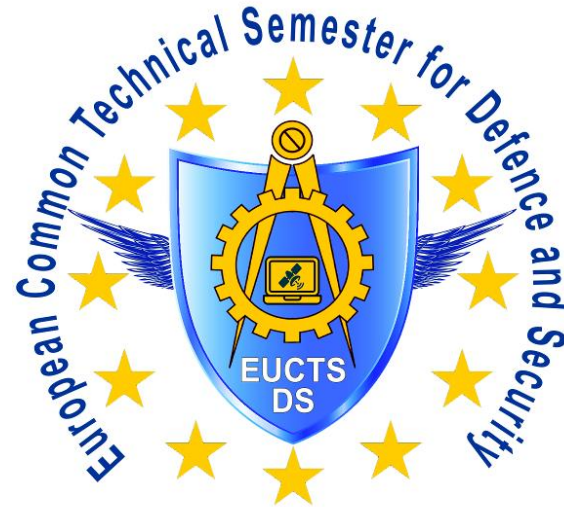




# Hellenic Air Force Academy, Greece



## 2<sup>nd</sup> MULTIPLIER EVENT

**European Common Technical Semester for Defence and Security**  
**PROJECT NO 2020-1-RO01-KA203-080375**

**Presentation of the KA2 Project E<sub>U</sub>CTS<sub>DS</sub>**



Co-funded by the  
Erasmus+ Programme  
of the European Union

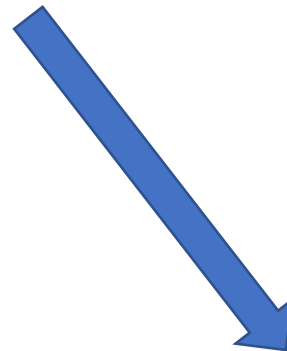
25 May 2023



# Presentation of the KA2 Project E<sub>U</sub>CTS<sub>DS</sub>



## Erasmus+



**European Common Technical Semester for Defence and Security**  
**PROJECT NO 