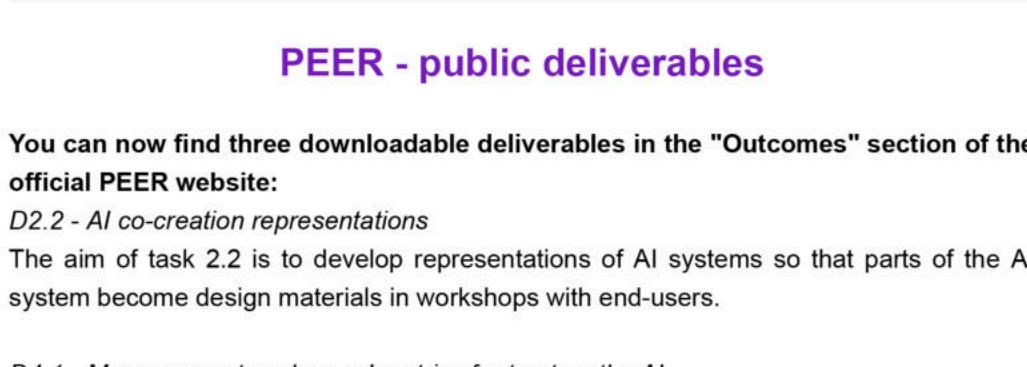


## PEER Newsletter - Issue 2

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101120406.



In this newsletter, you will find a recap of the activities performed by PEER.

### PEER - public deliverables

You can now find three downloadable deliverables in the "Outcomes" section of the official PEER website:

#### D2.2 - AI co-creation representations

The aim of task 2.2 is to develop representations of AI systems so that parts of the AI system become design materials in workshops with end-users.

#### D4.1 - Measurement scales and metrics for trustworthy AI

T4.1 focused on identifying reliable measurement scales for evaluating trustworthy AI, forming the foundation of the AIA index. This deliverable (D4.1) defines key concepts of trust and acceptance and compiles measurement tools to support the AIA index development.

#### D6.3 - DISSEMINATION & COMMUNICATION PLAN

The dissemination and communication plan is the main guideline for the execution of the D&C activities. It gives an overview of the whole D&C activities foreseen throughout the project.

[DOWNLOAD](#)

### ADRA 2025: Future-Ready: On-Demand Solutions with AI, Data, and Robotics with sister projects in BXL and ADRA Forum in Eindhoven, NL

PEER had yet another successful participation at the recent ADRA event, where we joined forces with our sister projects to tackle some of the most pressing innovation questions in AI. Questions were addressed such as:

How can trustworthiness and transparency in AI systems be balanced with technical complexity to maintain user empowerment?

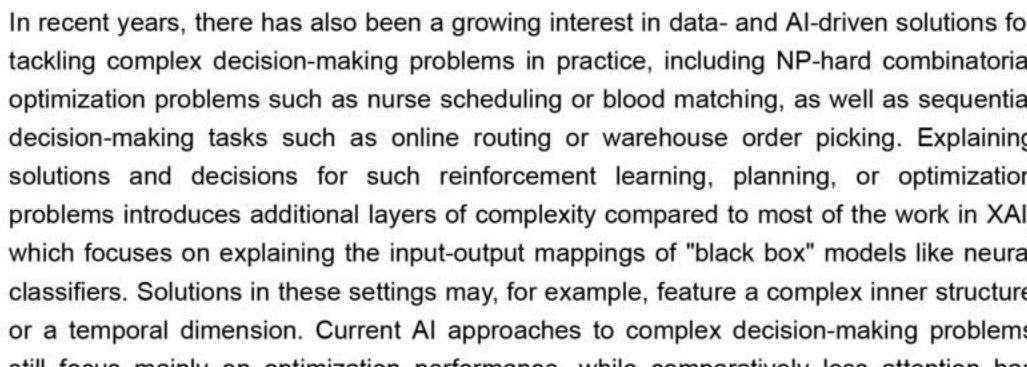
What frameworks or methodologies are you considering to evaluate the societal impact of your AI systems?

How does human feedback shape your project's AI lifecycle, and what mechanisms ensure its effective integration?

