

Opportunities for SMEs in the **European Defence Fund**



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The European Defence Fund


– Meeting the Challenges

Europe's defence and security needs are being shaped by a changing geopolitical context. Instability in neighbouring regions and emerging threats like cyber-attacks or hybrid attacks require a fresh approach. In order to respond to these developments, and to take greater responsibility for protecting its citizens, leaders of 27 Member States and the European Council, the European Parliament and the European Commission jointly declared in 2017 to increase their contribution to collective security and defence.

In this context, the Commission has established the **European Defence Fund (EDF)** to encourage its Member States to work together in the area of defence. The Fund has two parts. First, it offers grants for **collaborative research projects** in defence technologies and products in order to provide the military with cutting-edge technologies. The projects are fully funded by the EU budget. Second, the Fund co-finances **collaborative capability development projects** by complementing national contributions.

In addition to strengthening the EU's strategic autonomy, the EDF is expected to boost the competitiveness and innovative capacity of Europe's defence industry. The EDF will be at the forefront of developing **state-of-the-art technologies and equipment** that can meet Europe's current and future needs. To achieve its goals, the Fund aims at supporting industrial partnerships and collaboration across European defence supply chains.

Small and medium-sized enterprises (SMEs) that have well-established experience in defence as well as those that have not yet ventured into the sector are actively encouraged to participate in the EDF. Smaller companies' ability to innovate when developing new products and services will be crucial to the success of EDF projects, regardless of whether they have experience in the defence sector. SMEs active in a range of sectors – from aerospace to textiles and from chemicals to electronics – will have something to contribute.



SMEs taking part in the EDF can expect to benefit in a number of ways. The majority of projects will require companies to be engaged in steady, long-term work. They will be introduced to new partners from the private and public sectors, which opens up networking opportunities and a chance to build working relationships that last beyond a project's lifetime. As the EDF looks to generate **innovation in the defence sector**, SMEs will be contributing to the development of cutting-edge technologies and the results they achieve can be used subsequently to inform the development of new products for other clients.

This brochure is designed to raise awareness about the EDF and the opportunities available to SMEs, particularly in areas dedicated to funding European defence research projects, where work has already started. The brochure also introduces a new industrial programme which will fund the development of innovative equipment and technologies for the future of defence in Europe.



How the European Defence Fund Works

The EDF was launched in June 2017 and has a two-strand approach to project funding.

For an initial test period which runs between 2017 and 2020, collaborative research projects are supported under the programme **Preparatory Action on Defence Research (PADR)**, which has a budget of EUR 90 million from 2017 until 2019. To develop equipment and technologies, the **European Defence Industrial Development Programme (EDIDP)** will operate with a budget of EUR 500 million for 2019-2020.

For the period 2021 to 2027, the Commission proposed a budget of EUR 13 billion with EUR 4.1 billion allocated for research projects and EUR 8.9 billion for projects that develop defence capabilities. The European Parliament and the Council will decide on this proposal in the coming months.

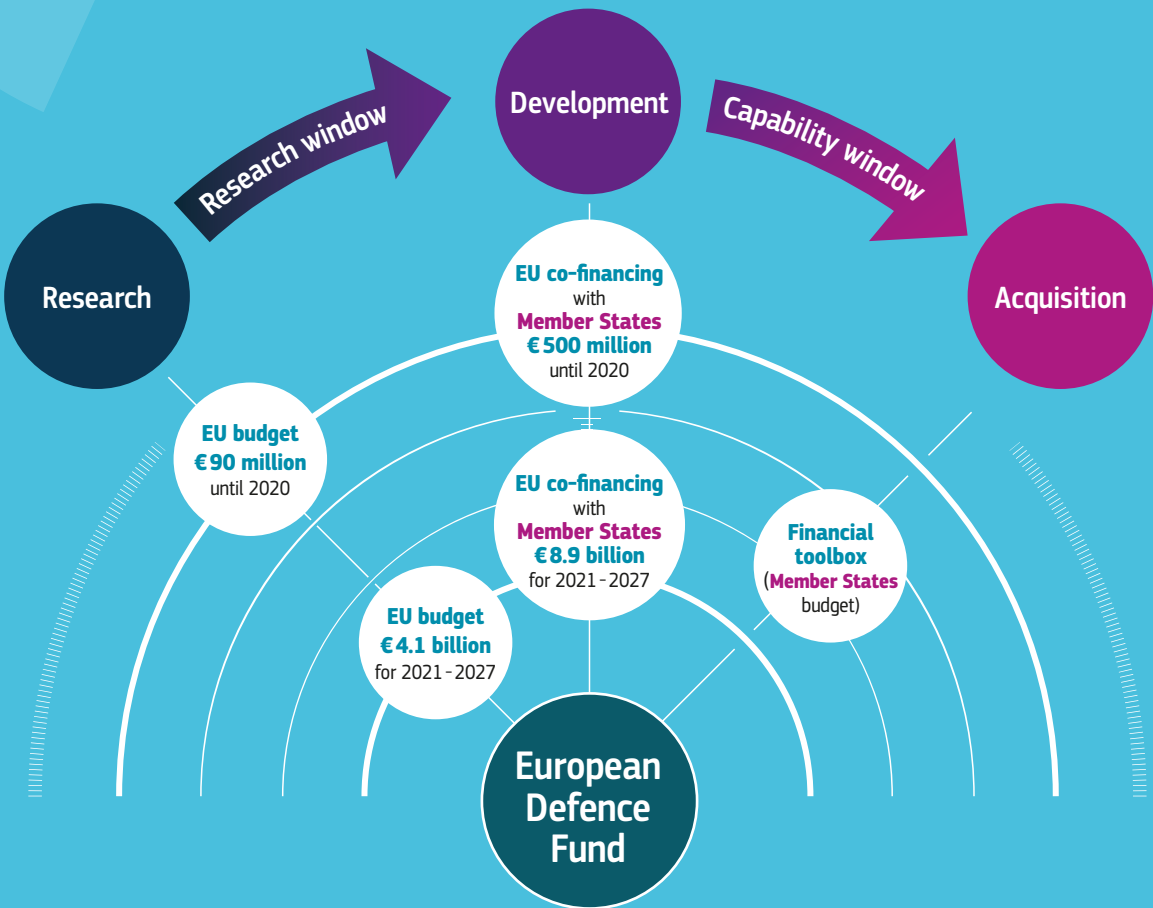
The EDF aims at coordinating, supplementing and amplifying national investments in defence research and development. Through its work, the Fund should help Member States spend more efficiently by reducing duplications. Pooling resources will help countries achieve better value for money and stimulate the development of technologies and capabilities, which are too costly to be developed by Member States on their own.

