

## **itag Atlantec AI Challenge 2025 – Rules of Engagement**

### **Participant Diversity & Team Composition**

Diverse teams are encouraged in terms of expertise, gender, and backgrounds. Each team should consist of approximately four participants, ensuring a balance of technical, strategic, and communication skills.

Recommended Team Roles:

- Team Lead (1): Oversees direction and ensures adherence to objectives.
- Developer (2): Focuses on AI model development and implementation.
- Product Lead (1): Provides domain-specific insights based on the problem statement.

All teams must be formed before the event starts, with at least 90% team formation achieved beforehand. Participants should form a team before registering on Eventbrite. Late registrations will not be accepted, and participant names must be entered accurately for certification purposes.

### **Ethical and Systemic Requirements**

All AI solutions must adhere to ethical AI principles, ensuring fairness, transparency, and accountability. Teams should conduct self-assessments of their projects for ethical compliance.

### **Pre-Event Engagement, Training & Networking**

To help participants prepare for the AI Challenge, the following pre-event support is available:

A Team Forming Event will be held in April (Date TBD) to support individual participants.

An in-person Meet & Greet session and AI Challenge launch event will happen on 6th May and attendance is strongly encouraged to learn more about AI fundamentals and cybersecurity.

### **Event-Specific Rules**

Teams are required to present their solutions in a structured format with a 5-minute pitch/demo followed by a 2-minute Q&A session. Judges will evaluate solutions based on defined criteria, including innovation, ethical compliance, and societal impact. The quality and clarity of the presentation will be part of the evaluation criteria. Teams must adhere to the event's schedule and complete all deliverables within the allocated time frames.

## Available Resources & Tools

Participants are encouraged to bring their own toolsets, but for those needing additional resources, a paved path will be provided e.g., Google's Gemini, OpenAI's ChatGPT, cloud credits, and datasets.

Cloud & Compute Access:

- Google Cloud Free Credits (\$300) for 3 months (for first-time users).
- Google Vertex AI Credits (\$1000) for first-time users.
- Pre-configured Virtual Machines (VMs) with Ubuntu (2-core CPU, 15GB SSD, 2GB RAM).
- Access to AI APIs: Google Gemini, OpenAI ChatGPT-4o, and Google AI Studio.
- Google Cloud instructions and API key setup details are available from the Organisers as required.

Finalist teams will receive extended API access to Google's Gemini, OpenAI's ChatGPT-4o, and additional cloud resources for refining their solutions beyond the AI Challenge to allow continued development in preparation for the National AI Meet in Q4 2025.

## AI Challenge Format & Timeline

The AI Challenge is structured across multiple phases:

Phase 1: Planning & Preparation (Jan – May 2025): Securing datasets, cloud resources, and technical infrastructure. Hosting webinars and online forums for team formation.

Phase 2: Training & Engagement (6th May 2025): Event Kick-Off at 5:00 PM (The Portershed, Market St.). Pre-challenge workshops on AI fundamentals, ethical AI, and cybersecurity.

Phase 3: AI Challenge Execution (16th May 2025):

- 8:30 AM: Reporting & Coffee - Participant check-in and networking.
- 09:15 AM – 1:00 PM: Build, Collaborate, and Document - Teams refine solutions with mentor support.
- 1:00 PM – 1:45 PM: Lunch (Pizzas & Drinks).
- 1:45 PM – 3:45 PM: Prepare to Present - Finalizing solutions and rehearsals.
- 3:45 PM – 5:00 PM: Pitch to the Panel - 5-minute pitch + 2-minute Q&A.

Phase 4: Post-Challenge Opportunities (June 2025): Finalist teams will receive extended AI API & cloud access to refine their solutions. Event Organisers will explore avenues for selected teams to present at the National AI Conference (Q4 2025, Galway).

## **Problem-Solving Criteria & Datasets**

Teams must address predefined societal challenges aligned with Ireland's National AI Strategy. Solutions must be innovative, scalable, and demonstrate technical depth.

Key Focus Areas & Dataset Sources:

- Healthcare: HSE, CSO, World Bank - Disease prevention, telemedicine, patient management.
- Housing: Housing Agency, CSO - Affordable housing, smart housing, urban planning.
- Economy & Finance: World Bank, CSO - Economic forecasting, fraud detection, tax compliance.
- Environment: EPA, CSO - Climate change, waste management, biodiversity conservation.
- Transport: Transport Infrastructure Ireland, CSO - Traffic management, sustainable transport.

## **Judging & Evaluation Criteria**

Teams will be evaluated on the following criteria:

- Problem Definition: Alignment with systemic societal challenges.
- Innovation: Creativity and originality in solving National AI challenges.
- Technical Depth: Teams will submit the codebase to help verify the solution is technically sound.
- Ethical Compliance: Adherence to fairness, transparency, and accountability.
- Skill Development Impact: Evidence of learning and interdisciplinary teamwork.
- Presentation Quality: Clarity, coherence, and demonstration of insights.

A working prototype is required for all submissions.

Award Categories:

- Best Technical Solution.
- Most Innovative Solution.
- Upskilling Excellence Award.
- Additional awards may be introduced based on the nature of the solutions submitted

### **Post-Event Engagement & Industry Opportunities**

Winning teams may be invited to present their solutions at the National AI Conference (Q4 2025, Galway) with networking opportunities with senior AI leaders across Industry.

Teams are encouraged to continue engagement with the ITAG community forums for future AI challenges and collaboration opportunities.