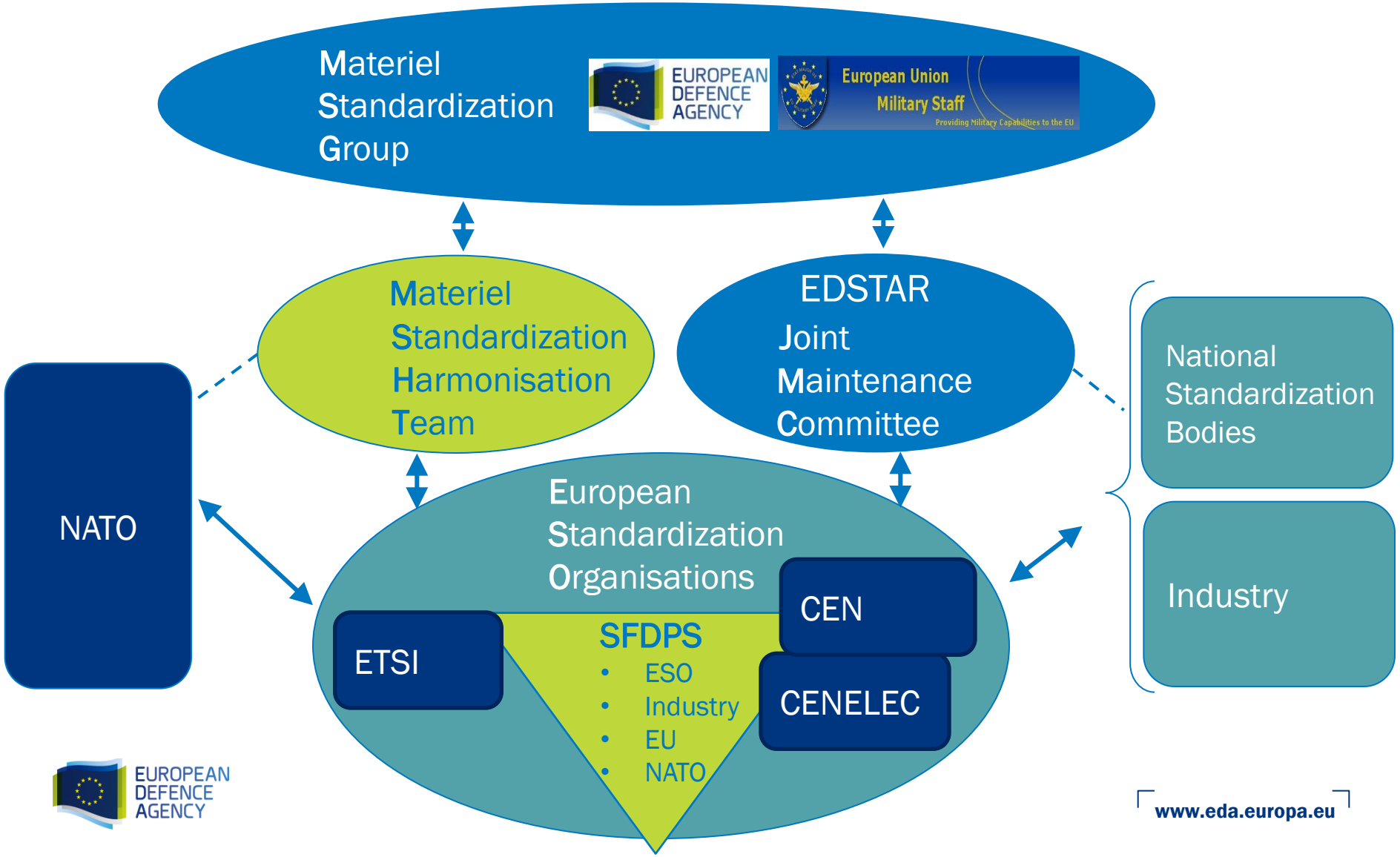
EUROPEAN DEFENCE AGENCY

Brussels, 04 April 2013
Christian Schleippmann & Isabelle Desjeux

EDA Standardization management and introduction to standardization relevant EDA projects

- **Defence Standardization stakeholders**
- EDSIS
- EDSTAR
- EDA standardization relevant projects

The Main Standardization Stakeholders



EUROPEAN DEFENCE AGENCY

The Materiel Standardization Group (MSG)

Mission

- Contribute to the implementation of the Common Security and Defence Policy (CSDP)
- Strengthening of the European Defence Technological and Industrial Base (EDTIB)

by supporting, coordinating and harmonising **European Defence materiel standardization.**

