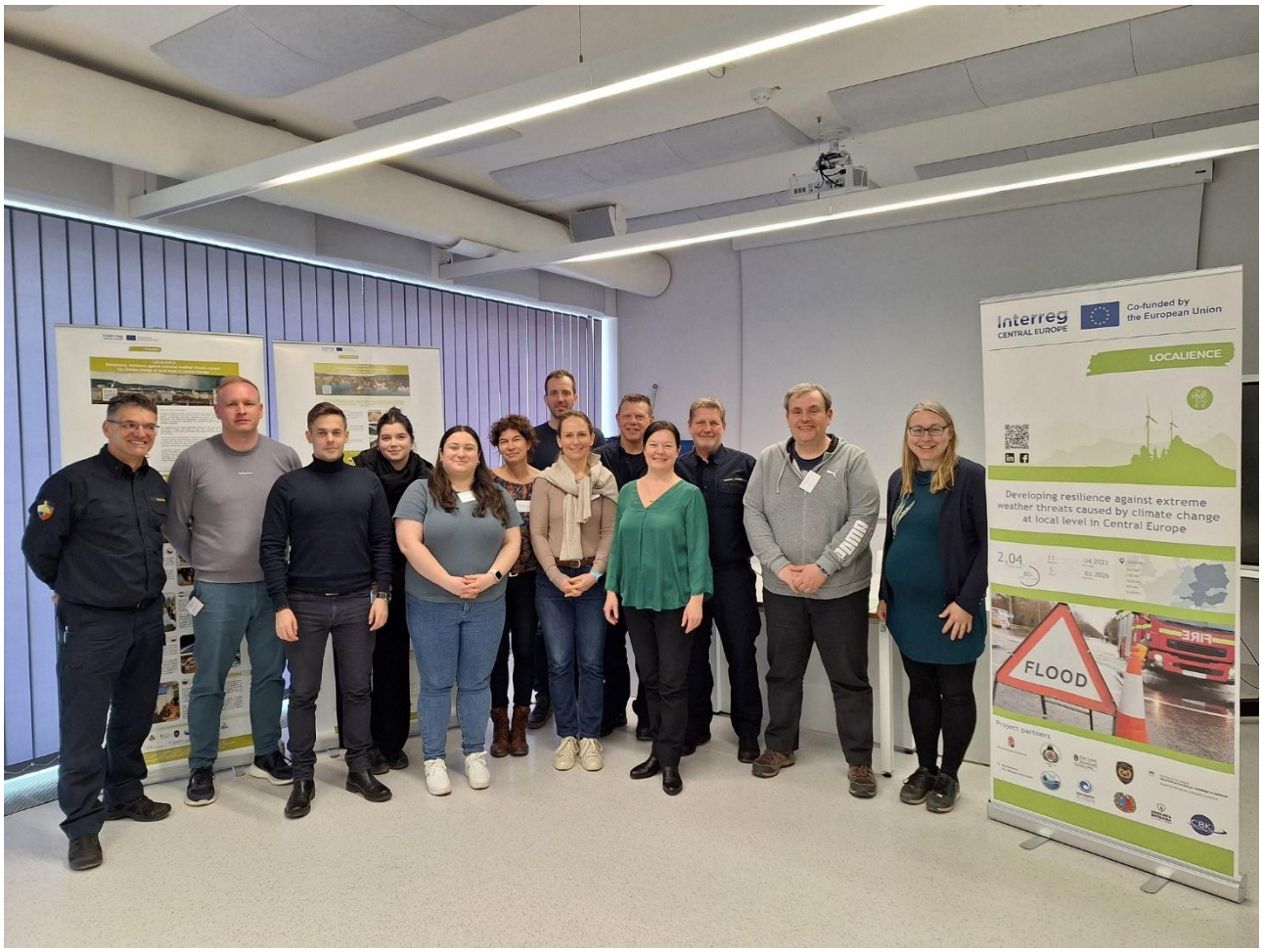
After the visit, each participant filled out the evaluation form to rate the experience.

Topic	Score (1-10)
Usefulness of presentations	9,9
Quality of speeches	9,9
Opportunities for discussion	10
Organisation and logistics	10
Venue and arrangements	9,9

1.4.5. Participant's feedback

According to the participants, the most interesting parts were the site visits (ARSO, LJFB, volunteer fire brigade station & the dams).

The least interesting part was not highlighted by the participants, but they noted, that the dams were quite similar in their own way.



