



European initiative on the exchange of young officers inspired by Erasmus

MECTS Users' Guide

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Drafter:
Lieutenant Colonel Harald GELL, MSc, MSD, MBA
Theresan Military Academy
Burgplatz 1
2700 WIENER NEUSTADT
AUSTRIA
E-mail: harald.gell@bmlvs.gv.at

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1. Introduction

- 1.1 This MECTS Users' Guide provides guidelines for implementation and use of the Military European Credit Transfer and Accumulation System (MECTS).
- 1.2 The use of MECTS was developed by the Implementation Group of the European initiative on the exchange of young officers inspired by Erasmus using the name Line of Development 1 (LoD1).
- 1.3 The guidelines were finalized under Swedish Presidency of the European Union in Stockholm in November 2009.
- 1.4 MECTS shall be used for modules during the basic or initial officer training outside existing academic systems (Annex 1).
- 1.5 MECTS shall be used at least for those Modules outside existing academic systems which a Member State of the European Union offers for international participation (Annex 2).
- 1.6 If a Member State of the European Union includes military or vocational training in its academic system, MECTS shall not be used. Existing academic systems remain untouched.
- 1.7 If a Member State of the European Union calculates all its own military or vocational training in MECTS it is national responsibility.
- 1.8 If a Member State of the European Union calculates all the own military or vocational training which takes place after the basic or initial officer training in MECTS it is national responsibility.
- 1.9 MECTS shall express the workload of a certain Module. Additional to the workload there shall be expressed: Prerequisites, knowledge, skills and competences of a Module (definitions: Annex 3) using a certain form (Annex 4a and Annex 4b). Elaborations of Line of Development 2 (comparison of courses based on competences) will be included or will replace that form when LoD2-work will be finalized.

2. Purpose

- 2.1 MECTS will give a better overview for comparison of workloads of military or vocational training held during basic or initial officer training outside of academic systems.
- 2.2 MECTS shall facilitate the use as a tool for mutual recognition.
- 2.3 Recognition of MECTS acquired abroad will be national responsibility. If a Member State of the European Union recognises MECTS for its own vocational/military training or for the academic education it is national responsibility.
- 2.4 Member States of the European Union shall avoid “double training” whenever possible. In principle trainees shall be sent abroad to those Modules only which can be recognised at the home-institution.

3. Calculation

- 3.1 MECTS-calculation must be equal in each Member State of the European Union to be comparable.
- 3.2 MECTS-calculation shall follow the principle of ECTS-calculation with reference to the Bologna-Model.
- 3.3 Whereas ECTS-calculation includes 50 percent of the workflow for self-studies automatically, MECTS-calculation shall include the real workflow of an estimated average for self-studies only.
- 3.4 If an exam takes place in an offered Module, the necessary working hours shall not be included into the MECTS-calculation.
- 3.5 If there is a need for administration hours within a Module (e.g. transportation from airports, registration,) these hours shall not be included into the MECTS-calculation.
- 3.6 1 (one) MECTS equals 30 working hours (WH) with 60 minutes each.
- 3.7 Calculation:
- All the necessary working hours for one Module should be added up. Necessary self-study working hours are to be included (see par. 3.3).
 - The sum is to divide by 30.
 - The result is the amount of MECTS for one Module.
 - Examples for calculating MECTS see Annex 5.
- 3.8 Rounding:
- MECTS shall be expressed with 1 unit place and 1 decile rank (e.g.: 0.8 or 1.7 or 2.9).
 - If the calculation results in more than one decimal place (e.g.: 1,777777 or 0.432198) figures are to round up or to round down.
 - Examples: 1.77777 is to round up to 1.8 MECTS. 0.432198 is to round down to 0.4 MECTS. 2.35123 is to round up to 2.4 MECTS.

4. Factors

- 4.1 Results of MECTS-calculations shall be multiplied with factors to take the level of training and the used language into account (examples see Annex 6).
- 4.2 Factors shall encourage Member States of the European Union to provide more education and training opportunities in another language than the mother tongue.
- 4.3 Factors shall favour the international and mobility dimension.
- 4.4 Factors shall be integrated into the MECTS-calculation by the host-institution in reference to the host-institution's overall training goal (e.g: host-institution's overall training goal is Platoon-level, the offered Module is on Platoon-level, and therefore MECTS are to multiply with 1.00 which is no change).
- 4.5 The home-institution include factors in reference to the own overall training goal after trainees will have returned. Including those factors is national responsibility (e.g.: Trainees return from a Module described in par. 4.4; the home-institution's training goal is Squad-level, and therefore the MECTS are to multiply with 1.25 because of being 1 level higher than the own overall training goal).
- 4.6 The following factors shall be used:

- Training-level (listed for Army. Other Services are to use equivalent level).

