



Iceland
Liechtenstein
Norway grants

AI4Deliberation

E. Tambouris
University of Macedonia and ITI/CERTH

Current Situation and Specific Needs

- Decline in citizen **trust** in **democracy**.
- **Online participation platforms** suffer from low participation, opaque processes and low-quality citizen contributions.
- **Deliberation** improves democratic dialogue but does not scale
- Trade-off between **deliberation quality** and **participation quantity**.
- Shift from text to audio/**video** in **online** communication (particularly between youngsters)
- **Underuse** of **AI** in digital deliberation; **Unclear impact** of AI on deliberation.
- **Unknown fit** of existing **AI solutions** for deliberation.
- Lack of **guidelines** for AI use in **government deliberations**.



SotA: Participation and Deliberation

- Deliberation
 - Aims to increase quality of discussion
- Participation
 - Aims to increase number of participants
- Deliberation and participation methods
 - deliberative polling
 - world café
 - citizen jury
 - civic lottery
 - citizens' initiatives reviews
 - Deliberative Delphi, and many others.
- Deliberation platforms
 - Enabling online deliberations to take place in various contexts and countries.
 - E.g., DebateGraph, Polis, assembl, decidim, citizen lab, adhocracy+, loomio, delib, civocracy, fluicity, discuto, ethelo
- Gamification
 - Motivating civic participation
 - e.g. use of scoreboards, skill levels, mission and avatars



Societal and Technology Trends

- New world: people communicate online increasingly via **audio** and **video**
- (Gen) **AI**: new capabilities in all human activities
- In mass deliberation, AI can assist in
 - facilitation of discussions; measuring deliberation quality;
 - Translation; fact-checking; sharing consensus,
 - clustering and organizing arguments; tracking overlaps;
 - enabling multi-modal communication; enabling gamification, ...
- However, we are unsure about integration in existing (deliberation) processes, citizens' uptake, trust, impact, as well as overall impact



Vision of AI4Deliberation

The vision of the project is to **equip governments** with a *theoretically solid and empirically tested* set of **AI-enabled deliberative processes**, a comprehensive **framework** with practical **guidelines**, and an **AI toolkit** that will **enable** them to **design**, **institutionalise**, **operate** and **evaluate** *transparent, ethical, inclusive, multimodal, gamified*, **mass citizens deliberations** **resulting** in more **active** and **inclusive citizenship** and **increased trust** to rule-of-law based institutions by citizens.



Indicative AI4Deliberation platform interface

1. Skill points
2. Multimodal input (video, audio, text)
3. AI moderation
4. AI-enabled new features – various processes

The screenshot displays the AI4Deliberation platform interface, divided into several sections:

- THE SCENARIO:** Lisa is using her mobile phone to connect to the city's deliberation platform. In light of a new policy proposal, she wants to participate in a discussion surrounding the role AI should play in decision-making in a medical context. The app connects Lisa with other local participants from her city in an online discussion setting. A virtual assistant joins and aids the group's deliberation with engaging statements, so that they, together, can iteratively build an understanding of the discussed topic before the group is presented with multiple consensus statements on which they can choose to agree or disagree. Insightful statements made during the conversation can be liked by other participants, which in turn not only increase Lisa's skill level on the platform but also motivate her to participate more thoughtfully. Various gamification elements such as polls, true or false questions, judgement calls, or other variants keep the participant engaged while fostering an insightful and interactive environment.
- THE SETUP:** Participants meet in an online discussion setting facilitated by an AI moderator.
- CONVERSATIONS:** The virtual assistant aids the discussion until e.g. a shared consensus is reached.
- KEY TAKE AWAYS:** A summary highlighting key takeaways and showing progress.
- THE CHALLENGE:** "What role should AI play in decision-making in a medical context?"
- DISCUSSION:** A chat interface showing messages from Kevin, Allyson, You, and the AI Moderator. A red box highlights a milestone proposal: "Humans are better judges of the context in which a diagnosis is made".
- TEAM:** A list of participants: Kevin Logowitz, Allyson, and You. A red box highlights the interaction icons (heart, microphone, video, chat) for Allyson.
- PROFILE:** Lisa Williams, Contribution Level Level 10, 29 Good Insights. A red box highlights the contribution level and insights.
- PROCESS:** A sidebar showing discussion progress: GOOD INSIGHT, MILESTONE, CONSENSUS, and OFF-TOPIC. A red box highlights the milestone and consensus sections.