The Materiel Standardization Group (MSG)

Composition

- EDA Armaments Director or his representative
- Representative(s) of each participating Member State of EDA
- Representative(s) from the European Commission
- Representative(s) from the EUMS

The Materiel Standardization Group (MSG)

Tasks

- Custodian of the EDA Defence Standardization Policy and Roadmap
- High level expert group for preparing standardization issues to be presented at EDA Steering Board
- Forum for harmonizing European positions to be promoted in other committees dealing with materiel standardization
- Supervising decision body for the European Defence Standards Reference system (EDSTAR)

- Defence Standardization stakeholders
- **EDSIS**
- EDSTAR
- EDA standardization relevant projects

What is EDSIS

- The **European Defence Standardization Information System** (EDSIS) is the central portal for all European Defence materiel standardization services.
- EDSIS's main function is to enable the participating Member States of the European Defence Agency and industry to **advertise Defence materiel standards <u>that are to be developed or undergo major modification</u>**. Other stakeholders from government or industry are able to express their interest in **joining the project through the EDSIS portal**. This co-operative working enables standards to be developed, recognized and used by a number of parties. Thus EDSIS plays its part in reducing the dependence on national Defence standards.
- Furthermore EDSIS gives registered users the possibility to get actively involved in creating new standardization solutions and to **network with Defence standardization stakeholders**.

What EDSIS can do

- EDSIS is a tool to Promote Defence standardization activities;
- Network with Defence standardization experts;
- Be up-to-date on Defence standardization activities, events & news;
- Only registered users can benefit from the standardization expert networking functionality. The registration is also necessary to publish new standardization projects. Only official representatives nominated by EDA participating Members are entitled to publish standardization projects.

EDSIS online

EDSIS is available at http://www.eda.europa.eu/edsisweb/
There is an open portal publicly available and a secured portal with additional functionalities for registered users.

EDSIS portal (for registered users)

- Defence Standardization stakeholders
- EDSIS
- **EDSTAR**
- EDA standardization relevant projects

What is EDSTAR?

EDSTAR

- EDSTAR has replaced the European Handbook for Defence Procurement.
- EDSTAR is the European Defence Standards Reference system containing references to “Best practice” standards and standard-like specifications to support Programme organizations.
- The EDSTAR database is owned by the European Defence Agency and maintained in cooperation with standardization stakeholders.

NOTE: “Best practice” standards are standards which have been selected by consensus by industry and governmental agencies to be the best applicable standards for defence purposes.

Objectives of EDSTAR

- EDSTAR is to be used by government procurement agencies and in defence industry for procurement of defence systems (including development and production).

- EDSTAR provides guidance on the selection and practice of standards and standard-like specifications to optimise effectiveness, efficiency, and interoperability of applications (Best practice recommendations).

- EDSTAR is a mean to consolidate the highly fragmented market for defence materiel in Europe. Commonly accepted standards support the interoperability of defence equipment.

Use of EDSTAR

- EDSTAR is a continually updated website. Currently 20 technological areas are covered and give guidance on the selection of **best practice standards**.
- Further areas of interest are identified and will expand the existing database in the future.
- Its relevance on a sufficient coverage of applicable domains depends very much on the support and inputs from users. A dedicated **change request form** allows users to contribute to the contents of the database (see "library" in EDSTAR).
- The standards referenced in EDSTAR are online available to official representatives of EDA pMS.
- For further information exchange on defence standardization issues the European Defence Information System (EDSIS) portal can be used. It is available at http://www.eda.europa.eu/edsisweb/Default.aspx .

Way ahead for EDSTAR

- The next steps will be to identify further technical domains for expanding the best practice standards recommendations. This will be an ongoing process which will be prioritized according to recommendations by JMC and decisions taken by the MSG.
- The next technical domain to be introduced will be “Systems architecture”. The expert group is nominated and will start working soon.
- Further technical domains are possibly introduced such as “Human Factors”.
- **Existing technical domain are to be reviewed, in particular also the “Armoured Land Vehicle Technology” domain.**

Armoured Land Vehicle Technology domain

Expert Group 09 “Armoured Land Vehicle Technology” was active between April 2007 and April 2008.

Compilation of approximately 500 standards, standards-like documents and legislative documents quoted in the specifications of the following vehicle projects:

Finland Patria AMV

France VBCI

Belgium Piranha

Italy Lince & Belgium LMV

Germany Puma

Germany & Netherlands Boxer

Germany Dingo & Belgium MPPV

Armoured Land Vehicle Technology domain (2)

The expert group made a "full-system" analysis. This is a quite complex approach, maybe even too complex for a consensus based activity.