2020-1-RO01-KA203-080375**



## European Initiative for the Exchange of Young Officers inspired by Erasmus



How it began (Nov. 2008)  
➔ Declaration of EU MoDs

**Establish an Implementation Group  
(IG) for the EMILYO**

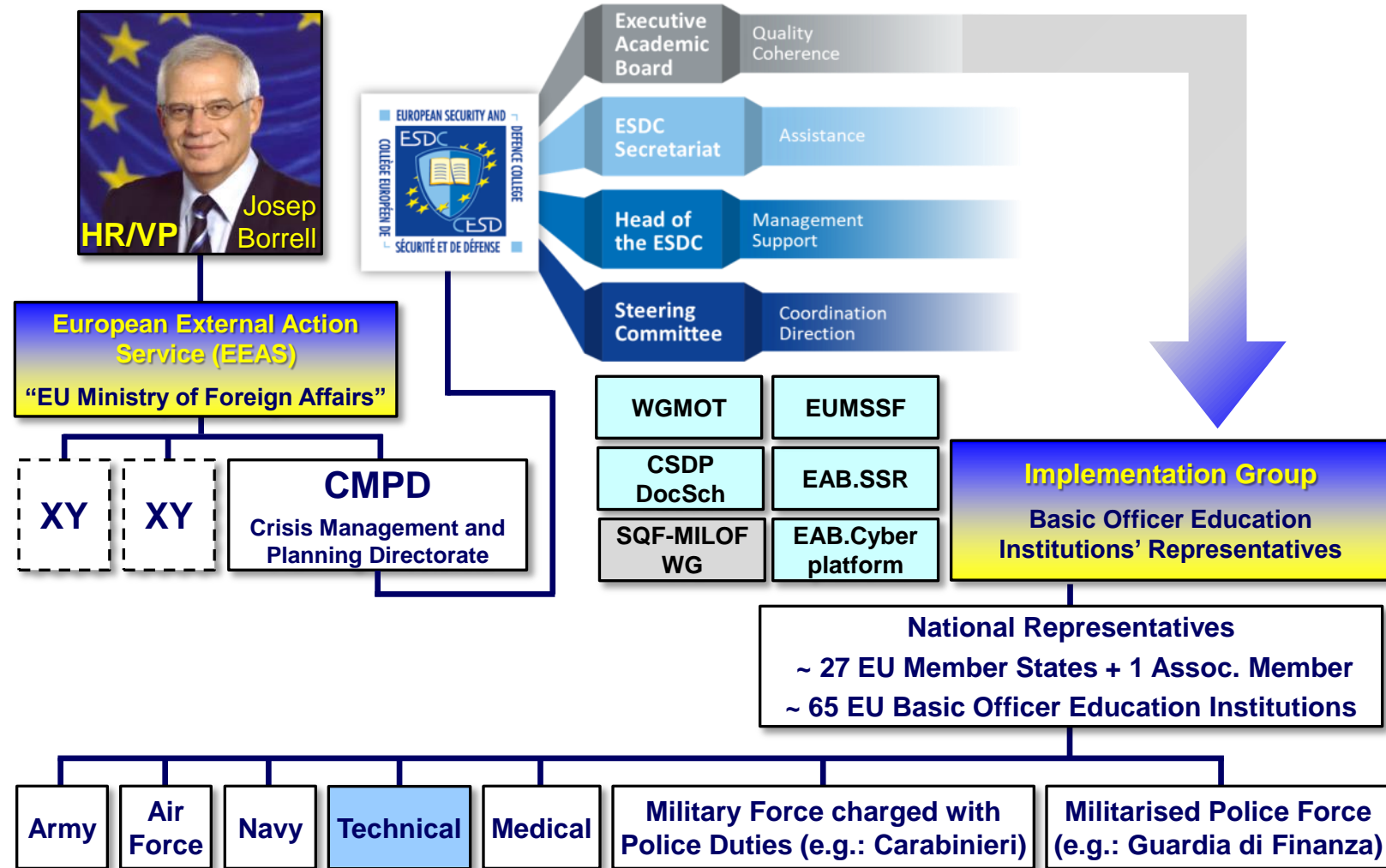
**Goals: Increase interoperability &  
“harmonise” EU Basic Officer  
Education, promote a  
“European Security and Defence  
Culture”**

**Source:** Council of the European Union, Council Conclusions on the ESDP, 2903<sup>rd</sup> External Relations Council Meeting. Brussels. 10<sup>th</sup> and 11<sup>th</sup> November, 2008.



