



EUROPEAN
UNION

EUROPEAN
DEFENCE
FUND

20
24

EUROPEAN DEFENCE FUND & EUROPEAN DEFENCE INNOVATION SCHEME

Vilem KOLIN

Policy Officer

DEFIS R.1

Prague, 08 April 2024



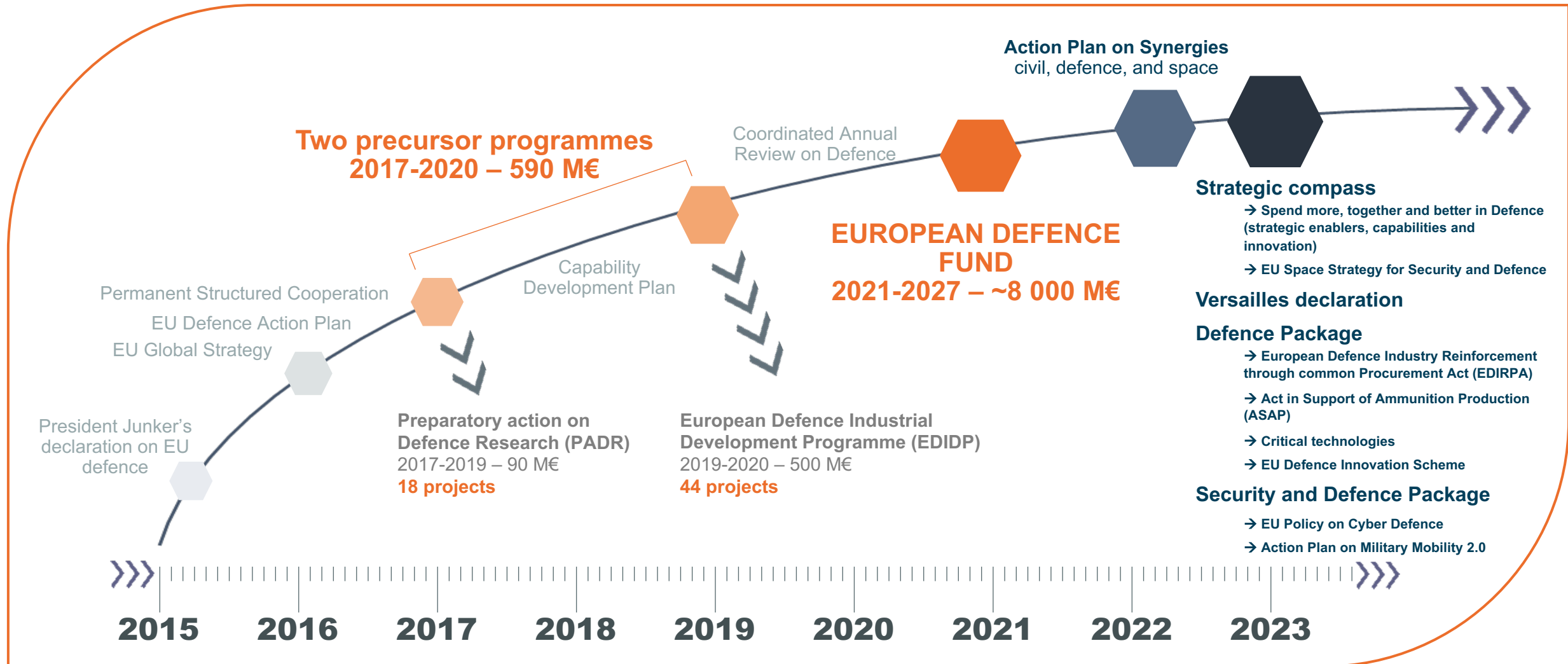
European
Commission

DEFIS

This document has been prepared by the Commission services. It cannot be understood as representing the Commission's position on these issues and does not bind the Commission in any way.

