



REACH Policy/Activities at European Defence Agency (EDA)

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TOPICS TO BE PRESENTED

- ✓ EDA at a glance
- ✓ EDA Space Activities
- ✓ EDA REACH Policy/Activities, *incl. REACH Impact on Defence*
- ✓ EDA REACH R&T Activities
- ✓ EDA – ESA Interaction on REACH, *incl. Defence/Space Proposed Way Ahead on REACH*





EDA at a glance

Main Mission

... to support the Council and the Member States in their effort to improve the Union's defence capabilities in the field of crisis management and to sustain the CSDP *

* Council decision 2015/1835 of 12 October 2015 on statute, seat and operational rules of the EDA

FACTS & FIGURES

Only EU Agency whose Steering Board meets at ministerial level



Established 2004

Based in **BRUSSELS**



+145 staff
connected with 2,500 experts
in Member States

Jorge Domecq
Chief Executive EDA

27 Member States

(all EU members except Denmark)

Administrative Arrangements

with Norway, Serbia, Switzerland and Ukraine

Budget 2018

€32.5 Mio

EDA Portfolio:

ca. 300 activities related to capability
development,
R&T and defence industry

Value R&T projects 2004-2017 run within
EDA:

approx. €1 billion

A PROACTIVE HUB FOR THE EUROPEAN DEFENCE COMMUNITY

EDA stakeholders

Partner organisations in improving European military capabilities

(e.g. OCCAR, EATC, NATO)

Key partners in civil-military coordination

(e.g. European Commission, EU Agencies, ESA, Eurocontrol, SESAR)

Industry,
through ASD & NDIAs



EDA PRIORITY WORKSTRANDS

SUPPORT

the development of **key capabilities** structuring European defence



+

STIMULATE

defence **R&T** to prepare the capabilities of tomorrow and support the EDTIB



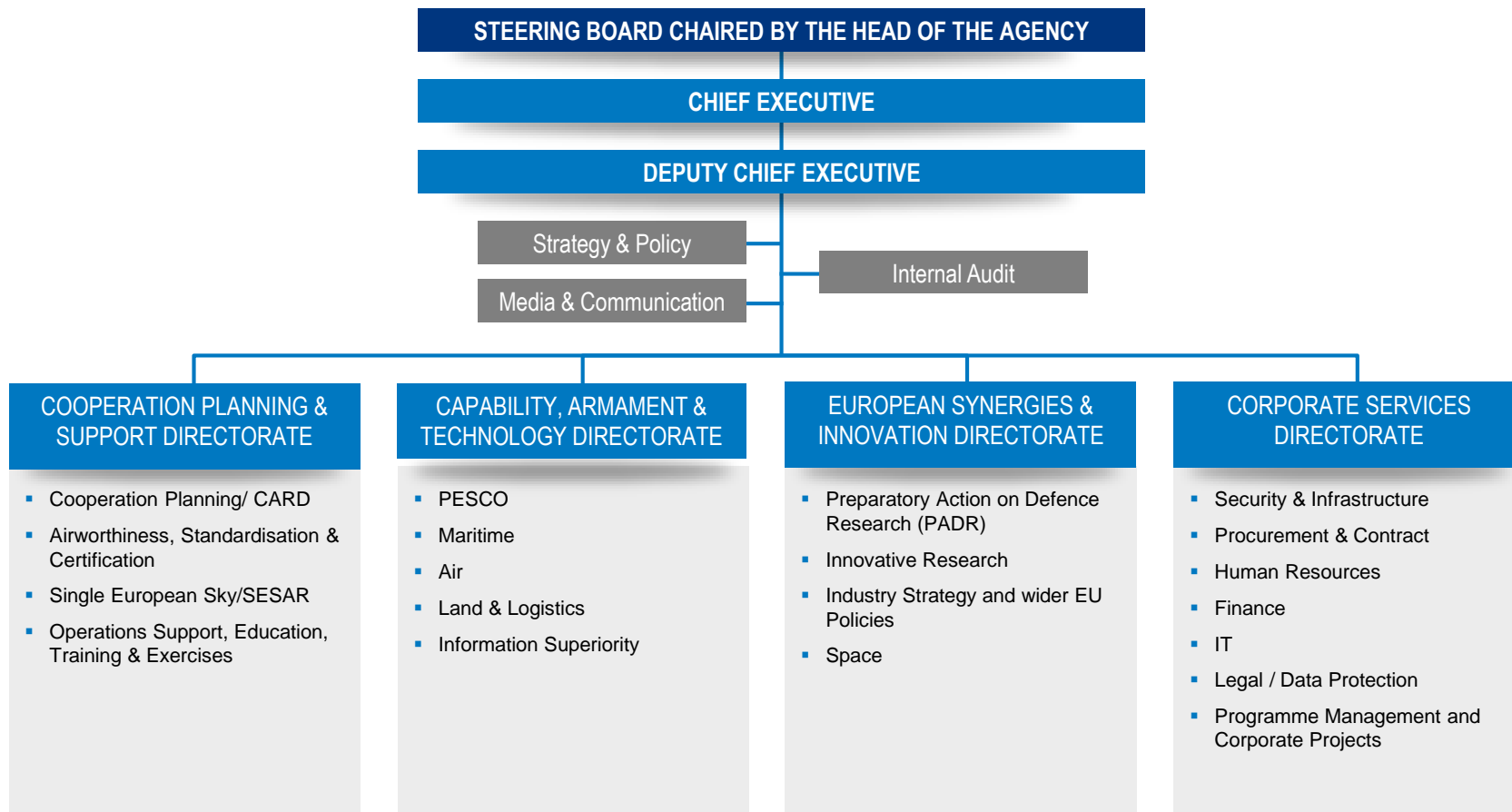
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ENSURE

