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Welcome to the 3rd edition of our BRIDGITISE newsletter!

The project has now reached the 1.5-year mark of its four-year duration, and this edition highlights the activities and progress made over the past six months. In line with our environmental commitment to reducing carbon emissions, several activities were held at a single location: the University of Twente. This extended stay not only minimized travel but also strengthened the bonds among consortium members and Doctoral Candidates (DCs).

The 3rd edition of BRIDGITISE newsletter encompasses the following highlights:

- The successful mid-term progress review meeting at the University of Twente, which gathered a vast majority of BRIDGITISE beneficiaries and partners.
- Training cluster and network activities performed in conjunction with review meeting.
- The one-week training school that took place after the mid-term meeting, offering the Doctoral Candidates the opportunity to gain hands-on experience in bridge management and to work in groups.
- A forward-looking view of activities for the second half of 2025, including plans for the end-user workshops scheduled for 2026.

Mid-Term Progress Meeting

The BRIDGITISE consortium gathered at the University of Twente for its Mid-Term Meeting on 8–9 May 2025. The meeting opened with a presentation by the EU Project Officer outlining the obligations set forth in the Grant Agreement, followed by an overview of the project's progress delivered by the Coordinator, Prof. Maria Pina Limongelli. A presentation by the leader of the External Advisory Board was given afterwards to showcase the active involvement and valuable contribution of the Board in key tasks, such as training, research and public engagement.

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The remaining time was devoted to the DCs, who presented their key objectives and progress. Following these presentations, a closed session was held between the EU Project Officer and the DCs to address questions and concerns in a more informal setting.

Overall, the meeting was a successful milestone for the BRIDGITISE project, confirming the strong commitment of the consortium, the proactive engagement of the DCs, and the solid governance of the project. Positive feedback from the EU Project Officer highlighted the quality of the work carried out so far and provided valuable guidance for the next phases. The collaborative atmosphere and constructive exchanges set a promising foundation for the continued development of the network. Below are some photos capturing key moments from the event!

The BRIDGITISE consortium during the mid-term review meeting.

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The coordinator of the project, Prof. Maria Giuseppina Limongelli, presented the progress of the project.

The External Advisory Board had an active involvement, represented by Prof. Jesus Rodriguez.

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Presentation of the EDGE project.

Presentation of the PLATFORM project.

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Presentation of the NEURAL project.

Presentation of the CORROSION project.

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Presentation of the VALUE project.

The social dinner at the end of the first day of the mid-term meeting.

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Cluster and Newtork Training Activities

Before the mid-term meeting and as part of the BRIDGITISE Cluster Training, DCs from Work Package 1 participated in a hands-on visual bridge inspection course led by Fred Westenberg. The session introduced key inspection principles, focusing on identifying visible damage in concrete, steel, and timber structures using simple tools and standardized methods. Real-world inspections in the Twente region were carried out, and the NEN 2767 standard was applied to assess and score defects. The course emphasized the importance of visual assessment in bridge maintenance, its limitations, and the need for accurate documentation and objective evaluation to support long-term infrastructure management. The hands-on experience was further elaborated by Fred Westenberg during his lecture in the 1st training school.

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Doctoral Candidates participated in the visual inspections on various bridges across the Twente region.

In addition, the DCs have started the BRIDGITISE Ontology Course, coordinated by Prof. Michael Havbro Faber. The course will run throughout the project and aims to develop a shared conceptual framework for Structural Health Monitoring (SHM). It addresses the need for clearer communication and coordination in complex systems, such as road networks and interconnected infrastructure, by tackling existing governance gaps and the lack of a common language in the field. The ontology is being developed collaboratively by the DCs through literature review and group work, drawing inspiration from the Risk, Resilience, and Sustainability Ontology. The goal is to create a structured and evolving SHM ontology, to be published in the BRIDGITISE D-BOOK, supporting consistent knowledge exchange and informed decision-making across the network.