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

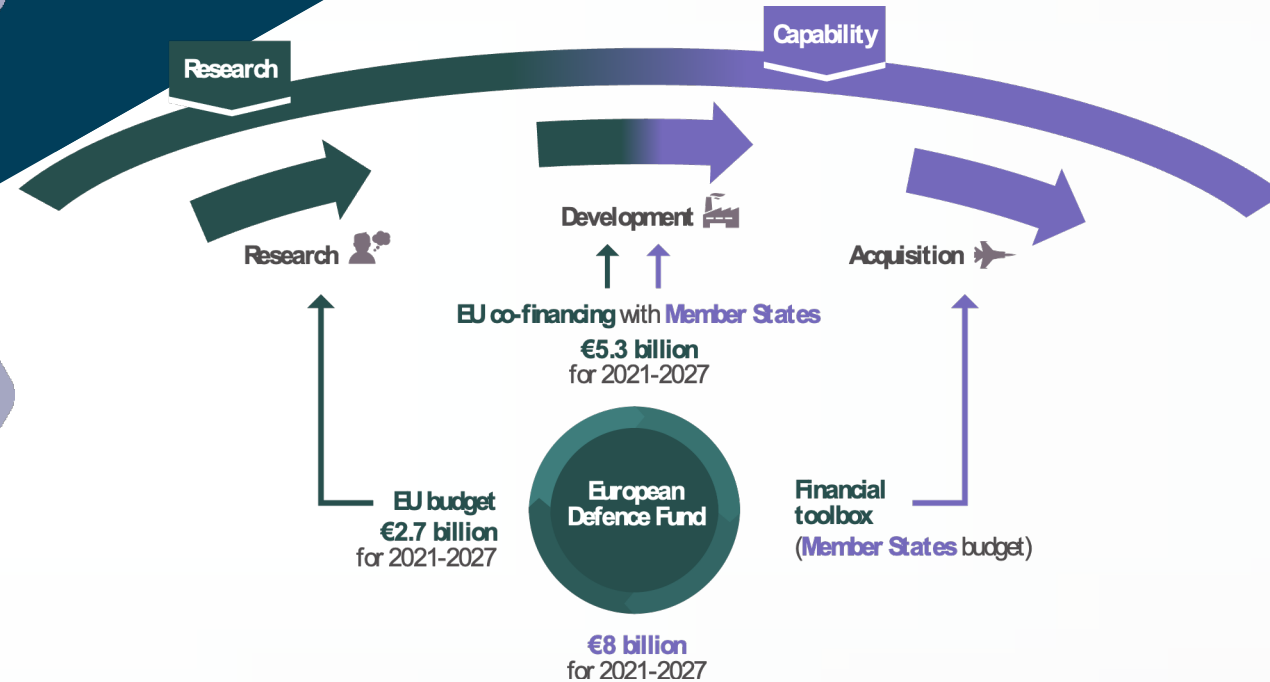
20
24



European Defence Fund

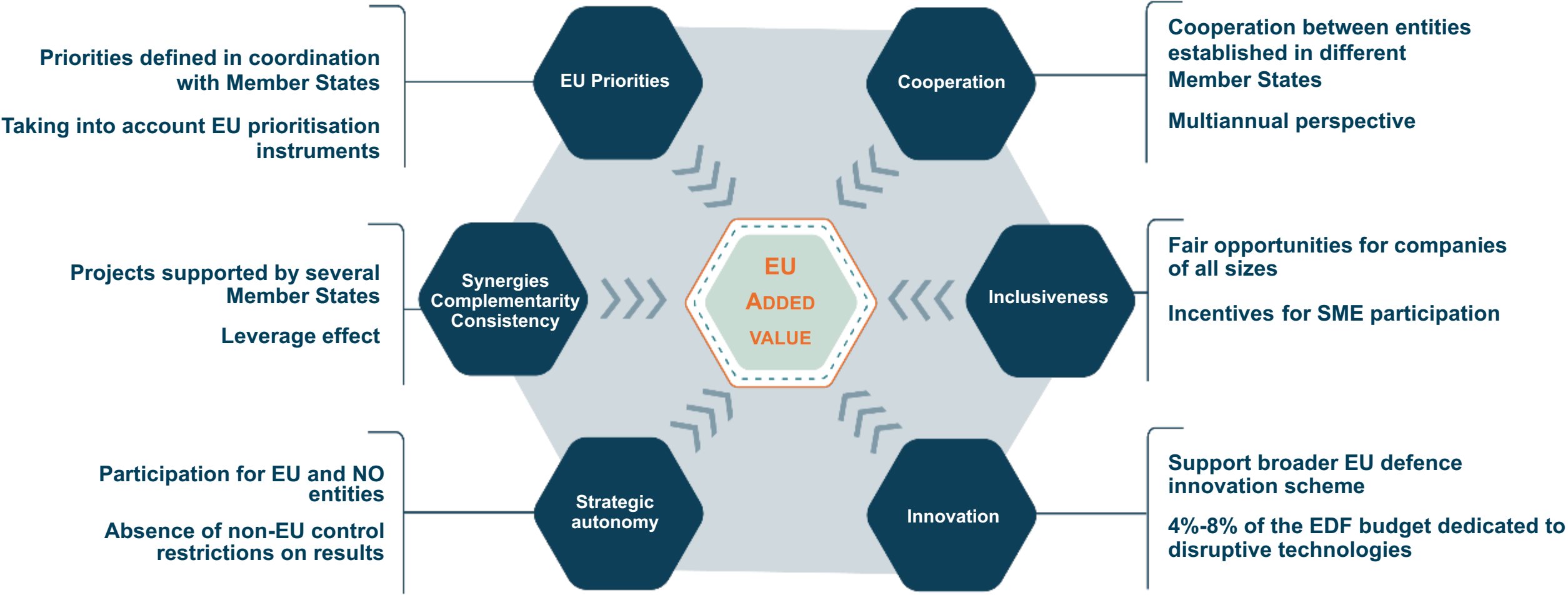
European Defence Fund : The EU defence R&D programme