# Presentation of the KA2 Project E<sub>U</sub>CTS<sub>DS</sub>

## European Initiative for the Exchange of Young Officers inspired by Erasmus



## European Initiative for the Exchange of Young Officers inspired by Erasmus

### Lines of Development



<http://www.emilyo.eu/>

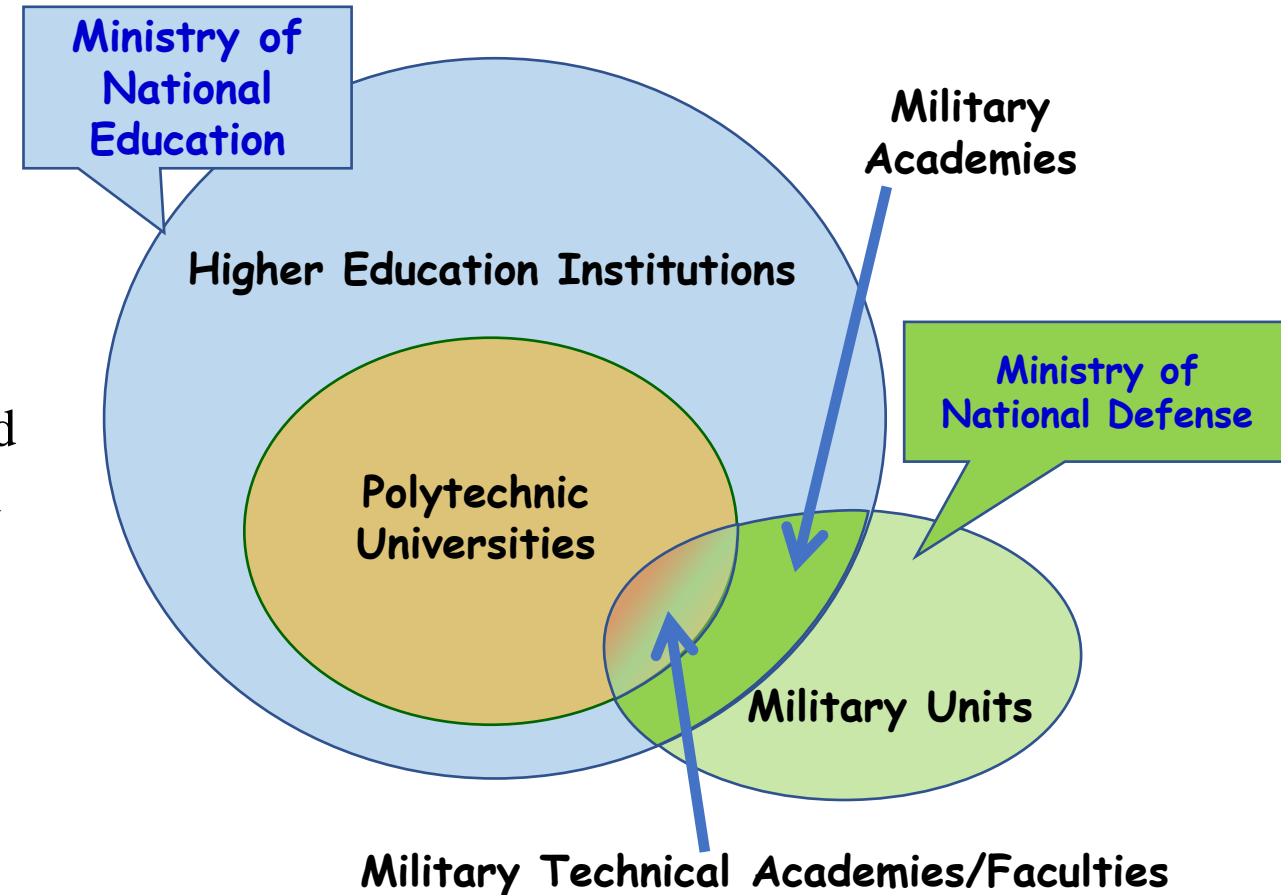


No.	LoD Name	Chairperson	BOEI
1	System of Equivalences	(Col Assoc. Prof. GELL Harald, PhD)	AT-TMA
2	Development of Competences	Capt (N) Assoc. Prof. DIMITROV Nedko, PhD	BG-NVNA
3	Development of e-learning	(Col Assoc. Prof. GELL Harald, PhD)	AT-TMA
4	Create an IT-Platform	Assoc. Prof. KARADIMAS Nikolaos V., PhD	GR-HAA
5	(Legal) Framework	Prof. RAGIES Ioannis, PhD	GR-HAA
6	Strategic Communication	(Col Assoc. Prof. GELL Harald, PhD)	AT-TMA
7	Financing the Initiative	Col MACHADO Paulo, MSc	PT-PMA
8	Common Modules	(LtCol SPINELLO Enrico)	IT-SAMS
9	Future Projects	Assoc. Prof. WINCEWICZ-BOSY Marta, PhD	PL-AWL
10	Gender Mainstreaming	Col Assoc. Prof. ATANASOVA-KRASTEVA Nevena, PhD	BG-NDU
11	International Naval Semester	Col Assoc. Prof. POPA Catalin, PhD	RO-RNA
12	International Air Force Semester	Assist. Prof. KARAMELAS Panagiotis, PhD	GR-HAFA
13	International Technical Semester	Col Prof. Eng. MOLDOVEANU Cristian Emil, PhD	RO-MTA
14	Research & Development	Assoc. Prof. TEMPLALEXIS Ioannis, PhD	GR-HAFA
15	International Medical Semester	frozen	
16	EU Military Academy	(Col Assoc. Prof. GELL Harald, PhD)	AT-TMA
17	Int'l Air Defence Semester	Col Assoc. Prof. GHERMAN Laurian, PhD	RO-HCAFA
18	Language Education & Training	Col (GS) Doc. Ing. HOLCNER Vladan, PhD	CZ-UoD

