



STRENGTHENING EUROPEAN DEFENCE TECHNOLOGICAL AND INDUSTRIAL BASE:

European Defence Fund & EU Defence Innovation Scheme

Agenda

- European Defence Fund (EDF)
- EU Defence Innovation Scheme (EUDIS)
- Upcoming events in Spring 2024

European Defence Fund

**Boosting Cross-Border Defence R&D
Cooperation in the EU**

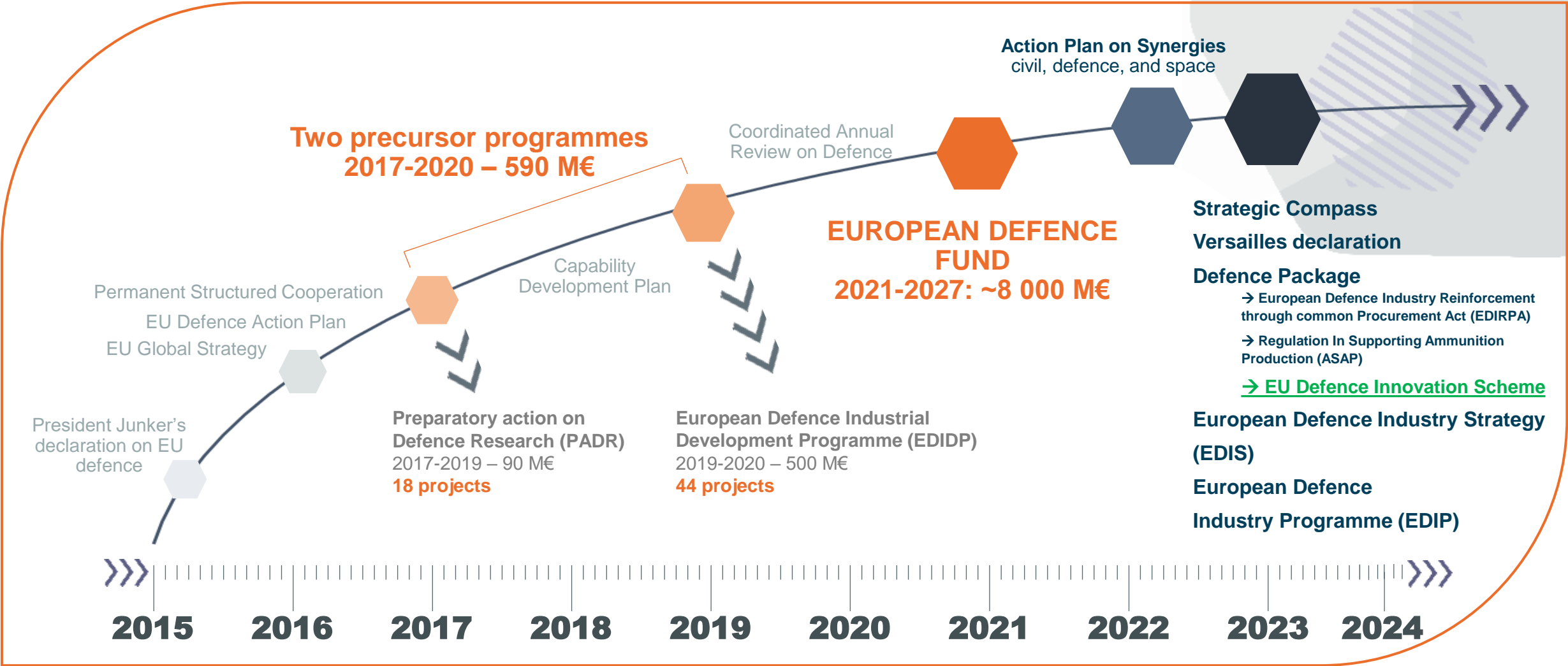


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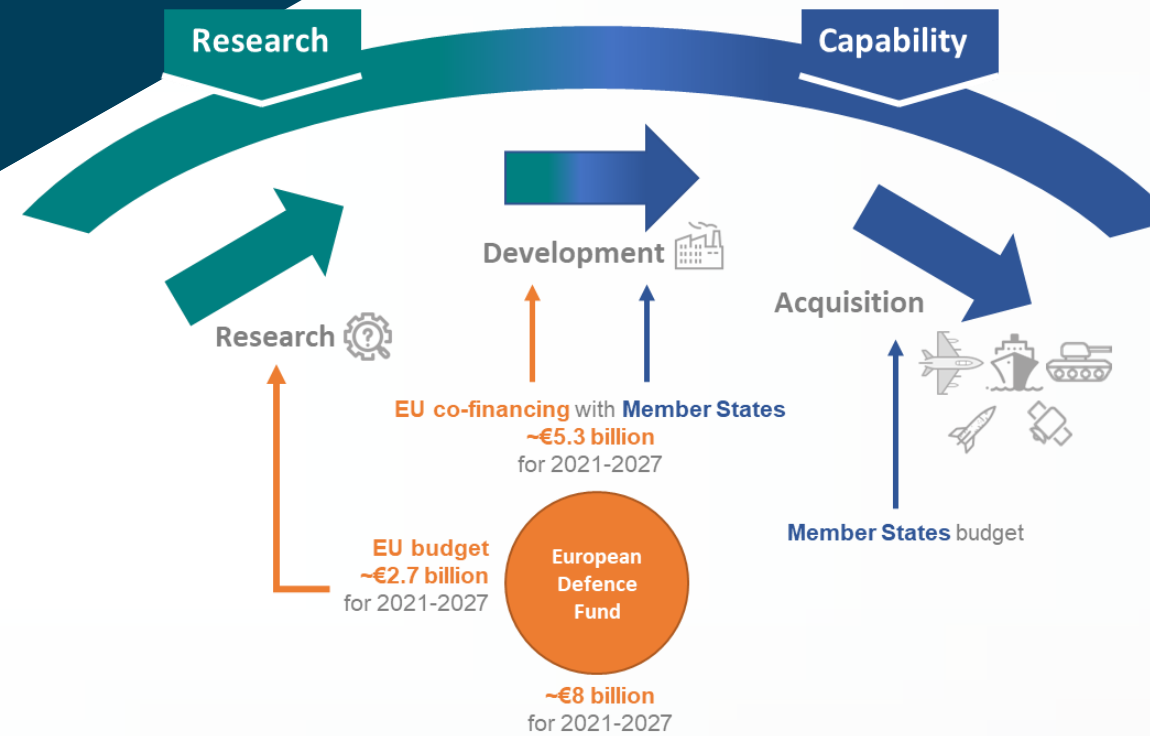
Ramping-up EU's collaborative approach to defence capability building



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DEFENCE CROSS-BORDER R&D

European Defence Fund: The EU defence R&D programme



- **EDF financial support mainly in the form of grants**
- **Open to EU Member States and Norway**
- **Security-based participation conditions for entities controlled by third-countries**

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EDF Categories of Actions

Addressed by annual work programmes & calls for proposals



-  **Medical response, CBRN & human factors**
-  **Information superiority**
-  **Sensors**
-  **Cyber**
-  **Space**
-  **Digital transformation**
-  **Energy resilience & environmental transition**
-  **Materials and components**