20
24



- **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**

General Principles governing implementation



EDF: key enabler in larger EU eco-system

20
24

- EDF annual Work programmes **informed by:**
 - **Strategic Compass:** critical capability gaps
 - **Capability Development Plan (CDP):** consistency with commonly agreed priorities
 - **Coordinated Annual Review on Defence (CARD):** opportunities for collaborative R&D
 - **Permanent Structured Cooperation (PESCO) projects**
 - **Synergies and complementarity** with other EU programmes
- EDF programming **informed by MS/NO co-financing & planning**, including regarding their NATO commitments (synergies and complementarity)



EDF implementation

20
24

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

238 proposals submitted

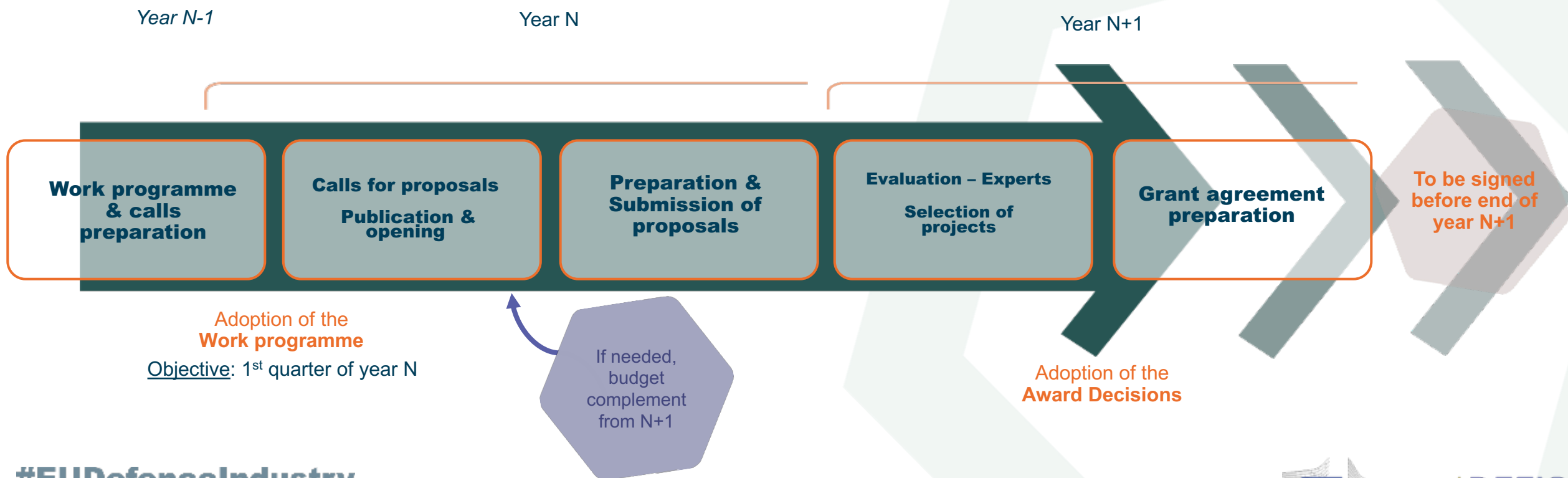
Evaluations
currently ongoing

EDF Life-cycle

20
24

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



Eligible conditions

20
24

Consortia: at least 3 eligible entities from 3 different MS/Norway (2 for disruptive call)

Recipients & main subcontractors + Infrastructure, facilities, assets and resources for the action located in EU or Norway