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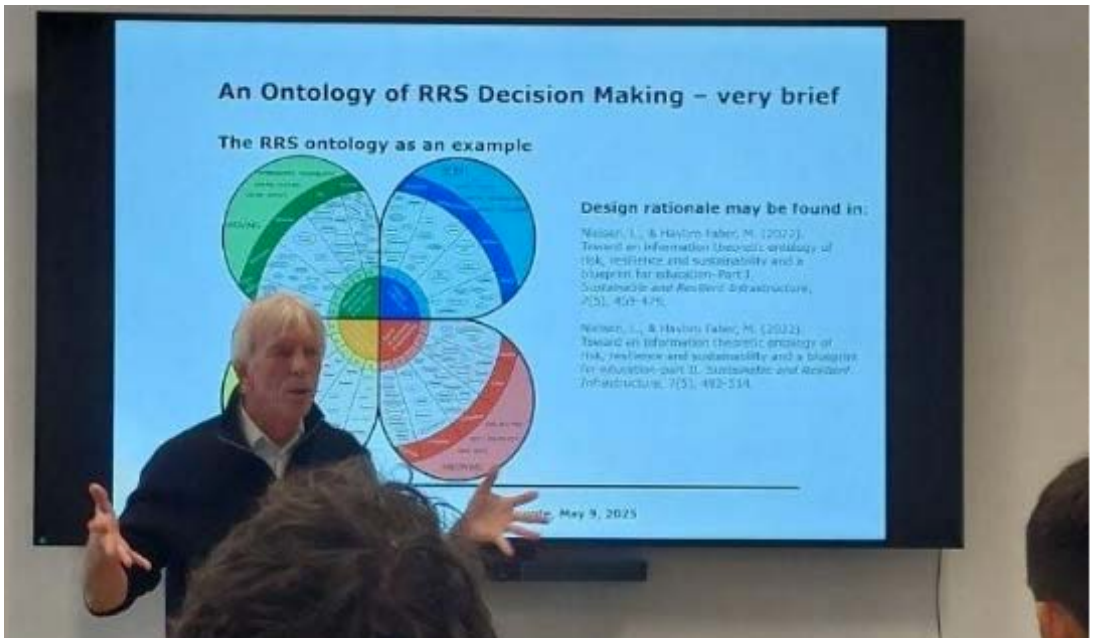
Snapshots during the course on Ontology



1st BRIDGITISE Training School

The first BRIDGITISE Training School was held from 12–16 May at the University of Twente, bringing together PhD candidates, academics, and industry experts for a week of intensive learning and collaboration in bridge management and innovation. The programme combined expert lectures, consortium-led sessions, and group work focused on bridging research and practice.

Key Topics Covered:

- **Bridge Management Standardisation** – Agnieszka Bigaj-van Vliet (TNO), member of the External Advisory Baord
- **Industry Perspectives and Lifecycle Management with respect to BRIDGITISE individual projects** – Helmut Wenzel (VCE)
- **Digital Asset Management** – Giel Klanker (Antea Group)
- **Mobile Crowdsensing & IoT** – Maria Giuseppina Limongelli & Pier Francesco Giordano (Politecnico di Milano)
- **AI for Visual Inspections** – Florian Scheidegger (IBM) & Michele Magno (ETH Zürich)

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- **Smart Monitoring with IoT, AI & 6G** – Nicola Cordeschi, Arcangela Rago (Politecnico di Bari) & Paolo Comi (Exprivia)
- **Visual Inspection ad Augmented Reality for Bridge Assessment** – Fred Westenberg & Roland Kromanis (University of Twente)
- **Circular Life Cycle Management** – Irina Stipanović & Andreas - Hartmann (University of Twente)

Fred Westenberg is having a lecture on the importance of visual inspections for bridge management

Our member of the External Advisory Board is having a guest lecture on standardization perspective for bridge lifecycle management