-  **Air combat**
-  **Air and Missile defence**
-  **Ground combat**
-  **Force protection and mobility**
-  **Naval combat**
-  **Underwater warfare**
-  **Simulation and training**



Horizontal categories

-  **Disruptive technologies**
-  **Innovative defence technologies (SMEs)**

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Eligibility of consortia and entities

Consortia

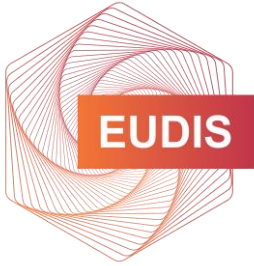
- at **least 3 eligible entities** established in at least three different Member States / Norway

Exception

- call for disruptive technologies at **least 2 eligible entities** established in at least two different Member States / Norway

Entities





Eligible actions

Background and generated foreground **Intellectual Property (IP)** shall **not be subject to any control or restriction** by non-EU countries/entities

Activities:



Research actions: applied/fundamental research, exclusive focus on defence applications - <i>low TRL (up to 4/5)</i>								
100%	100%	100%	100%					
Development actions: defence-oriented development (new/upgrade products/technologies) - <i>higher TRL (5-8)</i>								
Baseline:	65%	90%	65%	20%	45%	70%	70%	65%
@max bonus:	100%	100%	100%	55%	80%	80%	80%	100%