Participants after the pilot presentation organized within the framework of the Slovenian peer-review. Photo by PP8 ARSO

1.5. Polish peer-review visit

1.5.1. General information:

- Date: 9-10 April 2025
- Venue: Fire University, Juliusza Słowackiego Street 52/54, 01-629 Warsaw, Poland
- Participants:
    - Hosting Partner(s): PP10 FU & PP11 CBK PAN
    - Visiting Partner(s):
        - In person: LP, PP3 VCDM, PP4 AWM, PP6 CFS, PP7 OSU, PP8 ARSO, PP9 LJFB
        - Online: PP2 HWM & PP5 SWM

1.5.2. Main points of discussion

The Polish pilot, which focused on using simulation-based decision-making games for crisis management training, stood out as a strong and successful example within the LOCALIENCE project. It was seen as well-organised, creative, and flexible enough to be adapted in other countries. The pilot included useful tools like a gap analysis, a local needs assessment, and the idea for an IT system to track how people respond during the games — all of which were found to be practical and relevant.

One of the most valuable aspects of the visit was the chance to learn from each other. Even though each country has its own way of managing crises, many common challenges were identified — such as the need for fast responses, better communication between services, and better use of data. The Polish approach, especially the use of realistic simulation games, was seen as something that could work well in other places too.

The group also had a chance to tour several labs at Fire University — including an emergency simulation lab, a decision-making lab, and a lab focused on designing safe spaces. These visits helped everyone understand how the pilot works in practice and why it was designed the way it was.

There was strong support for using simulation games as a training tool. Participants agreed that these kinds of games are great for helping students, public officials, and emergency workers practice their roles in a crisis. The realistic nature of the scenarios makes the training more engaging and helps people feel more prepared for real-life situations.

Finally, there was strong support for ensuring the sustainability and further development of the tools and approaches introduced during the Polish pilot. Participants expressed a clear interest in maintaining cross-border collaboration, refining the methodologies, and disseminating project results more widely across relevant sectors and stakeholders.

1.5.3. Key lessons learned

1) **The simulation methodology is solid and adaptable**: The decision-making game approach developed in the Polish pilot proved to be well-structured, realistic, and flexible. It can be directly applied in other countries or customised to fit their specific needs and crisis contexts.

2) **Local case studies add value to scenarios:** Real-life situations from partner countries — for example, Austria's challenges with local flood warning systems — can be integrated into the simulations. This makes training more relevant, relatable, and impactful for participants.
3) **Cross-sector cooperation is essential for success:** Bringing together different stakeholders — such as emergency services, local authorities, environmental agencies, and academic institutions — strengthens crisis preparedness and ensures more effective responses in real situations.
4) **Shared challenges show the need for ongoing exchange:** Many pilots face similar issues, including communication gaps, limited resources, and coordination difficulties. Continued knowledge sharing and the development of joint strategies can help partners address these problems more efficiently.
5) **Focus group discussions provide valuable insights:** Open conversations during the visit allowed participants to exchange practical experiences, identify common priorities, and explore opportunities for future collaboration across borders.

1.5.4. Evaluation results

After the visit, each participant filled out the evaluation form to rate the experience.

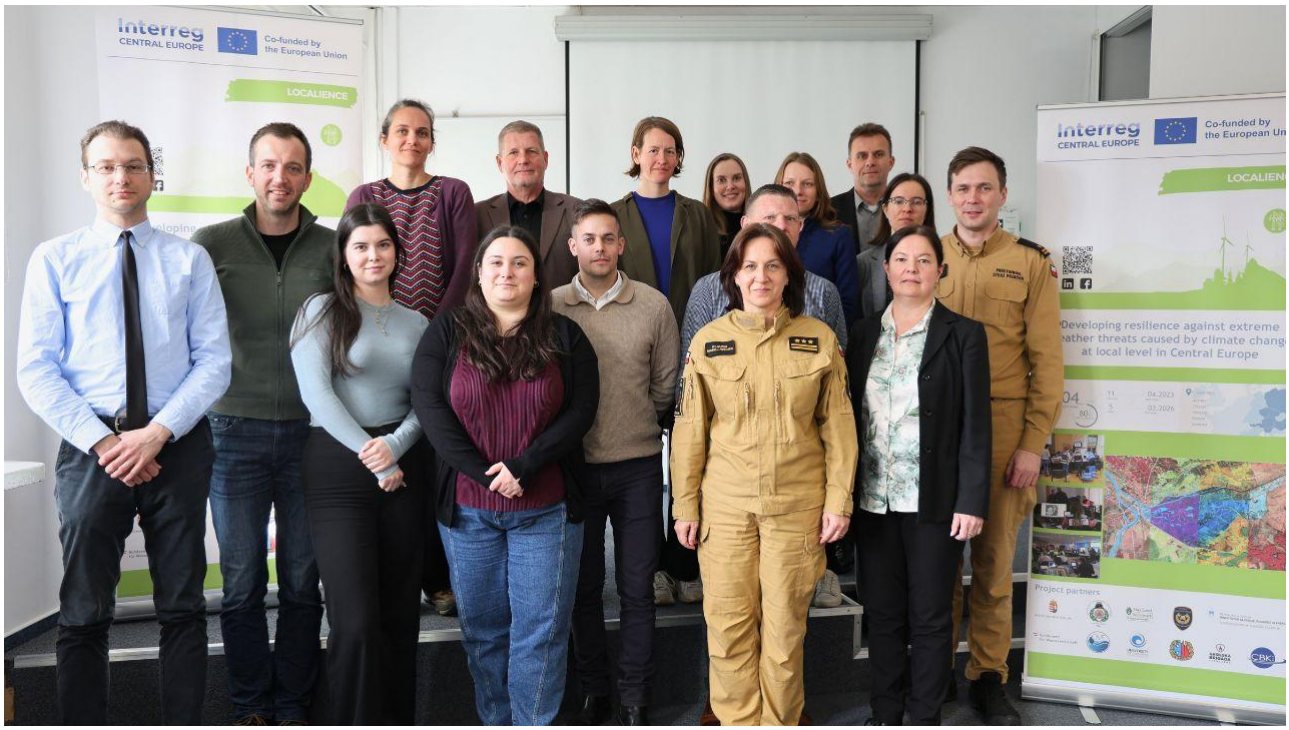
Topic	Score (1-10)
Usefulness of presentations	9,4
Quality of speeches	9,2
Opportunities for discussion	9,8
Organisation and logistics	9,9
Venue and arrangements	10

