

# ANNUAL REPORT 2019



# FOREWORD

---

**OLLI RUUTU**

*ACTING CHIEF EXECUTIVE*

The year 2019 was a significant and memorable year for the European Defence Agency, in many respects.

Internally, it was one of reflection and adjustment to the evolving environment. The Agency's 15<sup>th</sup> anniversary, celebrated with stakeholders and partners at a special ceremony held in June, provided an ideal moment to look back at recent developments and achievements, but also to reflect on the many challenges ahead. Among the latter are the consolidation and proper implementation of the EU defence cooperation tools: the Coordinated Annual Review on Defence (CARD), the Permanent Structured Cooperation (PESCO) and the European Defence Fund (EDF). To ensure that EDA can continue to deliver on its implementation roles in all three of them, a number of organisational adjustments became operational in 2019. Since then, the three renamed and restructured operational directorates – Industry, Synergies & Enablers Directorate (ISE), Capability,

Armament & Planning Directorate (CAP), Research, Technology & Innovation Directorate (RTI) – have already contributed to improving EDA's service to Member States, for instance with the creation of a dedicated PESCO unit. Agile and flexible, the Agency has the ability to quickly adapt to new requirements; it will continue do so in the future whenever the need for further adjustments may occur.

Meanwhile, the Agency's activity portfolio grew further over the past twelve months, also reflecting the central role EDA plays for the functioning and coherence of the EU defence tools. It now functions as the platform for reviewing and consolidating the EU Capability Development Priorities, as CARD and PESCO secretariats, together with the European External Action Service (EEAS) including the EU Military Staff (EUMS), and it supports the EDF precursor programmes. The Agency's contribution to ensuring overall coherence and added value of the three initiatives was explicitly recognised in the first HR/VP/

The Agency's activity portfolio grew further in 2019, also reflecting the central role EDA plays for the well-functioning and coherence of the EU defence tools

Head of Agency coherence report presented in summer 2019.

A significant part of the Agency's work in 2019 was devoted to developing the Strategic Context Cases (SCC) which will inform and guide the implementation of the EU Capability Development Priorities approved in 2018. The Agency also made sure activities developed by Member States within NATO were correctly reflected in the SCC, to further enhance coherence of output of EU and NATO defence planning processes. Needless to say, the SCC will remain high on EDA's work agenda in 2020.

The same can be said about PESCO whose implementation made important headway in 2019, with EDA support and expertise provided at different levels. First, in the assessment and preparation of the third wave of 13 additional PESCO projects adopted in November. Then, in the evaluation of Member States' National Implementation Plans (NIP). And finally, in offering expertise, advice and administrative support to

## END OF 2019, EDA MANAGED

# 113

ad hoc R&T  
and capability  
programmes/  
projects



Over

# 200

activities related  
to capability  
development,  
R&T and industry



Member States for the development and implementation of agreed PESCO projects. The fact that the Agency has already been solicited to support five running PESCO projects (two of them as Agency's ad-hoc projects) bodes well for the future.

Another milestone in 2019 was the launch of the first full CARD cycle, after a first test run completed in 2018. The Agency started bilateral dialogues with all Member States which are expected to last well into 2020 when, together with EEAS and EUMS, it will prepare a first assessment of the state of play and future trends in capability development. As Jorge Domecq, the previous Chief Executive who led the Agency over the past five years expressed it, CARD will have a very important role to play as a "pathfinder" for future collaborative projects.

Simultaneously, the Agency continued to support Member States in strengthening their defence capabilities – from

planning, research and standardisation to development, procurement and training. By the end of 2019, 30 new R&T projects were under negotiation with a view to being added to EDA's existing portfolio of 42 ongoing ad hoc R&T projects, representing an overall value of some €258 million. Altogether, at the end of 2019, the Agency managed 113 ad hoc R&T and capability programmes and projects as well as over 200 other activities related to capability development, research and technology and the defence industry. Going forward, the Agency will continue with its flexible "à la carte" approach which best fits Member States' needs.

Important headway was also made on new enablers and incentives for defence cooperation. I want to highlight the finalisation of the work on the Cooperative Financial Mechanism (CFM) for which the first Member States signed the programme arrangement in 2019, as did the European Investment Bank (EIB) in December. The use of VAT

exemption for projects to which EDA adds value has increased exponentially producing savings in 2019 of €12 million. Progress was also made on our ambition to increase military mobility: the Agency's first annual progress report was presented to the Steering Board and no less than 25 Member States joined the new programme on Cross-Border Movement Permissions.

The Agency also continued to play its role as interface towards wider EU policies for Member States, further broadened its working relations with the European Commission and other EU agencies and pursued its engagement with other stakeholders and third parties.

The Europe of Defence is taking shape. We are on the right track, though the journey is still long. To get there, EDA's unique expertise as an enabler and facilitator of collaborative technology and capability development will be even more needed in the future than today.

# JOINT PRIORITISATION

---

## IMPLEMENTING THE EUROPEAN CAPABILITY DEVELOPMENT PRIORITIES

The year 2019 was an important implementation year for the 11 EU Capability Development Priorities approved in 2018 as part of the revised Capability Development Plan (CDP) and covering the following domains: Enabling capabilities for cyber responsive operations; Space-based information and communication services; Information superiority; Ground combat capabilities; Enhanced logistic and medical supporting capabilities; Naval manoeuvrability; Underwater control contributing to resilience at sea; Air superiority; Air mobility; Integration of military air capabilities in a changing aviation sector; Cross-domain capabilities contributing to achieve EU's level of ambition.