Entities established in 3rd countries can be associated if security-specific conditions are met, but no EDF financial support

Recipients and main subcontractors not subject to control by 3rd country/entity

Derogation possible if approved security-specific guarantees can be provided

No restrictions nor control by 3rd country/entity on results

Compliance with international law and high ethics standards

+ specific to development actions

Co-financing where needed

Harmonised defence capability requirements jointly agreed by at least 2 MS/NO for design

Intention to procure & common technical specifications for system prototyping+ activities

Eligible actions

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%

← **upstream**

Support of at least two MS/NO (LoI, ICR, co-funding) is required

downstream →

Indirect costs: 25% flat rate or cost accounting of actual indirect costs
Boni: (≤ 35% bonus): PESCO (10%), (cross-border) participation of SMEs, (cross-border) participation of SMEs

The bonus system: development actions

20
24

Condition for application	Value of the bonus*
PESCO Bonus	
Action developed in context of the Permanent Structured Cooperation (PESCO)	+10% for all activities in the action
'Mid-cap' bonus	
% eligible costs allocated to 'Midcaps' established in the EU (and NO) $\geq 15\%$	+10% for the activity
SME Bonus	
% eligible costs allocated to 'SMEs' established in the EU (and NO) $\geq 10\%$	% of eligible costs allocated to ' non cross-border SMEs ' established in the EU and NO (maximum 5%) + 2 x % of eligible costs allocated to ' cross-border SMEs ' established in the EU and NO

Bonus system to **incentivise participation of SMEs and mid-caps**

* Overall bonus capped to 35%

EDF CATEGORIES OF ACTIONS

Addressed by annual work programmes & calls for proposals



20
24



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



Disruptive technologies



Innovative defence technologies (SMEs)

Horizontal categories

#EUDefenceIndustry











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 technologiesMulti-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 missilesUnmanned 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 systemsUnmanned ground systems ✓Beyond the line-of-sight close combatArmoured 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 ROsNon-thematic development for SMEs	34 M€ 33 M€



Others	<ul style="list-style-type: none">External expertise, audits, studies, IT, indirect managementBusiness coaching for SMEsBlending facility for equity funding for SMEs/Mid-CapsBusiness accelerating servicesMatchmaking events for investors and SMEs	7.6 M€ 1.6 M€ 20 M€ 2.6 M€ 0.6 M€ 1.2 M€
---------------	---	---