Red annotations highlight specific features:

- 1:** Points to the 'Contribution Level' and '29 Good Insights' in the user profile.
- 2:** Points to the interaction icons (heart, microphone, video, chat) for Allyson in the team list.
- 3:** Points to the 'AI Moderator' message in the discussion chat.
- 4:** Points to the 'MILESTONE' and 'CONSENSUS' sections in the process sidebar.



Indicative AI4Deliberation Gamification Elements

5. AI - enabled new features
– consensus
6. Gamifications processes to
gain skill points

👍 CONSENSUS
Fostering a sense of impact by enabling participants to state their opinion clearly.

Thanks for participating in this group discussion with Kevin and Allyson

The three of you have reached the following **consensus statements**:

- "We need for more oversight for medically-focused AIs"
- "AI cannot be held accountable for a faulty diagnosis"
- "Doctors must take the final decision in medical processes"

You have also touched on these **off-topic statements**:

- "Personal healthcare is also impacted by AI"

5

🎮 GAMIFICATION
Keeping Lisa and her group engaged through gamified processes.

6

🔔 GET INFORMED
Measuring your expertise about given topic

🕒 06:55 / 15:00

True or False?
Current regulations mandate that an AI's medical decision must always be reviewed by a certified healthcare professional before being acted upon.

🔔 Correct Answer
True. Generally, current regulations and guidelines in the healthcare industry require that decisions made by AI systems, particularly those impacting patient care, must be reviewed and interpreted by a certified healthcare professional before any action is taken. This is to ensure patient safety, the accuracy of the AI's recommendations, and to comply with medical and ethical standards. However, specific regulations can vary by country and region, and the field is evolving rapidly with advancements in AI. ¹

True or False?
All AI medical advice must be explainable and transparent to the patient under health informatics law.

🗳️ MINI POLLS
Vote for one of the three responses

🕒 09:41 / 15:00

Poll
In the context of medical decision-making, should AI only provide recommendations, or should it also be allowed to execute certain decisions under predefined conditions?

Poll
In the context of medical decision-making, should AI only provide recommendations, or should it also be allowed to execute certain decisions under predefined conditions?

🔔 DOES THIS EVEN
Judge if the following case makes sense.

🕒 01:19 / 15:00

Does this even?
The city is considering a policy where AI will automatically decide the treatment for patients in emergency situations, without any human oversight. The AI system is relatively new and has only been tested in a limited number of cases.

Judge whether this scenario makes sense. Consider the reliability of the AI system and the absence of human oversight in critical healthcare decisions.



AI4Deliberation in a Nutshell

Democracy

Deliberative, inclusive, participatory to complement rather than replace representative democracy.
Institutionalised AI-enabled multimodal (video, audio, text), gamified, Deliberative Processes: AI deliberative polling, AI mass deliberation, AI citizens assemblies, AI mini-publics etc.

Organisations

Holistic Framework to design, operate, evaluate institutionalised AI deliberations, which includes investment decisions, framework condition, guidelines, and roadmaps

AI4Deliberation



Society

Increased: civil participation, convenience, trust, acceptance, youth engagement, inclusiveness
Decreased: polarization, misinformation