As a first implementation step, the Agency developed Strategic Context Cases (SCC) for each of the priorities, which were endorsed by the Steering Board in Capability Directors' composition in June 2019. The SCC give an overview of the current situation in the given capability domain and indicate possibilities for cooperation, accompanied by roadmaps with objectives and milestones. Each SCC provides thus guidance where and how possible cooperation between Member States could contribute to address existing capability gaps and improve the coherence of the European capability landscape. To prepare the SCC, EDA worked closely with Member States, the EUMC, the EUMS and European industry which was consulted to collect their views on technological solutions



EDA developed  
Strategic Context  
Cases (SCC) for each  
of the 11 EU Capability  
Development Priorities

to close identified capability gaps and face the new security challenges. The Agency also ran staff to staff meetings with NATO to ensure activities developed by participating Member States within NATO are correctly reflected. The work continues in 2020: in February, EDA presented to the Steering Board part two of the SCC containing roadmaps of ongoing capability development activities and possible new ones which, subject to the necessary ad-hoc decisions by Member States, could be taken forward in the Agency framework. The SCC are living documents and will be updated by EDA over time, also on the basis of Member States' feedback, to make sure they always reflect the latest developments in the implementation of each and every priority.



### OVERARCHING STRATEGIC RESEARCH AGENDA (OSRA)

2019 saw also important implementation work delivered on the revised Overarching Strategic Research Agenda (OSRA) which was validated by the EDA Steering Board in January 2019. The new OSRA is set to guide and inform all relevant European funding instruments and collaborative European defence research activities, be it at multinational level, in the EDA framework or under EU-funded research frameworks. Practically speaking, the revised OSRA identified a total of 139 R&T areas, the so-called Technology Building Blocks (TBBs), in which European cooperation would yield added-value to support the development of defence capabilities. In 2019,

the Agency supported its Member States in the implementation of the TBBs by developing a total of 65 detailed technology roadmaps. These roadmaps will not only help national Ministries of Defence to engage in cooperative ad-hoc R&T projects but also inform funding decisions in the future European Defence Fund.

# 139

**The revised OSRA identified 139 R&T areas in which European cooperation would yield added-value**

---

### KEY STRATEGIC ACTIVITIES (KSA)

Throughout 2019, the Agency continued identifying Key Strategic Activities (KSA), i.e. critical skills, areas of know-how and industrial capacities deemed essential to underpin Europe's strategic autonomy. It did so by analysing the industrial dimension of identified capability and research priorities before determining in which area the European defence technological and industrial base needs to be reinforced. As a result, a total of 16 KSA reports were produced in 2019, in consultation with Member States and industrial stakeholders. Additional reports will follow in 2020.

# JOINT DEFENCE PLANNING & COOPERATION

---



EDA continued to support Member States with the development of their PESCO projects, providing expertise, advice and administrative support



## PERMANENT STRUCTURED COOPERATION (PESCO)



## PESCO

The Agency assisted participating Member States in preparing the third wave of 13 additional PESCO projects adopted in November 2019

---

As part of the PESCO secretariat (together with the EEAS, including the EUMS), the Agency assisted participating Member States in preparing the third wave of 13 additional PESCO projects adopted in November 2019, notably through the assessment of project proposals on the basis of agreed criteria and the organisation of dedicated workshops with Member States' experts. The Secretariat further provided Member States with feedback on the PESCO National Implementation Plans (NIP). EDA also continued to support Member States with the development of their PESCO projects, providing expertise, advice and

administrative support. At the end of 2019, five PESCO projects were receiving dedicated support by the Agency, in the areas of Chemical, Biological, Radiological and Nuclear defence (CBRN), Maritime Mine Counter Measures, Deployable Modular Underwater Intervention Capability Package (Divepack), European Secure Software defined Radio (ESSOR) and Cyber Rapid Response Teams and Mutual Assistance in Cyber Security (CRRT). For two of them, CBRN and Divepack, EDA was asked to take the project forward as an Agency activity, in line with the PESCO commitment to use EDA as the European forum for project capability development.



© Shutterstock

### SUPPORT TO THE EUROPEAN DEFENCE FUND (EDF)

EDA pursued its work and support activities related to the two dimensions (research, capability) of the future European Defence Fund (EDF). As regards **research**, the way towards a European defence research programme under the EU's next Multiannual Financial Framework (2021-2027) is being paved by the ongoing Preparatory Action on Defence Research (PADR) which is implemented by EDA on the basis of a Delegation Agreement signed with the European Commission in May 2017. The PADR was preceded by the Pilot Project (PP), the first EU-funded defence research activity, which was concluded in

2019. The PADR continued in 2019 with calls for proposals issued related to research projects in the domains of Electromagnetic Spectrum Dominance, Future Disruptive Defence Technologies and Unmanned Systems. The biggest PADR cooperation project running so far, OCEAN2020, was the subject of a life demonstration in November 2019 with assets deployed in the Mediterranean Sea. Regarding the **capability** dimension of the EDF and its precursor, the European Defence Industrial Development Programme (EDIDP), EDA continued in 2019 to support Member States in the preparation

of EDIDP projects. The Agency also provides its views and expertise to the EDIDP Programme Committee, in line with the EDIDP regulation. In 2019, EDA has also set up an EDIDP/EDF 'Marketplace' to provide Member States with an informal framework for the preparation and consolidation of EDIDP/EDF projects. The Marketplace provides Member States with an opportunity to present and informally exchange on project proposals and ideas in view of the EDIDP/EDF calls. The Marketplace is being tested in preparation for the second year of EDIDP (2020) and the first year of the EDF (2021).



EDA continued its work on improving military mobility with Member States

### COORDINATED ANNUAL REVIEW ON DEFENCE (CARD)

Building on the lessons identified during the 2018 CARD trial run and based on the revised CARD methodology agreed by the EDA Steering Board in June 2019, the Agency launched the first full CARD cycle in September 2019. EDA is currently in the process of conducting bilateral dialogues with all Member States which

are expected to last until March 2020. As a result of these bilateral dialogues, EDA, together with the EEAS including the EUMS, will elaborate an assessment of the state of play and future trends in capability development to inform Ministers in the EDA Steering Board in November 2020, including on potential future defence cooperation.