#EUDefence

Legend: Research Development EUDIS-related STEP

2024

S

EDF 2023 Calls - Indicative timeline

20
24

22 June 2023

22 November 2023

June 2024

Q4 2024

Nov./Dec. 2024

Opening of EDF
2023 on the
Funding & Tender
Portal

Final submission
deadline for EDF
2023 calls

Information to
applicants on
evaluations
results

Signature of Grants
Agreements with
awarded
proposals/consortia

Projects
Implementation

***In 2024: Calls to be
closed on 5 November***

Establishment of the
Security Framework

1- Grant
Agreement
Preparation

2- GA
signature

3- Project
management

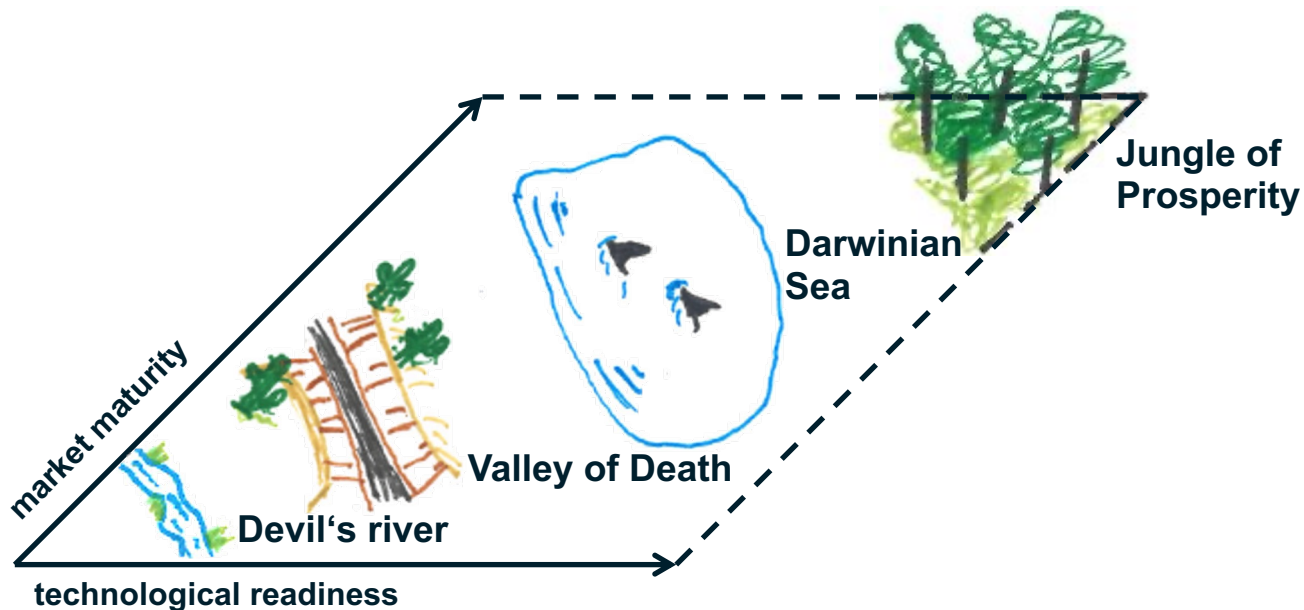
4- End of the
project

European Defence Innovation Scheme (EUDIS)

European Defence Innovation Scheme

20
24

Any sector

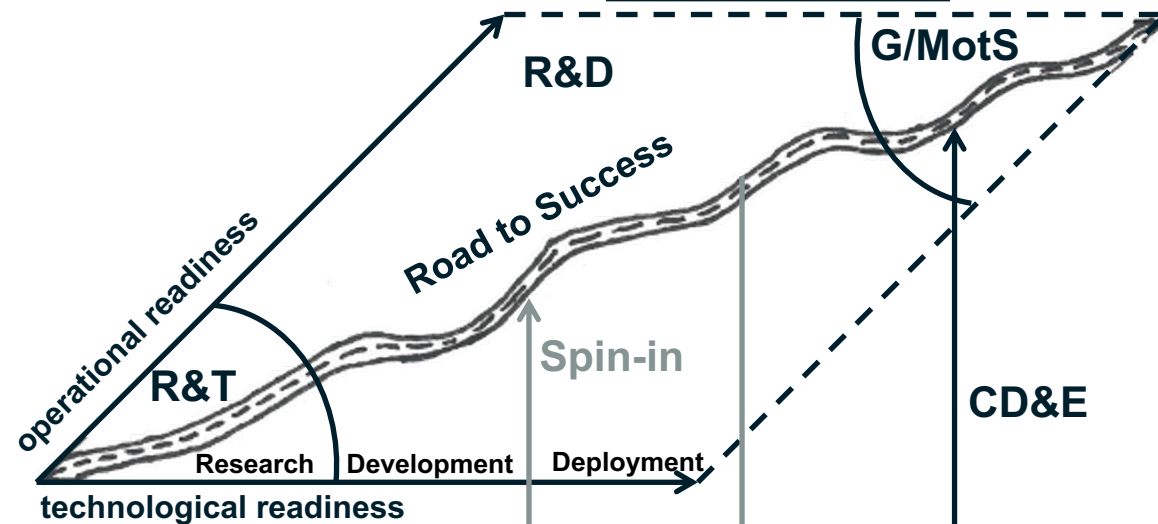


European Defence Innovation Scheme:

- provides five tailor innovation tracks, including access to finance
- covers two dimensions (technology & market)
- based upon extended pipeline model (research → prototype)
- funds the full innovation spectrum (research → commercialization)
- is non-sequential
- is a combination of specifically designed calls for proposals and specific support services procured by COM

