



EUDIS

EU DEFENCE INNOVATION SCHEME

**For European
Defence
Innovators**

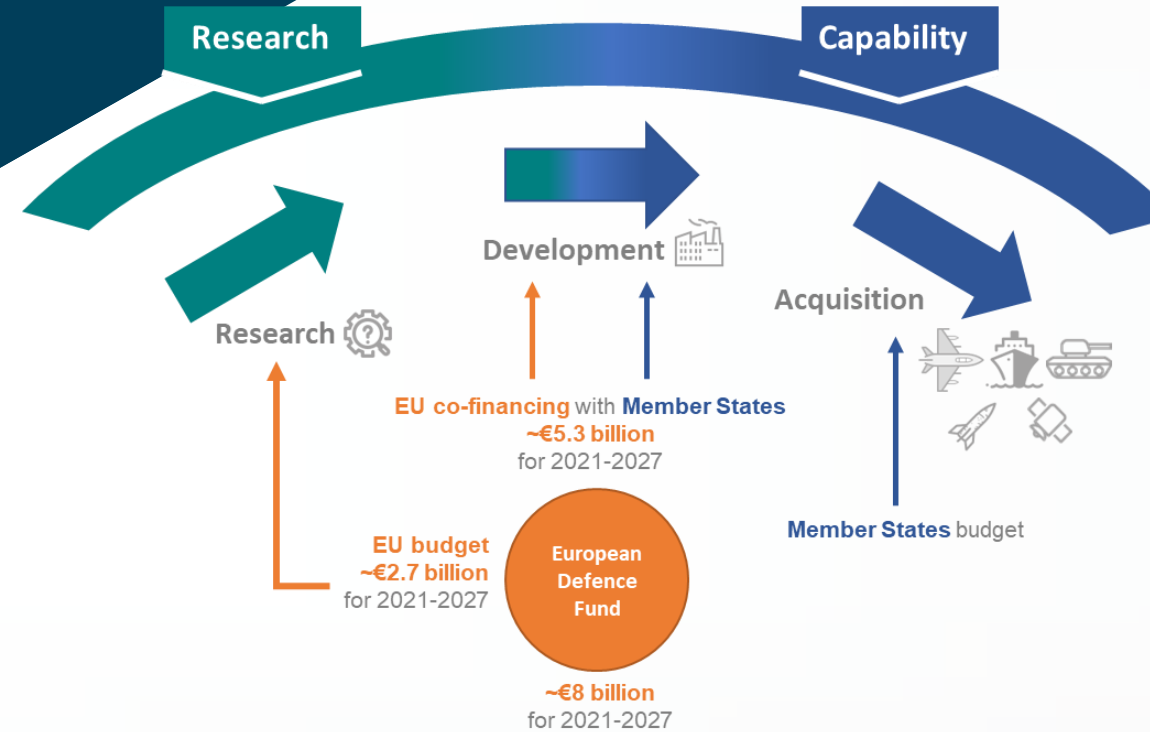


**Kristīne Rudzīte-Stejskala
DG DEFIS
Brussels, 18 October 2023**

Agenda

- Background of EUDIS
- EUDIS measures in 2023
- Way ahead

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**

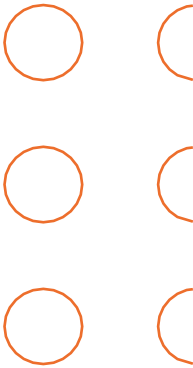
EDF Categories of Actions

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)**



Eligibility of consortia and entities

Consortia

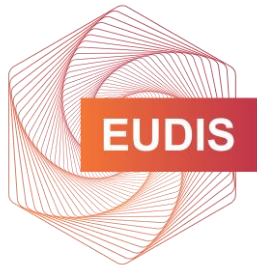
- at least three **eligible** entities
- established in at least three different MS/Norway

Exception

- call for disruptive technologies (EDF-2023-LS-RA-DIS): at least 2 MS/Norway

Entities





Eligible actions

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

Activities:



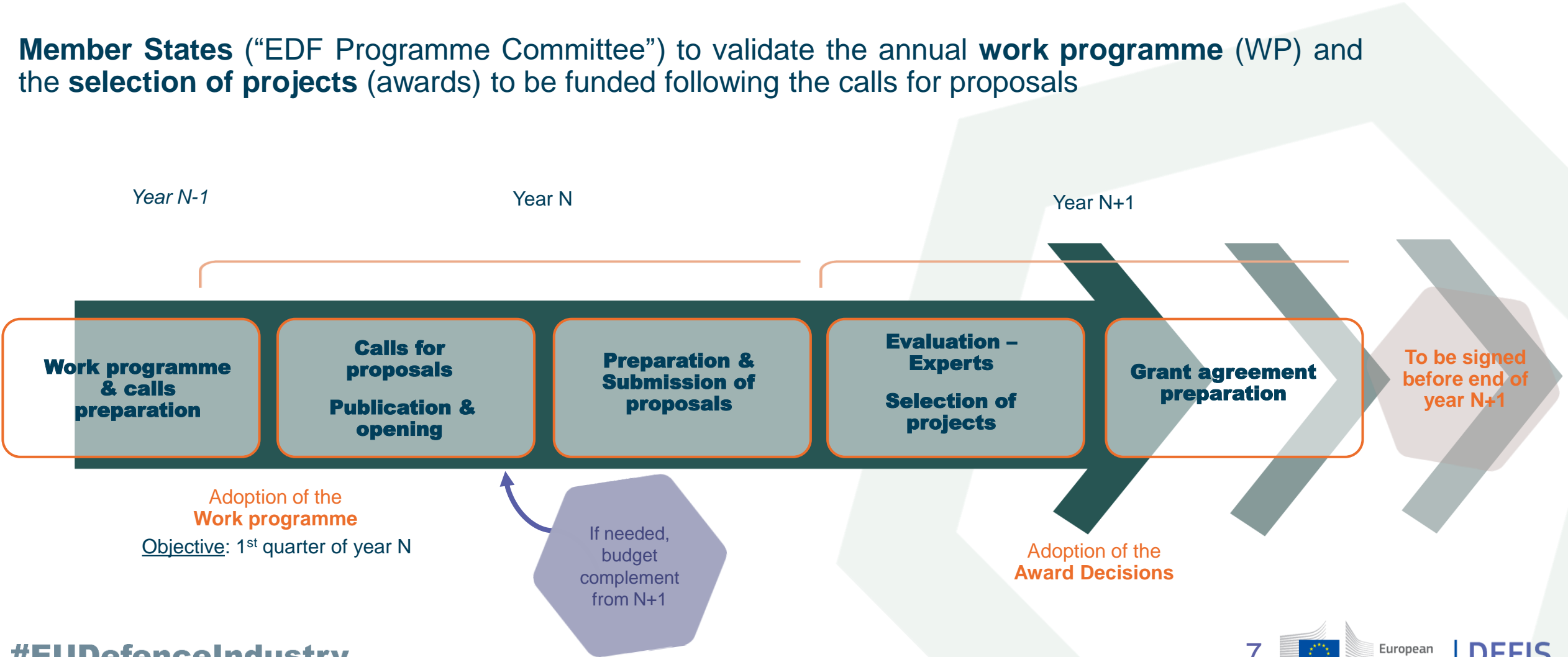
Research actions: applied/fundamental research, exclusive focus on defence applications - <i>low TRL (up to 4/5)</i>								
100%	100%	100%	100%					
Development actions: defence oriented development (new/upgrade products/technologies) - <i>higher TRL (5-8)</i>								
Baseline:	65%	90%	65%	20%	45%	70%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

Support of at least two MoDs (LoI, co-funding) is required

EDF Life-cycle

Annual work programmes and calls for proposals + indicative **multiannual perspective**

Member States (“EDF Programme Committee”) to validate the annual **work programme** (WP) and the **selection of projects** (awards) to be funded following the calls for proposals