The first full CARD cycle was launched in September 2019



© Bundeswehr

## MILITARY MOBILITY

In May 2019, the EDA Steering Board welcomed the Agency's first Annual Progress Report on Military Mobility. EDA continued its work on improving military mobility with Member States and in close coordination with EEAS, EUMS, EUMC, the Commission (DG MOVE, DG TAXUD) and other relevant stakeholders, notably NATO. 25 Member States joined the new ad-hoc programme on "Cross Border Movement Permissions" which focuses on Member States' movement approval procedures,

addressing legal constraints and taking into account the transport of dangerous goods, possibly leading to pre-authorisation of movement both in surface and air domain. In the frame of the second EDA ad-hoc programme on Customs, the EDA Steering Board agreed on the new EU form 302 for military use regarding customs-related activities. The form was submitted to the Commission (DG TAXUD) in September 2019, and the next foreseen step is customs

digitalisation, making use of the development of a Military Customs System. The work builds on existing military mobility-related EDA projects such as the Multimodal Transport Hub (M2TH) and Diplomatic Clearances, and two studies on dangerous goods and legal aspects conducted in spring 2019. Within the M2TH, Member States have developed the Technical Arrangement providing for simplified procedures for border crossing.

# SUPPORTING TECHNOLOGY & CAPABILITY DEVELOPMENT

---

## CYBER DEFENCE

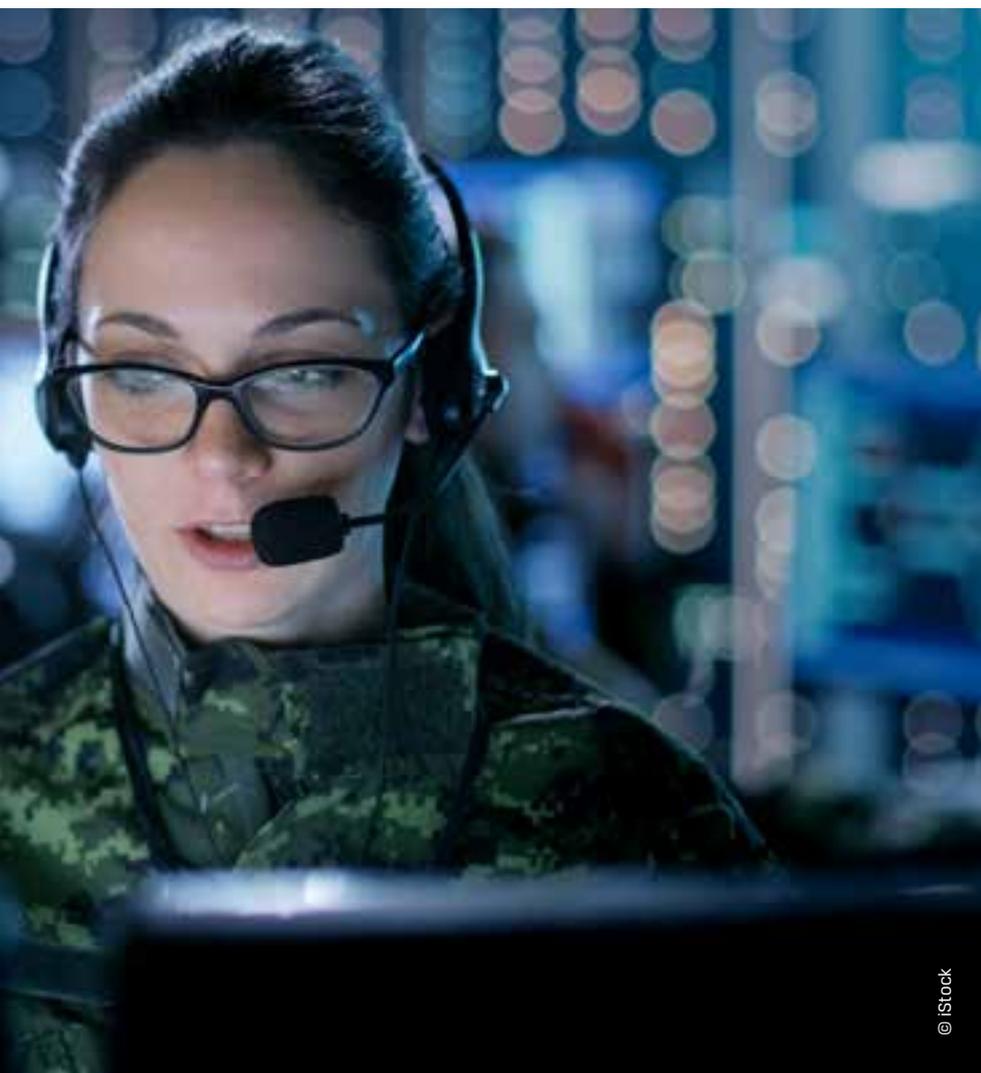
EDA pursued its work on the Cyber Ranges Federation project in which 11 Member States federate their national cyber ranges and thereby improve their respective cyber defence training capabilities. In cooperation with the Finnish Ministry of Defence and the European Space Agency (ESA), the Agency also organised

in November a multinational cyber ranges federation demonstration exercise held in Helsinki. In April, the Agency launched the contractual work on the Cyber Defence Situation Awareness Package Rapid Research Prototype (CySAP-RRP) project. EDA continued to support Member States in



EDA developed a common definition, taxonomy and glossary of Artificial Intelligence in defence

conducting the Comprehensive Cyber Senior decision-making and Cyber Operational Planning (Cyber Phalanx) exercises on demand, and further contributed to the Cyber Education, Training, Exercise and Evaluation (ETEE) platform within the European Security and Defence College.