- **Support of at least two MS/NO (Letter of Intent, co-funding) is required**

EDF implementation

After the implementation of the first 2 annual Work Programmes:

- **High EU investment: €2 billion**
- **101 projects**
- **Large coverage: 19% EU funding to SMEs**
- **Real cooperative and multinational dimension: in average, 20 entities from 8 MS and Norway are involved in an EDF funded defence R&D project**

EDF 2021



€1.2 billion

60 projects selected

142 proposals submitted

692 entities from 26 MS + NO
43% SMEs

1092 participations
34% from SMEs

18.4% of overall budget
allocated to SMEs

EDF 2022



€0.8 billion

41 projects selected

134 proposals submitted

550 entities from 26 MS + NO
39% SMEs

887 participations
30% from SMEs

19.8% of overall budget
allocated to SMEs

EDF 2023



~ €1.2 billion

238 proposals submitted

Evaluations
currently ongoing till
May 2024


































EDF Work Programme 2024

Published: 15 March 2024

32 topics

Submission Deadline: 5 November 2024

EUR 1.1 billion

 Medical Response & CBRN	<ul style="list-style-type: none"> SGA under FPA on medical countermeasures  SGA under FPA on medical countermeasures  	15 M€ 10 M€
 Information superiority	<ul style="list-style-type: none"> AI-based multifunctional aperture and transceiver  Defence multi-dimensional communication standard  Small UAS  MALE RPAS 	45 M€ 25 M€ 11 M€ 100 M€
 Sensors	<ul style="list-style-type: none"> Advanced radar technologies Multi-sensors integration for autonomous drone navigation (challenge, 2 topics) 	35 M€ 27 M€
 Cyber	<ul style="list-style-type: none"> Federated cyber ranges  	48 M€
 Space	<ul style="list-style-type: none"> Multi-source satellite image analysis (challenge, 2 topics) Secure waveform for satellite communications  	25 M€ 25 M€
 Digital transformation	<ul style="list-style-type: none"> Automated structural modelling for effect prediction 	15 M€
 Energy & Environment	<ul style="list-style-type: none"> Energy-independent and energy-efficient systems for military camps  	40 M€
 Materials & Components	<ul style="list-style-type: none"> Electronic components (spin-in)  	25 M€
 Air combat	<ul style="list-style-type: none"> Advanced air-to-air missiles Unmanned collaborative combat aircraft systems  Next generation rotorcraft 	35 M€ 15 M€ 100 M€
 Air & missile defence	<ul style="list-style-type: none"> Countering Hypersonic glide vehicles 	78 M€
 Ground combat	<ul style="list-style-type: none"> Intelligent weaponry and ammunition systems Unmanned ground systems  Beyond the line-of-sight close combat Armoured infantry fighting vehicle 	30 M€ 50 M€ 25 M€ 25 M€
 Protection & Mobility	<ul style="list-style-type: none"> Future mid-size tactical cargo aircraft 	30 M€
 Naval combat	<ul style="list-style-type: none"> Functional smart system-of-systems under integral survivability approach for future naval platforms 	45 M€
 Underwater warfare	<ul style="list-style-type: none"> Secured/adaptive underwater communications for UUVs  Autonomous heavy minesweeping system 	24 M€ 30 M€
 Simulation & training	<ul style="list-style-type: none"> Methods for bridging reality gaps (cascade funding)  Simulation and training for medical emergencies  	15 M€ 10 M€
 Disruptive technologies	<ul style="list-style-type: none"> Quantum technologies  Non-thematic research 	24 M€ 16 M€
 SMEs	<ul style="list-style-type: none"> Non-thematic research for SMEs and ROs Non-thematic development for SMEs 	34 M€ 33 M€
 Others	<ul style="list-style-type: none"> External expertise, audits, studies, IT, indirect management Business coaching for SMEs Blending facility for equity funding for SMEs/Mid-Caps Business accelerating services Matchmaking events for investors and SMEs EDF hackathon events 	7.6 M€ 1.6 M€ 20 M€ 2.6 M€ 0.6 M€ 1.2 M€

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Legend: **Research** **Development** **EUDIS-related**  **STEP**

