EUROPEAN DEFENCE AGENCY

FACT SHEET

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RESULTS OF FIRST COORDINATED ANNUAL REVIEW ON DEFENCE

Europe's security environment is increasingly dynamic, which requires highly resilient and responsive armed forces. However, with defence planning and development of military assets taking place at a national level, anticipating and identifying opportunities for European cooperation is often impeded.

Initiated by the Council of the European Union in 2016 the Coordinated Annual Review on Defence, or CARD, provides for the first time a fully-fledged defence review at EU level. It provides Member States with a comprehensive overview of the European defence landscape, including capability, research, and industrial aspects. Acting as a pathfinder for cooperation, CARD offers Member States a tool to increase consistency between their national defence plans from a European perspective and to engage more systematically and in a more structured manner in defence cooperation.

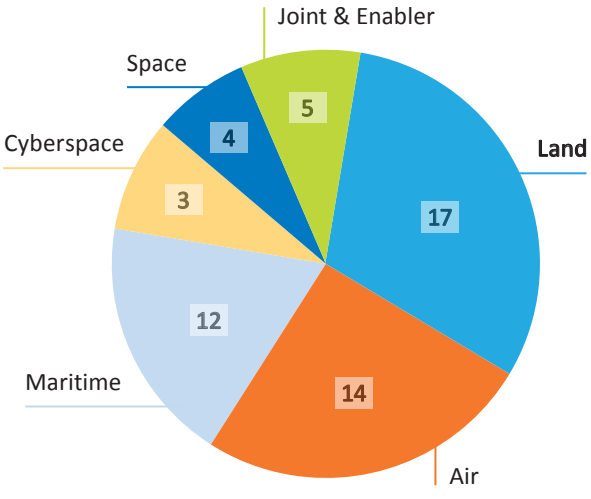
Triggering European Collaboration

CARD aims to enhance the coherence of the European defence landscape and may result in new cooperation projects launched by Member States in various formats - under PESCO, within EDA or in other bilateral or multinational frameworks. Some of those may be co-funded by the European Defence Fund (EDF).

All collaborative opportunities are linked to the 2018 EU Capability Development Priorities, resulting from the Capability Development Plan. Member States will decide which projects may be taken forward and within which format, should they decide to develop cooperation in these areas.

CARD identified 55 collaborative opportunities in capability development in all operational domains and 56 related opportunities for R&T cooperation.

55 collaborative capability development opportunities across domains



6 Focus Areas for collaboration

CARD recommends concentrating capability development efforts on next generation capabilities and preparing the future together within six focus areas.

Main Battle Tank

Upgrade, modernise and develop the backbone of land-based operations

Soldier Systems

Improve individual protection & operational awareness

European Patrol Class Surface Ships

Ensure extended surface presence at sea

Counter UAS/ Anti Access/Area Denial (A2/AD)

Countering aerial threats

Defence in Space

Access to space services and the protection of space-based assets

Enhanced Military Mobility

Rapid movement for the security of Europe

CARD concludes that these capabilities would yield significant benefits in addressing Member States' declared national priorities as they have been identified as having good potential for cooperation, due to a match in Member States' planning and interests. In addition, they are considered to have a significant impact in structuring the European capability landscape and ensuring Europe's ability to generate required high-end capabilities. Moreover, these focus areas have the potential to spearhead clusters of related collaborative projects, including the research & technology dimension, across all planning horizons. This offers Member States the opportunity to prepare the future together and to shape the European capability landscape in a structured and sustainable manner.

European Defence Landscape

CARD confirms that the European defence landscape is characterised by fragmentation with very high diversity of types in major equipment and different levels of modernisation and interoperability. Defragmentation and coherence of the European defence landscape requires coordinated and continuous efforts over a long period in three key major areas: defence spending, defence planning and defence cooperation.

» **Defence Spending**

Sustain defence investment and increase consultations with other Member States. CARD highlights that the current outlook for collaborative R&T spending levels remains insufficient, putting EU strategic autonomy at risk.

» **Defence Planning**

Take into consideration the EU landscape when establishing national plans and/or making investment decisions. CARD indicates that the recent EU defence initiatives have yet to produce a significant and positive impact on the European defence landscape.

» **Defence Cooperation**

Before making decisions at national level, enhance dialogue with other Member States and analyse their impact on the EU capability landscape. CARD acknowledges that, while the EU defence initiatives have generated more interaction among Member States, national approaches to capability development continue to prevail.

The Cost of Fragmentation

A more coherent defence landscape can be achieved by preparing the future together and enhancing at the same time the coherence of the European capability landscape in terms of modernisation, innovation, and commonality.