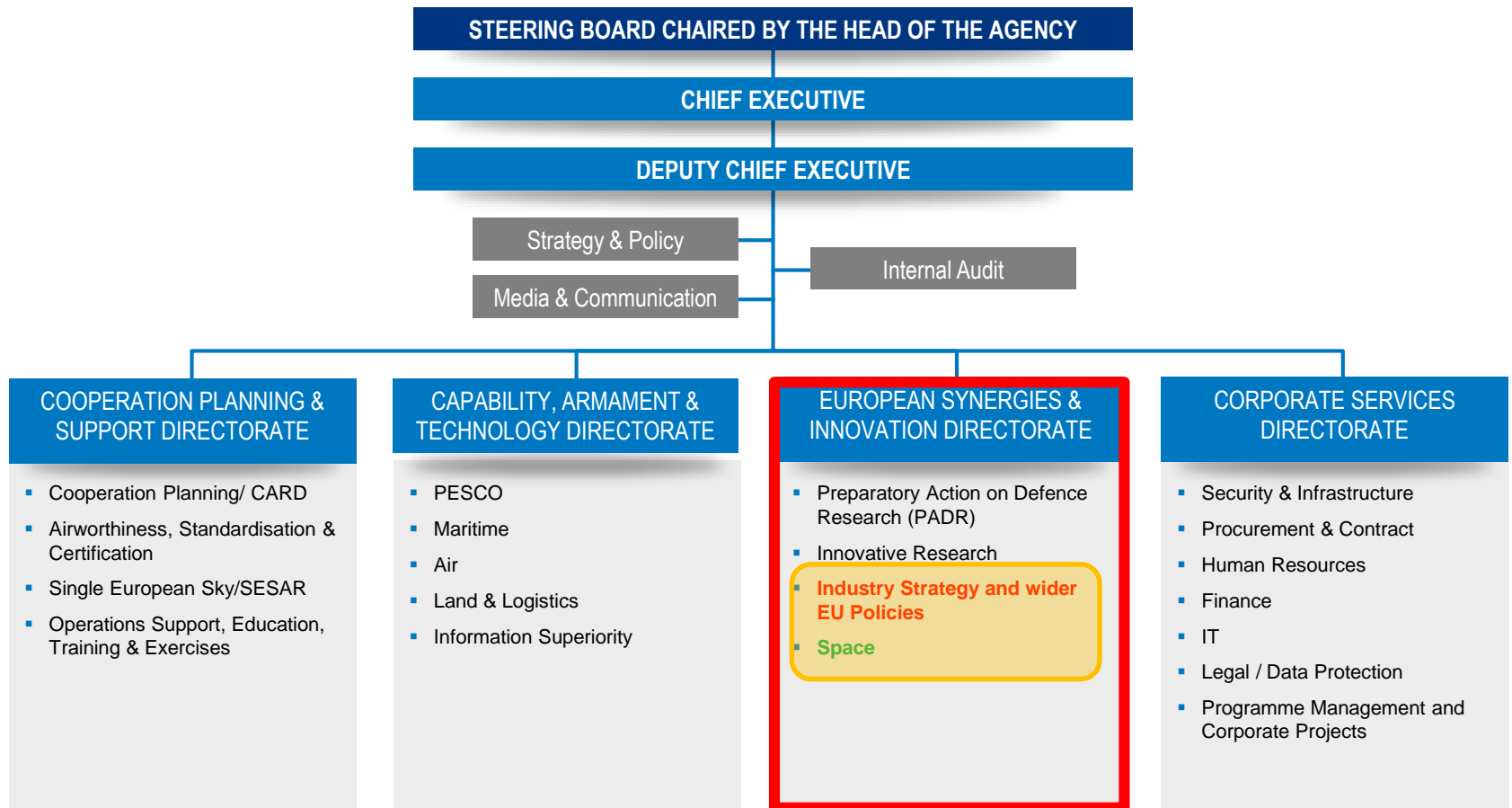
that military interests are taken into account in **wider EU policies**



ORGANISATION

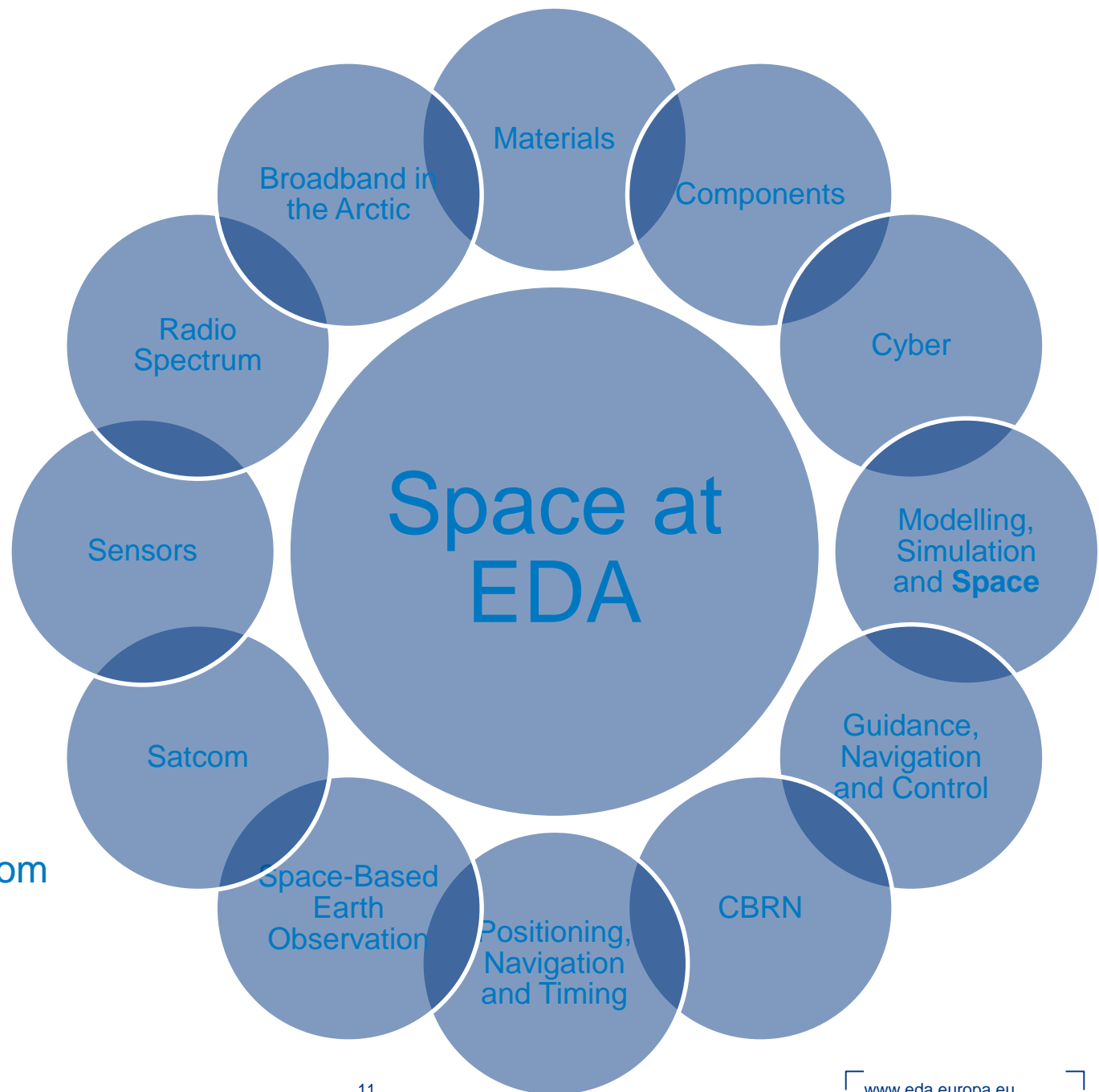


ORGANISATION





EDA SPACE ACTIVITIES



Linking Research
to Capability
requirements and
priorities resulting from
the **Capability
Development Plan
(CDP)**