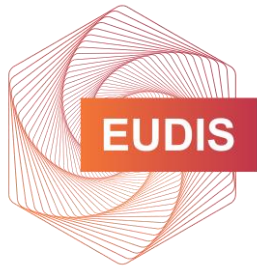


EUDIS

EU DEFENCE INNOVATION SCHEME

**For European
Defence
Innovators**

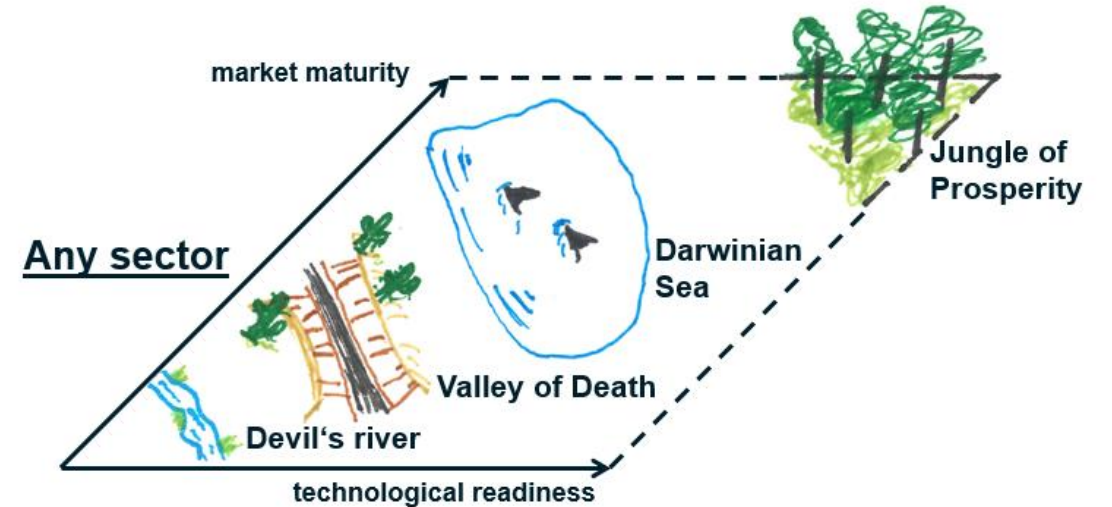


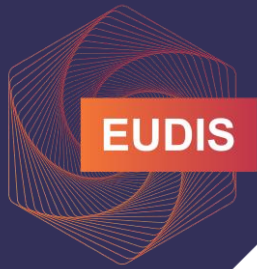


EU Defence Innovation Scheme

A stronger defence innovation ecosystem

- **Focus on SMEs, including start-ups and non-traditional players** in defence industrial ecosystem
- Tap into the full **potential of defence & civil** innovation communities
- Many opportunities, depending on **innovation maturity level**
- Investment ambition close to **€2 billion until 2027**
- **Integrated in the EDF**
- **Five tracks** combine calls & SME support services





FIVE EUDIS INNOVATION TRACKS



CHALLENGE YOUR IDEA

53 M€

- Defence Hackathon
- Technological Challenges on Space and Advanced Active & Passive Radars



EMPOWER SMEs

112 M€

- Open SME R&D calls (67 M€)
- Research calls for disruptive technologies (40 M€)
- Business coaching for grant receivers (1.6 M€)
- Business Accelerator & Matchmaking (3.2 M€) *upcoming in 2025*



ACCELERATE YOUR INNOVATION

15 M€

- Simulation & Training - A selected consortium invites individual SMEs and start-ups for targeted acceleration services



225 M€
2024



IMPROVE ACCESS TO FINANCE

20 M€

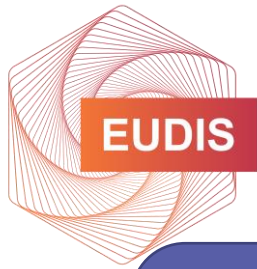
- 175 M€D Defence Equity Facility, implemented by the European Investment Fund