#EUDefenceIndustry

Defence sector

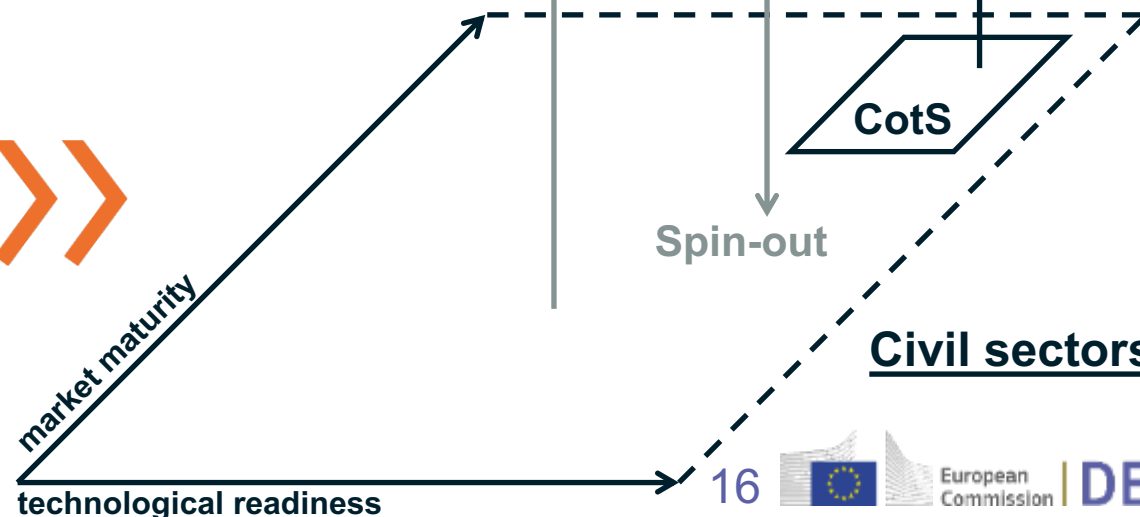


CD&E

CotS

Spin-out

Civil sectors



16



European
Commission

DEFIS

FIVE EUDIS INNOVATION TRACKS

2024

Limited Knowledge



Legacy sector

Risk assessment



Limited access to finance



Underwhelming RoI



Valley of death and more



Limited access to test facilities



CHALLENGE YOUR IDEA

- Technological challenge
- Hackathons



TEST & ACCELERATE YOUR INNOVATION

- Innovation test hub



MIGRATE YOUR INNOVATION FROM CIVIL TO DEFENCE

- Spin-in calls



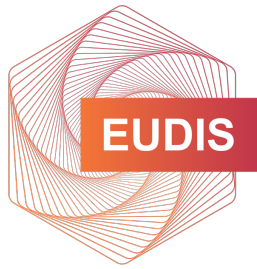
EMPOWER SMEs

- Open SME R&D calls
- Disruptive technologies research calls
- Matchmaking
- Business coaching for grant receivers



IMPROVE ACCESS TO FINANCE

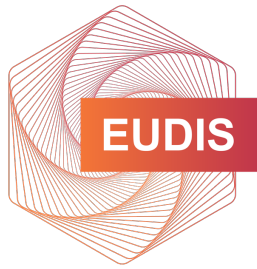
- Proposed Defence Equity Facility under InvestEU



Challenge your novel ideas **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.

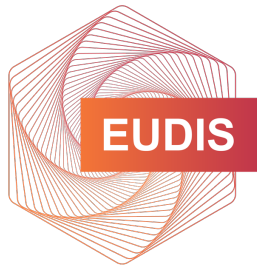
- **EUDIS hackathons** each Spring 2024-2027, and additionally **planned** joint space/defence hackathons each Autumn 2024-2027
- **First EUDIS hackathon** to take place 31 May – 2 June 2024
- **One central hackathon hub** with local organisers in EU Member States/Norway
- **Awards** to hackathon winners through mentoring programmes
- **COM has a framework contract** with a contractor to provide organisational services



Local organisers and challenges

National Centre for Scientific Research Demokritos	Greece	Athens
Krakov Technology Park	Poland	Krakov
Sopra Steria Benelux	Belgium	Brussels
Kaunas University of Technology	Lithuania	Kaunas
Design Terminal	Hungary	Budapest
Cefriel	Italy	Milano

- Main theme – “Digital in Defence”
- Challenges:
 - Improving situational awareness/Multiple intelligence sources (MULTIINT) fusion
 - Cybersecurity
 - Sub-Sea Infrastructure Protection
- More information on https://eudis.europa.eu/hackathons_en and eudis-hackathon.eu



Challenge your novel ideas **Technological challenge**

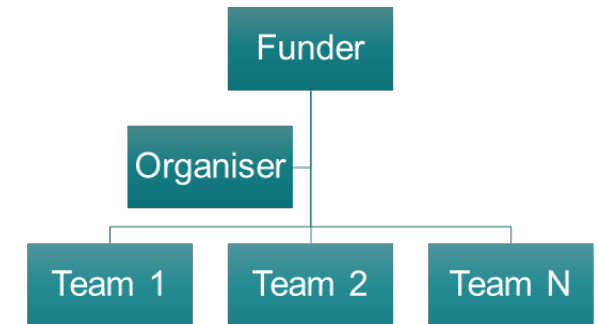
- Incentivise researchers or developers to address a given challenging objective
- Set up a testing environment to measure and foster the progress of R&D teams