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

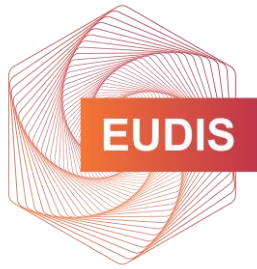
EDF 2023



~ €1.2 billion

34 call topics

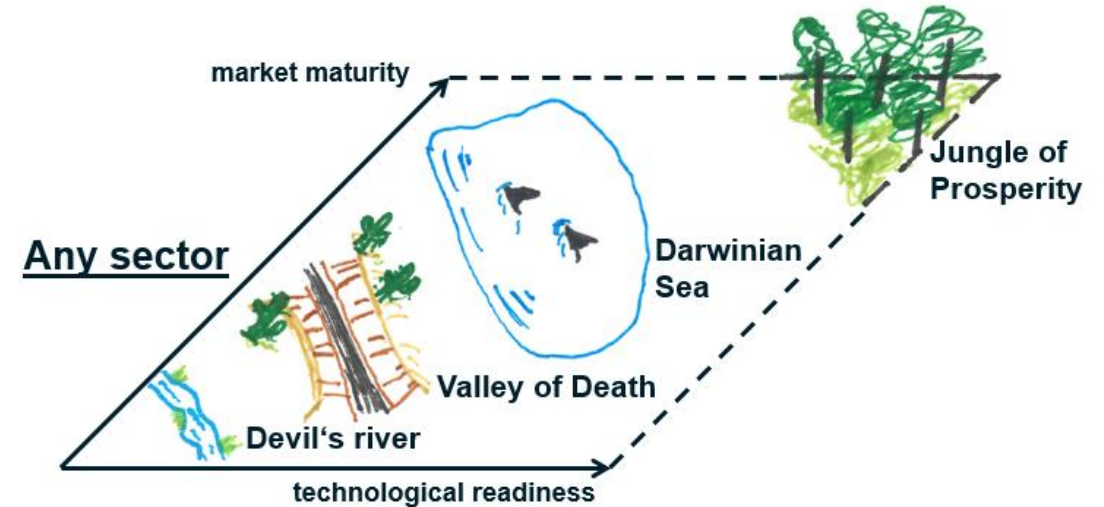
Deadline for submission:
22 November 2023

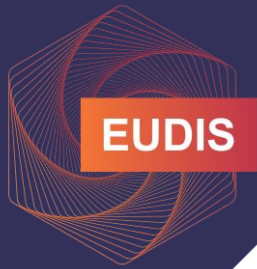


EU Defence Innovation Scheme

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**
- An investment ambition close to **€ 2 billion until 2027**
- **Five tracks** combine different approaches to call organization & SME support services
- **Integrated in the EDF**
- Aims to reach **up to 400 SMEs** annually





FIVE EUDIS INNOVATION TRACKS



CHALLENGE YOUR IDEA

26 M€

- Technological challenge – Digital transformation (25 M€)
- Hackathons (0.6 M€)



EMPOWER SMEs

89 M€

- Open SME R&D calls (72 M€)
- Disruptive technologies research calls (16 M€)
- Matchmaking
- Business coaching for grant receivers (1.2 M€)



TEST & ACCELERATE YOUR INNOVATION

30 M€

- Innovation test hub (Materials & components)



224 M€
in 2023



IMPROVE ACCESS TO FINANCE

20 M€

- Proposed Defence Equity Facility under InvestEU



MIGRATE YOUR INNOVATION FROM CIVIL TO DEFENCE

59 M€

- Energy & environment (25 M€)
- Materials & components (20 M€)
- Cyber (14 M€)

