The Preparatory Action on Defence Research

in the context of the European Defence Fund

Preparatory Action on Defence Research
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Does not represent an official legal opinion of the European Commission
POLICY CONTEXT: EUROPEAN DEFENCE FUND
Challenges

Security Threats
• To our borders
• Increasing complexity – hybrid

Markets & Industry
• Fragmented
• Rapidly evolving – new sources of innovation
• Increasing global competition
Fragmentation ...

... the case for greater cooperation on defence

<table>
<thead>
<tr>
<th></th>
<th>EU-28</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defence Expenditure</strong></td>
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<td></td>
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<tr>
<td>Total amount</td>
<td>€ 227 billion</td>
<td>€ 545 billion</td>
</tr>
<tr>
<td>% of GDP</td>
<td>1.34</td>
<td>3.3</td>
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<tr>
<td>Investment per Soldier</td>
<td>€ 27,639</td>
<td>€ 108,322</td>
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<thead>
<tr>
<th><strong>Duplication of Systems in Use</strong></th>
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<tbody>
<tr>
<td>Number of types of weapon systems*</td>
<td>178</td>
</tr>
<tr>
<td>Main battle tanks</td>
<td>17</td>
</tr>
<tr>
<td>Destroyers/frigates</td>
<td>29</td>
</tr>
<tr>
<td>Fighter planes</td>
<td>20</td>
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</tbody>
</table>

* Number of types of weapon systems for selected weapon systems categories

Source: NATO, International Institute for Strategic Studies, SIPRI
European Framework

President Juncker makes a stronger Europe in security and defence one of his Commission's 10 priorities

- EU-NATO sign Joint Declaration on cooperation in Warsaw
- Bratislava summit: Leaders agree to give new impetus to security and defence
  - Member States agree implementation plan on security and defence
  - Commission proposes European Defence Action Plan to increase research and capabilities
  - EU and NATO endorse common set of proposals for implementation of Warsaw Declaration
  - European Council endorses implementation of Defence Action Plan, Global Strategy and Warsaw Declaration

Rome Declaration: Leaders agree to create a more competitive and integrated defence industry
- Commission to present proposals for a European Defence Fund
- Commission to present a Reflection paper on the future of European Defence by 2025
- Prague high-level European conference on defence and security
European Defence Action Plan

President Juncker –

"For European defence to be strong, the European defence industry needs to innovate"

Objectives:
- Support EU defence collaboration
- Ensure EU retains industrial capacity in key areas
- Support competitive industry & innovative EDTIB
European Defence Action Plan

• Focus on defence capability needs and support to the European Defence Industry

• Main pillars
  • Launching a European Defence Fund
  • Fostering investments in defence supply chains
  • Reinforcing the single market for defence
  • Civil/military synergies
European Defence Fund

Policy Context

European Defence

Preparatory Action on Defence Research
European Defence Research Programme

Research Window

- EU funding

Capability Window

- Pooling of national contributions
- EU co-financing

European Defence Industrial Development Programme

Development

Acquisition

- Practical support by European Commission

COM(2017)295
European Defence Fund

### Policy Context

**European Defence Fund**

- **All budgets are proposals!**
- **Investment decisions should be based on defence capability priorities agreed by the Member States**

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<thead>
<tr>
<th><strong>RESEARCH</strong></th>
<th><strong>DEVELOPMENT</strong></th>
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<tbody>
<tr>
<td>• Fully and directly funded from EU budget</td>
<td>• Member States budget at least 80%</td>
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<td></td>
<td>• Co-financing from EU budget up to 20%</td>
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<tr>
<th><strong>PADR!!</strong></th>
<th><strong>€90 million total</strong></th>
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<tr>
<td><strong>€2 billion total</strong></td>
<td><strong>€500 million</strong></td>
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<tr>
<th><strong>UNTIL 2020</strong></th>
<th><strong>POST - 2020</strong></th>
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<tr>
<td></td>
<td><em><em>€500 million</em>/ year</em>*</td>
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<td><em><em>€1 billion</em>/ year</em>*</td>
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<tr>
<td><em><em>€5.5 billion</em>/ year</em>*</td>
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How to try something new at EU level?