## CHALLENGES



1. Military Technical Academies/Faculties have as mission the training of **engineer officers**
2. Military Technical Academies/Faculties develop and conduct higher education study programs organized in undergraduate, master and/or PhD studies in a **high number of fields and specializations**.
3. Difficulties to establish **common courses** for all **engineering branches** in order to organize an **International Technical Semester**.

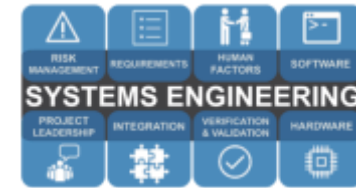




## CHALLENGES

Military Technical Academies/Faculties develop and conduct higher education study programs organized in undergraduate, master and/or PhD studies in **a high number of fields and specializations**:

- Armament, Ammunition and Missiles Engineering;
  - Aerospace Engineering;
  - Automotive Engineering;
  - Military Engineering;
  - Civil Engineering;
  - Geomatics;
  - Electronic Engineering;
  - Telecommunication and Information Technology;
  - Computers and Information Technology;
  - System Engineering, etc.
- 
- A collage of military and aerospace equipment. It includes an assault rifle with a yellow and green body, a large blue and black missile, and several smaller ammunition rounds and components. The items are arranged in a cluster on the right side of the slide.



# Presentation of the KA2 Project E<sub>U</sub>CTS<sub>DS</sub>



- development and designing of a **new modular curriculum** for an **international technical semester for defence and security**, at bachelor level, common at European Union;
- testing a **new modular curriculum** for an **international technical semester for defence and security**, at bachelor level, common at European Union;
- development of a **network of teachers with competences in the field of technical systems** to support the European Common Technical Semester for Defence and Security.





## PROJECT PREPARATION

### 1. Defence Technology Forum 2015 – 2019 Shumen



*DTF'2015*



*DTF'2017*



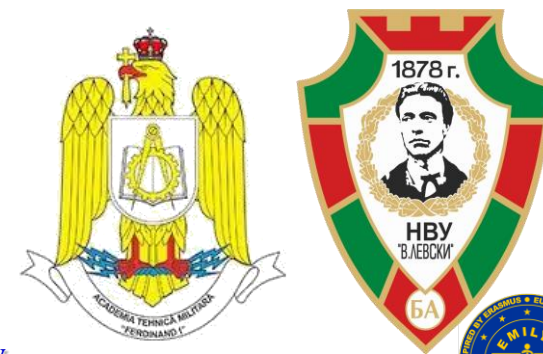
*DTF'2016*



*DTF '2018*



*DTF'2019*







## PROJECT PREPARATION

### 2. Bilateral cooperation PL WAT – RO MTA (2017)







## PROJECT PREPARATION

### 3. Student's International Conference "CERC" 2019



<https://www.mta.ro/international/en/cerc/>





## PROJECT PREPARATION

### 4. International Semester “Defence and Security Technical Systems” 2019



RO MTA  
PL WAT  
BG NMU  
FR UPS

<https://www.mta.ro/international/en/international-semester/>

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## PROJECT PREPARATION

### 5. LoD13 International Technical Semester - Military Erasmus Initiative



*38<sup>th</sup> IG Meeting Veliko Tarnovo 2018*



*43<sup>rd</sup> IG Meeting Brussels 2019  
1<sup>st</sup> Plenary Meeting LoD13*