MIGRATE YOUR INNOVATION FROM CIVIL TO DEFENCE

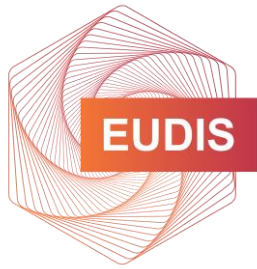
25 M€

- Materials & components



Challenge your novel ideas **EUDIS Defence Hackathon and Mentoring**

- Outreach events to discover innovative solutions for defence, attract skills to the defence sector, foster and bridge various communities with each other.
- Defence Hackathon (each Spring) & Space for Defence Hackathon (each Autumn)
- **EUDIS Defence Hackathon DIGITAL IN DEFENCE - 31 May – 2 June 202**
 - Central hub in Tallinn. Local organisers - **Athens, Brussels, Budapest, Kaunas, Krakow & Milan**
 - **2024 Edition's three challenges:** Subsea infrastructure protection; Improving Situation Awareness; Cybersecurity
 - Open call for participation - mid April. Six local winners will compete in an online EU wide competition, taking place on 5 June.
 - **Awards:** the three top winners will get a mentoring programme of 100 hours, the runners-up (4-6) will get 20 hours
- **Cassini Space for Defence - Autumn 2024**



Challenge your novel ideas **Technological Challenge**

- Incentivise researchers or developers to address a given challenging objective
- Set up a testing environment to measure and foster the progress of R&D teams

- **Technological Challenges for EDF 2024 in Category/topic:**

1. **Space/Multi-source satellite image analysis** (25 MEUR)
2. **Sensors/Multi-sensors integration for autonomous drone navigation** (27 MEUR)

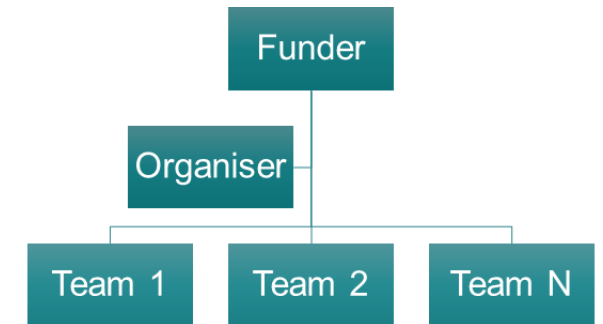
- **Two topics for each tech Challenge:**

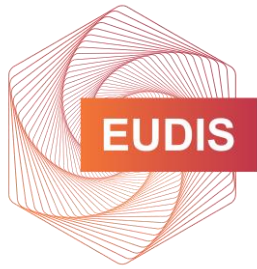
- (1) Challenge **Organiser**

- Aims at setting up a testing environment and organizing a technological challenge, to which research teams will participate. The testing environment should enable objective comparisons between different approaches

- (2) **Participation** in a Challenge

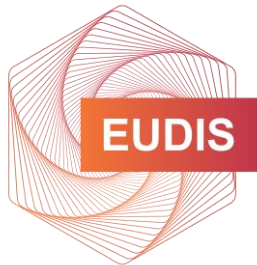
- **Space/Multi-source satellite image analysis:** Aims to improve the automatic detection, identification and characterisation of relevant information from multi-source satellite images, in particular by taking advantage of the complementarity of optical and radar images
- **Sensors/Multi-sensors integration for autonomous drone navigation:** Addresses the development of a new multi-sensor robust and reliable perception system for UAS





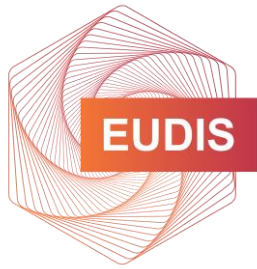
Test and accelerate Innovation Test Hubs

- **Aims to create defence industry knowledge hubs in specific fields (as required by MS) to foster uptake of civil technologies in defence domain**
- **A selected consortium invites individual innovative and scalable start-ups for targeted acceleration services and use up to 16% of grant funding (cascade funding/Financial support to Third Parties)**
- **Category/topic: Simulation & Training (SIMTRAIN) / Methods for bridging reality gaps**
- **Specific objective:** Support the creation of an innovation test hub in the field of simulation and training
- **Indicative budget:** 15 MEUR, incl. 16% (2,4 MEUR) for Financial Support to Third Parties/cascade funding
- **Two-tier grant scheme (Financial Support to Third Parties/cascade funding):**
 - **First tier:** EDF grant beneficiary is a R&D consortium
 - **Second tier:** During project implementation, the consortium organizes their own calls for SMEs/start-ups
- **COM** defines the support to SMEs in the call text (e.g., tech mentoring, testing, class on doing business in defence)
- *Opportunity for incubators/accelerators to join the project!*