Level	Multiplier
Personal or Team	0.50
Squad	0.75
Platoon	1.00
Company	1.25
Battalion	1.50

- Language:

Language	Multiplier
Mother tongue	1.00
Other language than mother tongue	1.25

- 4.6 Calculation-results are to round up or to round down following the method described in par. 3.8.

5. Quality Assurance

- 5.1 MECTS are to be implemented by national institutions (Military Universities, Military-, Naval-, Air Force Academies or equivalent, Applications Schools) of Member States of the European Union by themselves.
- 5.2 For the purpose of implementing MECTS in time, EFQ, NFQ or any accreditation system shall not be used yet.
- 5.3 So far the following quality assurance methods shall be used:
- Each module offered for international participation shall be described with prerequisites, knowledge, skills and competences using the same form (Annex 4a and Annex 4b). Including the work of LoD2 see par. 1.9.
 - The qualification of instructors / teachers for the respective Module shall be described.
 - How to carefully examine the learning outcome shall be described.
 - It is up to national institutions to send observers or instructors to Modules abroad.
 - Trainees may place an evaluation report onto the EMILYO-homepage.
 - On a regular basis a report is to hand over to ESDC, as proposed by LoD5 (develop supporting mechanisms). This report can be seen as a Module-evaluation.
- 5.4 If any other quality assurance methods shall be integrated in a further stage it requires the consensus of the Implementation Group.

Annex 1

Frame for the use of MECTS (in general)

Examples for different officer education systems

<table><tr><td>1st Semester Academic education (30 ECTS are used)</td><td>"Other" education / training (MECTS are used)</td><td>2nd Semester Academic education (30 ECTS are used)</td><td>MECTS</td></tr><tr><td>3rd Semester Academic education (30 ECTS are used)</td><td>MECTS</td><td>4th Semester Academic education (30 ECTS are used)</td><td>MECTS</td></tr><tr><td>5th Semester Academic education (30 ECTS are used)</td><td>MECTS</td><td>6th Semester Academic education (30 ECTS are used)</td><td></td></tr></table>	1 st Semester Academic education (30 ECTS are used)	"Other" education / training (MECTS are used)	2 nd Semester Academic education (30 ECTS are used)	MECTS	3 rd Semester Academic education (30 ECTS are used)	MECTS	4 th Semester Academic education (30 ECTS are used)	MECTS	5 th Semester Academic education (30 ECTS are used)	MECTS	6 th Semester Academic education (30 ECTS are used)		<p>Military or vocational training takes place between the academic semesters.</p> <p>MECTS shall be used for the "green" parts only.</p>
1 st Semester Academic education (30 ECTS are used)	"Other" education / training (MECTS are used)	2 nd Semester Academic education (30 ECTS are used)	MECTS										
3 rd Semester Academic education (30 ECTS are used)	MECTS	4 th Semester Academic education (30 ECTS are used)	MECTS										
5 th Semester Academic education (30 ECTS are used)	MECTS	6 th Semester Academic education (30 ECTS are used)											
<table><tr><td>1st Semester Academic education (30 ECTS are used)</td><td>2nd Semester Academic education (30 ECTS are used)</td></tr><tr><td>3rd Semester Academic education (30 ECTS are used)</td><td>4th Semester Academic education (30 ECTS are used)</td></tr><tr><td>5th Semester Academic education (30 ECTS are used)</td><td>6th Semester Academic education (30 ECTS are used)</td></tr></table>	1 st Semester Academic education (30 ECTS are used)	2 nd Semester Academic education (30 ECTS are used)	3 rd Semester Academic education (30 ECTS are used)	4 th Semester Academic education (30 ECTS are used)	5 th Semester Academic education (30 ECTS are used)	6 th Semester Academic education (30 ECTS are used)	<p>Military or vocational training included in the academic system remains untouched.</p> <p>MECTS will not be implemented.</p>						
1 st Semester Academic education (30 ECTS are used)	2 nd Semester Academic education (30 ECTS are used)												
3 rd Semester Academic education (30 ECTS are used)	4 th Semester Academic education (30 ECTS are used)												
5 th Semester Academic education (30 ECTS are used)	6 th Semester Academic education (30 ECTS are used)												
<table><tr><td colspan="2">"Other" education / training MECTS are used</td></tr><tr><td>1st Semester Academic education (30 ECTS are used)</td><td>2nd Semester Academic education (30 ECTS are used)</td></tr><tr><td>3rd Semester Academic education (30 ECTS are used)</td><td>4th Semester Academic education (30 ECTS are used)</td></tr><tr><td>5th Semester Academic education (30 ECTS are used)</td><td>6th Semester Academic education (30 ECTS are used)</td></tr><tr><td colspan="2">"Other" education / training MECTS are used</td></tr></table>	"Other" education / training MECTS are used		1 st Semester Academic education (30 ECTS are used)	2 nd Semester Academic education (30 ECTS are used)	3 rd Semester Academic education (30 ECTS are used)	4 th Semester Academic education (30 ECTS are used)	5 th Semester Academic education (30 ECTS are used)	6 th Semester Academic education (30 ECTS are used)	"Other" education / training MECTS are used		<p>Military or vocational training takes place before and / or after the academic semesters.</p> <p>MECTS shall be used for the "green" parts only.</p>		
"Other" education / training MECTS are used													
1 st Semester Academic education (30 ECTS are used)	2 nd Semester Academic education (30 ECTS are used)												
3 rd Semester Academic education (30 ECTS are used)	4 th Semester Academic education (30 ECTS are used)												
5 th Semester Academic education (30 ECTS are used)	6 th Semester Academic education (30 ECTS are used)												
"Other" education / training MECTS are used													