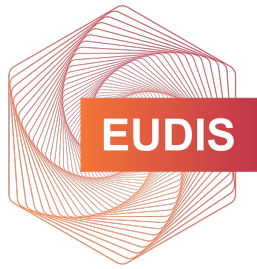
- **Technological Challenges for EDF 2024 in Category/topic:**

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

- **Two topics for each of the two above Challenges:**

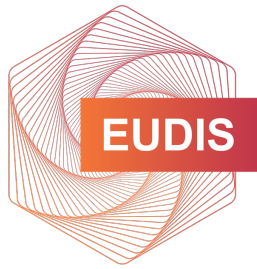
- (1) Challenge **Organiser**
 - Aims at setting up a testing environment and organizing a technological challenge, to which research teams will participate. The testing environment should enable objective comparisons between different approaches
- (2) **Participation** in a Challenge
 - **Space/Multi-source 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**

- Create defence industry knowledge hubs in specific fields (as required by MS) to foster uptake of civil technologies in defence domain
 - Funding for the consortium's R&D project (main part of the grant), incl. 16% funding for organizing calls for innovative and scalable SMEs (Financial Support to Third Parties/cascade funding)
-
- **Category/topic:** Simulation and 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)



Migrate innovation from civil to defence

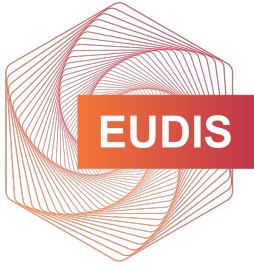
Spin-in calls

- 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 under Invest EU**

- 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
 - **Implementation** starts in 2024
 - Financial instrument accompanied with **capacity building activities for fund managers** and matchmaking for investors and SMEs



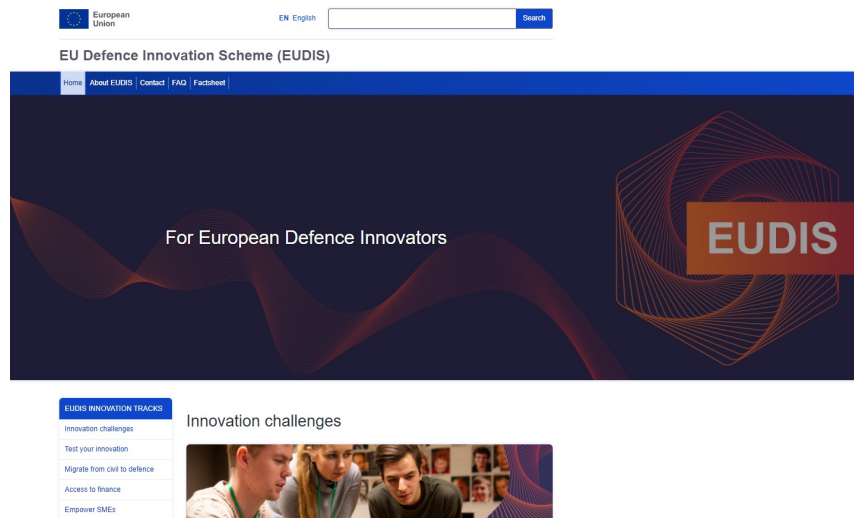
Empower SMEs and RTOs

- Open SME R&D calls (lump sum grants)
 - Research calls for disruptive technologies
 - Business coaching for SME beneficiaries
 - Business accelerator and Matchmaking Services (starting in 2025)
-
- **Categories:** SMEs, Disruptive Technologies
 - **Open Calls:** SMEs, R&D, Disruptive Technologies
 - **Indicative funding:** EUR 112 MEUR



Current agenda

- Dedicated EUDIS webpage – eudis.europa.eu
- Assess opportunities for continuous deployment of EUDIS instruments for EDF WP 2025 and beyond:
 - Timely identification of spin-in and spin-out opportunities.
 - New support measures for SMEs: (business accelerator, investor matchmaking).
- Cooperate with EDA: information, outreach, implementation.
- Regular dialogue with teams of NATO DIANA and NATO Innovation Fund.