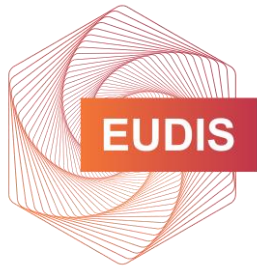
Migrate innovation from civil to defence **Spin-in calls**

- Support proposals that build on results from civil EU funded R&D programmes
- **Category/topic:** Materials and components/Electronic components
- **Indicative funding:** 15 MEUR, several proposals may be funded
- **Specific objective:** Increase interoperability and resilience, including secured production and exchange of data, to master critical defence technologies, to strengthen the security of supply and to enable the effective exploitation of results for defence products and technologies
- **Synergies** with civil EU-funded R&D programmes – including the possibility of “spin outs”



Improve access to finance **Defence Equity Facility**

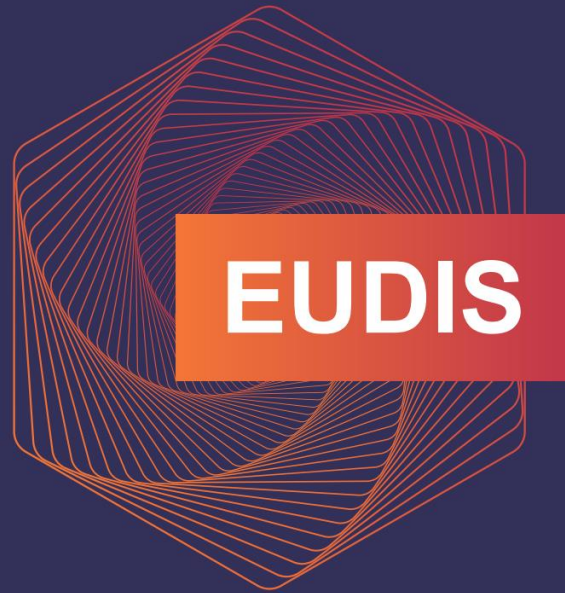
- Fund of Funds mechanism stimulating the development of an ecosystem of European private fund supporting defence innovation.
- EDF will support investments made by the **European Investment Fund (EIF)** into private funds (Venture capital or private equity funds) focusing on innovative SMEs (including start-ups) and small midcaps developing **technologies with both civilian and defence applications.**
- Financing: **175 MEUR** (100 MEUR from EDF* + 75 MEUR EIF ‘Top-up’)
- By taking cornerstone positions in the funds it supports, **the EIF will act as key investor** and help crowding-in additional investors.
- Investors can **apply for funding** through EIF’s website (call always open):
 - More info on https://eudis.europa.eu/defence-equity-facility_en
- Funding opportunity accompanied by **capacity building for fund managers** and **matchmaking** for investors and companies:
 - Investor sessions @ **EDF Info Days** on 29 May 2024



Empower SMEs

Open-non-thematic SME and disruptive technology calls

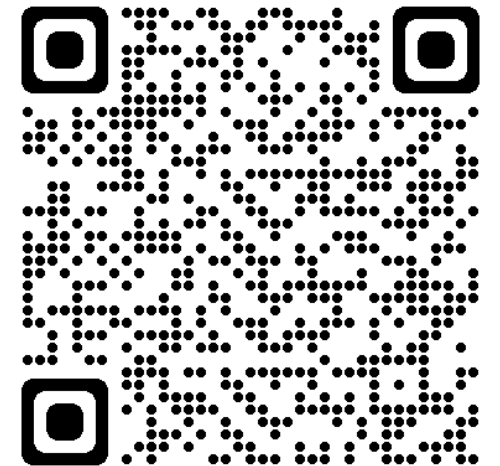
- Open R&D calls targeting SMEs - lump sum grants
 - Business coaching to guide SMEs in their business challenges
 - Business Acceleration and Matchmaking Services
- **Categories:** SMEs, Disruptive Technologies
 - **Open R&D Calls:**
 - 67 MEUR – Research and Development calls for SMEs & RTOs with 4-6 MEUR cap per project
 - 16 MEUR – Research calls for Disruptive Technologies with 4 MEUR cap per project
 - **Business Coaching for SMEs in the EDF consortia** - to address business challenges such as human resources, legal and financial challenges, accessing the defence market, help to find cooperation partners
 - **EUDIS Business Accelerator & Matchmaking Services** (3.2 MEUR) upcoming in 2025



Thank you!



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