The Fund finances collaborative, cross-border projects through calls for proposals based on priorities set with the Member States at EU level. Participants can include SMEs and larger companies, defence ministries, research institutes and universities. An EDF project requires the participation of at least three organisations from at least three different Member States.

However, projects are likely to be formed by large consortia since it is essential to demonstrate the ability to collaborate on defence capabilities and programmes. One on-going project is formed by 16 large industrial companies, 14 SMEs, seven universities and research institutes, and five ministries of defence, among 42 partners from 15 EU countries.

Developing cutting-edge defence technologies and equipment is not straightforward and requires long-term commitment. The Fund has been structured to **support the entire research and development lifecycle**. As well as backing research projects, the Fund will ensure results have the best chance to come to fruition by supporting prototype development and testing. For example, one of the EDF's first projects is conducting research into improving body armour for soldiers. The end result could be used by a number of military forces across the continent.

Finally, the European Commission is developing a **financial toolbox** which could include advice on cost-saving financial arrangements, a provision of templates for terms and framework agreements, as well as advice on ownership structures to support Member States that want to jointly acquire developed equipment or technology.



€ 13 billion for the period 2021 to 2027

Funding Research

Through the **Preparatory Action on Defence Research (PADR)**, the EDF offers fully-funded grants for collaborative research projects into defence technologies and products. The focus is on delivering innovation in a range of areas – from electronics and clothing to software encryption and robotics.

The **PYTHIA**¹ consortium was the first to receive a grant agreement under PADR as a project working to identify key trends in defence technologies. The other four PADR projects that received a grant in the first year are: Ocean2020² which aims to demonstrate the cooperation of manned and unmanned systems for improved maritime surveillance; ACAMSII which is developing adaptive camouflage; Vestlife which is developing ultra-light body armour; and Gossra³, which is working to improve the compatibility of complex system elements worn by soldiers, such as sensors or digital goggles.

The **Vestlife**⁴ project is conducting research into ultra-light, modular and bullet-proof armour for soldiers. The aim of this EUR 2.4 million project is to develop clothing that is effective for defence purposes, but also light, flexible and comfortable. Led by *Asociacion De Investigacion De La Industria Textil* (AITEK), the consortium includes five additional participants from five countries including research institutes and companies that specialise in material technologies.

ACAMSII⁵ is developing adaptive camouflage for soldiers. The **EUR 2.6 million project involves seven partners from six countries**. The consortium is led by *Totalforsvarets Forskningsinstitut* (FOI) from Sweden and includes research centres and companies with expertise in textiles, aerospace technologies and defence systems. ACAMSII aims to integrate anti-sensor technologies into camouflage clothing to protect soldiers against sensors operating in several wavelengths, making it harder to detect them by means of near, short-wave and thermal infra-red devices, as well as radar. Reducing detection ranges will increase a soldier's protection during military engagement. The project team will work closely with military end-users as it develops the new kit.

¹ <http://pythia-project.eng.it/about-the-project>

² https://www.eda.europa.eu/docs/default-source/projects/padr-ocean2020-projectweb_2018-05.pdf

³ https://www.eda.europa.eu/docs/default-source/projects/padr-gossra-projectweb_v2.pdf

⁴ <http://vestlife-project.eu>

⁵ <https://www.eda.europa.eu/docs/default-source/projects/padr-acamsii-projectweb-final.pdf>



The Preparatory Action on Defence Research 2018 Work Programme

The defence research work programme for 2018, for which calls for proposals were launched, consists of:

- > Electronic design technologies for defence applications
- > Research into a high-powered laser effector
- > Strategic and technological foresight to address critical defence issues

Grants for the 2018 projects are expected to be signed by the end of the year.