The current EDA project on Land Vehicle with Open System Architecture (LAVOSAR) is aiming for a standard for an open architecture focusing on mission systems.

Component/Assembly:	STANAG and other NATO Documents	Civilian Standards / Documents	National Military Standards / Specifications	Other Standards / Documents
Engine/Powerpack				
Fuel System				
Engine Cooling System				
Electrical System				
Batteries				
Auxilliary Power Units				
Transmission				
Axels / Wheels / Tires				
Running Gear / Tracks				
Suspension system				
Braking System				
Steering System				
Hydraulic / Pneumatic Systems				
Internal Installations (e.g. seats, brackets)				
Hull				
Turret				
Armour				
Optics / Optronics				
Fire Extinguishing System				
Aircondition / Heating System				
Deep Fording Equipment				
Main Weapon				
Secondary Weapons				
Weapons Stabilization System				
Fire Control systems				
Communications Systems				
Command, Control and Information Systems				
Thermal Imager / Infra Red Viewer				
NBC- Protection System				
Surface Coating / Camouflage Pattern				
Fuels and Lubricants				
Towing attachements and equipment				
Accessories				
Special Tools				
Others				
Requirements:				
Environmental Conditions				
Transportabilty (Road/Rail/Air/Ship)				
Fording ability				
Road Traffic Regulations				
Safety Regulations				
Ergonomic Requirements / Guidelines				
Test Procedures				
Others				

EDSTAR online

EDSTAR is publicly available at http://www.eda.europa.eu/edstar/

EDSTAR a portal of EUROPEAN DEFENCE AGENCY

Standards | Best Practice Recommendations | Library | F.A.Q. | Glossary | Contact Us | Help | EDSIS |

EDSTAR
- About us
- History

EDSTAR

Welcome to the European Defence Standards Reference System (EDSTAR) containing references to "Best practice" standards and "standard-like" specifications. The "Best practice" standards are standards which have been selected by consensus by industry and governmental organisations to be the best applicable standards for defence purposes.

Who are the main users / customers that are supposed to use EDSTAR? They mainly belong to the following two categories:

a) For members of Project Teams in national governmental procurement authorities or in multinational Project Teams / procurement agencies etc.

EDSTAR provides support in order to select the most appropriate standards and "standard-like" documents ("Best Practice Standards") when deciding upon technical specifications.

b) For members of Project Teams in defence industries

EDSTAR also provides support in order to assist with the selection of the most appropriate standards and "standard-like" documents ("Best Practice Standards") when drafting specifications for their sub-contractors.

Beside references to the Best Practice Standards, EDSTAR also provides detailed "Best Practice Recommendations" for the application of the recommended standards in a number of Technical Domains.

Users are invited to provide their suggestions for improving EDSTAR's functionality and website as well as suggestions for the inclusion of new Technical Domains. For any suggestion, please use the Change request form which can be downloaded from the Library and send your Change Requests by email to edstar@eda.europa.eu .

© 2005-2012 European Defence Agency Information on this site is subject to legal notices.

- Defence Standardization stakeholders
- EDSIS
- EDSTAR
- **EDA standardization relevant projects**

