



EUROPEAN
DEFENCE
AGENCY

HEDI

HEDI 2.0

ADVANCING DEFENCE INNOVATION
FROM IDEA TO CAPABILITY



From HEDI to HEDI 2.0

The Hub for EU Defence Innovation (HEDI) was established within the European Defence Agency (EDA) to drive innovation for military capabilities. Ministers of Defence approved HEDI on 17 May 2022 as a key deliverable of the EU's Strategic Compass for Security and Defence.

The Hub reflects EU Member States' strengthened commitment to cooperate in defence innovation. Europe needs innovative armed forces to stay ahead of adversaries, reach defence readiness, and turn cutting-edge technology into a real operational advantage.



Initial portfolio

HEDI was designed to strengthen EDA's existing innovation activities and initiate new ones, in close cooperation with Member States and EU stakeholders. It also ensured synergies with related European Commission activities, notably the EU defence innovation scheme (EUDIS), and coherence with NATO innovation initiatives. HEDI has built upon EDA's innovation framework, which supports collaborative defence innovation through three key pillars:

1. Identify transformative ideas and innovators
2. Implement these ideas into actionable solutions
3. Expand outreach to ensure widespread adoption

Lessons learned

HEDI's early work delivered solid results and valuable lessons. By engaging a wide range of stakeholders across several thematic phases, HEDI identified an important gap: promising early ideas were not sufficiently connected to real operational use.

In response, HEDI broadened its outreach, strengthened its focus on understanding military needs, and refined the approach. The services were consolidated around clear objectives, and innovative procurement methods were applied to bring the most promising solutions into operational use more quickly.



HEDI 2.0: Faster transition from the lab to the field

Core objectives



HEDI 2.0 streamlines ideas into capabilities. The upgraded portfolio focuses on making the transition from research to deployment faster, clearer, and better coordinated.

HEDI 2.0 shortens time-to-field by combining frontier insights, challenge-driven development, through operational experimentation OPEX campaigns, and fit-for-purpose procurement. The result: faster uptake of high-impact solutions, stronger European technological sovereignty, and practical support to Member States as they qualify, integrate, and scale capabilities aligned with shared EU objectives.

Alignment with EU strategic priorities

HEDI is tightly aligned with the EU's defence policy stack. It operationalises demand signals from the Capability Development Plan (CDP) and the Overarching Strategic Research Agenda (OSRA), and directly supports the European Council conclusions on EU defence priority areas. In line with the European Commission's White Paper on Defence and the Readiness 2030 roadmap, HEDI accelerates the transfer of critical capabilities to the field, makes defence systems more resilient and interoperable, and fosters Europe's technological edge. Through targeted scouting, structured experimentation, and

innovative procurement, HEDI links research to capability delivery, turning EU-level priorities into outcomes that Member States can buy, qualify, and deploy.

Four integrated services

1. DEFENCE FRONTIER INSIGHTS (DFI)

A core goal of HEDI 2.0 is to identify and support high-potential innovations early to empower Member States with relevant insights to meet evolving security and defence challenges. At the centre of this effort is the **Defence Frontier Insights (DFI)** – HEDI's early-warning and analysis service. DFI monitors defence and non-defence sectors and identifies emerging technologies, new players and promising trends. Through technology watch and landscaping, military utility assessment, and market consultation, the DFI provides actionable intelligence that:

- Informs the entire innovation process, from research to deployment
- Optimises funding allocation to focus resources where they have the greatest impact
- Strengthens links between early-stage research, innovation, and capability development by using EDA's prioritisation tools