We shared strategies that have proven effective in fostering collaboration across disciplines, while also acknowledging the challenges that remain.

We further proposed scalable solutions in ethical AI design. Practical steps were proposed to address ethical concerns such as bias, privacy, and misuse in AI design, ensuring our systems are both fair and secure.

[LINK](#)



### PEER Workshop accepted at the 28th European Conference on Artificial Intelligence (October 25-30, 2025, Bologna, Italy)

While explainable artificial intelligence (XAI) has become massively popular and impactful over the last years and has become an integral part of all major AI venues, progress in the field is, to some degree, still hindered by a lack of agreed-on evaluation methods and metrics. Many articles present only anecdotal evidence, and the large variation in explanation techniques and application domains makes it challenging to define, quantify, and compare the relevant performance criteria for XAI. This leads to a lack of standardized baselines and established state-of-the-art, making the contributions of newly proposed XAI methods difficult to evaluate. The discussion on how to evaluate explainability and interpretability, whether through user studies or with computational proxy measures, is ongoing.

In recent years, there has also been a growing interest in data- and AI-driven solutions for tackling complex decision-making problems in practice, including NP-hard combinatorial optimization problems such as nurse scheduling or blood matching, as well as sequential decision-making tasks such as online routing or warehouse order picking. Explaining solutions and decisions for such reinforcement learning, planning, or optimization problems introduces additional layers of complexity compared to most of the work in XAI, which focuses on explaining the input-output mappings of "black box" models like neural classifiers. Solutions in these settings may, for example, feature a complex inner structure or a temporal dimension. Current AI approaches to complex decision-making problems still focus mainly on optimization performance, while comparatively less attention has been paid to explainability; and there is an even more significant gap in research on evaluation metrics and methods for explainability in this context.

The "Evaluating Explainable AI and Complex Decision-Making (EXCD)" workshop at ECAI 2025 in Bologna will bring together researchers interested in XAI in general and in AI planning, reinforcement learning, and data-driven optimization in particular, to discuss recent developments in XAI evaluation and collaboratively develop a roadmap to address this gap.

[LINK](#)

### HUMAN-AI COLLABORATION CARDS

The human-AI collaboration cards are designed as a tool for including the intended end-users of an AI system in development. Their aim is to ensure that the system is developed according to the end-users needs, requirements, and specific contexts of use, thus ensuring better adoption and fit-for-purpose use. The cards are designed to be used in a workshop setting and to discuss with the end-users what their ideal human-AI collaboration should look like.

The card set consists of two different cards sets:

AI collaborator cards describe the types of human-AI collaboration. These cards serve as a conversation starter to discuss how the end-users envision their ideal human-AI collaboration.

AI characteristic cards describe several elements of a human-AI collaboration, such as trust enablers, attributes, capabilities, qualities, tone of voice, and interface types. By using these cards, the end-users can elaborate more on what their ideal human-AI collaboration would look like by expressing what characteristics they deem more important, or less.

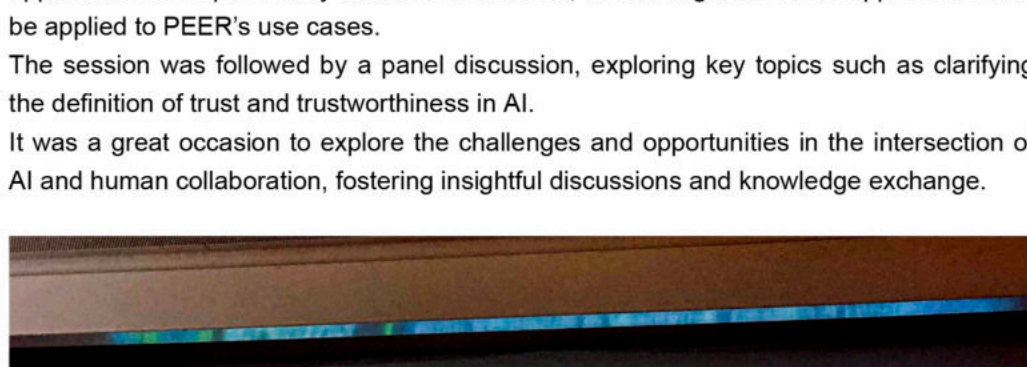
By making use of the card set, end-users can build their ideal AI partner and define the characteristics, features, and elements of the human-AI collaboration. A fully guided workshop with the help of the human-AI collaboration cards is designed. This workshop and cards set can be used by any team developing an AI system and wants to ensure meaningful user participation in the design of the system.