**Also
good
to
know**

Call for experts: profile (1/2)

20
24

Experts assist the Commission in the assessment of the proposals submitted to the EDF 2023 calls
Expertise in **technical areas**, **ethics** or in **financial assessment** of defence related activities



**CBRN medical
countermeasures
CBRN detection**



**Aircraft configurations
Air Traffic Management**



**Unmanned systems
Manned-Unmanned teaming**



**C4ISR
Signal transmission**



**AI and its evaluation
Databases**



**Missile defence
warheads**



**Sonar, radar, optical ...
Data fusion**



**Synthetic fuels
Batteries**



**Collaborative
Combat**



**Cyber defence
Exercises and trainings**



**Electronics manufacturing
Advanced materials**



**Protection
Soldier systems**



**Shipbuilding
Naval architecture**



Camouflage



**Electronic warfare
Command posts**

...

Call for experts: profile (2/2)

20
24



Call for experts: registration

20
24

At any time:

Register or update your **profile** in the EU experts database with relevant **fixed and free text keywords**

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/work-as-an-expert>

Send an email with your CV + registration number to **ec-edf-experts@ec.europa.eu**

More information on our website under 'Funding and Grants' > 'Space and Defence related funding'

https://defence-industry-space.ec.europa.eu/calls-tenders/defence-industry-call-experts-assist-european-commission-evaluation-proposals-submitted-funding_en

European Commission | Funding & tender opportunities | Single Electronic Data Interchange Area (SEDIA)

English | Register | Login

SEARCH FUNDING & TENDERS | HOW TO PARTICIPATE | PROJECTS & RESULTS | **WORK AS AN EXPERT** | SUPPORT

European Defence Fund (EDF)

Work as an expert

The European Union Institutions appoint external experts to assist in the evaluation of grant applications, projects and tenders, and to provide opinions and advice in specific cases.

Being an expert for the European Commission

In particular, experts assist in:

- Evaluation of proposals, prize applications and tenders
- Monitoring of actions, grant agreements, public procurement contracts

In addition, experts provide opinion and advice on:

- Preparation, implementation and evaluation of EU programmes and design of policies.

In order to select experts, the European Union Institutions publish regularly calls for expression of interest (see list below) detailing the selection criteria, the required expertise, the description of the tasks, their duration and the conditions of remuneration.

Interested? Please join the database of external experts!

Register as expert

As new expert, you will be first requested to create your EU

News

18 Jul 2021
Horizon Europe: key changes to the Ethics Appraisal Process
The recording of the training session on the key changes to the Ethics Appraisal Process in Horizon Europe, identifying serious and complex issues in EU-funded...

15 Feb 2021
INEA looking for experts to assess CEF Energy calls
The Innovation and Networks Executive Agency (INEA) is looking for experienced experts in energy to assess project proposals submitted under the 2021 Connecting...

Quick Links

EDF National Focal Points – a network for YOU

20
24

»»» Nominated by Member States and Norway

»»» Supported by national structures under their responsibility/control

»»» Inspired by National Contact Points in Horizon Europe

Main tasks

- Provide practical information and assistance on all aspects of participation in EDF
- Organise awareness raising events
- Help with partner search
- Signpost to relevant national/EU sources

»»» **Find your EDF National Focal Point**
Through our website under
EU Defence Policy > Network of European Defence Fund National Focal Points (NFP)
https://ec.europa.eu/defence-industry-space/network-european-defence-fund-national-focal-points-nfp-0_en

How to search for partners?

20
24

Partner search tool on the Funding & Tender portal

- Register and request/offer expertise to your topics of interest (EDF topics are under “Horizon Europe” programme)

EDF Info Days brokerage / matchmaking
organised on **28-29 May 2024**

- B2B platform remains open

Network of EDF National Focal Points (NFP)

- Contact details of your national contact point(s) on the web site!

Other platforms

- Enterprise Europe Network
- European Defence Agency B2B platform
- European Network of Defence related Regions (ENDR)

- General information on the EDF on DG DEFIS website
(including EDF annual work programmes and multiannual perspective, and selected projects)
- EDF Calls for proposals on the *Funding and Tenders portal* (where and how to apply)
- EDF Reference documents on the *Funding and Tenders portal*
(Regulation, conditions to apply, submission templates, model grant agreements, etc.)
- European Defence Innovation Scheme
- National Focal Points Network
- Call for Experts
- EDF Info Days in Brussels, 28-29 May 2024

**THANK YOU
FOR YOUR
ATTENTION**

This document has been prepared by the Commission services. It cannot be understood as representing the Commission's position on these issues and does not bind the Commission in any way.