VLIR, the Flemish Interuniversity Council, is an autonomous body funded by the five universities of Flanders, Belgium: VUB, KU Leuven, UAntwerpen, UHasselt and Ghent University. The following feedback is the output of interuniversity discussions and represents its shared stance on the European Commission's White Paper "On options for enhancing support for research and development involving technologies with dual-use potential".

Background

In January 2024 the European Commission launched a white paper on options for dual-use research in the new multiannual framework programme.[1] The origins of the white paper lie in the European Economic Security Strategy, adopted on 20 June 2023.[2] The Strategy is built around three axes: 1) prioritising the EU's own competitiveness; 2) protecting its economic security risks; and 3) partnering with the widest range of countries sharing the EU's concerns and interests in economic security. An important component of the protection of the EU's economic security is maintaining and securing the EU's technological advantage regarding technologies critical for the EU's economic security, which often have dual-use potential. However, current instruments (mainly Horizon Europe and the European Defence Fund (EDF), but also the European Investment Bank), lack opportunities for civil-defence synergies and cross-fertilisation between research on technologies with dual-use potential intended for the civil market and those intended for the defence and/or military market.

Current framework

Currently, Horizon Europe exclusively targets civil applications (while research on dual-use technologies is possible, the intended application needs to be exclusively civil), whereas defence research activities are funded under the EDF. While instruments exist to promote synergies between the two funding schemes, the Commission feels that these instruments do not sufficiently enable cross-fertilisation between research on technologies with dual-use potential with an intended civil application and research with an intended military application.

Suggestions

To further facilitate research on technologies with a potential dual-use application, the Commission suggests three potential future pathways, indicating that option 2 and 3 are mutually exclusive:

1. Going further based on the current set-up.
   This option would aim to improve the current set up and leverage measures already introduced to stimulate both research on technologies with dual-use potential with civil and defence

[1] European Commission (2024). *White Paper on options for enhancing support for research and development involving technologies with dual-use potential*, https://research-and-innovation.ec.europa.eu/document/download/7ae11ca9-9ff5-4d0f-a097-86a719ed6892_en.
[2] https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3358.

applications, such as the EIC transition scheme and the EU Defence Innovation Scheme (EUDIS). It also aims to develop a common definition of technologies with dual-use potential with the EIB and the EIF to promote joint investments in such technologies for military mobility, green transition, critical infrastructure, etc. This option would be possible within the current multiannual framework but would increase the need for better coordination on the EU level.

2. Remove the exclusive focus on civil applications in selected parts of the successor of Horizon Europe

   This option suggests replacing the words 'exclusive focus' with 'focus' in selected parts of the new multiannual framework programme. All remaining parts would remain exclusively focused on civil applications. This option would allow for strategic emerging technologies to be supported in the multiannual framework programme, independent of whether the technologies have a military or civil application. This would likely attract more industry stakeholders, contributing to cross-fertilisation of civil and defence industries.

3. Create a dedicated instrument with a specific focus on R&D with dual-use potential

   In the white paper, this option is the least developed, but it could take several forms:
   - A specific instrument devoted to research with dual-use potential, with own budget and regulations;
   - Increasing support for EU Market uptake of technologies with a dual-use potential through a dedicated mechanism or structure;
   - Planning of dual-use flagship projects, which support the development of critical technologies.

   This option seems to be the least preferred option for the Commission. The White Paper states that this "would add complexity to a crowded R&D support environment as well as lead to rigidity in resource allocation and potential for duplication of Horizon or EDF efforts".

While the exact modalities and implementation will need to be developed for all three potential future pathways, VLIR welcomes the opportunity to give feedback on the options presented by the European Commission.

Feedback

VLIR understands the need to focus on the EU's strategic autonomy and acknowledges that EU research institutes should play a vital role in strengthening the security of the EU.

Of the presented options, VLIR prefers option 1, with a few considerations:

Option 1 promotes stronger synergies between the 10th framework programme and other funding channels to facilitate the development of defence technology. VLIR asks the Commission to further clarify the synergies between FP10-projects and defence-focussed R&D programmes, to communicate clearly on these funding opportunities, and to provide clear guidelines on how synergies between FP10-projects and defence-oriented follow-up projects can be realised. This enables researchers to understand and fully utilise the funding landscape and should allow for a further development of dual-use technology originating in FP10 for military applications, as envisaged by the European Commission.