EDF Work Programme 2023

EUR 1.18 billion

34 topics

Opening of the calls: 15 June 2023

Deadline for submission: 22 November 2023

 Medical Response & CBRN	<ul style="list-style-type: none"> Federated CBRN systems 15 M€ 1st SGA under FPA on medical countermeasures 25 M€ 	 Air combat	<ul style="list-style-type: none"> Smart technologies for next generation fighter systems 30 M€ Self-protection systems 33 M€
 Information superiority	<ul style="list-style-type: none"> Laser communications 17 M€ Tactical RPAS 42 M€ Detect and avoid 40 M€ 	 Air & missile defence	<ul style="list-style-type: none"> Counter-UAS 43 M€ Endo-atmospheric interceptor (dual sourcing/direct award) 80 M€
 Sensors	<ul style="list-style-type: none"> Electromagnetic signal propagation 22 M€ Optronics detector 20 M€ Sensor grid 27 M€ 	 Ground combat	<ul style="list-style-type: none"> Main battle tank technologies 20 M€ Long range indirect fire support 27 M€
 Cyber	<ul style="list-style-type: none"> Automation of security penetration tests (spin-in) 14 M€ Cyber situational awareness 20 M€ Deployable Autonomous AI Agent 26 M€ 	 Protection & Mobility	<ul style="list-style-type: none"> Defeating unexploded explosive ordnances and IEDs 25 M€ Strategic air transport for outsized cargo 20 M€
 Space	<ul style="list-style-type: none"> Threats surveillance and protection of space assets 25 M€ Space situational awareness 100 M€ 	 Naval combat	<ul style="list-style-type: none"> Modular and multirole patrol corvette 154.5 M€
 Digital transformation	<ul style="list-style-type: none"> Dedicated hardware architectures for energy-efficient AI 20 M€ Human language technologies (challenge, 2 topics) 25 M€ 	 Underwater warfare	<ul style="list-style-type: none"> Unmanned anti-submarine and seabed warfare 45 M€ Mine countermeasures 45 M€
 Energy & Environment	<ul style="list-style-type: none"> Innovative propulsion systems (spin-in) 25 M€ 	 Disruptive technologies	<ul style="list-style-type: none"> Laser-based directed-energy weapons 25 M€ Non-thematic research 16 M€
 Materials & Components	<ul style="list-style-type: none"> High-performance materials (spin-in) 20 M€ Maintenance, joining and repair (cross-border defence innovation network) 30 M€ 	 SMEs	<ul style="list-style-type: none"> Non-thematic research for SMEs and ROs 36 M€ Non-thematic development for SMEs 36 M€
		 Others	<ul style="list-style-type: none"> External expertise, audits, IT, indirect management 8.5 M€ Business coaching for SMEs 1.2 M€ Blending facility for equity funding for SMEs/Mid-Caps 20 M€ EDF hackathon events 0.6 M€

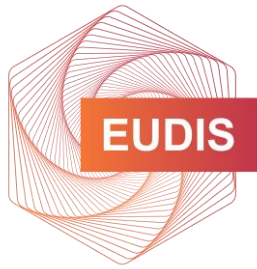
#EUDefenceIndustry

Legend: Research Development EUDIS-related

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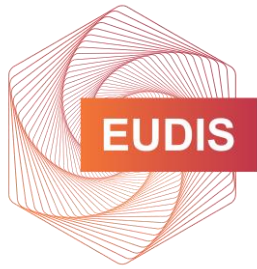


DEFIS



Challenge your novel ideas **Hackathon**

- Outreach events to discover innovative solutions for defence and attract skills to the defence sector
- **Indicative funding:** EUR 0.6 Mio annually (Public procurement)
- **Hackathon themes & challenges** – selected by COM in co-operation with Member States/Norway and EDA/HEDI
- **Organization:**
 - Central hackathon hub with several locations in Member States/NO
 - At least one hackathon event organized annually 2024-2027.
 - Mentoring program for the winners of hackathon
- **Timeline for 2023/2024:**
 - Nov/Dec 2023 → COM signs the Framework contract and specific contract for the first hackathon
 - Spring 2024 → First EUDIS Defence Hackathon in at least six location



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

- **Category/topic:** *Digital transformation. Agile and robust human language technologies for defence.*