EUROPEAN DEFENCE AGENCY

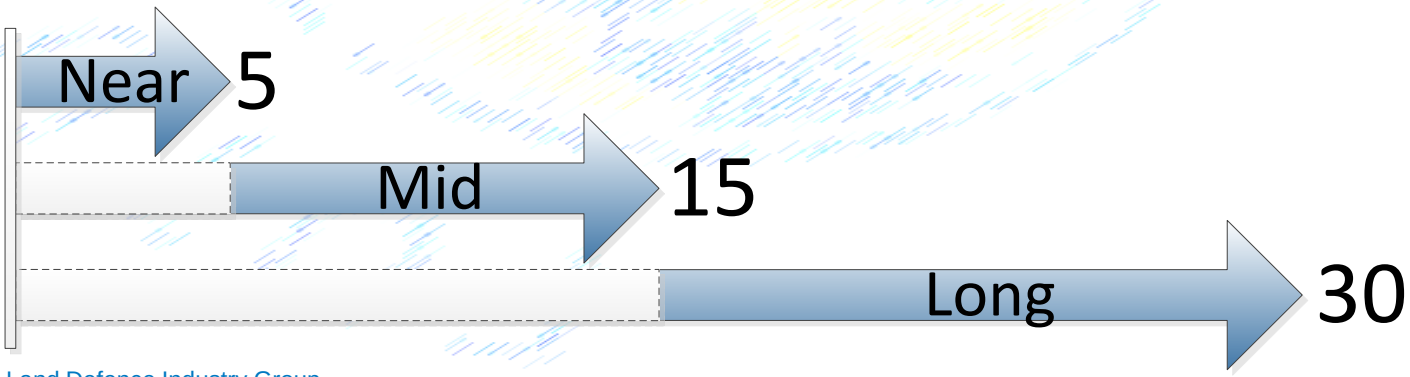
Future Land Systems

Future Land Systems Study

EDA contracted in December 2011 a consortium of 17 companies, all members of ELDIG*, to perform the study "Roadmap and Implementation Plan for the Key Industrial Capabilities on Future Land Systems (FLS)"

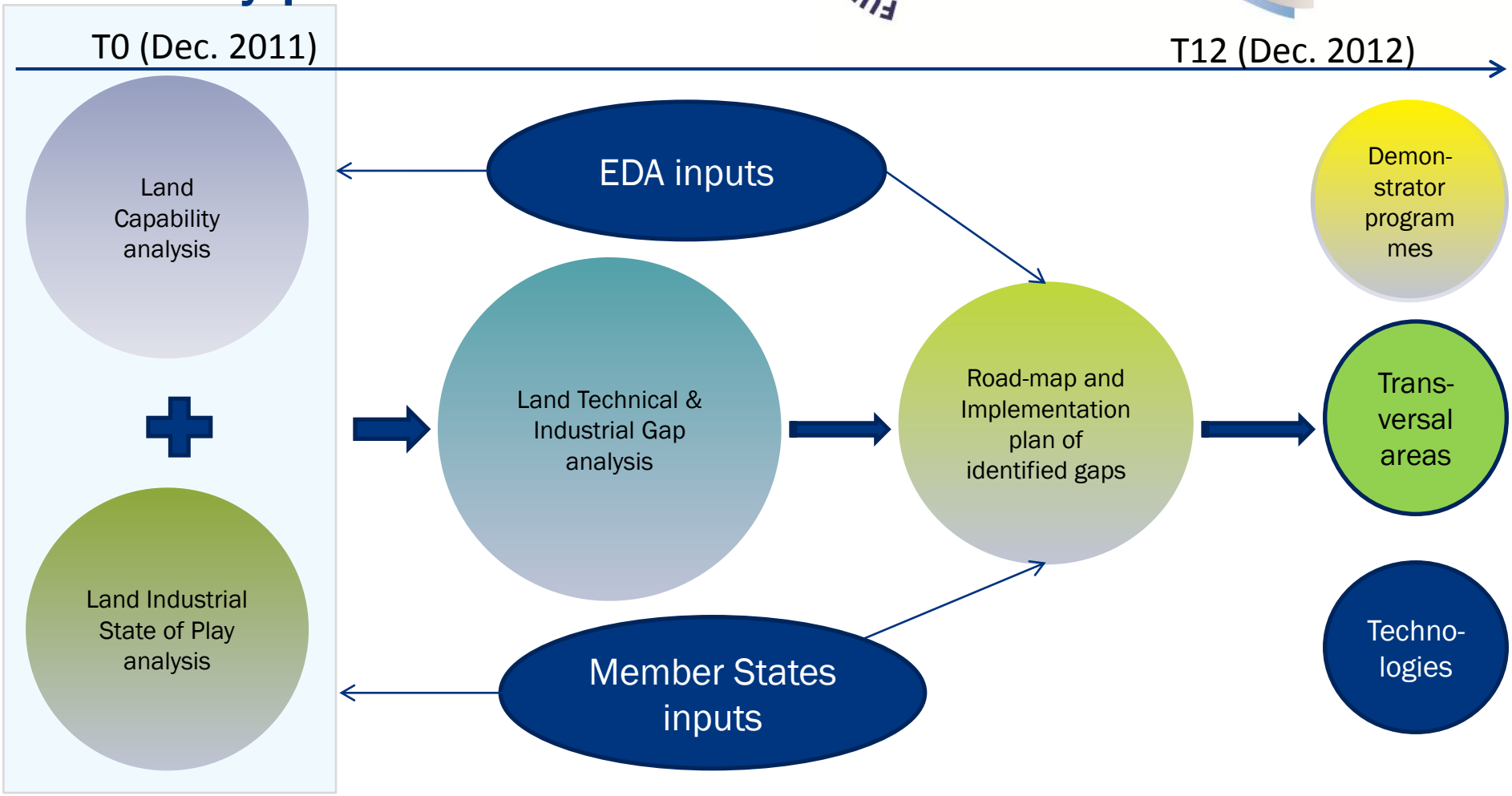
The overall **objective** was to **identify the key industrial capabilities** (technologies, skills, know-how etc.) **and propose actions** to be taken to ensure a sustainable and competitive land European Defence Technological and Industrial Base (EDTIB).