SPACE FOR SECURITY AND DEFENCE



R&T projects and comprehensive EDA space policy towards, and institutional relations with, Defence Ministries, EU institutions, European Space Agency, other agencies and institutions, as well as industry engagement on space affairs, interdirectorate collaboration

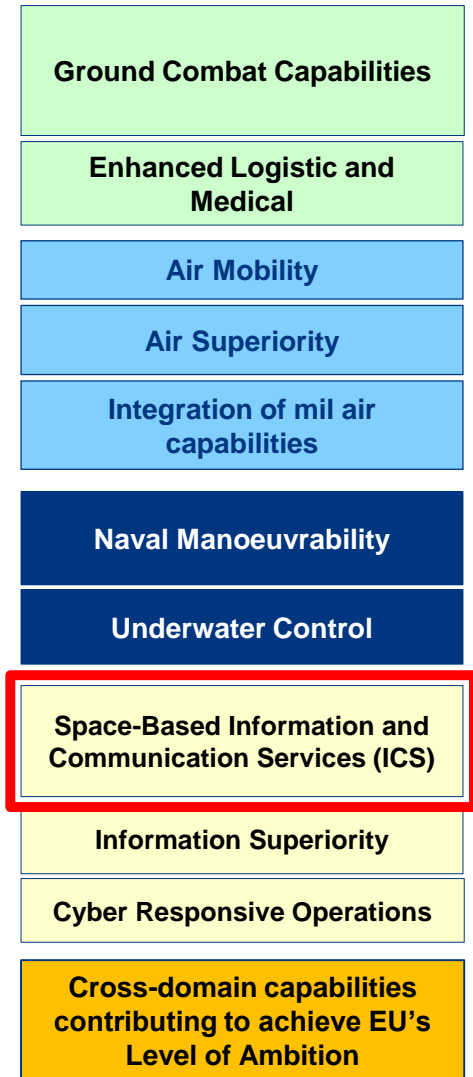
- **Policy priorities:**

- **Ensuring wider acceptance of security and defence requirements and defence as an important user community in the frame of European space programmes including EU, ESA, bilateral, national, ...**
- **Strengthening the role of EDA in the frame of EU space programmes as interface and facilitator of MODs through the elaboration of MS mandates.**

- Capability development mainly within the frame of Space-Based Earth Observation (including Copernicus); Positioning, Navigation and Timing (including EGNSS); Satellite Communications (including GOVSATCOM);
- “EU Satcom Market” project (pay-per-use commercial satcom)

EDA 2018 CDP

- Approved at Steering Board in June 2018
 - Provides a full capability picture that supports decision-making processes at EU and national level regarding military capability development, thus contributing to increased coherence between Member States' defence planning.
 - Addresses security and defence challenges from the perspective of European capability development, looks at the future operational environment and defines EU Capability Development Priorities agreed by Member States.
- 11 Lines of Development, amongst which
 - ❑ **Space-Based Information and Communication Services (ICS)**
 - **Satcom, EO, PNT, SSA/SST**



MORE INFORMATION ON EDA SPACE ACTIVITIES AND 2018 CAPABILITY DEVELOPMENT PLAN (CDP)

- <https://www.eda.europa.eu/info-hub/publications/publication-details/pub/factsheet-space>
- <https://www.eda.europa.eu/docs/default-source/documents/eda-information-sheet-on-space.pdf>
- <https://www.eda.europa.eu/info-hub/press-centre/latest-news/2018/06/28/new-2018-eu-capability-development-priorities-approved>
- https://www.eda.europa.eu/docs/default-source/eda-factsheets/2018-06-28-factsheet_cdpb020b03fa4d264cfa776ff000087ef0f
- <https://www.eda.europa.eu/what-we-do/our-current-priorities/strategies/Capabilities>





EDA REACH Policy/Activities

incl. REACH Impact on Defence

BACKGROUND/STATE OF PLAY



- **EDA activities on REACH:** since 2009
- **Continuous interaction-cooperation with/support by all EU competent stakeholders**
Member States, European Commission, ECHA, ESA, European defence industry;
(also US Department of Defence and US industry)
- **Wide EDA network of Member States REACH experts**
 - **EDA REACH Task Force** [experts from 10 MS (**DE, EL, ES, FI, FR, IT, NL, RO, SE, UK**) and **NO**] supporting EDA at technical level.

EDA only forum for structured dialogue - central role as military coordinator on REACH defence-related issues

HARMONISATION OF NATIONAL DEFENCE EXEMPTION PROCEDURES

- Article 2(3) REACH
- EDA Code of Conduct on REACH Defence Exemptions
- Adopted Mar 2015
- Not a panacea -
defence exemptions
only as a last resort
solution

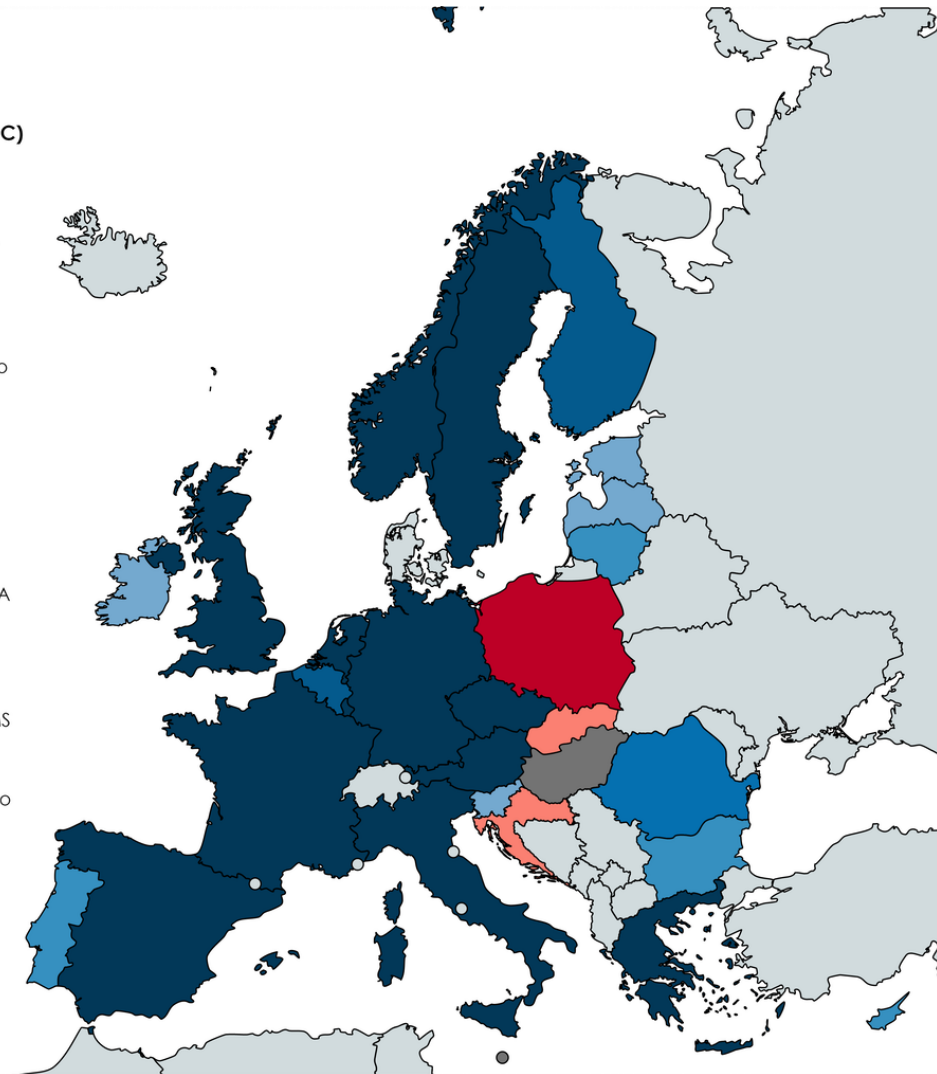
EDA CoC available at:

<https://www.eda.europa.eu/info-hub/press-centre/latest-news/2015/06/23/member-states-implement-code-of-conduct-on-reach>

Harmonisation of National REACH Defence Exemption Procedures, on the basis of the EDA Code of Conduct (CoC) on REACH Defence Exemptions

- National procedure exists - aligned with EDA CoC: 11 MS (AT, CZ, DE, EL, ES, FR, IT, LU, NL, SE, UK) + NO
- National procedure exists - mostly aligned/small differences with EDA CoC - no further actions are envisaged: 2 MS (BE, FI)
- National procedure exists - not aligned/differences exist - in process to be aligned with EDA CoC: 1 MS (RO)
- National procedure does not exist yet - in process to develop one aligned with EDA CoC: 4 MS (BG, CY, LT, PT)
- National procedure does not exist - to be developed in the future, if needed, in alignment with EDA CoC: 4 MS (EE, IE, LV, SI)
- National procedure exists - not aligned with EDA CoC - no further actions are envisaged: 2 MS (HR, SK)
- Subscribed to EDA CoC, but status under investigation: 2 MS (HU, MT)
- Not subscribed to EDA CoC - potential subscription under national examination: 1 MS (PL)

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EDA REACH PORTAL



[Home](#) [FAQ](#)

Member States

Austria	
Belgium	
Bulgaria	
Croatia	
Czech Republic	
Cyprus	
Estonia	
Finland	
France	
Germany	
Greece	
Hungary	
Ireland	
Italy	
Latvia	
Lithuania	
Luxembourg	
Malta	
Netherlands	
Norway	
Poland	
Portugal	
Romania	
Slovakia	
Slovenia	
Spain	
Sweden	
United Kingdom	

Welcome to the REACH portal!

Use the menu on your left to learn more about national policies and procedures on granting exemptions from REACH obligations in the interest of Defence.

REACH – NATIONAL EXEMPTIONS IN THE INTEREST OF DEFENCE

Starting back in early 2009, the European Defence Agency (EDA), at the request of its participating Member States, launched – in coordination with the European Commission – an initiative with respect to the European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its defence implications, specifically focusing on the area of national defence exemptions and their potential impact on the European Defence Equipment Market (EDEM).

REACH basically provides for a European system of registration of chemical substances. In the registration process, the chemical substance and its intended use have to be reported to the European Chemicals Agency (ECHA) by the producer or importer into the EU. Producers and importers also have to test the chemical substances and provide respective data to ECHA.

REACH, as a European Regulation, is directly applicable in Member States and hence applies to the defence sector as well. However, REACH in its Article 2, paragraph 3, states that "Member States may allow for exemptions from this Regulation in specific cases for certain substances, on their own, in a mixture or in an article, where necessary in the interests of defence".

Granting such defence exemptions is first and foremost a national responsibility. However, REACH is clearly an area where a harmonised approach towards granting or denying of national defence exemptions would contribute to a level playing field for European defence industries, reducing their administrative burden and related costs and hence support the creation of an open and transparent EDEM and the maintenance and development of a capable and capability-driven European Defence Technological and Industrial Base (EDTIB), providing Armed Forces with the right defence equipment to meet their operational requirements.

Accordingly, the EDA Steering Board Decision on REACH in March 2010 tasked the Agency to work with Member States in establishing harmonised standards for granting defence exemptions, emphasising in parallel the need for transparency about national policies and procedures.

As a result, the EDA's REACH web-portal, allowing pMS to post basic information on their national procedures for granting defence exemptions, was established and is accessible to the public since 14 October 2010.

In March 2015, the EDA Code of Conduct (CoC) on REACH Defence Exemptions and associated technical Framework for Applying for a Defence Exemption from a Requirement of REACH, annexed to the CoC, were adopted by the EDA participating Member States.

[Read more about EDA's REACH Work and Activities](#)

- Member States' **voluntary information** on national procedures for granting defence exemptions (incl. number of exemptions granted).
- **Continuously updated, aiming to increase transparency among stakeholders.**
 - **18 MS as well as Norway** - have posted information
 - **9 MS** – In the process to post information

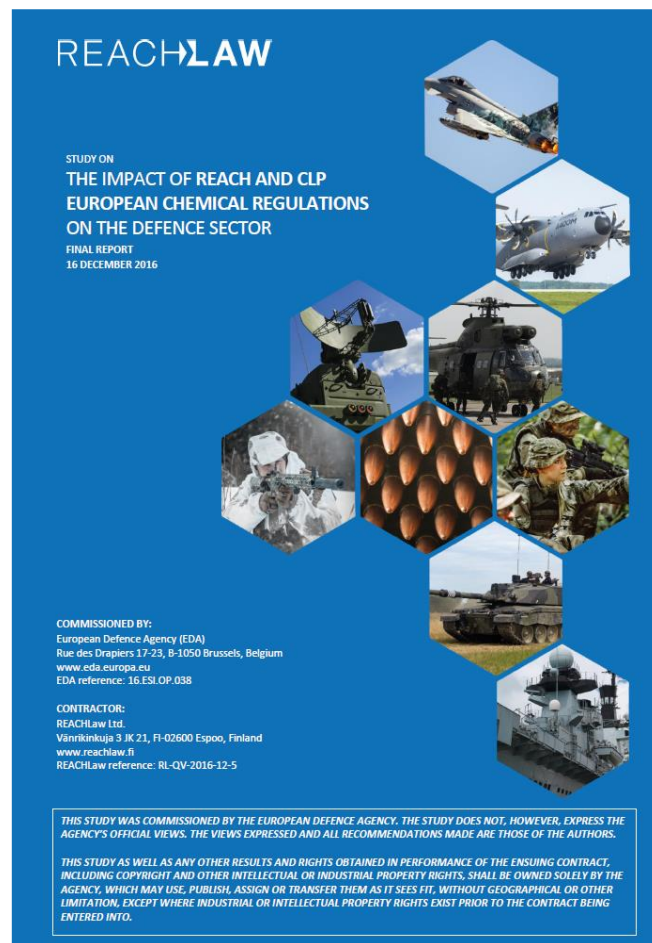
<http://reach.eda.europa.eu/>



EDA STUDY ON THE IMPACT OF REACH (& CLP) ON DEFENCE

- **Final Report Dec 2016**
- **Concluding on the impact** of REACH / CLP on defence stakeholders (MoDs + defence industry):

“REACH and its processes, as they stand now, may impact the actual operability of Member States’ Armed Forces, especially considering the long lifecycles of military equipment.”
- **Recommendations:**
 - **For improvement of REACH regulation and its processes** → EC + ECHA (EC 2017 REACH Review)
 - **For further work on mitigating impact of REACH on defence** → EDA + MS MoDs + Defence Industry.