*42<sup>nd</sup> IG Meeting Wiener Neustadt 2019  
iMAF 2019*



*44<sup>th</sup> IG Meeting Bucharest 2019  
2<sup>nd</sup> Plenary Meeting LoD13*



*45<sup>th</sup> IG Meeting Brussels 2020,  
3<sup>rd</sup> Plenary Meeting LoD13*

<http://www.emilyo.eu/node/1387>

# Presentation of the KA2 Project EuCTS<sub>DS</sub>



## PROJECT PREPARATION

### EuCTS<sub>DS</sub>

Military Technical Academy “Ferdinand I”,  
Bucharest (MTA Bucharest), Romania

Military University of Technology, Warsaw  
(WAT Warsaw), Poland

“Vasil Levski” National Military University  
(NMU Shumen), Bulgaria

Hellenic Air Force Academy, Athens  
(HAFA Athens), Greece

French Air Force Academy, Salon de Provence  
(FASFA Salon de Provence), France





# Presentation of the KA2 Project EUCTS<sub>DS</sub>

## PROJECT



**Application sent: 23 April 2020**

**Date for results: 22 September 2020**

**Referential project number: 2020-1-RO01-KA203-080375**

**Budget granted for the project: 194.791 EURO**

**Period of the project: 24 months (01.12.2020 – 30.11.2022 – extended to 31.07.2023)**

**Number of evaluated projects: 48**

**Number of financed projects: 17**

**Highest score obtained by the EUCTS<sub>DS</sub> project at the evaluation process**

Budget items	Euros					TOTAL
	Coordinator RO MTA	Partner 1 PL WAT	Partner 2 GR HAFA	Partner 3 BG NMU	Partner 4 FR FAFA	
Project Management and Implementation	12.000	6.000	6.000	6.000	6.000	36.000
Transnational Project Meetings	1.725	1.725	2.300	1.725	1.725	9.200
Intellectual Outputs	19.513	21.300	17.309	15.443	19.816	93.381
Multiplier Events	10.000	0	0	10.000	0	20.000
Travel	3.015	3.300	3.300	3.015	3.300	15.930
Individual Support	4.056	4.056	4.056	4.056	4.056	20.280
<b>Total</b>	<b>50.309</b>	<b>36.381</b>	<b>32.965</b>	<b>40.239</b>	<b>34.897</b>	<b>194.791</b>





# Presentation of the KA2 Project EuCTS<sub>DS</sub>

## INTELLECTUAL OUTPUTS



**O1 Design and Development of the EuCTS<sub>DS</sub> Curriculum**



01.12.2020

30.11.2022

31.07.2022



**O6 Guide for the EuCTS<sub>DS</sub> Implementation**



**O2 Network of teachers**



**O3 Subjects Description and Education materials for EuCTS<sub>DS</sub>**



**O4 Methodology and Guide for the Interdisciplinary Scientific Project**



**O5 E-learning Platform**



# Presentation of the KA2 Project EUCTS<sub>DS</sub>



## EUCTS<sub>DS</sub> Curriculum

**Basic Engineering (6 ECTS)**  
- 2 subjects

**Military Science (6 ECTS)**  
- 2 subjects

**Electronic Engineering and Computer Science  
(12 ECTS)**  
- 4 subjects

**Mechanical and Aerospace Engineering  
(12 ECTS)**  
- 4 subjects

**Interdisciplinary Scientific Project  
(6 ECTS)**

**Supplementary subjects  
(4 ECTS)**  
- 2 subjects

European Common Technical Semester for Defence and Security  
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# Presentation of the KA2 Project EUCTS<sub>DS</sub>