Artificial Intelligence

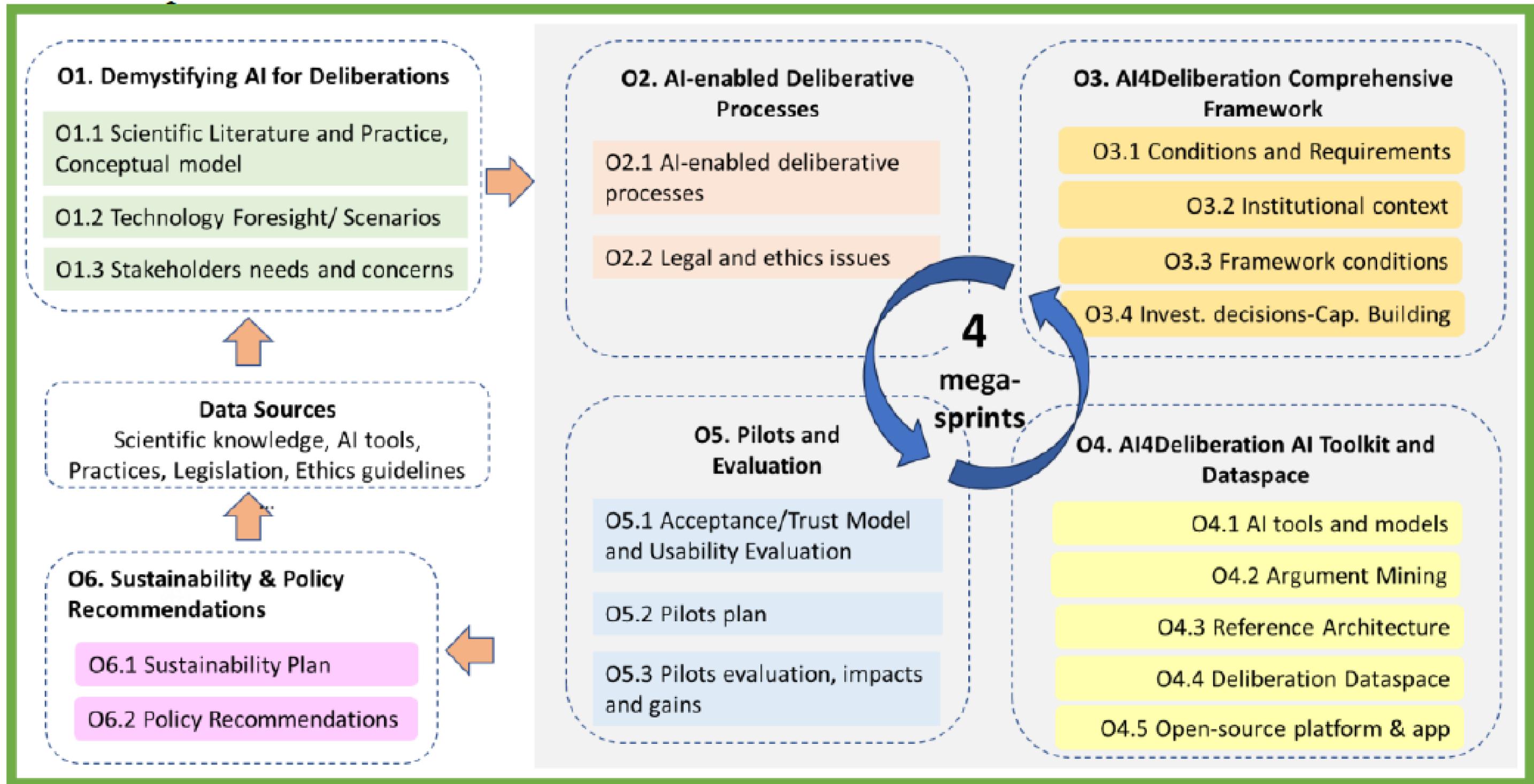
Principles: legal, ethical, trustworthy, transparent, low-risk
Features: multimodal, gamified AI features, e.g. summarization, argument mining, fact-checking, moderation etc.

Architecture & Platforms

API-based open specifications Reference Architecture, compatibility with existing deliberation platforms, scalability, interoperability, cloud-enabled



Overall Approach



Pilots and Evaluation

- **Four trial pilots**
 - Local level
 - National level
 - International level
- **Evaluation plan** for each of the first three mega-sprints
 - Evaluation of AI deliberation methods
 - Evaluation of the framework
 - Evaluation of the AI toolkit

Country	Level	Topic	Cur. Platform	Pilot Platform
Greece	National	Law to be decided during pilot	WordPress	AI4Deliberations + app
Over 100 countries	International	Long Covid	DebateGraph	DebateGraph + AI features
Italy	National	Climate change	Ad hoc	Common Ground + project's features
Germany	Local	To be decided during pilot	Consul	Consul plus project's features