© iStock

### ARTIFICIAL INTELLIGENCE (AI)

AI for research and development of future capability systems and concepts is reflected across the EU Capability Development Priorities adopted in 2018. Following Steering Board taskings in February and June 2019, EDA has considerably stepped up its

activities in the AI and defence domain, including developing a common narrative, definition, taxonomy and glossary of AI in defence. A dedicated AI Action Plan is under preparation for endorsement in 2020.

### AIR-TO-AIR REFUELLING (AAR)

EDA continued its support to the Multinational MRTT Fleet (MMF) programme which now consists of five countries (Netherlands, Luxembourg, Germany, Norway, Belgium) and so far resulted in the common procurement and operation of 8 tanker aircraft in total. EDA co-organised a joint AAR Conference in Europe with NATO in October 2019.

© Airbus



© Airbus

## EUROPEAN MALE RPAS

EDA continued to contribute to the preparation of the development phase of the European Medium Altitude Long Endurance Remotely Piloted Aircraft System (MALE RPAS) programme and to support air traffic integration activities. The MALE RPAS Training Technology Demonstrator (RTTD) project reached full maturity and is now deployed in 10 Member

States. The remaining training programme, to be implemented jointly with the European Air Group, is scheduled to continue until 2021 and will address increasingly complex missions. Initial scoping work commenced on new initiatives covering RPAS contracted services and Countering Unmanned Aerial Vehicles (C-UAV). In order to

address the threats to deployed European armed forces from hostile mini-UAVs, EDA organised a C-UAV workshop in December 2019 with the EUMS and the Military Planning and Conduct Capability (MPCC) to share information and explore synergies on operational and capability aspects related to Air Superiority.



The Agency  
contributed to  
the MALE RPAS  
development phase  
and supported air  
traffic integration

## COMMUNICATION AND INFORMATION SYSTEMS (CIS)

The Governmental Satellite Communications Pooling and Sharing Demonstration project entered its operational phase and yielded its first benefits by delivering satellite capacities from one Member State's resources to other Member States. Other Satcom activities carried forward in 2019 include the EU SatCom Market project and the Agency's support to Member States for the establishment of security and

access requirements for satellite communications. The Agency acted as facilitator in support of Ministries of Defence under the European Global Navigation Satellite Systems (EGNSS) programme, increasing cooperation with the European Commission. The Agency pursued its work on common staff requirements and a business case for the Earth Observation capability requirements for 2025-2030 which will allow to identify cooperative

opportunities in the area of Space Based Earth Observation. Moreover, in October, the Agency completed a joint study with ESA on Earth Observation requirements. The implementation of EDA's Geospatial Information to Support Decision-Making in Operations (GISMO) project made headway in 2019 as its Geohub geospatial information software achieved Full Operational Capability at the HQ of Operation Sophia in Rome.



© EUNAVFOR



# MARSUR

**The MARSUR Networking Community enhanced its efforts to integrate the MARSUR technology into national systems**

---

## MARITIME SURVEILLANCE (MARSUR)

In 2019, EDA continued to support Member States with the further rollout of MARSUR, seeking complementarity and synergies with the Commission's Common Information Sharing Environment (CISE). It implemented MARSUR phase 2 (MARSUR II) and prepared a future extension of the programme (MARSUR III), in order to further improve the provision of a common European recognised maritime picture. The MARSUR Networking Community enhanced its efforts to integrate the MARSUR technology into national systems. EDA supported the further development of MARSUR technology in view of achieving full operational capability.

## MARITIME WARFARE

Following a formal request from the project coordinator, EDA provided support to the PESCO project on Maritime (semi) Autonomous Systems for Mine Countermeasures (MAS MCM). The Agency continued to engage in capability development activities for maritime mine counter measures, in addition to collaborative research and technology projects, with a focus on unmanned maritime systems.

### COUNTER-IMPROVISED EXPLOSIVE DEVICES (IED)

Following its inauguration in 2018, the European Centre for Manual Neutralisation Capabilities (ECMAN) developed through an EDA project involving seven participating Member States, organised six major training and education activities as well as research and development. The two available Joint Deployable Exploitation and Analysis Laboratories (JDEAL), also set up under the auspices of EDA, were used in two major C-IED exercises in 2019. Other activities included the deployment of a mobile training team and the launch of a Smart Future C-IED Field Laboratory project.

### ANTI-TANK SYSTEMS

EDA further advanced in the study of operational requirements for the future generation of anti-tank weapon systems (beyond 2030). Results are expected to facilitate the joint development of a new generation of missile systems to reduce existing capability shortfalls in the area of anti-tank.

### MEDICAL SUPPORT

Following the signature of the programme arrangement in 2018, the Multinational Medical Modular Unit (M3U) project entered its operational stage in 2019. Along with the Multinational Medical Treatment Facility and training activities, it aims at addressing the harmonisation of standards, procedures, legislation, credentials and equipment.

# STIMULATING R&T AND INNOVATION



## €258M

30 new research projects were under negotiation at the end of 2019 with a view of being added to EDA's portfolio of 42 ongoing R&T projects worth €258 million

### CAPABILITY AND TECHNOLOGY GROUPS (CAPTECHS)

In 2019, Member States continued to bring additional ad hoc research and technology (R&T) projects into EDA, taking benefit of the Agency's expertise and incentives. By the end of the year, 30 such new R&T projects were under negotiation with a view to being added to EDA's existing portfolio of 42 ongoing ad hoc R&T projects, representing an overall value of some €258 million. Simultaneously, in 2019, the Agency's CapTechs have all undergone a systematic review to ensure high quality output and alignment with EDA's prioritisation work being done through the CDP and the specific SCC, as well as OSRA and KSA.