## EUCTS<sub>DS</sub> Curriculum

No.	Subjects		ECTS
1	Applied Informatics – RO MTA	Basic Engineering – RO MTA (6 ECTS)	3
2	Applied Automation for Engineering Systems – PL MUT		3
3	Integrated Weapon Systems – RO MTA	Military Science – FR FASFA (6 ECTS)	3
4	Common Security and Defence Policy for Technical Systems - FR FASFA		3
5a	Computer Networks – BG NMU	Electronic Engineering and Computer Science – BG NMU (12 ECTS)	3
6a	Programming Languages – RO MTA		3
7a	Signal Processing – GR HAFA		3
8a	Microcontrollers – RO MTA		3
5b	Propulsion Systems – GR HAFA	Mechanical and Aerospace Engineering – PL MUT (12 ECTS)	3
6b	Dynamic of Flight – PL MUT		3
7b	Mechanics and Material Science – GR HAFA		3
8b	Computer-Aided-Design and Numerical Analysis – BG NMU		3
9	Interdisciplinary Scientific Project – GR HAFA		6
10	Intercultural Communication (Bulgarian/French/Greek/Polish/Romanian)	Supplementary subjects (4 ECTS)	2
11	Physical Education and Sports		2
TOTAL			34

# Presentation of the KA2 Project EUCTS<sub>DS</sub>

## LEARNING / TEACHING ACTIVITIES



**Intensive Study Programmes**  
**“Electronic Engineering and**  
**Computer Science”**



**Intensive Study Programmes**  
**“Military Science”**



**Intensive Study Programmes**  
**“Basic Engineering”**



**Intensive Study Programmes**  
**“Mechanical and Aerospace**  
**Engineering”**



**Intensive Study Programmes**  
**“Interdisciplinary Scientific**  
**Project”**



# Presentation of the KA2 Project EUCTS<sub>DS</sub>

## MULTIPLIER EVENTS



**E1 European Forum of  
Defence and Security  
Technical Systems 2022**

**EUCTS<sub>DS</sub>**



**E2 European Forum of  
Defence and Security  
Technical Systems 2023**



**PILOT EDITION: MTA OFFER in the period 27.02 – 24.06.2023**

Period	Subject		ECTS
27.02 – 26.03.2023	Applied Informatics		3
	Applied Automation for Engineering Systems		3
27.03 – 09.04.2023	A. Signal Processing		3
	B. Mechanics and Material Science		
17.04 – 30.04.2023	Common Security and Defence Policy for Technical Systems		3
01.05 – 14.05.2023	A. Programming Languages		3
	B. Dynamic of Flight		
15.05 – 28.05.2023	A. Computer Networks		3
	B. Propulsion Systems		
29.05 – 11.06.2023	A. Microcontrollers		3
	B. Computer-Aided-Design and Numerical Analysis		
12.06 – 26.06.2023	Integrated Weapon Systems		3
27.02 – 24.06.2023	Scientific Project	A. Armament Systems and Military Engineering	6
		B. Aerospace and Transport Engineering	
		C. Computer Sciences and Cyber Security	
		E. Electronic and Communication Engineering	
27.02 – 24.06.2023	Intercultural communication		2
	Physical Education and Sports		2
TOTAL			







## PILOT EDITION: MTA OFFER in the period 27.02 – 24.06.2023





# Presentation of the KA2 Project E<sub>U</sub>CTS<sub>DS</sub>



- The cadets/students will have the chance of gaining experience of working in an international and interdisciplinary environment, having in the same time available the engineering part and the military science component, that is not usually available in a regular study programme that could be followed by students in Erasmus mobilities;
- The teachers will benefit through the exchange of ideas and best practice in the area of technical systems for defence and security and didactical methods;
- The Interdisciplinary Scientific Project will provide to the teachers and students a wider perspective over the field of technical systems for defence and security, and will enhance their skills in the area of didactical and pedagogical methods;
- The implementation of the European Common Technical Semester for Defence and Security in each of the consortium member institutions will increase the internationalisation at home and will lead to the a possible future network of universities, **European University for Defence and Security**;
- The new E<sub>U</sub>CTS<sub>DS</sub> will facilitate creation and development of partnerships in the field of teacher and student mobility, as well as in the field of international scientific research project between the consortium members and other EU and NATO military academies;
- The project will provide experience and new skills in the field of management and coordination of international cooperation projects.