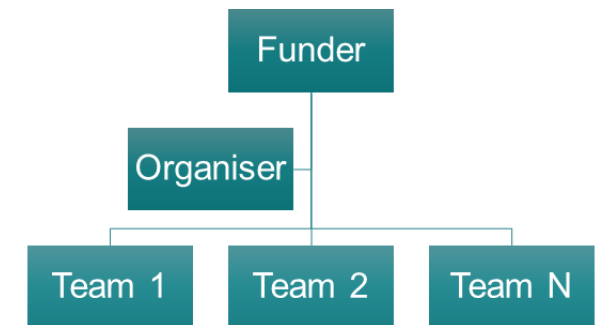
- **Two topics:**

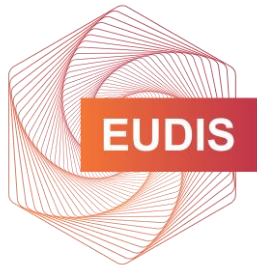
- (1) Challenge Organiser

- **Targeted activities:** setting-up of the infrastructures for testing HLT systems in the framework of the technological challenge; collection and annotation of data, quality assessment, distribution and curation of databases and organisation of the evaluation campaigns. Support several teams pursuing different solutions: a preliminary evaluation plan provided
 - Indicative budget: **EUR 7 Mio**, one proposal

- (2) Participation in a Technological Challenge

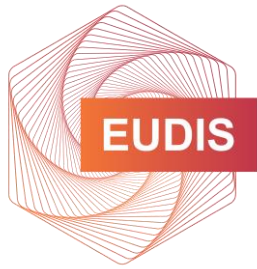
- **Targeted activities:** Research on language technologies; and participate in the evaluation campaigns, integrate modules in tech demonstrators that can be tested
 - Indicative budget: **EUR 18 Mio.**, several proposals (**not to exceed EUR 6 Mio**)





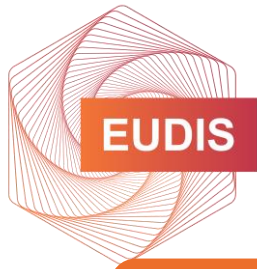
Test and accelerate **Innovation Test Hubs**

- Create defence industry knowledge hubs in specific fields (as required by MS) to foster uptake of civil technologies in defence domain
- Funding for consortium's R&D project (main part of the grant), incl. 12% funding for organizing calls for innovative and scalable SMEs (financial support to third parties/cascade funding)
- **Category/topic:** *Materials and components. Technologies and processes for maintenance, joining and repair through an innovation test hub.*
- **Specific objective:** set-up a demonstrator platform as test environment that offers possibility to test, qualify and certify technologies covering fields of joining, repair and maintenance
- **Indicative budget:** 30 MEUR, incl. 12% (3,6 MEUR) for FSTP/cascade funding
- **Two-tier grant scheme (financial support to third parties/cascade funding):**
 - **First tier:** EDF grant beneficiary is R&D consortium (e.g., industry, test centers, RTOs, accelerators, certification authorities)
 - **Second tier:** During project implementation, consortium organizes own calls for SMEs/start-ups
 - COM defined support to SMEs (e.g., tech mentoring, testing, class on doing business in defence).



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

- Support proposals that build on results from civil EU funded R&D programmes
- *Categories: **cyber**, energy resilience and environmental transition, materials and components*
- **Indicative funding:** EUR 59 Mio, several applications
- **Topics:**
 - *Automation of security penetration tests (EUR 14 Mio)*
 - *Innovative propulsion systems for defence applications (EUR 25 Mio)*
 - *High-performance materials (EUR 20 Mio)*
- **Promising technologies** that can have potential defence applications (e.g., AI, medicine/ biotechnology, energy and environmental transition, cyber, materials & components, autonomy, quantum)
- Synergies with civil EU-funded R&D programmes – including the possibility of “spin outs”