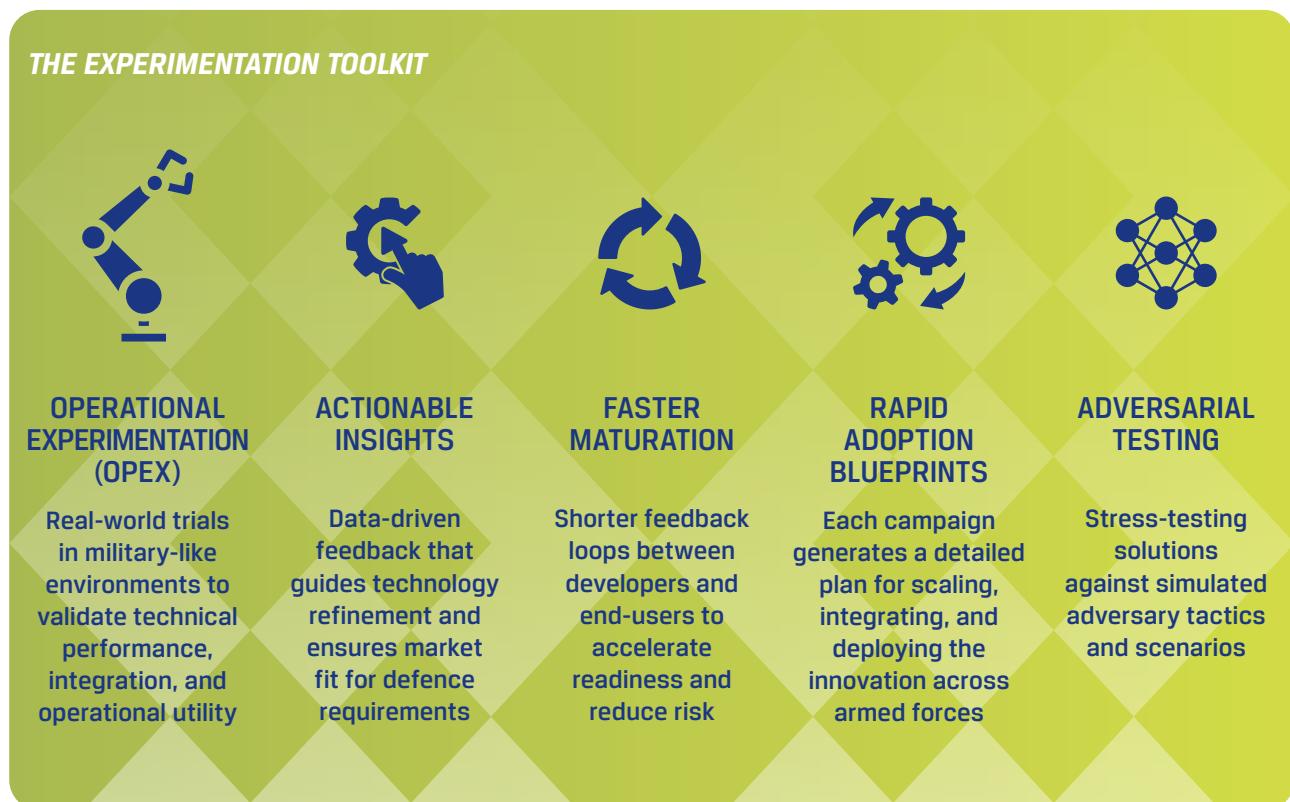
2. INNOVATORS FORGE



The **HEDI Innovators Forge** helps European innovators transform ideas into solutions for concrete military challenges. The Forge focuses on military utility and operational relevance, supporting non-traditional innovators through a structured development cycle with four main benefits. The Forge works through a phase-based development model:

- **Streamlined path:** A smooth journey from idea to demonstrator, reducing time, complexity, and the need for multiple funding rounds
- **Focused resources:** Funding prioritises the most promising solutions with real defence potential
- **Trusted validation:** Each phase tests solutions in increasingly realistic conditions, giving Member States confidence in their readiness
- **Stronger connections:** Links innovators to EDA working bodies (especially CapTechs) and strengthens networks across the defence ecosystem

3. UPTAKE OF INNOVATION



HEDI 2.0 introduces a robust **experimentation toolkit** to accelerate the rapid adoption of emerging and disruptive technologies by the armed forces. The **Uptake of Innovation** service offers structured, scalable

pathways for validating and adopting new technologies. It encompasses several layers of experimentation tailored to technological maturity and leverage flexible, fit-for-purpose procurement methods.

Highlight: OPEX 2025 – Europe's first operational defence innovation campaign

Launched in January 2025 under the HEDI umbrella, OPEX 2025 marked a milestone in European defence innovation as the first EU-level operational experimentation campaign. Hosted by the Italian Army at one of its test centres, the CEPOLISPE facility near Rome, the campaign focused on testing Unmanned Aerial Systems (UAS/UAVs) and Unmanned Ground Systems (UGS/UGVs) in real-world, field-like conditions.

Purpose & approach

- Bridge the gap between research, innovation, and operational deployment
- Accelerate the adoption of emerging, disruptive technologies into EU capability development
- Test autonomous systems in realistic operational environments
- Evaluate performance, integration, and interoperability under demanding mission scenarios

Participants

- Expert Working Group of 76 specialists from 14 EU Member States, plus Switzerland and Ukraine
- 6 European defence tech companies:
 - UAS: Beyond Vision (Portugal), UAS ALTUS (Greece), SCHIEBEL (Austria)
 - UGS: ALYSIS (Spain), PIAP (Poland), ARX ROBOTICS (Germany)

- Operational support provided by EDA, the Italian military authorities, and the French company EXTENSEE

Key outcomes

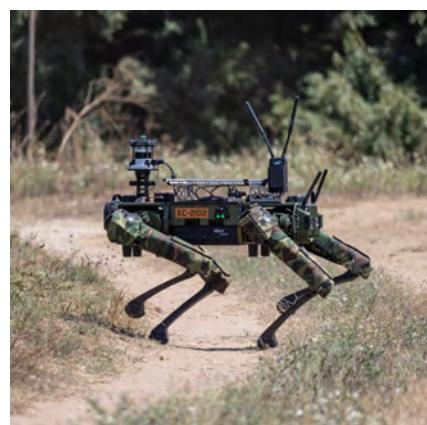
- Demonstrated multiple UAV and UGV systems in operationally relevant scenarios
- Delivered insights on challenges in integration and logistics
- Validated system readiness for capability development and adoption
- Established a blueprint for future OPEX campaigns involving international cooperation, end-user engagement, and capability planning alignment