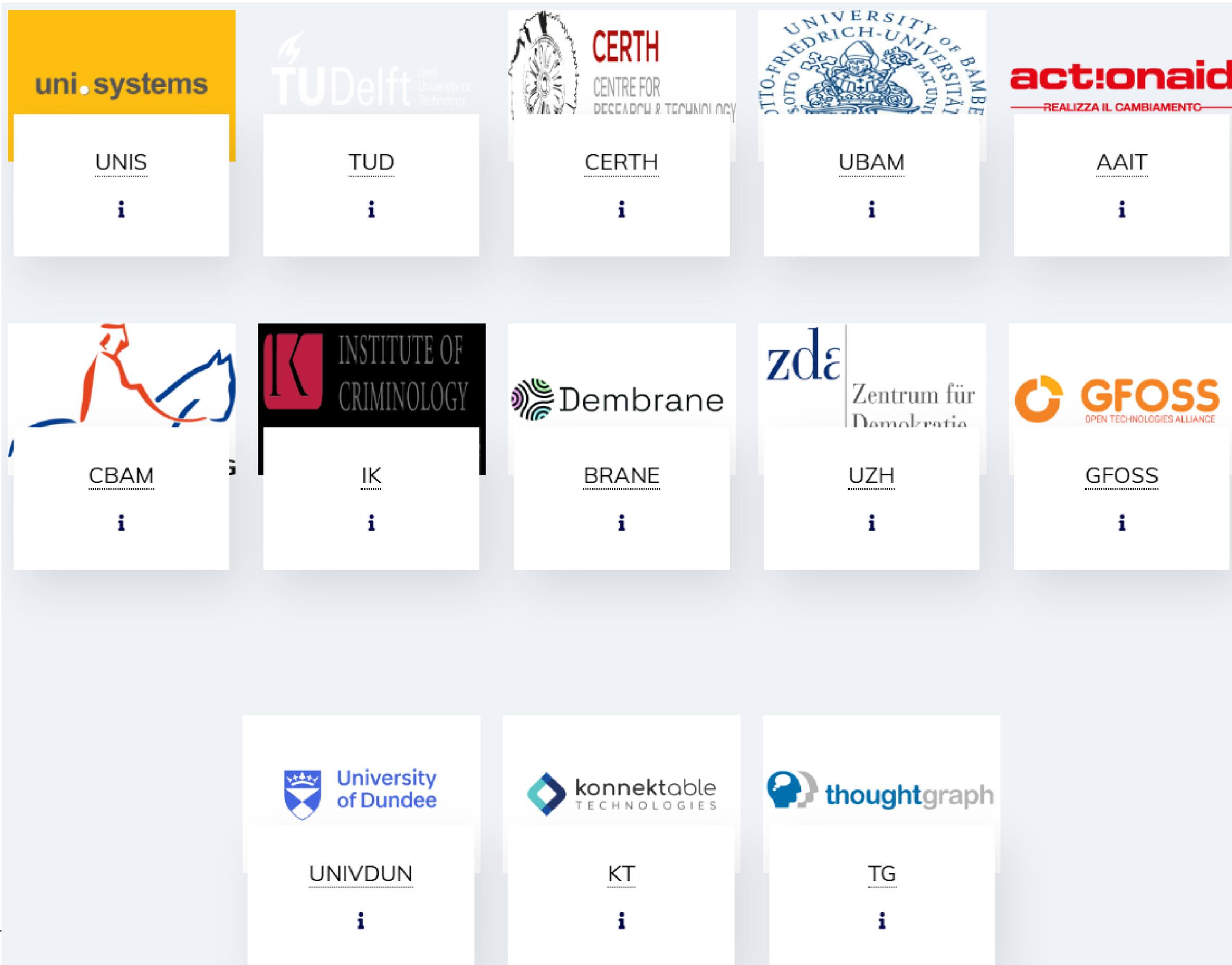
Summary: Expected Results

- Integration of **multimodal AI** and **gamification** in **deliberation process designs**.
- Development of practical **guides, roadmaps** and training materials for public authorities.
- Enhancement of an **existing open-source platform** to accommodate multimodal, gamified **AI** deliberations.
- Enhancement of **two existing deliberation platforms** with multimodal, gamified AI features.
- Availability of **AI features** supporting deliberation via **APIs**.
- Novel **methods** to **assess acceptance** and **trust** in AI-assisted deliberations.
- Establishment of a deliberation **Knowledge Graph** with structured, high-quality content.
- Formulation of **policy recommendations** for integrating AI into deliberative processes.
Collection of **empirical data** on AI use in deliberations in both test and real-world settings.



Thank you for your attention.

<https://www.ai4dproject.eu/>



Iceland 
Liechtenstein
Norway grants

Thank you!

www.eeagrants.org

Facebook, Twitter, LinkedIn, Instagram

YouTube: [EEANorwayGrants](https://www.youtube.com/EEANorwayGrants)

Mail: info-fmo@efta.int