Proposed measures should have a time horizon divided into **near term (5 years) , midterm (15 years) and long term (up to 30 years)**.

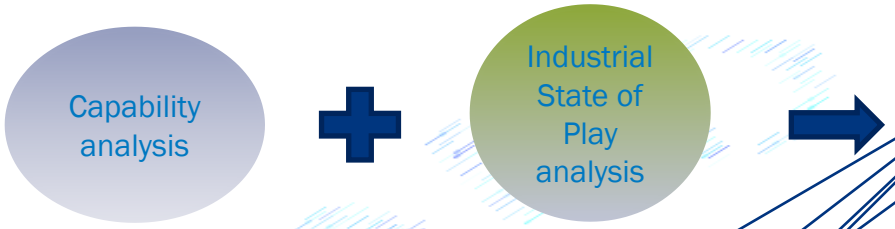


*ELDIG - European Land Defence Industry Group

FLS study process



FLS Recommendations / Proposals



- Technological shortfall
- Programs shortfall
- Economical shortfall
- Industrial shortfall
- Other shortfall
  - Non-dependency
  - P&S

N°	Recommendations
1	Coordination of Europe for Defence Technology export
2	Empower EDA role at the Land System Sector
3	Interoperability standards (Software & Networks)
4	Investing in Future Defence Technologies
5	Financing, Funding and Harmonization (new models approach)
6	Competence & Education for Defence.
7	Pooling and sharing (effect on industrial supply chain)
8	Power Sources
9	War gaming and Combat Simulation
10	Protection materials
11	Electronics (including FPGA)

	Technology gaps (PRIORITY 1)	PRIORITIZED PROGRAMMES (§7.8)						
		UGV	UAV	Soldier-systems	C-IED Systems	Camp protect-tion	Missiles & Ammu-nition	EU battle Group
6	Protocol Technology (A08.02)							
9	Interoperability Standards. (B09.02)							
12	Electrical Batteries. (A05.04)							
21	War gaming and Combat Simulation. (C01.09)							
42	Encryption / Crypto Technologies. (A08.07)							
49	Signal and Control Electronics including FPGA(B03.08)							

Proposals for programmes and studies	Recommendation No	Tech. No
Proposal 01 – Interoperability Standards Open Architecture	3	9
Proposal 02 – Encryption Methods	3	42
Proposal 03 – Protocols for Data Links	3	6
Proposal 04 – Pooling and Sharing	7	
Proposal 05 – Simulations Training Methods	9	
Proposal 06 – Roadmap on Cost Effectiveness	5	
Proposal 07 – Investing in Future Defence Technologies	4	
Proposal 08 – Networked Education	6	
Proposal 09 – Fire Power Mobile Platform for Mobility Assurance	EU Battle Group	
Proposal 10 – Power Sources	8	12
Proposal 11 – Electronics including FPGA	11	49
Proposal 12 – War gaming and Combat Simulation	9	21
Proposal 13 – Active and Passive Protection	10	

EUROPEAN DEFENCE AGENCY

Harmonization of Ammunition Qualification

Ammunition qualification

- Ammunition qualification as one of the five areas for EDA to focus its work on ammunition
- Identified critical P&S enabler
- EDA's main outputs:
  - Establishment of ENNSA
  - HAQ Roadmap

HAQ Roadmap

"Quick Wins"

EUROPEAN DEFENCE AGENCY

Standardised Qualification Report

EUROPEAN DEFENCE AGENCY

Recommended Safety Data Package

EUROPEAN DEFENCE AGENCY

Ammunition standard's User's Groups

Mid-term

EUROPEAN DEFENCE AGENCY

Endorsement of Test Houses

Longer term

EUROPEAN DEFENCE AGENCY

Centralized European Ammunition Qualification

EUROPEAN DEFENCE AGENCY

Harmonization on the Implementation of Standards

2013

2015

EUROPEAN DEFENCE AGENCY

www.eda.europa.eu

Thank you for your attention!