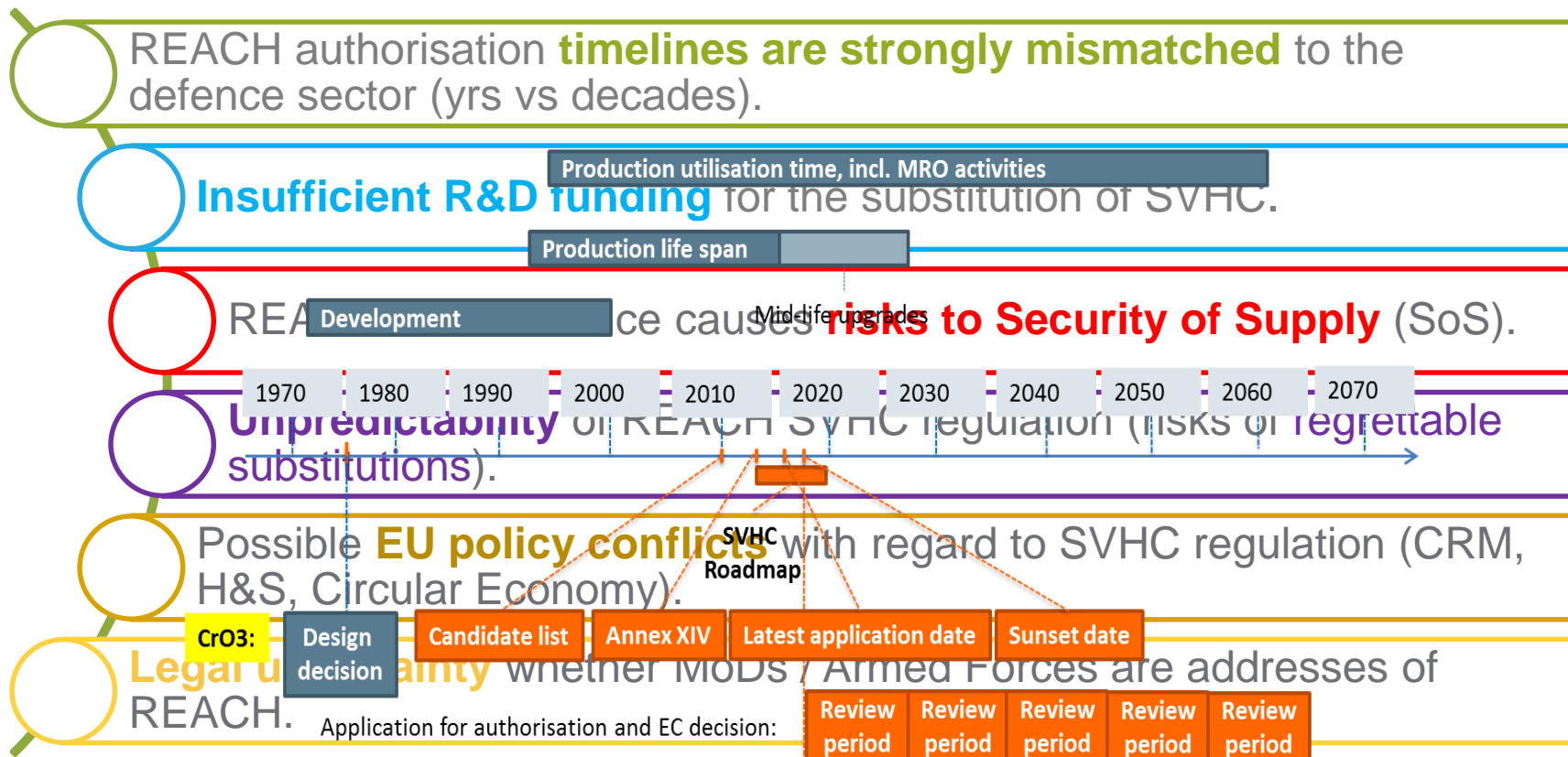


available at:

<https://www.eda.europa.eu/docs/default-source/reports/eda-reach-study-final-report-2016-december-16-p.pdf>

EDA STUDY ON IMPACT OF REACH ON DEFENCE _

SOME FINDINGS



EDA STUDY ON IMPACT OF REACH ON DEFENCE _

AREAS/SUBSTANCES IMPACTED BY REACH

Substance / substance group	REACH/CLP status	Air-Naval-Land	Space	Electronics	Nuclear	Munitions	CRM	R&T ongoing*
Phthalates	Annex XIV: first sunset date passed 21.02.2015	+				+		YES
Lead chromate (CAS 7758-97-6)	Annex XIV: sunset date passed 21.05.2015	+				+		YES
Trichloroethylene (CAS 79-01-6)	Annex XIV: sunset date passed 21.04.2016	+				+		YES
Cr(VI) compounds	Annex XIV: first sunset date on 21.09.2017	+	+	+		+	Chromium	YES (high)
Cobalt salts	Annex XIV recommendation (2011) - on hold	+	+				Cobalt	Not known
ADCA (CAS 123-77-3)	Annex XIV recommendation (2014)					+		Not known
Refractory ceramic fibres	Annex XIV recommendation (2014)	+					Silicon metal	Not known
Boric Acid (CAS 10043-35-3)	Annex XIV recommendation (2015)	+	+		+		Borates	YES (some)
Lead and its compounds	Annex XIV recommendation (2016) - partly	+	+	+		+		YES
Hydrazine (CAS 302-01-2)	Candidate list (20.06.2011)	+	+		+	+		NO (F-16)
Lead titanium zirconium oxide (CAS 12626-81-2)	Candidate list (19.12.2012)	+		+	+			YES
Cadmium (CAS 7440-43-9)	Candidate list (20.06.2013)	+	+	+	+	+		YES (some)
Ammonium perchlorate (CAS 7790-98-9)	RMOA (after substance evaluation)		+			+		YES
Beryllium (CAS 7440-41-7)	RMOA	+	+	+	+	+	Beryllium	Not known
Bisphenol A (CAS 80-05-7)	SVHC proposal and intention; restriction	+						Not known
Diisocyanates	RMOA concluded: Annex XVII proposal	+	+	+	+	+		Not known
Gallium Arsenide (CAS 1303-00-0)	CLP Annex VI			+			Gallium	YES
Nickel salts	RMOA	+	+	+		+		YES (some)
Petroleum substances, e.g. in NATO fuel	SVHC Roadmap to 2020 / PetCo Group	+						YES (some)