European fragmentation can only be addressed by seizing opportunities of multinational cooperation across the entire life cycle of a capability. This would improve European interoperability in operations, allow to speed up the force generation process and contribute to PESCO commitments.

EU Strategic Autonomy

CARD also revealed an uneven understanding of the concept of strategic autonomy as well as a generic overlook of the EU context when referring to industrial issues. The focus remains mainly national. CARD can contribute to raising awareness and support common understanding of the notion of the EU's strategic autonomy.

CARD highlights that a more coordinated and harmonised approach at EU level is paramount to avoid uncoordinated defence cuts, reduce dependencies, master critical technologies, and protect strategic European activities.

How CARD works

1. CARD is a cyclic review of the European defence landscape based on permanent dialogue with the participating Member States and between EU institutions. At the start of the CARD process, EDA, in coordination with the European External Action Service, including the EU Military Staff, collects information already made available by Member States to review their contribution to the European defence landscape.

2. Bilateral dialogues are then held with each Member State, to validate, complement and consolidate the information, making use of NATO's Defence Planning and the Partnership for Peace Planning and Review Process, where relevant.

3. Once the bilateral dialogues are completed, the results are analysed to identify trends, primarily on defence spending, on defence planning in particular then implementation of priorities resulting from EDA's Capability Development Plan, as well as opportunities for defence cooperation.

4. Based on the results of this review and Member States' feedback, recommendations and opportunities for cooperation are presented to Ministers of Defence in the final CARD report. These recommendations and opportunities will be addressed in the next CARD cycle to ensure the monitoring of Member States' efforts.

Background

The EU Global Strategy (EUGS) presented in June 2016 called for the "gradual synchronisation and mutual adaptation of national defence planning cycles and capability development practices" to enhance strategic convergence between Member States and facilitate and promote defence cooperation among them. On 18 May 2017, the Council endorsed the modalities to establish the Coordinated Annual Review on Defence (CARD) and launched the CARD Trial Run.

Focus areas

Main Battle Tank

Upgrade, modernise and develop the backbone of land-based operations

The land domain is characterised by high fragmentation, leading to a lack of coherence, especially with regards to armoured vehicles. The multitude of models operated by Member States and the lack of harmonisation between modernisation and replacement programmes explains the current level of fragmentation.

The main areas in the land domain, in terms of national priorities and spending efforts, seem to be armoured personnel carriers, infantry fighting vehicles, main battle tanks (MBTs) and artillery.

18 Member States currently operate more than 4,000 MBTs of different types and variants. Many MBT assets currently held by Member States are ageing or obsolete. The MBT has proven its relevance in conventional high intensity operations as well as crisis management operations. CARD shows that the majority of Member States plan to upgrade or replace their MBTs, while others are planning already for the next generation. This is a short-term priority for 7 Member States and medium-term for 8 Member States with 11 expressing an interest in cooperation going forward.

The overall investment expenditure in Ground Combat including MBT is generally increasing throughout short-term planning horizons and will amount to almost €40 bn, more than doubling in the medium- and long-term, according to 25 Member States' recorded investment plans.

CARD identified a clear and significant potential for cooperation in the short-term. It recommends a more focused and coordinated approach for MBT via joint upgrades of various models. This includes the management of the replacement of current fleets with a focus on supporting logistic synergies, digitalisation and implementing commonalities at system and subsystem level in the mid-term. In the long term, it also includes joint development and acquisition of a next generation MBT.

Soldier Systems

Improve individual protection & operational awareness

Soldier Systems comprise the equipment of individual military personnel to be able to operate with a sufficient level of protection in any operational environment. Soldier Systems are a primary force multiplier. They support force protection, increase operational effectiveness, reliability and endurance of individual soldiers and formations. The development and integration of cutting edge technology is key for forces.

The main areas, in terms of national priorities, spending efforts as well as training, include improved survivability and situational awareness.

There is a wide variety of systems deployed with 730,000 active land forces in the EU and different soldier systems also used by other services. The current very high fragmentation of soldier systems could be reduced by 30% in the medium term thus ensuring operational interoperability and enabling joint logistics support for soldier systems.

Many Member States also envisage acquiring modern integrated soldier systems, with a focus on protection. The overarching aim is to integrate the technological innovations in a standardised and consistent manner using an open architecture approach, shared by a large number of Member States.

Plans to acquire integrated soldier systems and soldier C4I systems in multiple countries seem to match in terms of substance and timelines.

CARD recommends that Member States strive to have a commonly shared architecture by the mid-2020s for all subsystems (e.g. small arms, night vision systems, individual CBRN protection equipment, digital communications), based on cutting edge technology, as a realistic ambition.