1.5.5. Participant's feedback

According to the participants, the most interesting parts were:

- The tour of the FU laboratories.
- Demonstration of the crisis simulation game.
- Focus group discussions on pilot integration.
- Seeing the Polish pilot "in action"

The least interesting part was the topic of financial reporting.



Participants between sessions at the Polish peer-review.

Photo by PP10 FU

III. Synthesis of the peer-review visits

The peer-review visits conducted across Austria, the Czech Republic, Hungary, Slovenia, and Poland revealed several common findings, challenges, and lessons that provide valuable insights for the consortium.

1.1. Common challenges

Across all pilots, effective communication and coordination between institutions proved to be one of the most significant challenges. Even where well-established systems were in place, the pressure of real emergency situations exposed gaps in information flow and decision-making. Another recurring issue concerned the long-term sustainability of technical measures, such as flood defences or early-warning applications, which require clear maintenance strategies and stable resources. In addition, partners underlined the persistent difficulty of ensuring that early-warning messages reliably reach all segments of the population, particularly vulnerable groups, rural residents, and those with limited digital access.

1.2. Easier issues and successes

In contrast, several elements were highlighted as relatively straightforward to implement and highly effective. The involvement of volunteer fire brigades, municipalities, and local associations was widely recognised as an accessible and powerful means of strengthening resilience, bringing trust, local knowledge, and rapid response capacity. Knowledge-sharing tools—such as hazard-specific checklists, mobile applications, and simulation games—were also considered easy to adapt across different contexts, as they provide clear, structured guidance without requiring heavy infrastructure investments. Furthermore, interactive learning formats, including joint drills, living labs, and simulation-based training, were consistently praised for their ability to facilitate practical exchanges and foster mutual understanding among partners.

1.3. Most memorable and engaging elements

The most engaging aspects of the visits were typically the field components and practical demonstrations. In Austria, participants valued the site visit to pumping stations and the demonstration of hydrodynamic modelling tools, which showed high transferability potential. The Czech peer-review impressed partners with its mobile alert application, especially its offline functionality and ease of integration with local systems. In Hungary, the emphasis on cross-border collaboration and the essential contribution of volunteer brigades offered a strong example of community-based resilience. Slovenia showcased the benefits of integrated institutional cooperation, advanced forecasting tools, and structured long-term planning, providing a comprehensive vision for resilience-building. Finally, the Polish peer-review stood out for its innovative use of decision-making simulation games, which participants described as creative, realistic, and widely applicable for training purposes.

1.4. Less interesting or less impactful aspects

Although the visits were overall highly appreciated, some elements were considered less engaging. In Austria, the detailed meteorological modelling presentations were perceived as overly technical for part of the audience. In Slovenia, while the site visits were valued, certain dam visits were regarded as

somewhat repetitive. In Poland, discussions on financial reporting were assessed as less relevant compared to the more interactive and practical components of the programme.

1.5. Closing thoughts

This synthesis demonstrates that while all pilots faced challenges in communication, sustainability, and inclusiveness of alert systems, they also identified accessible solutions through strong community engagement, digital tools, and interactive training. The visits not only reinforced the importance of knowledge exchange and cross-border cooperation but also provided memorable insights that can be scaled and adapted across regions.