Legend:

Annex XIV	ECHA recommendation	Candidate List	(Potential) SVHC	*Information on R&T based on MoD and defence industry survey
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AMMUNITION CLASSIFICATION UNDER REACH

EDA Member States' Common Position on Ammunition Classification under REACH

- **Adopted Sep 2017**
- **Reducing the risk of misinterpretation of, and enhancing compliance to, the REACH provisions on substances/mixtures or articles;**
- **Supporting the European Defence Technological and Industrial Base (EDTIB)** in its efforts to raise awareness on issues pertaining to ammunition classification under REACH;



EDA MEMBER STATES
COMMON POSITION ON AMMUNITION
CLASSIFICATION UNDER REACH

25 September 2017

available at:

<https://www.eda.europa.eu/info-hub/press-centre/latest-news/2017/10/02/eda-member-states-adopt-common-position-on-ammunition-classification-under-reach>

EDA REACH ROADMAP 2018 - 2020

Adopted Oct 2017

- ❑ Facilitating **common prioritised - coordinated actions**, in close cooperation with the EC, ECHA and industry;

- ❑ Supporting the main purpose of REACH, while **mitigating its impact on Defence** and **ensuring the operational effectiveness** of the European Armed Forces.

available at: <https://www.eda.europa.eu/docs/default-source/brochures/eda-reach-roadmap-2018-2020.pdf>

[illegible]

EDA REACH ROADMAP 2018-2020 _ MAIN ACTIVITIES

- **EDA Role in REACH Defence Matters**
- **EC REACH Refit 2017 Outcome and related way-ahead for Defence**
 - **Most (if not all) main relevant key recommendations from the EDA study have been dealt with**, either as part of the REACH review documentation or through separate EC/ECHA actions.
 - **Defence related criterion for more than 12 years authorisation review periods** – Adopted by EC/CARACAL in November 2017
- **EDA REACH Code of Conduct**
 - Harmonisation, transparency, reciprocal acknowledgment, improvements/evolutions, CLP defence exemptions
- **Ammunition Classification under REACH**
 - Assessment of feedback from MS Common Position
 - Continuation of work

EDA REACH ROADMAP 2018-2020 _ MAIN ACTIVITIES

- **Align Procurement Contract Terms with REACH**
 - EDA Guidance to MS in preparation – **Expected adoption Feb 2019**
- **REACH Art. 33 Implementation**
 - Incl. issues related to **recently updated Waste Directive/ECHA Database**
- **Ammunition CLP Labelling**
- **Clarifying REACH Links with other EU Laws and Policies**
 - REACH and Circular Economy
 - Study on Consistency of EU Chemicals' / Products' Laws Impacting Defence (e.g. POP, RoHS etc.)
- **Promotion of REACH R&T Activities for Innovative Substitution**
 - Collaborative R&T
 - EU R&T&D Funding Schemes for REACH projects



EDA REACH R&T Activities

EDA CAPABILITY TECHNOLOGY GROUPS (CAPTECHS)

Capability, Armament & Technology					
Information Superiority		Intervention & Protection			
Communication Information Systems & Networks	System of systems, Battlelab and Modelling & Simulation	Aerial Systems	Ground Systems	Naval Systems	Ammunition Technology

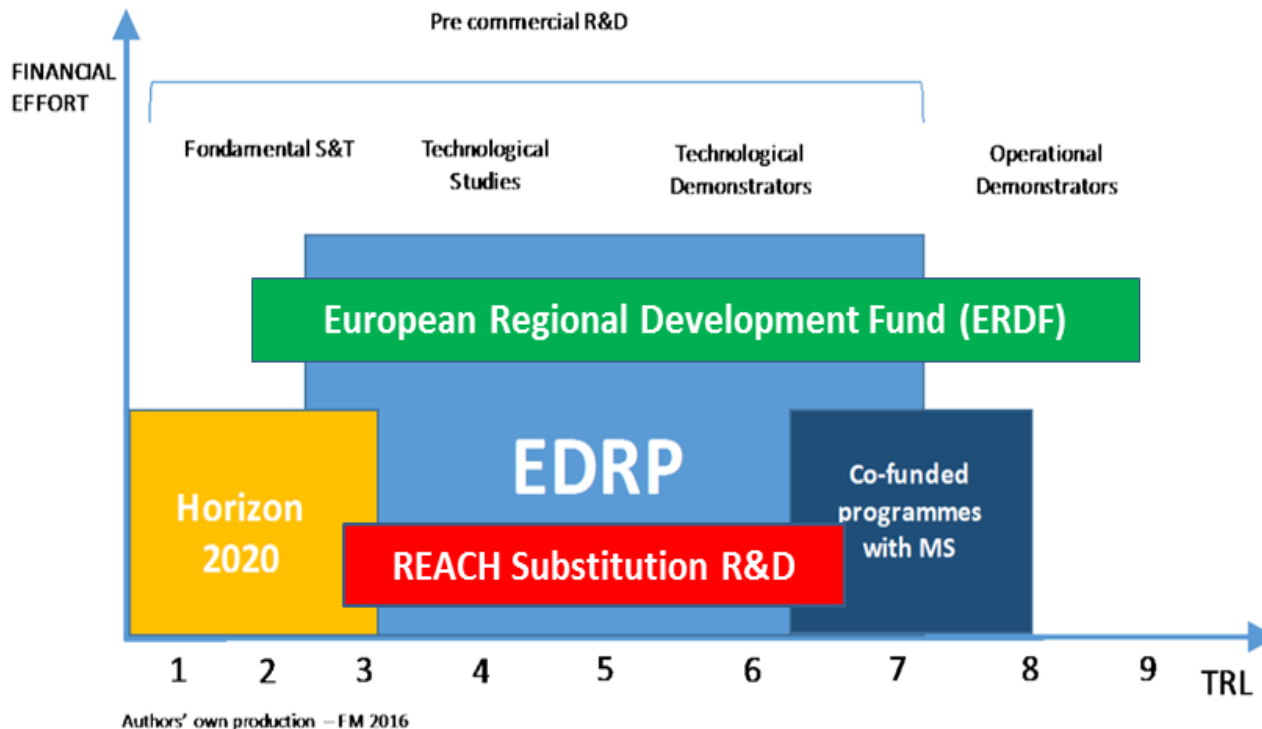
European Synergies and Innovation	
Innovative Research	
Materials & Structures	
Technologies for Components and Modules	
Radio Frequency Sensors Technologies	
Electro-Optical Sensors Technologies	
CBRN Protection and Human Factors	
Guidance & Control	
Energy WG	