Why it matters

OPEX 2025 exemplifies HEDI's mission to:

- Strengthen cooperation among Member States
- Promote innovation by supporting real-world testing
- Accelerate capability development across the EU
- Enhance strategic alignment between innovation and defence needs

[OPEX 2025 VIDEO](#)



Unmanned aerial and ground systems tested in real-world conditions during the OPEX 2025 campaign in Italy

4. STRENGTHENING CONNECTIONS

Beyond advancing technology, HEDI 2.0 also plays a vital role in strengthening **Europe's defence innovation ecosystem**. It connects key actors across Member States, industry, academia, and international partners. At the heart of this effort is the **European Defence Innovation Network (EDIN)**, a platform launched to foster situational awareness, share best practices, and align innovation efforts across national and EU levels. Bringing together Member States three to four times a year, EDIN provides a valuable forum to exchange on initiatives, build synergies, and advance a more coordinated European approach to defence innovation.

HEDI 2.0's flagship event is the **European Defence Innovation Days (EDID)**. It brings together innovators, end-users, policymakers, and investors. At the event, innovators showcase results, accelerate collaboration, and drive forward defence capability development through innovation.

HEDI 2.0 also works in close coordination with the European Commission and international partners such as NATO's DIANA (Defence Innovation Accelerator for the North Atlantic). These collaborations ensure synergies and help avoid fragmentation.

In 2026, HEDI 2.0 will launch the pilot **Defence Innovation Course (DEFIC)**, a dedicated programme for professionals in defence innovation across Europe. By developing a common understanding and promoting best practices, the course will create the defence innovation elite of Europe, further strengthen the growing network of innovation stakeholders, and bridge institutional, national, and disciplinary boundaries.

Highlight: European Defence Innovation Days 2025 (EDID 2025)

14–16 MAY 2025, KRAKÓW, POLAND

Held under the Polish Presidency of the Council of the EU, EDID 2025 brought together nearly 1,000 participants to Europe's flagship defence innovation event, fostering dialogue and collaboration. Notably, the event featured a high-level Ukrainian delegation, marking a significant step in closer EU-Ukraine defence innovation cooperation.

Purpose & Approach

- Strengthen cross-sector collaboration among defence, industry, and research actors
- Connect innovators directly with defence end-users and EU-level initiatives
- Showcase practical solutions, emerging technologies, and experimental formats
- Provide a platform for policy, technical, and operational exchange

Participants

- Ministries of defence and armed forces
- Defence industry leaders, start-ups and SMEs
- Research organisations and academia
- EU institutions and key international partners
- High-level Ukrainian delegation engaging with the European innovation community

Activities

- High-level plenary sessions and policy debates
- 90+ exhibition stands
- Makeathon focused on unmanned ground vehicles
- AI pitch battle highlighting dual-use defence applications
- Expert technical breakout sessions and hands-on innovation showcases

Why it matters

- Builds early collaboration pipelines
- Accelerates idea-to-prototype development
- Aligns innovation efforts across Europe
- Promotes mission-driven engagement between developers and end-users
- Demonstrates strong solidarity and shared innovation efforts with Ukraine

[EDID 2025 VIDEO](#)





Main stage of EDID 2025, set for discussions on accelerating defence innovation from concept to fielding



Cutting-edge unmanned aerial systems were on display throughout the exhibition



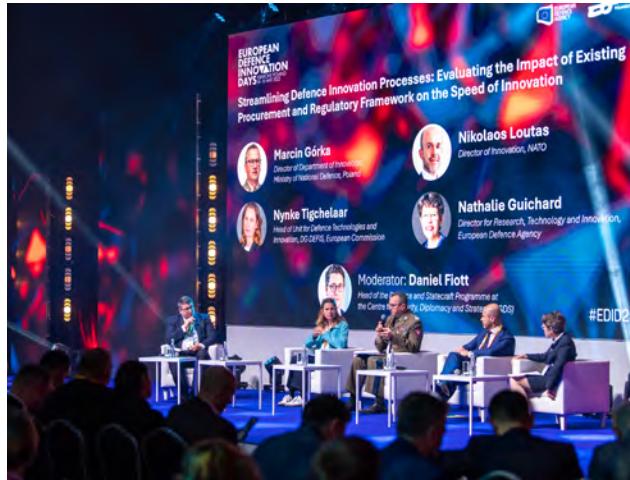
EDA's Chief Executive André Denk visits the exhibition area



EDID 2025 showcased Ukraine as a case study in rapid innovation under extreme conditions



Makeathon participants work on UGV prototypes for challenge scenarios



Panellists take the stage during EDID 2025's 2.5-day conference programme

FOR MORE INFORMATION

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FIND OUT MORE