### PREPARATORY ACTION ON DEFENCE RESEARCH (PADR)

EDA pursued the PADR implementation on behalf of the European Commission, in line with the delegation agreement signed in May 2017. Following two successful rounds of PADR calls for proposals in 2017 and 2018, and in compliance with the work programme for 2019, the third and last batch of calls for proposals was published in March 2019 with a focus on three domains: electromagnetic spectrum dominance, future disruptive defence technologies, as well as unmanned systems. Meanwhile, several previously launched PADR projects delivered results in 2019. As regards the OCEAN2020

project, which was launched in 2018 with a budget of €35 million and 42 beneficiaries in 15 Member States, a large-scale technology demonstration was organised by EDA, Commission and the consortium in November 2019. The upgrade of unmanned assets and their integration into a common network to deliver increased maritime situational awareness has further advanced throughout the year. The validation of the Generic Open Soldier System Reference Architecture (GOSSRA) project, launched in 2017, started with a test and demonstration campaign, to be concluded in 2020.



### EDA DEFENCE INNOVATION PRIZE

In 2019, EDA organised the 3<sup>rd</sup> edition of its Defence Innovation Prize which rewards companies and research entities who come up with particularly innovative and ground-breaking technologies, products, processes or services applicable in the defence domain. A key objective of the Prize is to attract additional innovative R&T actors, such as SMEs and start-ups, to EDA's R&T working groups and CapTechs. The 2019 edition was

focused on Artificial Intelligence applications in defence. Following a call for applications and the subsequent assessment process, the Prize was awarded to *epic. blue*, a Belgian company, for their idea to use Artificial Intelligence to provide commanders of military operations with accurate and seamless positioning data of teams in GNSS-denied environments. The Prize was awarded at the EDA Annual Conference on 28 November.

### EXPLOITATION OF DUAL USER SYNERGIES

Activities aimed at enhancing dual-use synergies, including with European Commission services, were pursued on a systematic basis throughout 2019. Examples of ongoing work include EDA cooperation with the European Commission (DG RTD, DG HOME, DG CONNECT), the Joint Research Centre (JRC) and the European Institute of Innovation and Technology, including in the context of the Preparatory Action on Defence Research, and with the European Border and Coast Guard Agency (Frontex) on Technology Watch.

# ENABLERS & INCENTIVES

---



## COOPERATIVE FINANCIAL MECHANISM (CFM)

2019 saw important progress in the setting up of the Agency's Cooperative Financial Mechanism (CFM) designed to overcome the recurrent problem of unsynchronised defence budgets in participating Member States which can hinder or impede the launch of collaborative defence projects. To mitigate this problem, the CFM will offer mutual State to State lending or, alternatively, outside support from the European Investment Bank (EIB). In 2019, the programme arrangement was put to interested Member States and the EIB for signing. At the end of the year, 10 participating Member States (Belgium, Bulgaria, Cyprus, France, Greece, Hungary, Lithuania, the Netherlands, Portugal, Spain) had already signed it or declared their intention to join the programme. Furthermore, the EIB signed the programme arrangement in December. It will enter into force at the date of the signature of the last country having declared its intention to join.

## MILITARY AVIATION

In 2019, more national military airworthiness/aviation authorities made use of the European Military Airworthiness Requirements (EMAR) for airworthiness management, aircraft maintenance, training/licencing and certification which had previously been developed at EDA. The Military Airworthiness Authorities (MAWA) forum continued to update those requirements, revised the recognition process and developed a new airworthiness roadmap. A central part of the roadmap are the development and implementation of a harmonised European Military Airworthiness System. An important first step has been achieved with the development of a so-called 'Total Aviation System' approach to military aviation, aiming at the continuous improvement of interoperability and the efficient use of military assets, to be followed by the launch of two pilot projects on transport aircraft and RPAS.

## STANDARDISATION

Following Member States' approval in 2018 of the European Defence Standardisation Strategy, the development of a dedicated implementation plan made good progress in 2019. The setting up of a European Defence Standardisation Committee is envisaged with a view to addressing new standardisation challenges and enable cooperation with other institutional and industrial stakeholders, including NATO. Further to the introduction of the Project Standardisation Management Plan (PSMP) as a tool for EDA project officers to systematically identify standardisation needs at the earliest stages of a project, two pilot projects on Single European Sky ATM Research (SESAR) and RPAS demonstrated the tool's viability. Going forward, it will be applied across all EDA activities, contributing to regular updates of the European Defence Standards Reference (EDSTAR) database in support of industrial cooperation and Member States' interoperability.



# 10

End of 2019,  
10 participating  
Member States had signed  
or declared their intention  
to join the Cooperative  
Financial Mechanism (CFM)

### DEFENCE TEST AND EVALUATION BASE (DTEB)

The implementation of EDA's Test and Evaluation Strategy continued in 2019. The Agency identified required test and evaluation capabilities as part of a gap analysis study comparing available European test capabilities with the requirements derived from the EU Capability Development Priorities. End of 2019, the results were being addressed by domain-specific subgroups established within the DTEB framework.

### SUPPORT TO CSDP OPERATIONS/MISSIONS

Participation to the EU SatCom Market project, which pools the demand for SatCom and communication and information services and provides CSDP operations/missions with commercially available capabilities to meet the demand, increased to 29 members, including 19 Member States, the Athena mechanism, including EU civilian missions and military operations. During the first three quarters of 2019, contracted services were in the range of €14 million, bringing the total volume of provided services since inception of the project to some €47 million. The Agency has also established a market for AIRMEDEVAC contracted

services through the award of four frameworks contracts covering fixed and rotary wing platforms deployed both in Europe and Africa. The market offering is for commercially available in-theatre aeromedical evacuation services and has already been accessed by Belgium for a forthcoming deployment in Niger. In addition, various other EDA projects (including a human resources management software, the MARSUR networking, the GeoHub, and Contractor Support to Operations web platform) are used by EU military missions and operations. Work on the Smart Camps Technology Demonstrator continued in EUTM Mali.