The results of projects which are funded under the 10th framework programme (i.e. exclusive civil applications), and which have a dual-use potential (i.e. potential civil and military application)

can be further developed/explored/exploited under the European Innovation Council (EIC) scheme for civil applications and under the EU Defence Innovation Scheme (EUDIS) for the military applications, respectively.

Option 1 refers to both the "Commission Recommendation on critical technology areas for the EU's economic security (03.10.2023)"[3] and the "Council Recommendation on enhancing research security"[4]. Both documents mention the necessity of thorough risk assessment when working on dual-use research or within a critical technology area (as listed in annex 1 on the Commission Recommendation 03.10.2023). VLIR asks the EC to provide clear guidelines on the necessary assessments, the responsibilities of both Member States and research organisations, and the requirements to be met by applicants and their institutions.

Option 1 has the advantage that it avoids some of the risks that come with option 2, being:

- One of the many strengths of Horizon Europe is its openness to the world: in search for scientific excellence, EU researchers are encouraged to collaborate with excellent researchers worldwide. Option 2 could undermine the Framework Programmes fundamental principles (*"Open to the world"* in Horizon 2020, *"As open as possible, as closed as necessary"* in Horizon Europe). Including research on technologies with a dual-use potential for military applications in the framework programme will increase the number of calls restricting access to third countries, limiting universities' opportunities to collaborate with their peers outside of the European Union.[5] This goes against the academic culture of openness and should always remain the exception. In addition, more security measures will be needed within universities, restricting information exchange and collaboration within research groups even further than is already the case under the current calls restricting access.
- Research on technologies with dual-use potential that is intended to lead towards application in the defence industry will most likely be of a high TRL, putting more focus on applied research and limiting the possibilities for fundamental research.
- Allowing research for military applications within Horizon Europe will lead to a higher involvement of defence companies in research consortia. This is not self-evident due to institutional, ethical, or policy constraints. For example, certain defence companies sell military equipment to countries that are non-democratic or authoritarian, that use this equipment for violations of international humanitarian law and human rights (including internal repression). Facilitating the participation of such companies in research consortia will result in universities being unwilling or unable to participate in FP10 research projects.
- Research on technologies with dual-use potential is already possible under Horizon Europe, but the applications within the projects can only be of a civil nature. Enabling military applications in the next framework programme and removing the exclusive civil focus, leads to the normalisation of military research. It gives a strong signal towards researchers that

[3] https://defence-industry-space.ec.europa.eu/commission-recommendation-03-october-2023-critical-technology-areas-eus-economic-security-further_en

[4] https://webapi2016.eesc.europa.eu/v1/documents/com26-2024_part1_ext_EN.docx/content

[5] Even under current regulations, there is a noticeable shift towards less open collaborations. The Horizon Europe Regulation Article 22(5), which allows restriction of participation in order to safeguard EU strategic assets, interests, autonomy, or security in certain sensitive areas, was applied to 49 topics in the Horizon Europe work programme 2021-2022 **representing around 4% of that work programme's budget** (around 2% of the overall 2021-2022 Horizon Europe operational budget). Ref.: eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023DC0277, p. 6.

military research is the 'new normal' and that participating in military research should be self-evident. This will represent a big shift in the culture of many universities.

- Including research on technologies with dual-use potential for military applications in the framework programme will lead to additional scrutiny (and consequently criticism) by civil society (e.g. non-governmental organisations, journalists, or citizens). By consequence, this will discredit the entire framework programme, which is currently perceived very positively.
- The past years have shown that any research programme on technologies with dual-use potential or military technologies will need to be easily adaptable to changes in the geopolitical climate, much faster than can be adapted by multiannual strategic plans or even by (bi-)annual work programmes. Including this research in a large vehicle such as the framework programme considerably restricts the agility of any policy to adjust to new geopolitical demands.
- Earmarking pillar 2 funding in FP10 for technologies with dual-use potential may lead to a loss of funding for the societal challenges that are currently being funded under Horizon Europe (or any other new societal challenge that would be introduced in the new framework programme), while many high-quality project proposals already stay unfunded today. This would mean less budget for research to implement the Green Deal, Digital Transition, Migration, etc., or even worse, for bottom-up research under MSCA or ERC.

Option 1 also has the advantage that it avoids some of the risks that come with option 3, in particular: option 3 adds more complexity to the existing funding landscape while it is insufficiently clear how an additional funding programme could offer a solution that cannot be reached by facilitating synergies between the current programmes.