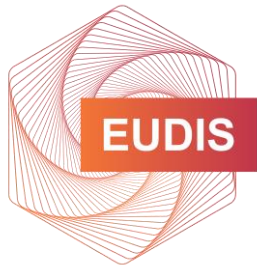


EUDIS

Improve access to finance

Defence Equity Facility under Invest EU **(COMING SOON!)**

- Improve access to equity investments in Europe
- Stimulate development of an ecosystem of European private fund supporting defence innovation
- **Fund of funds mechanism:**
 - EDF will support investments made by the **European Investment Fund (EIF)** into private funds focusing on innovative SMEs (including start-ups) and **midcaps developing technologies with both civilian and defence applications.**
 - EIF's investment reduces risks for investors, sends a positive signal to the market and crowds-in co-investors.
- **Financing:** 100 MEUR from EDF* + EIF 'Top-up' + Private investments
- Leverage effect for EDF between 3.5 - 5 times
- Ambition to **start implementation in Autumn 2023**
- Financial instrument accompanied with **capacity building activities for fund managers** and matchmaking for investors and SMEs

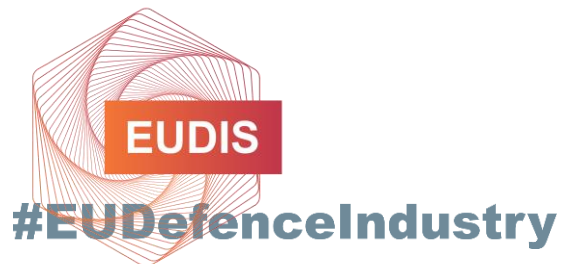
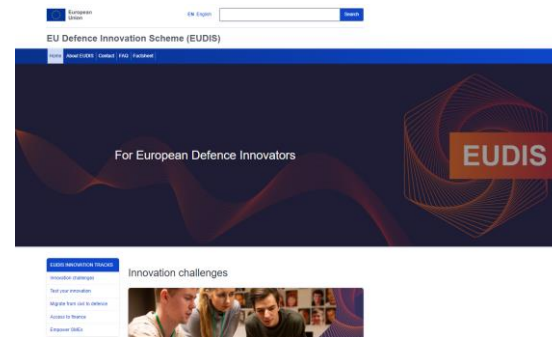
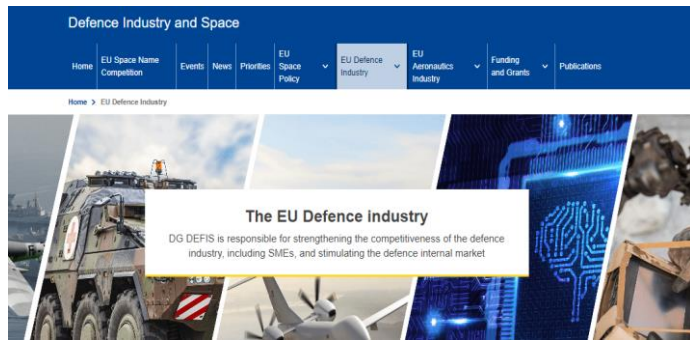
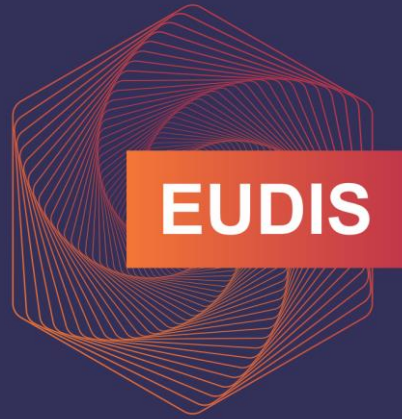


Empower SMEs **Open-non-thematic SME and disruptive technology calls**

- R&D calls targeting SMEs - lump sum grants
 - Business coaching to guide SMEs in their business challenges
 - Matchmaking opportunities during the Annual EDF Info Days
-
- **Categories:** *SMEs*, *Disruptive Technologies*
 - **Indicative funding:** EUR 89,2 Mio
 - **Business Coaching** will be offered to address business challenges such as:
 - Human resources
 - Legal and financial challenges
 - Market analysis & accessing the defence market
 - Help to define and find the right cooperation partners
 - **COM has framework contract with external party** to provide the services

Thank you!

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