## The MALE RPAS Training Technology Demonstrator reached full maturity in 2019 and is now deployed in 10 Member States



# €265M

27 project arrangements worth €265 million benefited from VAT exemption in 2019, yielding savings for Member States of €12 million

### VAT EXEMPTION

Several additional projects and programmes incorporating the provisions relating to VAT exemption were concluded in 2019. A total of 27 Programme Arrangements benefited from VAT exemption within EDA. Considering that the overall value of these projects is over €265 million, the actual financial benefit of the VAT exemption for Member States stands at €12 million (based on the signed contract values). An updated guide on VAT exemption was published in December 2019.

### EDUCATION, TRAINING AND EXERCISES

#### **RPAS**

The MALE RPAS Training Technology Demonstrator (RTTD) project reached full maturity in 2019 and is now deployed in 10 Member States with first exercises covering maritime, desert and Middle East scenarios completed and tested. The remaining training programme, to be implemented jointly with the European Air Group, is scheduled to continue until 2021 and will address increasingly complex missions. Initial scoping work commenced on new initiatives covering RPAS contracted services and Counter-UAV.



© EDA

### ***Fixed-Wing***

In 2019, the European Tactical Airlift Centre (ETAC) made further progress towards full operational capability which will see it organise European Advanced Airlift Tactics Training Courses, European Advanced Tactical Instructor Courses, as well as European Airlift Transport Trainings on a yearly basis. EDA continued to support the development of a European Military Transport Pilot Training and common operational requirements. Within the C27J Spartan Cooperation programme, the Agency further assisted the C-27J community and supported the improvement of the European Spartan exercises and trainings.

### ***Rotary-Wing***

A total of eight training courses related to Helicopter Tactics and Electronic Warfare, one Helicopter Tactics Symposium and one Multinational Helicopter Exercise ('Dark Blade 2019') were carried out in 2019, enhancing crews interoperability, their readiness to deploy to a variety of operational theatres, and their capability to operate in complex and demanding operational scenarios. Furthermore, 14 Member States attended the first Project Team meeting on the Multinational Helicopter Training Centre (MHTC) in the Agency in September 2019. The MHTC will be hosted by Portugal in the Sintra Airbase and is expected to achieve initial operational capability in 2022.

### ***Armaments Cooperation***

The Agency continued to support the European Security and Defence College (ESDC) and Austria (lead nation) with the delivery of the European Armaments Cooperation Course, conducted in two modules in Brussels in October and in Zagreb in November 2019.

# INTERFACE FOR WIDER EU POLICIES

---



## CYBER

EDA pursued the implementation of the quadrilateral cooperation established with the EU agencies working in the cyber domain – the European Union Agency for Cybersecurity (ENISA), the European Union Agency for Law Enforcement Cooperation (Europol) and the Computer Emergency Response Team for the EU Institutions, Bodies and Agencies (CERT-EU) – through regular exchanges and meetings. To further implement the Cyber Defence Policy Framework revised in November 2018, the Agency is developing a systems engineering framework for cyber defence and contributed to the report on the implementation of the EU's Cyber Defence Policy Framework.

## MARITIME

EDA continued its contribution to the implementation of the EU Maritime Security Strategy Action Plan, in complementarity and, where applicable, through synergies with the EEAS and the Commission. EDA also further developed its cooperation with Frontex, with a focus on training as well as research & technology. The first joint pilot course, with a focus on the humanitarian crisis in the

Mediterranean, was successfully implemented in March/April 2019. A first informal quadrilateral meeting with the EU agencies in the maritime domain - the European Maritime Safety Agency (EMSA), the European Fisheries Control Agency (EFCA) and Frontex - took place in November 2019 to discuss potential synergies in areas of common interest, such as maritime surveillance, RPAS, or cyber.



## EDA is exploring possible synergies between European space programmes and the new EU Capability Development Priorities with regard to space

### RPAS AIR TRAFFIC INTEGRATION (ATI)

EDA continued its support to the accommodation of MALE-type RPAS in non-segregated airspace for the 2020/2025 timeframe, together with the European Union Aviation Safety Agency (EASA), the SESAR Joint Undertaking and the European Commission. Together with EASA, the Agency produced guidelines for the accommodation of military RPAS, identifying best practices in current operations, and supported the definition of standards and preparation of relevant flight test scenarios. Through EDA's industry exchange platform on RPAS ATI, EDA and Member States established a common understanding on the technical enablers (e.g. detect and avoid system, command & control link, automation) allowing for full integration of MALE RPAS into European airspace between 2025 and 2030.

### SINGLE EUROPEAN SKY (SES) AND SESAR

In the context of EDA's SES Military Aviation Board, the SES Military Aviation Action Plan 2019-2020 was approved in February 2019. EDA facilitated the inclusion of military requirements in the annual SESAR ATM Master Plan and participated to the Wise Persons Group on the future of SES.

### SPACE

EDA continued to facilitate the coordination and harmonisation of Member States' views and positions towards European space programmes. The Agency is exploring possible synergies between European space programmes and the new EU Capability Development Priorities with regard to space, and considers the opportunities provided by PESCO and EDIDP for space related defence activities.



## Phase 3 of the Consultation Forum for Sustainable Energy in the Defence and Security Sector kicked off in September 2019

### ENERGY, ENVIRONMENT

The Agency pursued the implementation of activities related to the REACH Regulation on Chemicals, supporting Member States and defence industry in mitigating the related impact on defence. Building on the achievements of the first two phases (2015-2019), EDA and the European Commission launched the third phase of the Consultation

Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS) in September, providing a platform for Ministries of Defence to cooperate on defence energy-related aspects. The New Energy Storage project made progress with the development of a reference architecture for innovative energy management in military installations. The pilot

phase of the Defence Energy Managers Course was concluded and a methodology for the collection and analysis of Member States' defence energy data was developed. Cross-cutting good practices regarding the application of circular economy to defence continued to be analysed in the respective Capability Technology groups of the Agency.



