

Belgian Preparatory Action on Defence Research (PADR) outcome and participation analysis

In preparation of the future European Defence Fund to be launched in 2021 for a period of 7 years, two test actions have been implemented as trial or preparation actions. The Preparatory Action on Defence Research (PADR) is addressing the research window of the future defence fund, while the European Defence Industrial Development Programme (EDIDP) is devoted to the capability window with a focus on development and industrial aspects. This article is an analysis of the outcome of the PADR and the Belgian participation.

The PADR proposed, over a 3-year test period (2017-2019), a representative work programme for the future research window of the European Defence Fund: a variety of defence technological domains addressed, mixing research actions as well as coordination and support actions, with different funding scales from €1M to €35M per project.

Year	Call	Budget (M€)	Type of action	Call area
2017	PADR-US-01-2017	35,5	RA	Unmanned Systems
	PADR-FPSS-01-2017	6,8	RA	Force Protection & Soldier Systems
	PADR-STF-01-2017	1,0	CSA	European Defence Research Runway - Part 1
	Total 2017	43,2		
2018	PADR-EDT-2018	12,0	RA	Electronic Design Technologies for Defence Applications
	PADR-EF-02-2018	5,4	RA	Effects
	PADR-STF-02-2018	1,9	CSA	European Defence Research Runway - Part 2
	Total 2018	19,3		
2019	PADR-EMS-2019	10,0	RA	Electromagnetic Spectrum Dominance
	PADR-FDDT-OPEN-2019	4,0	RA	Future Disruptive Defence Technologies
	PADR-FDDT-EMERGING-2019	7,5	RA	Future Disruptive Defence Technologies
	PADR-US-2019	1,5	RA	Unmanned Systems
	Total 2019	23,0		

Table 1 : PADR calls information

The PADR gave rise to a large interest coming from 26 EU Member States (and Norway) with 127 proposals involving 889 entities, a huge response for a relatively small budget (€90M for the whole program). With 18 proposals, involving 202 entities from 22 nations, being funded, the EU average success rate is 14%.

Figure 1 shows the profile of the participating entities. Although the PADR is oriented on research, the presence of research institutions and academia is reaching a ratio of 38%, which is nevertheless inferior to the Horizon 2020 ratio (64%). SMEs participation ratio reaches 22%, which is similar to the H2020 SMEs participation ratio (23.6%).

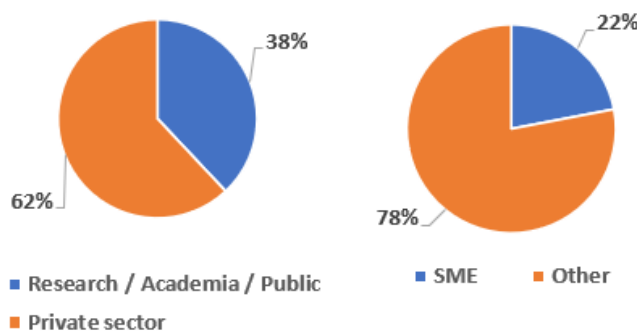


Figure 1 : Profile of participating entities

Number of participating universities	
Italy	3
Belgium	2
France	2
Poland	1
Greece	1
Romania	1
Slovakia	1
United Kingdom	1

Table 2: Participating universities per country

Within the research actors, a closer analysis revealed that universities are only marginally represented. Only 12 institutions from 8 Member States are participating (Table 2), which represents 1.35% of the participating entities. The Belgian universities participating to funded projects are the Royal Military Academy and the Université Catholique de Louvain.

As regards the Belgian participation to the whole PADR, 15 different entities participated in 17 proposals.

With 6 funded proposals involving 7 entities, the Belgian success rate is 35%, which is above the EU average. In comparison to other EU countries, Belgium ranks joint 5th in number of awarded projects and joint 6th in terms of participating entities involved in these projects, what is considered a good performance (Figure 2).

It is also worth to mention that 50% of the projects to which a Belgian entity is participating belongs to the domain of disruptive technologies.

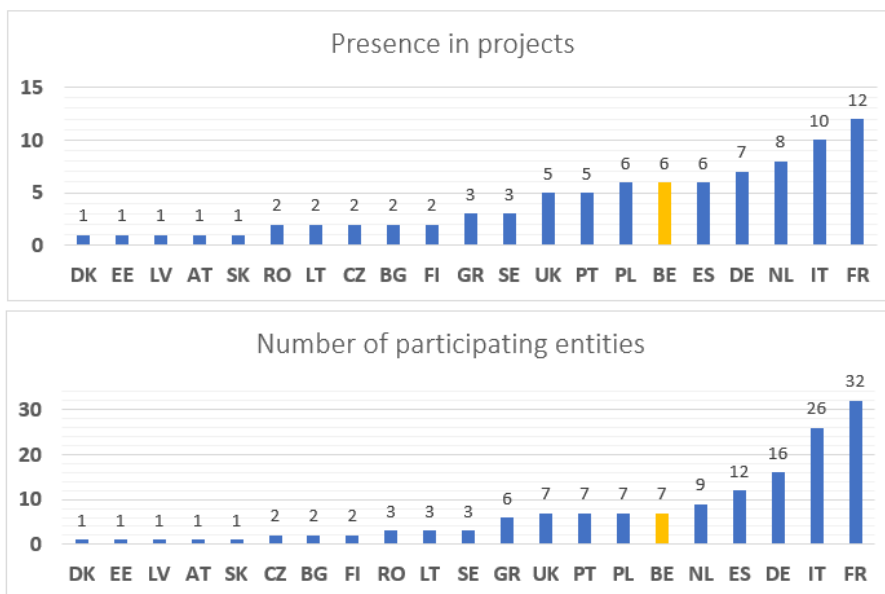


Figure 2: Belgian participation vs. other EU countries

In view of the foregoing, the research window of the upcoming European Defence Fund will offer key opportunities to industry, research centres and academic institutions already involved in defence research or willing to do so.

In collaboration with the Federal and Regional institutions, the Ministry of Defence will promote the participation to research actions of the European Defence Fund, and closely monitor the progress and success of this effort.

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Information used for this analysis come from the [EDA](#) and [Commission](#) web sites