European Patrol Class Surface Ships

Ensure extended surface presence at sea

European Patrol Class Surface Ships (EPC2S) are a key capability to ensure military presence at sea which has to meet the challenges of an integrated digitised operational environment. This area remains very much affected by fragmentation which extends to the national level where simultaneous procurement of different types of platforms occurs.

20 Member States currently operate a high number of Maritime Patrol Vessels, of which 45 are Offshore Patrol Vessels. Several Member States' acquisition plans and programmes match in terms of substance and timelines. This is a short-term priority for 9 Member States and medium term for 6 Member States, with 7 expressing an interest in cooperation going forward.

Ensuring surface presence at sea is based on the following highly interoperable capabilities to be developed: long endurance at sea enabled by unmanned high end platforms; modular designed multipurpose combat ships; and offshore patrol vessels to be adapted to sea basins.

Seizing collaborative opportunities with a focus on surface combatants ships and their protection, in which Member States invest over €17 bn just within the short term, would entail significant capability gains and long-term cost benefits.

CARD recommends that Member States include their national approaches into an EU wide concept with more commonalities at platform and subsystem level for ongoing and future programmes. A unique multinational effort in this area, the European Patrol Corvette PESCO project might serve as an integral core of this focus area, including by attracting more participants. Based on shared operational concepts and benefiting from research and technology innovations the system approach will contribute to a maritime patrolling capability that will be more cost effective, interoperable and standardised.

Counter UAS/Anti Access/Area Denial (A2/AD)

Countering aerial threats

Member States' resources allocated to Anti Access/Area Denial (A2/AD), including C-UAV grow more rapidly than other air capabilities, with the overall air domain representing 40% of Member States' total investment.

The A2/AD domain is quite large, ranging from countering UAS, over air surveillance and air defence systems including missile defence. The total investment of Member States on related capabilities amount in the short term to more than € 23 bn.

In the A2/AD area, cooperation is key to enable integration of air defence systems and combined assets, which is the only way to cope with modern threats in modern engagements in coalition operations. Collaborative opportunities entail the system and subsystem level, including a significant potential in research & technology, Artificial Intelligence, advanced radar technologies as well as advanced weapon systems for air defence. European capability approaches towards A2/AD would ensure interoperability and increased efficiency resulting in significant cost benefits.

CARD recommends that Member States put their initial focus on C-UAV. It is further recommended that Member States extend their collaboration to ground-based air surveillance and short, medium and long-range air defence systems.

Defence in Space

Access to space services and the protection of space-based assets

Space is a highly dynamic and rapidly evolving area, an emerging operational domain. It provides efficiency and effectiveness that are indispensable for military operations. Space based services comprise Satellite Communication (SatCom), Positioning, Navigation and Timing (PNT), Space Based Earth Observation (SBEO) and Space Situational Awareness (SSA). Compared to other operational domains, cooperation appears to be a more commonly accepted way to develop the required capabilities for the space domain.

More collaborative approaches to the existing and planned space related activities would contribute to ensuring more prominent involvement of Ministries of Defence and recognition of military requirements in wider space programmes conducted at EU level.

The main investment expenditure in the space domain is related to Satellite Communication - SatCom (€4 bn or more than 50% of all investment in the space domain) and Earth Observation - EO (€ 3 bn or 40% of space investment in short-term). Most Member States' space related programmes (75%) are related to these two areas.

Investment in Positioning, Navigation and Timing - PNT and Space Situational Awareness - SSA is much lower (together less than €0.5 bn), partially covering the security dimension. Despite low investment, many Member States have programmes in the area of PNT (17) and in SSA (13) showing a large number of countries consider these capabilities as key in the future.

CARD therefore recommends developing a European approach to defence in space to improve access to space services and protection of space-based assets with regards to all the dimensions mentioned above: SatCom, EO, PNT and SSA.

Enhanced Military Mobility

Rapid movement for the security of Europe

Facilitating the movement of military troops and assets (air, land and sea) is essential for the security of European citizens.

Military mobility is already a focus area for Member States, including in the PESCO context. Enhanced military mobility is for example taking into account threats that are of hybrid nature as well as infrastructure, facilities and means of military transportation. This offers the opportunity for a more holistic approach by all Member States. It entails the improvement and development of related capabilities and services that could also support civilian response systems in times of crisis.

CARD therefore recommends more in-depth involvement of all Member States in military mobility programmes, including through the digitalisation of processes and procedures, improving cyber and infrastructure resilience as well as developing the necessary sea and air transport/air lift capabilities.