### ENGAGEMENT WITH INDUSTRY

The Agency's engagement with industry was focused on the capability development process (CDP implementation, Strategic Context Cases), R&T and innovation prioritisation, Key Strategic Activities, wider EU policies (SES/SESAR, REACH) and overall support to industry, including small and medium-sized enterprises (SMEs). Close dialogue was held with the Heads of European and National

Defence Industry Associations. At project level, the EDIDP/EDF marketplace will be complemented by meetings with industry upon Member States' request with a view to further facilitate the matchmaking among potential industry partners and consolidate specific projects. To that effect the Agency also launched a new electronic platform (B2B Platform).

### ACCESS TO EU FUNDING

EDA further enhanced its service for defence-related SMEs by developing a free of charge online tool called 'IdentiFunding' which allows defence stakeholders to quickly identify existing EU funding schemes available for their defence-related projects.

# WORKING WITH PARTNERS

---

## ADMINISTRATIVE ARRANGEMENT (AA) COUNTRIES

EDA further developed its relations with the four countries having concluded an Administrative Arrangement (AA) with EDA, taking a clear output-oriented approach. Norway continued to engage with the Agency's projects and activities, especially in the area of research and technology where Norway remains active in all relevant fora. EDA also pursued efforts to implement the AAs with the other three countries. In 2019, Ukraine maintained its involvement in EDA activities on

standardisation and on Single European Sky. Switzerland formally joined several EDA CapTechs and the Multinational Helicopter Training Centre, thereby taking important steps towards engaging with the Agency's portfolio more broadly. Serbia also formally joined the Multinational Helicopter Training Centre, as well as EDA working bodies on standardisation, and participated on ad-hoc basis to the Dark Blade exercise 2019, as well as to EDA meetings related to medical.



# 30

EDA contributes to the implementation of 30 out of the 74 common proposals agreed following the EU-NATO Joint Declaration

---

## EUROPEAN SPACE AGENCY (ESA)

Cooperation with ESA, based on the Administrative Arrangement signed in 2011, was mainly focused on the implementation of established projects in areas such as GOVSATCOM, RPAS, Intelligence Surveillance and Reconnaissance (ISR), critical space technologies and on Unmanned Maritime Systems (UMS). Two new implementing arrangements on Cyber and CBRN were negotiated. In December, two new cooperative projects were launched: one related to drones monitoring disaster-stricken regions or toxic spill sites; and another one on the use of Artificial Intelligence for navigating the surface of asteroids or other terra incognita.



## OCCAR

Cooperation with OCCAR, in the frame of the Administrative Arrangement concluded in 2012, continued apace throughout 2019, notably addressing the Multinational MRTT Fleet (MFF) and the European MALE RPAS programmes as well as on standardisation, REACH and Military Airworthiness.

## NATO

In 2019, EDA further contributed, through staff-to-staff cooperation with NATO, to the implementation of 30 out of the 74 common set of proposals in the frame of the Warsaw and Brussels Joint Declarations. The Agency, involved in six out of seven areas of cooperation and focused on defence capability development, further pursued coherence of output between the respective projects but also between the EU and NATO defence planning processes. Progress was also made in all other areas, notably military mobility, cyber, hybrid, AAR, military aviation, and standardisation.

## OTHER THIRD PARTIES

In September 2019, EDA and the European Air Transport Command (EATC) signed an Exchange of Letters to formalise existing cooperation on areas of common interest, such as air mobility, military aviation, and military mobility. Furthermore, in November 2019, EDA and the European Security and Defence College (ESDC) signed an Exchange of Letters to structure and enhance on-going interactions. The cooperation with the EU SatCen is increasing within the framework of the REACT, GISMO and METEOR projects. The Agency also associated Denmark to discussions within EDA directly related to wider EU policies and regulations, and activities for which funding from the EU budget is envisaged (PADR; EDIDP/EDF; SES; Military Mobility; Energy Consultation Forum; REACH). EDA maintained informal contacts on selected topics of mutual interest with the United States (military mobility, REACH, airworthiness) and with Canada (military mobility).

## IN-HOUSE

---



### EDA'S 15<sup>TH</sup> ANNIVERSARY CEREMONY

In June 2019, EDA celebrated its 15th Anniversary with a ceremony in its premises attended by the then Head of the Agency, Federica Mogherini, high representatives from its 27 Member States and the four associated countries, the Chairman of the EU Military Committee, Deputy Secretary-Generals of the EEAS, the Director General of the EU Military Staff, several European Commissioners and Commission Director-Generals, Executive Directors and senior officials of all EU institutions and agencies, NATO senior representatives as well representatives from the European defence industry and the media.

### EDA ANNUAL CONFERENCE

'Taking European Defence Cooperation to the Next Level - Prospects for the decade ahead' was the topic of the Agency's 2019 Annual Conference which took place on 28 November in Brussels and gathered some 400 attendees and participants from national governments, armed forces, European and euro-atlantic institutions, industry, academia and media. Among the speakers were three acting Defence Ministers

(François Bausch of Luxembourg, João Gomes Cravinho of Portugal, and Thomas Starlinger of Austria), as well as the European Commission's Brexit Chief Negotiator Michel Barnier, the Chairman of the European Union Military Committee, General Claudio Graziano, NATO's Deputy Secretary General for Defence investment, Camille Grand, and the Chief of Defence of Finland (representing the then Finnish EU Presidency), General Timo Kivinen.



