



HUB FOR EU DEFENCE INNOVATION (HEDI)

With the rapid development of new and often disruptive technologies and their fast weaponisation, **innovation is a geostrategic factor** shaping the international security environment and the global balance of power. Staying ahead of the curve in the defence sector is paramount to ensuring the credibility and effectiveness of the Armed Forces. Developing defence innovation in Europe is intrinsically linked to its ambition to be a credible security provider.

Against this backdrop, Defence Ministers approved the establishment of a **Hub for EU Defence Innovation (HEDI)** at the Steering Board on 17 May 2022. HEDI is designed to strengthen EDA's existing innovation activities but also initiate new ones, in close cooperation with Member States and EU stakeholders. HEDI serves as a platform to **stimulate and facilitate cooperation on defence innovation among Member States** while ensuring synergies with related European Commission activities, notably the EU defence innovation scheme, and coherence of output with NATO innovation initiatives.

BOOSTING EDA'S INNOVATION FRAMEWORK

HEDI operates at the intersection of EDA's already existing innovation activities, serving as a catalyst and amplifier. The existing **innovation framework** in EDA contains tools to support collaborative defence innovation and is based on three pillars:

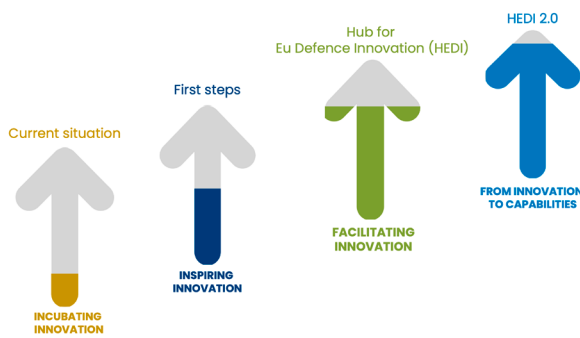
- › **identification** of innovative ideas and innovators
- › **implementation** of these ideas
- › **outreach** to increase the awareness of the solutions produced and their application to the defence domain.

HEDI's activities will contribute to and focus on the agreed EU priorities for capability development (Capability Development Plan), defence research (Overarching Strategic Research Agenda) as well as skills, technologies, manufacturing capabilities (Key Strategic Activities).

THREE STEP APPROACH

Three steps have been defined for the Hub to grow to fulfil its role and potential as catalyst and amplifier of defence innovation at EU level:

- › The first step will **inspire and promote** innovation at the European level: the Hub will focus on networking and situational awareness activities. It should be considered as a **ramp-up phase**, making the most of existing EDA resources.
- › The second step will allow the Hub to be **operational** across all activities and services identified in the initial portfolio. This will set the Hub at the heart of facilitating defence innovation across Member States and EU institutions.
- › The third step, **HEDI 2.0** is proposed as a way to reach the full potential of the Hub as an **EU-wide platform** for cooperative design and experimentation embedded in the EU capability development process and has to be further defined and decided at a later stage.



ACTIVITIES AND SERVICES

The initial portfolio of the Hub has been organised in six clusters of activities:

- › **Common Picture:** The Hub will contribute to creating a common picture on defence innovation, including but not limited to best practices, methodologies, experiences, lessons identified and learned, specific projects, initiatives, and status of play on Emerging and Disruptive Technologies. For this purpose, the Hub will involve defence innovation experts from the Member States. The Hub will set up and manage networks of defence innovation organisations and researchers, who will be invited to exchange views on these topics once or twice a year. These exchanges will further support the professionalisation of defence innovation and scale up defence innovation activities across Europe. The activities within this cluster will be organised in cooperation with the European Commission.
- › **EDA Innovation Prizes:** Innovation prizes are a way to collect a pool of innovative ideas and solutions at all Technology Readiness Levels to fill identified gaps and needs. The winners of the prize are provided with seed funding to work on a plan for the development of their ideas towards proof-of-concept or demonstrators. Although the innovation prize is an already established *modus operandi* at EDA, the establishment of the Hub will reinforce this activity not only by increasing the number of prizes awarded and the number of domains covered, but also by accelerating the uptake of innovation into capabilities. Innovation prizes address the initial phase of innovation in which it is key to exploring many different technical solutions with the full spectrum of actors, from start-ups and SMEs to prime contractors.
- › **Innovation challenges:** Challenges and Hackathons are a specific R&T methodology targeting short cycles of development from proof-of-principle to minimum viable product. These methodologies have proved effective in attracting non-traditional defence players due to their short and focused nature and their lower initial threshold of access. The Hub, in cooperation with partners, will select innovations suitable for this approach based on outcomes of other activities (e.g. innovation prizes) or specific capability gaps

identified by Member States. The Hub will be able to design, oversee, and manage in-the-field experimentation of solutions and ideas.

- › **Proof-of-concept/demonstrators:** Making use of EDA flexible contractual framework and selecting the most suitable funding stream (e.g. EDA Operational Budget, EDA ad-hoc projects and programmes), the Hub will advance the development of the technologies showing the most potential in terms of performance and receiving the most support from potential users.
- › **European Defence Innovation Shows:** An important dimension in the innovation funnel is the need to have a platform to increase awareness about the European defence innovation ecosystem, disseminate project results and connect stakeholders. The Hub will organise yearly a series of shows combining exhibitions and projects outcomes, conferences, panel discussions and prize awards. The programme of the show will be prepared by the Hub, selecting a core theme for the conference and panel discussions, and coordinating the logistics. The exhibition area will be dedicated to showcasing the outcomes of cooperative and national defence innovation projects.
- › **Uptake of innovation:** To ensure a coordinated and harmonised uptake of innovations into capabilities, taking into account all dimensions (Doctrine, Organisation, Training, Materiel, Leadership and Education, Personnel, Facilities and Interoperability) and paving the way towards an initial operational capability, the Hub will explore the potential to organise multinational Concept, Development, Experimentation and Concurrent Design campaigns based on participating Member States' priorities.

EMBEDDED IN EDA

HEDI will be embedded within the existing EDA framework and staffed by EDA personnel. It will function under EDA's 3-Year Planning Framework with a yearly reporting and evaluation in the starting phase. EDA shall regularly report to the Steering Board on the progress and way ahead, specifically on the impact, lessons learned, and possible updates of the stepped implementation plan.

BACKGROUND

The work that led to the creation of HEDI initially started in May 2021 when the Foreign Affairs Council called for reinforcing EDA's role in fostering defence innovation and tasked the HR/VP and Head of EDA, Josep Borrell, to present options by the end of 2021. Among the options put on the table (and now approved) was that of establishing a Hub for EU Defence Innovation within EDA. The Strategic Compass for Security and Defence, approved by the EU Council of Ministers in March 2022, also called for the creation of such a Hub in 2022.