# Presentation of the KA2 Project EUCTS<sub>DS</sub>

## PROJECT PARTNERS

### European Common Technical Semester for Defence and Security



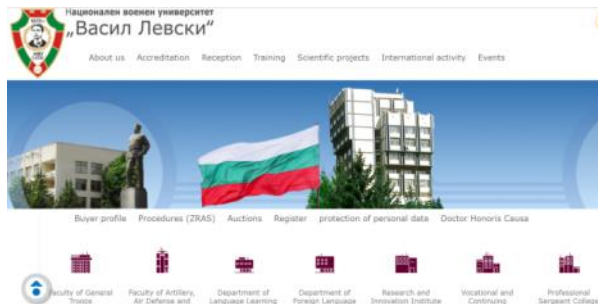
**FAFA Salon de Provence (FR)**



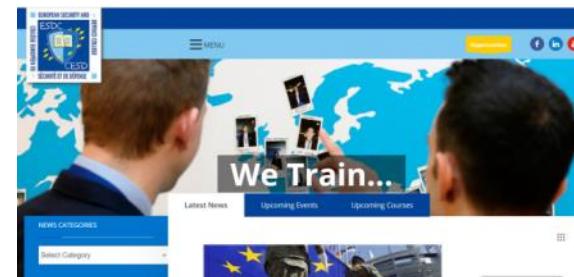
**MTA Bucharest (RO)**



**HAFA Athens (GR)**



**NMU Veliko Tarnovo (BG)**



**ESDC Brussels (EU)**

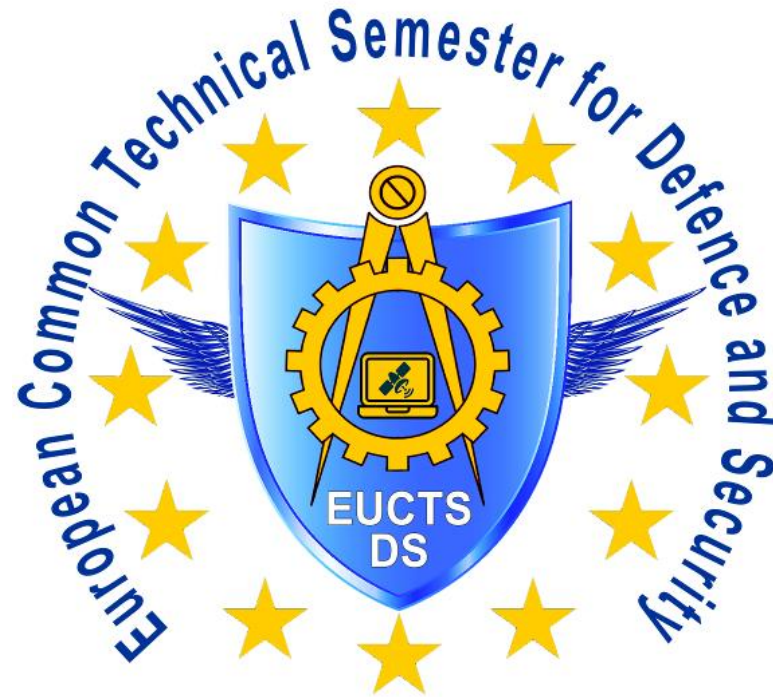


**MUT Warsaw (PL)**





# Presentation of the KA2 Project E<sub>U</sub>CTS<sub>DS</sub>



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