### INTERNAL REORGANISATION

In January 2019, the Agency performed an organisational reshuffle with the renaming and restructuring of its three operational Directorates: Industry, Synergies & Enablers Directorate (ISE), Capability, Armament & Planning Directorate (CAP), Research, Technology & Innovation Directorate (RTI). The reorganisation was implemented smoothly and quickly started to deliver on its intended objectives, namely to further increase the efficiency and readability of the Agency's activities and to deliver constantly improving services to Member States in the context of the evolving tasks, including with a newly-created dedicated PESCO unit.

### PROJECT AND PORTFOLIO MANAGEMENT (PPM) SYSTEM

After becoming fully operational in 2018, the PPM system continued in 2019 to provide substantial benefits for the Agency's Member States who can access real-time project development and management information. The system allows Member States to have an up-to-date, centralised and holistic view of the programme and project-related EDA activities in which they are engaged.

### DATA PROTECTION

Regarding data protection, EDA has reflected the key requirements for the protection of personal data in line with the new Data Protection Regulation applicable to EU institutions, bodies and agencies and is working towards ensuring full compliance in line with EDPS guidelines and recommendations. The Data Protection Office successfully assisted its stakeholders in a large number of requests relating to data protection. No requests for access to personal data were received from data subjects in 2019.

## ACCESS TO DOCUMENTS

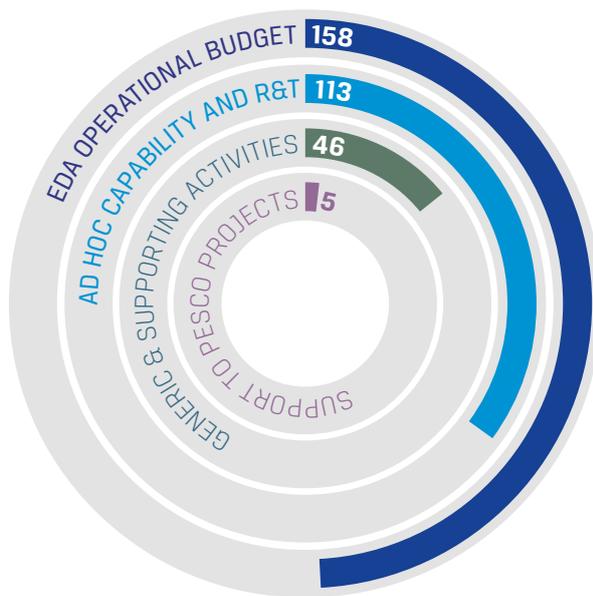
In 2019, the Agency ensured that its policy on the handling of requests for public access to documents was made more easily accessible to the public by creating a dedicated page on the subject on its public website and establishing a dedicated point of access in line with the European Ombudsman recommendations. Throughout the year, EDA received 21 access to documents requests under the Regulation for public access to documents – Regulation 1049/2001, which represents a

significant increase compared to the 14 requests received in 2018. Five of the requests were fully granted. EDA refused access to five requests while eight requests were devoid of purpose as EDA was not in possession of the documents requested. EDA granted partial access in three of the submitted requests. The exception(s) used by the Agency in the cases of refusal of partial access were the one set out under Article 4 of Regulation 1049/2001 and in particular, Article 4(1)(a) second indent – defence

and military matters and Article 4(1)(b) – privacy and integrity of the individuals in accordance with the Union legislation regarding the protection of personal data and 4(2) first indent – protection of commercial interests, including intellectual property rights. All access to documents requests submitted to EDA were received electronically. EDA received two confirmatory applications in 2019 and one European Ombudsman complaint relating to an access to documents request which, at the end of 2019, was still ongoing.

# EDA PORTFOLIO

**NUMBER OF PROJECTS, PROGRAMMES AND ACTIVITIES WHICH WERE IN PROGRESS AT YEAR-END 2019**



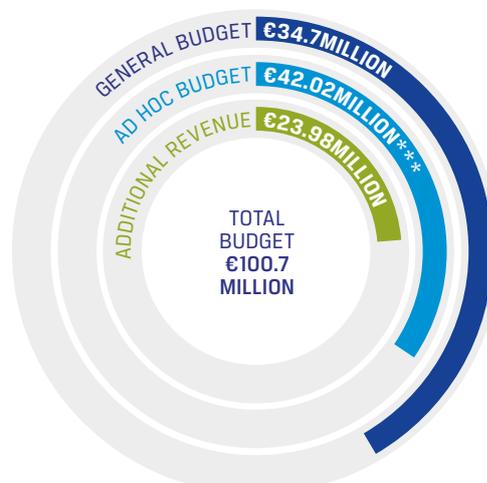
**MEMBER STATES' CONTRIBUTION TO ONGOING AD HOC CAPABILITY AND R&T PROGRAMMES AND PROJECTS**

(with effect end - 2019, in million Euros)\*



**EDA BUDGET 2019**

EDA's budget consists of the general budget, the budgets associated with ad hoc projects or programmes and budgets resulting from additional revenue for a total budget of €100.7million\*\*



\* Where formal agreements have been concluded

\*\* 2019 figures are provisional

\*\*\* Ad hoc budget figures include only financial contributions directly managed by EDA (44 projects in total)

**European Defence Agency**

Rue des Drapiers 17-23  
B-1050 Brussels - Belgium

[www.eda.europa.eu](http://www.eda.europa.eu)

Tel +32 2 504 28 00  
[info@eda.europa.eu](mailto:info@eda.europa.eu)



Printed by Paperland in Belgium

Luxembourg: Publications Office of the European Union, 2020

© European Union, 2020

Print: QU-AA-20-001-EN-C – ISBN 978-92-95075-51-1 – ISSN 1831-919X – doi: 10.2836/755176

PDF: QU-AA-20-001-EN-N – ISBN 978-92-95075-50-4 – ISSN 2363-4340 – doi:10.2836/535595



Publications Office  
of the European Union