COLLABORATIVE R&T ON SUBSTITUTION OF REACH SVHC

- *Promote innovative substitution of substances critical for defence which are impacted by REACH (SVHCs), through enhanced collaborative R&T projects under the EDA CapTechs*
 - Overarching Strategic Research Agenda (OSRA)/ Technology Building Blocks (TBBs)
 - Strategic Research Agendas (SRAs)
- **Defence R&T**
 - Critical Space Technologies
 - Critical Defence Technologies
 - Synergies civil and defence R&T

R&D FUNDING SCHEMES FOR INNOVATIVE SUBSTITUTION

- Possible EU level funding schemes for REACH substitution R&D



- Best exploitation of potential EU-level R&D funding schemes / sources** (such as **ESIF**, **EDIDP**, **EDF**) for funding of future R&T projects for innovative substitution of REACH related Substances of Very High Concern (SVHCs) impacting defence

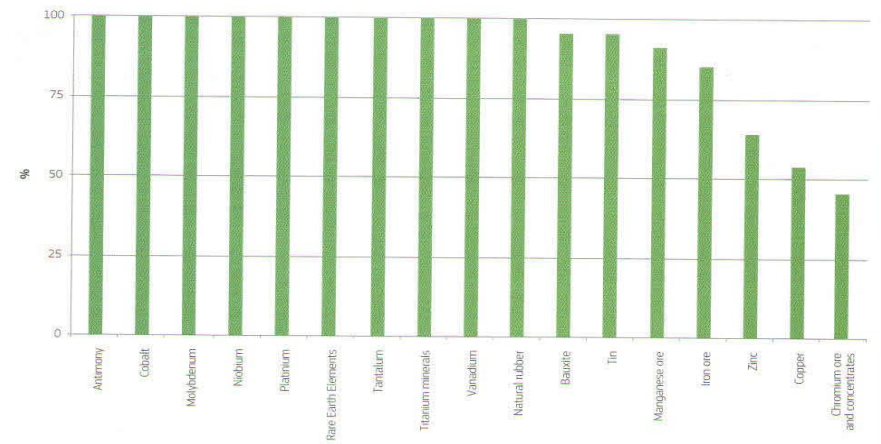
REACH AND MATERIALS CAPTECH

- Main TBB affected: **surface treatment for maximum lifetime and/or hostile environments.** Coatings as vital factor for all types of platform and system deployed in operations exposed to hostile environment (taking into account REACH considerations)
- **“Three facets coin” issue:** a position paper endorsed by the CapTech and cMS
 - (1st facet) EDA study on the impact of REACH to the defence sector



“THREE FACETS COIN” ISSUE (CONT'D)

- (2nd facet) European dependence on **Critical Raw Materials** (CRMs) from Third Countries Impact on the strategic development of new materials
- Impact on the present European **supply chain landscape**



“THREE FACETS COIN” ISSUE (CONT'D)

- (3rd facet) **Forward-looking approach** in the substitution strategy
- **Circular Economy** Strategy
- Circular materials and processes (advanced design/architecture), enhancing the **recycling of CRMs**



IMPACT ON DEFENCE APPLICATIONS

➤ Surface treatments

- ✓ Hexavalent Chromium compounds in surface treatment of many defence products
- ✓ Cadmium plating in the aerospace & defence sector (fasteners, connector housings, etc.)
- ✓ Boric acid, critical use in electrolytic deposition of metals, e.g. Ni, SnPb, Co, Cd. And for metal working fluids and brazing fluxes.



IMPACT ON DEFENCE APPLICATIONS (CONT)

➤ Soldering

- ✓ Lead-free -> brittleness, whiskering

➤ Thermal and fire insulation materials

- ✓ Refractory ceramic fibres, in black-boxes and engine fire shields. No optimal alternatives found hitherto

➤ Alloys

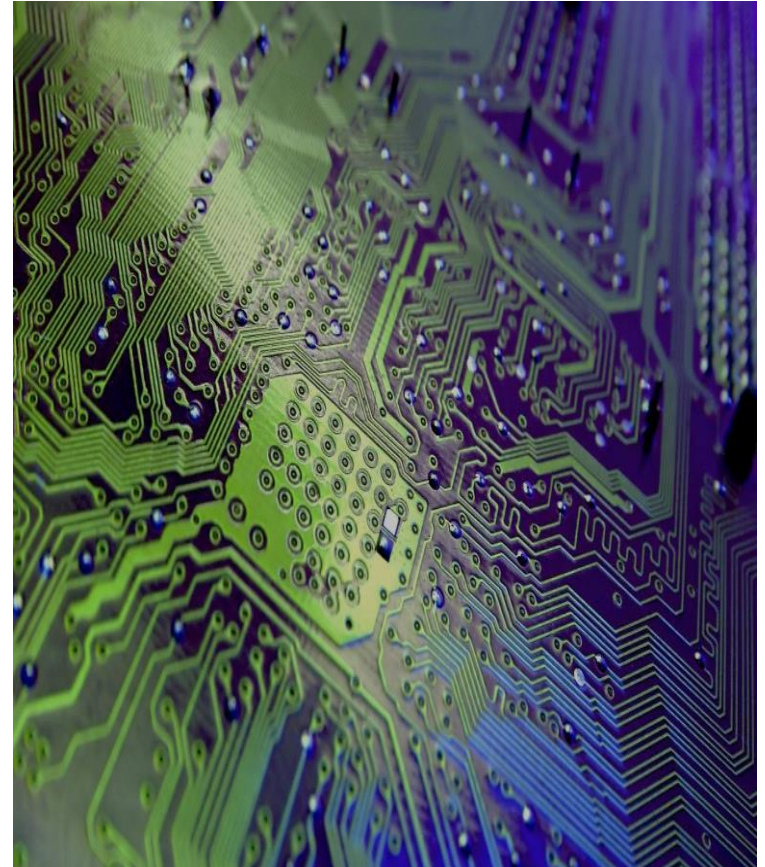
- ✓ Lead-free alloys limited, difficult to apply to critical aircraft structure

➤ Boron oxide

- ✓ Reagent in GaAs manufacturing
- ✓ Gunn diodes

➤ Cobalt

- ✓ Ni-based corrosion protection



ENERGETIC MATERIALS TOWARDS AN ENHANCED EUROPEAN CAPABILITY [EMTEEC]