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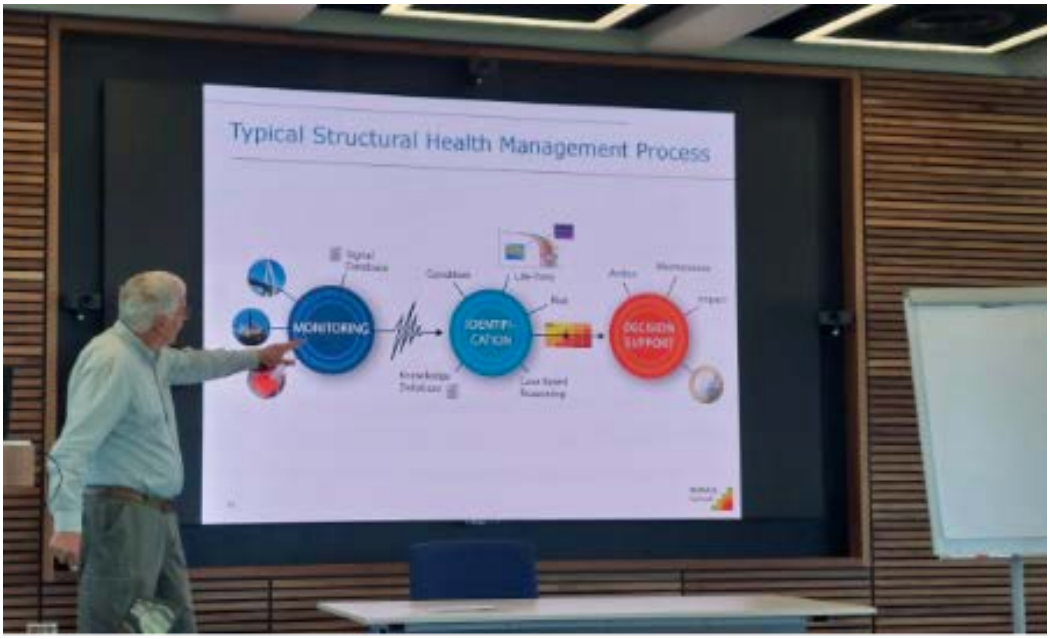
Our member of the External Advisory Board, Helmut Wenzel



Group picture during the 1st BRIDGITISE training school

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Case Study

One of the central activities of the training school was a hands-on case study focused on a 27 m steel girder bridge located on the University of Twente campus. The bridge, used by pedestrians and cyclists, is equipped with a range of SHM systems and provided an ideal setting for applying the methods introduced during the lectures.

Working in multidisciplinary teams, participants collected and analysed structural data using techniques such as vibration monitoring, computer vision, and digital inspection tools. The goal was to assess the condition of the bridge and outline possible maintenance and management actions based on the results.

Facilitated by Dr. Rolands Kromanis, the case study challenged participants to integrate knowledge across domains (engineering, data science, and asset management), foster collaboration, and think critically about the complexities of real-world bridge maintenance.

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Best Performing Group Award

The training school concluded with final group presentations, where participants showcased their case study findings and proposed bridge management strategies. Among the teams, one stood out for its innovative approach, technical depth, and clear communication. Congratulations to Elie Issa, Liv Breivik, Qing-Chen Tang, Mohsen Rezvani Alile, and Tommaso Panigati for receiving the Best Performing Group Award in recognition of their exceptional teamwork and well-rounded project outcomes.

The best performing group of the training school

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Upcoming events and initiatives

The BRIDGITISE project has a dynamic agenda for the rest of 2025 and beyond, focusing on end-users workshops, research workshops, and other outreach activities.

🔹 End-Users Workshop
📍 Location: Ljubljana, Slovenia
📅 Date: January 2025

This event will foster meaningful engagement between DCs and industry stakeholders. A highlight will be the “speed-dating” sessions, where DCs—grouped by research themes—will engage in focused, time-efficient discussions with end-users. Participants will prepare short briefs outlining their research challenges, digital tools, and expected impact, enabling targeted feedback and potential collaboration.

🔹 Research Workshop
📍 Location: Ljubljana, Slovenia
📅 Date: January 21-22, 2026

This workshop will serve as a cornerstone for scientific development within the project. DCs will deliver concise 5-minute presentations in front of the consortium, covering their research challenge, digital technologies, and anticipated innovation. The format will combine thematic roundtable discussions and live feedback sessions, creating a collaborative, non-evaluative space to refine research questions and promote integration among the individual projects of DCs.

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🔹 Bike Tour & Social Event
📍 Location: Adda River, near Mantua, Italy
📅 Date: September 2026

This event combines sustainability, public engagement, and informal networking in a unique setting. Participants will cycle along the scenic Adda River, with a stop at the Brivio Bridge for live SHM demonstrations using smartphones, drones, and sensors. The tour will also feature cultural highlights, including a visit to Leonardo's historic ferry in Imbersago, offering a memorable mix of science, community, and heritage.

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