The next PADR work programme and calls for proposals are expected to be released by early 2019.

Applying for Grants under the Preparatory Action on Defence Research

The latest information about the **PADR work programme**⁶ and calls for proposals can be found on the European Commission's **Research and Innovation Participant Portal**. Comprehensive information on how to apply for funding, manage a project and where to get help can also be found there.

By means of an agreement, the Commission delegated the management and implementation of calls to the **European Defence Agency (EDA)**. Information days and brokerage events are listed on its website.

SMEs can submit questions about PADR through the **European Network of Defence-related Region's 'Questions for EDF'**⁷ facility. The website provides the latest information on the EDF and on how the Network brings together regions and clusters to access EU funding.

Alternatively, the **Enterprise Europe Network** can be the entry point for finding information on the EDF calls. SMEs can address their relevant sector group or turn to the group for **Aeronautics, Space and Dual Use Technologies**.

⁶ <https://www.eda.europa.eu/what-we-do/activities/activities-search/preparatory-action-for-defence-research>

⁷ <https://www.endr.eu/question-about-edf>

Video No. 5213

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SME Gears up for Multi-Partner Project

Case study

Antycip Simulation SAS is one of seven SMEs working in the PADR project OCEAN2020⁸, which aims at improving maritime surveillance and the effectiveness of military missions at sea. With a EUR 35 million grant from the EDF, the project is working to increase situational awareness at sea by integrating drones and unmanned submarines into fleet operations.

The company provides **virtual simulation software and applications**, as well as projection and display systems. Its role is to help simulate and test the applications and platforms before their development in the 'real world'.

'Use of computer simulation is very important in such a large and complex project, which has to test and integrate so many different elements', explains Frank Reynolds, Antycip Simulation's European Marketing Manager.

According to Mr Reynolds, large-scale initiatives like OCEAN2020 offer great opportunities for SMEs. 'Big projects with a range of partners have complex supply chains which often require the specific expertise of smaller companies – it can be very niche, but contributions can often be made by the smallest of businesses.'

Although the idea of working on a large project could be initially daunting for some SMEs, the benefits are numerous providing that they can commit their resources and are flexible enough to adapt to changes in budgets and work programmes.

'Big projects can take a while to get going, but on the plus side they are often long-term – for example, OCEAN2020 lasts for three years', says Mr Reynolds. 'This is great for business planning and the order book as you have an income stream for that period of time.'

⁸ https://www.eda.europa.eu/docs/default-source/projects/padr-ocean2020-projectweb_2018-05.pdf



Working in big consortia can also provide SMEs with more intangible benefits. The range and number of organisations involved naturally generates networking opportunities. Companies can find out about forthcoming tenders and other business opportunities from project partners. **Plus, the delivery of a successful project provides a boost to the reputation of everyone involved.**



Moreover, the hard work and commitment required to work on large projects can help smaller companies innovate and move forward. **‘The knowledge gained from working on the specific needs of OCEAN2020 will be used to inform new products and services which we can then introduce to the marketplace’**, adds Mr Reynolds.



Developing Defence Capabilities

The **European Defence Industrial Development Programme (EDIDP)** is expected to become operational with the first calls for proposals being launched at the beginning of 2019.

The programme has been designed to foster the competitiveness, efficiency and innovation capacity of the European defence industry; support and leverage cooperation between undertakings and EU Member States in the development of defence products and technologies; and encourage better exploitation of defence research.

Areas which could attract support from the EDIDP include: carrying out **feasibility studies; product design and testing; development of prototype equipment and technology; and qualification and certification.**

Funding will be made available through co-financing. For prototyping, 20 % of costs will be covered by the programme, while feasibility studies, design, testing, qualification and certification could attract up to 100 %. There is also a 25 % flat rate contribution for indirect costs.

SMEs in the European Defence Industrial Development Programme

Promoting cross-border SME involvement is one of the key objectives for the EDF. The Fund will favour project bids by consortia which include SMEs and higher financing rates will be provided when SMEs are included. In addition, at least 10 % of the programme's budget will benefit SME cross-border participation.

The EDIDP will follow a work programme with defined areas based on input from Member States, and a project category will be dedicated to SMEs. The EDIDP work programme will be established by the end of 2018, but **SMEs may already approach their Ministry of Defence to register their interest.**



Further Information

DG Growth information on European Defence Industrial Policy:

ec.europa.eu/growth/sectors/defence/industrial-policy_en

The European Defence Fund – Frequently Asked Questions:

europa.eu/rapid/press-release_MEMO-17-1476_en.htm

The European Network of Defence-related Regions:

www.endr.eu/

The European Commission's Research and Information Participant Portal:

ec.europa.eu/research/participants/portal/desktop/en/home.html

EDA's European Funding Gateway:

eda.europa.eu/what-we-do/our-current-priorities/eu-funding-gateway

Enterprise Europe Network:

een.ec.europa.eu/

The Enterprise Europe Network's local contacts:

een.ec.europa.eu/about/branches

EU EDIDP Regulation:

eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32018R1092