- **Project type:** Cat B
- **cMS:** SE, CZ, DE, NL, FR + NO
- **Aim:** develop mutual awareness and knowledge of selected future EM, production methods for critical components, including raw material and small scale evaluation methods.
- **Timeframe:** 2016 - 2020
- **Status:** running (next meeting 26-27 Oct, DE)
- **REACH related work:**
 - Identification of critical or restricted components (e.g. ITAR, EAR, REACH), such as burn rate modifiers, HTPB, bonding agents, plasticizers and solvents
 - Secure the production methods of the European manufacturers, complying with current international regulation (REACH)
- **Military benefits:**

Maintain and enhance European capability to produce Energetic

Materials for Engage Capability



CAPTECH AMMUNITION TECHNOLOGIES – TECHNOLOGY BUILDING BLOCK (TBB)

**High
Performance,
low sensitivity
and REACH
Compliant
Energetic
Materials**

Chemical quantum calculations, thermochemical and detonation codes

Simulation of EM reaction level under thermal and/or chemical stresses

New chemical (energetic and non-energetic) materials

Innovative techniques for accurate and efficient characterization of environmental impact of EM used in missiles and munitions

Prioritization and replacement of toxic or other environmentally harmful EM to be developed, including those related to potential future REACH-compliance requirements

Implementation of a European common data base related to EM



EDA – ESA Interaction on REACH

incl. Defence/Space Proposed Way Ahead on REACH

EDA – ESA INTERACTION ON REACH

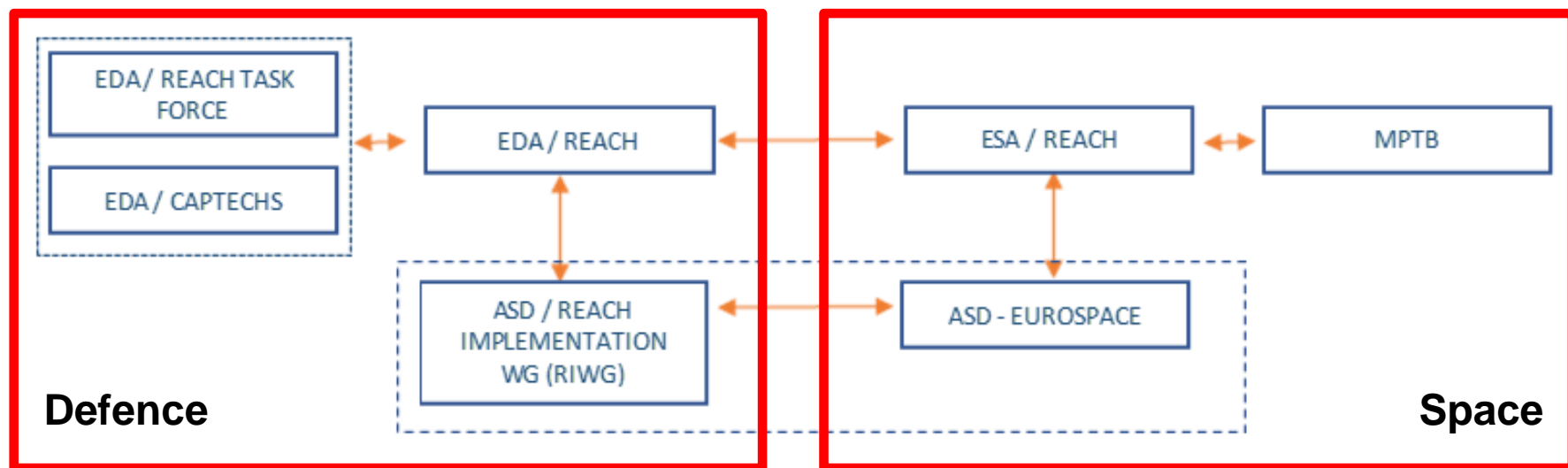
- EDA/ESA Interaction was initiated **early 2018**
- EDA invited/to invite ESA to EDA REACH Plenary meetings, as **observer**
 - ESA attended the 10th EDA REACH Plenary meeting (**June 2018**) and was invited to 11th REACH Plenary meeting (**22 November 2018**)
- ESA granted to EDA membership in MPTB, as **observer**
 - EDA attended the 19th (**June 2018**) and 20th MPTB (**September 2018**) meetings
- **27 September 2018** : ESA – EDA Bilateral meeting on REACH

DEFENCE/SPACE vs REACH

- Many of challenges that defence sector faces on REACH **are very relevant (in some cases identical)** to the ones that the space sector is encountering
- Both sectors
 - **niche players** that use **low quantities** (materials, components, etc.) - **share components** (e.g. electronics and propellants)
 - supported through **complex cross-border multi-tier industrial supply chains**
- Several topics of common interest, for which **further exchange of information/common action would be mutually beneficial** e.g.
 - Specific important substances regulated/impacted by REACH critical for defence/space (e.g. chromates)
 - Recent Example: **Chromium Trioxide**
 - R&T for innovative substitution of such substances
 - REACH Art. 33 implementation incl. updated Waste Directive/ECHA Database
 - Classification (e.g. in the area of ammunition/propellants)

DEFENCE/SPACE vs REACH (CONT'D)

- In-depth expertise/technical groups from both sides
- Defence/Space Industry at EU level : Common denominator **ASD** and its **activities/forums on REACH (ASD REACH Implementation WG) and Space (ASD-Eurospace)**
- **Current overall supporting set-up:**



PROPOSED WAY AHEAD FOR REACH

- EDA and ESA to **continue to closely liaise at technical level** on REACH areas/topics of common interest
- Keep each other regularly informed on developments for REACH activities, with a view of **cross-fertilisation of work as well as exploiting potential synergies**, for the benefit of defence and space stakeholders



By joining forces, EDA/defence and ESA/space can have a stronger common voice and make themselves heard towards other EU REACH stakeholders, in view of minimizing the potential future impact of REACH for both Defence and Space



EDA REACH Activities – More information

EDA REACH ACTIVITIES _ FURTHER INFORMATION

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REACH

Sep 20, 2018



Start Date: 2009
End Date: n/a.
Participating Countries: All
Other partners: European Commission,
European Chemicals Agency (ECHA)

Assess European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) implications in defence, specifically focusing on potential REACH impact on the European Defence Equipment Market (EDEM).

Project goals

- >> Support harmonisation of national policies and procedures regarding granting of REACH defence exemptions
- >> Build a common understanding of REACH and exchange best practices in the regulation implementation
- >> Identify the impact of REACH on defence sector, develop proposals and implement activities to mitigate such impact

General Background on REACH Regulation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) was adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry.

REACH basically provides for a European system of registration of chemical substances. In the registration process, the chemical substance and its intended use have to be reported to the European Chemicals Agency (ECHA) by the producer or importer into the EU. Producers and importers also have to test the chemical substances and provide respective data to ECHA.

EDA REACH Project Webpage:

<https://www.eda.europa.eu/what-we-do/activities/activities-search/reach/>

EDA REACH POs:

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Thank you for your attention!!
** QUESTIONS?? **

REACH Policy/Activities at European Defence Agency (EDA)

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