[DOWNLOAD / INFO](#)

### PEER - VIDEO Introduction

PEER: THE HYPER EXPERT COLLABORATIVE AI ASSISTANT - video introduction by Ann Nowe, Rob Heyman, Diederik M. Roijers.

A video featuring interviews and recorded footage from the PEER project kick-off meeting held in Brussels, Belgium, at VUB Vrije Universiteit Brussel is available. It provides a detailed explanation of certain components of the PEER project.



### PEER review meeting in AMSTERDAM

"Redefining Human-AI Collaboration for Complex Decisions"

The review meeting of the PEER project was held on 6th December 2024 in Amsterdam. This meeting was kindly hosted by our partner **Gemeente Amsterdam** at their facilities at **Marineterrein Amsterdam**.



### ADRF 2024 - Workshop

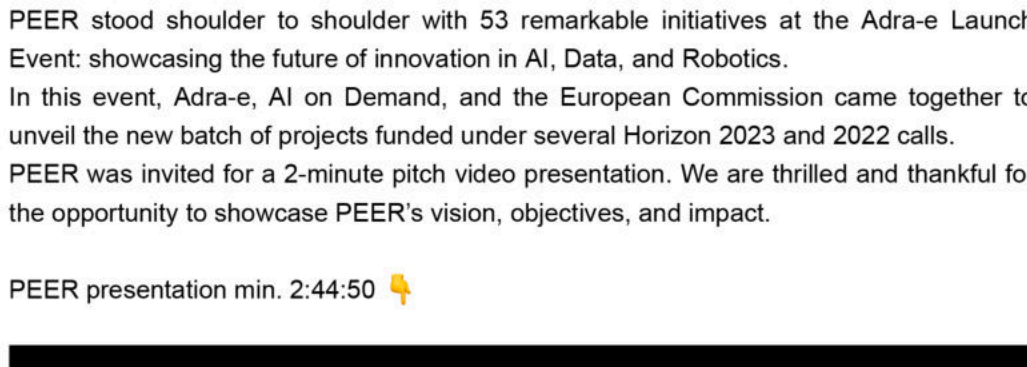
We had a joint workshop with our project cluster: AI4REALNET Projects, THESIS 5.0, TANGO Project, and HumAlne project on the topic "From Algorithms to Assurance: Designing Human-Centric AI to Enhance Collaboration, Trust, and Acceptance."

During the session, Ann Nowe from Vrije Universiteit Brussel presented the PEER project and its methodology, focusing on how PEER addresses explainability and trustworthiness in sequential decision-making.

Professor Ann Nowe provided an in-depth overview of the taxonomy of current approaches to explainability and trustworthiness, discussing how these approaches can be applied to PEER's use cases.

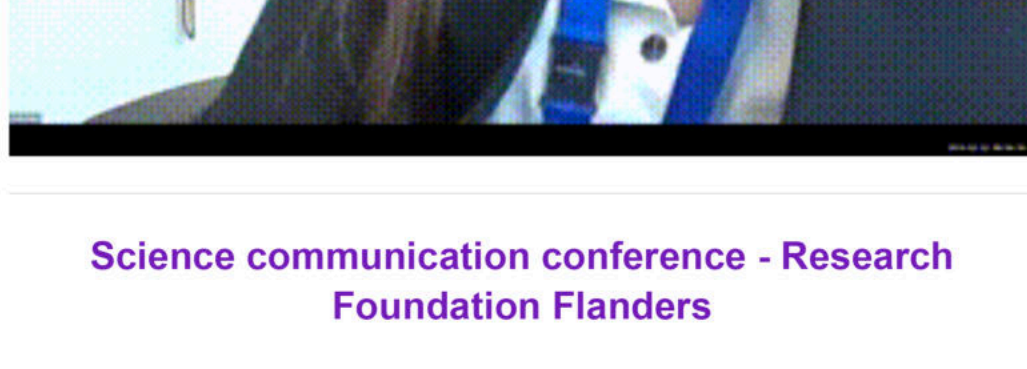
The session was followed by a panel discussion, exploring key topics such as clarifying the definition of trust and trustworthiness in AI.