- General principle: no legal framework – no money!
- Three exceptions for testing new actions:
  - Pilot Project: experiment to test the feasibility and usefulness of an action (max 2 year duration)
  - Preparatory Action: prepare for a proposal for a new legal framework (max 3 year duration – max EUR 100 million per action)
  - Propose new legislation – EXCEPTIONAL
Policy Context

PILOT PROJECT ON DEFENCE RESEARCH
Three topics – three projects

- Unmanned Heterogeneous Swarm of Sensor Platforms
  **EuroSWARM** (Cranfield University, 434 k€, 12M)
- Inside Building Awareness and Navigation for Urban Warfare
  **SPIDER** (TEKEVER, 433 k€, 12M)
- Standardisation of Remotely Piloted Aircraft System (RPAS) Detect and Avoid
  **TRAWA** (NLR, 433 k€, 18M)
PREPARATORY ACTION ON DEFENCE RESEARCH
PADR Objectives

- Demonstrate and assess added-value of EU supported defence R&T
- Results should foster further cooperation between Member States and between EU defence industries
- Prepare for a basic act to launch a substantial defence research programme from 2021 onwards
PADR Scale and Scope

- Duration: 3 years – 2017-2019
- Requested total budget: EUR 90 million, subject to yearly decisions
- 2017 Budget: EUR 25 million APPROVED!!
- 2018 Budget: EUR 40 million REQUESTED
- Bulk of the PADR budget to set-up a small defence R&T programme to prepare and test mechanisms to deliver cooperative defence research activities
2017 PADR Governance
PADR Modalities (1/2)

- **Horizon 2020 "look & feel"** as close as possible but adapted to specificities of the defence sector & Financial Regulations
- Mainly **GRANT-based scheme** (research actions – coordination and support actions); procurement limited to studies
- Participation: legal entities established in Member States or Norway only
- Evaluation based on **excellence** organised by EDA assisted by independent experts, validated by national authorities

\(^1\) Subject to amendment of Protocol 31 to the EEA Agreement
PADR Modalities (2/2)

- Funding: 100% direct eligible costs + indirect costs (flat rate of 25% of direct eligible costs)
- Personnel costs can be declared as unit costs (if this is the beneficiary's usual accounting practice)
- EU funding can only be used for R&T activities related to defence technologies, products and systems, and not to fund military operations
- IPR: results owned by participants; measures to inform national authorities on the outcome of the projects
## Structure of PADR R&T Programme

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<tr>
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<th>Effects</th>
<th>Force Protection and soldier systems</th>
<th>Unmanned Platforms</th>
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Strategic Technology Foresight Modalities
2017 WORKPROGRAMME
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**Strategic Technology Foresight Modalities**
Calls available on Participant Portal

2017 Work Programme

Calls for Proposals

Pilot Projects and Preparatory Actions

Pilot projects (PP) and Preparatory Actions (PA) introduce new initiatives that might turn into standing EU funding programmes. A Pilot Project is an initiative of an experimental nature designed to test the feasibility of an action and its usefulness and lasts not more than two years. A Preparatory Action - normally the successor of a successful pilot project on the same matter - is designed to prepare new actions like EU policies, legislation, programmes etc., with funding for not more than three years. For more information on the Pilot Projects and Preparatory Actions see the annual report on pilot projects and preparatory actions.

In addition to the search facilities, the full list of Union Civil Protection Mechanism Programme Calls can be found here.
EDA CALL FOR EXPERTS
Call for experts in the field of Defence Research 7/06/2017

1. The European Defence Agency (EDA) is launching a call for experts to be registered in the European Commission’s Participant Portal and who can be called on in connection with the Preparatory Action on Defence Research (PADR) (2017-2021), for the following tasks:

- evaluation of proposals
- monitoring of the implementation of actions
- ethics reviews, checks and audits

2. EDA is looking for experts with a high level of expertise and professional experience in a military context, in one or more of the following areas:

- Unmanned Platforms
- Command, Control, Communications, Computers, Intelligence, Surveillance and reconnaissance (C4ISR)
- Effects
- Force Protection and Soldier Systems
- Military Cyber protection

EUROPEAN DEFENCE RESEARCH PROGRAMME (EDRP)
EDRP

- Multiannual Financial Framework post 2020
- Estimated budget: EUR 500 million per year
- Adoption of the proposal, accompanied by an impact assessment, in 2018
- Focus on targeted research activities supporting the development of defence-related products and innovative technologies.
- EDRP should be capability-driven and focus on critical defence technologies as well as exploratory and disruptive research with the potential to strengthen the technological leadership of the European defence industry.
EDRP : Points to note

- **Legal issues**: precise relationship with the successor to Horizon 2020 needs to be determined
- **Financing**: separate from and not affect the civilian research programme
- **Priorities-setting**: Member States will identify, with the help of the EDA, the defence capability priorities and the R&T priorities. The Commission will take these into account in the EDRP.
- **Governance**: tailor made governance structure, reflecting the specificities of the defence sector; Commission, EDA, Member States, Industry.
- **Modalities**: EDRP should attract broad participation of different actors, including SMEs.
THANK YOU FOR YOUR ATTENTION

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