It was a great occasion to explore the challenges and opportunities in the intersection of AI and human collaboration, fostering insightful discussions and knowledge exchange.



### PEER consortium meeting in Porto

PEER project gathered at the **INESC TEC** headquarters in Porto for the General Assembly. During the meeting, the progress made so far was reviewed, and future challenges were discussed.



### PEER presentation Adra - AI-Data-Robotics-Association Event

PEER stood shoulder to shoulder with 53 remarkable initiatives at the Adra-e Launch Event: showcasing the future of innovation in AI, Data, and Robotics.

In this event, Adra-e, AI on Demand, and the European Commission came together to unveil the new batch of projects funded under several Horizon 2023 and 2022 calls.

PEER was invited for a 2-minute pitch video presentation. We are thrilled and thankful for the opportunity to showcase PEER's vision, objectives, and impact.

PEER presentation min. 2:44:50 [📌](#)



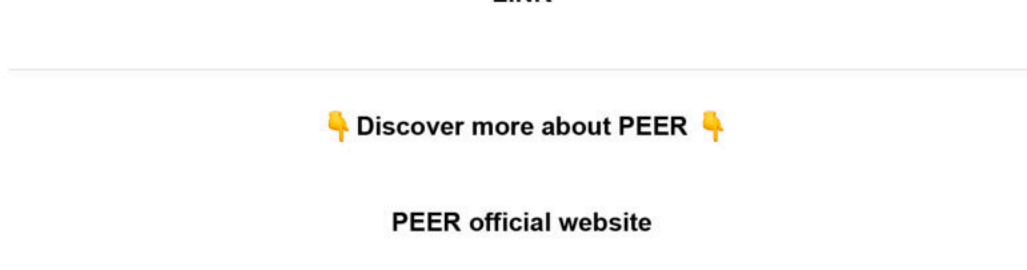
### Science communication conference - Research Foundation Flanders

Professor Ann Nowe from Vrije Universiteit Brussel, co-ordinator of the PEER project, participated in a science communication conference co-organized by Science Europe, Research Foundation Flanders - FWO, and F.R.S. - FNRS under the auspices of the Belgian Foundation of the Council of the European Union 2024.

The purpose of this event was to bring European policymakers and stakeholders together to highlight the importance of open, Ethical Science communication in research processes and to increase awareness of the need to address scientific communication more formally in research programs, as one of Science Europe's priorities is to "strengthen the voice of science in and for society."

We recognize the importance of effective communication with policymakers. Indeed, one of the priorities of the project is to address potential communication gaps by promoting a deeper understanding of human-AI interaction.

PEER project aims to build interactive, understandable, and trustworthy sequential decision-making AI systems that empower end-users by providing them with flexible, personalized solutions adapted to their requirements and capabilities. It can directly contribute to the European Commission's priorities of "An economy that works for people" by adopting a human-centric approach to digital technologies.



[Follow us on social media!](#)

### PEER @ AMAAS Conference in New Zealand

If you would like to unsubscribe, please [click here](#). Professor Ann Nowe, director of the AI Lab at Vrije Universiteit Brussel (VUB), participated in the AMAAS Conference in New Zealand.

During her talk, Professor Nowe explored the evolving landscape of Reinforcement Learning (RL), highlighting how modern Deep RL has surpassed traditional methods that ensured policy convergence but restricted real-world applications. She addressed the growing challenges of transparency and explainability in RL, which remain underexplored despite increased attention in the broader Machine Learning field.

Her presentation provided a comprehensive overview of state-of-the-art approaches, including policy distillation, formal guarantees, and the fairness implications of RL systems. This discussion reinforced the commitment to advancing trustworthy AI and human-AI collaboration.

[LINK](#)

[Discover more about PEER](#)

[PEER official website](#)