Annex 2

Frame for the use of MECTS (in detail)

1st step of implementing MECTS

	<p>Modules foreseen for international participation are marked in “blue”.</p> <p>In a 1st step MECTS shall be implemented for those “blue” Modules only.</p>
	<p>If an officer education institution in a 2nd step uses MECTS for all the military or vocational training (here marked in blue), it is national responsibility (not a must).</p>

Annex 3

Definitions ¹

Learning outcomes	“Learning outcomes” means statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence.
Prerequisites ²	“Prerequisites” means what a trainee should know before the Module starts. Prerequisites will be different from Module to Module and from Nation to Nation, prerequisites shall be described with a number of years how long trainees have been educated in the own system at least. Describing additional prerequisites is responsibility of the host-institution which offers Modules for international participation.
Knowledge	“Knowledge” means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.
Skills	“Skills” means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).
Competence	“Competence” means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.
Level ³	“Level” means the military echelon, level is described with a hierarchic classification of military leadership following organizational point of views (e.g: Team, Squad, Platoon, Company, Battalion or equivalent echelons in other services).

¹ According to: The European Qualifications Framework for Lifelong Learning (EQF); Annex I.

² Own definition, it is not defined in EQF.

³ Own definition, it is not defined in EQF.

Annex 4a

Form for a Module description (page 1)
 Example (important parts are highlighted in blue)

Country Austria	Institution Theresan Military Academy	Module Course for PSO (Module D)	Amount of MECTS 4.0
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Level Platoon	Minimum Qualification of Instructors <ul style="list-style-type: none"> Officers: <ul style="list-style-type: none"> English: NATO STANAG Level 3, Company Commander of Infantry, mechanized Infantry or Reconnaissance branch, at least 1 PSO-mission abroad. Non-Commissioned Officers: <ul style="list-style-type: none"> English: NATO STANAG Level 2, Platoon Leader or Company Sergeant Major of Infantry, mechanized Infantry or Reconnaissance branch, at least 1 PSO-mission abroad.
Language English	

Prerequisites for international participants <ul style="list-style-type: none"> English: NATO STANAG Level 2, at least 2 years of national military education, <u>basic</u> knowledge of PSO-TTP (Tactics, Techniques and Procedures) such as checkpoints, patrolling, convoy, ..., <u>basic</u> knowledge of radio communication in English 	Goal of the Module Learning basic branch-independent leadership skills for Peace Support Operations (PSO) on Platoon Level. To reach that goal the model of a motorised and/or mechanized Infantry Platoon within the frame of a Company is used.
---	---

Learning outcomes	Know-ledge	<ul style="list-style-type: none"> Detailed knowledge about leadership principles, tactics and techniques and use of force in PSO within an international environment.
	Skills	<ul style="list-style-type: none"> Train and supervise trainees on Squad- and Platoon-level
	Compe-tences	<ul style="list-style-type: none"> Act as a platoon leader in PSO

Form for a Module description (page 2)**Example**

Verification of learning outcomes	
•	Mid course exam:
○	At the end of the first week or at the beginning of the second week.
○	Course director is to test trainees about the content of the first week.
○	The type of the exam is up to the course director.
•	Observation:
○	During the whole course trainees are to observe and are to be evaluated during practical execution of in advance theoretical learned topics.
•	Final exam:
○	On the last day of the course trainees have to absolve a final oral exam in front of a commission (Commander Cadets' Corps, 2 Officers who are responsible for the course)

Course details		
Topic	Working Hours	Details
Leadership in general	7.5	<ul style="list-style-type: none"> • Lead of a Platoon as Platoon Leader / Deputy Platoon Leader in a PSO-scenario using principles of war. • Execution of Military Decision Making Process (MDMP) on Platoon level. • Execution of terrain orientation. • Issuing and implementation of orders. • Faculty to write reports (patrol report, incident report, ...)
Rules of Engagement	4.5	<ul style="list-style-type: none"> • Use of ROE for PSO on Platoon level.
TTP / PSO	75.0	<ul style="list-style-type: none"> • Execution of TTP in PSO on Platoon level (field exercise)
Negotiations	7.5	<ul style="list-style-type: none"> • Intended use of negotiation norms.
Media awareness	3.0	<ul style="list-style-type: none"> • Specific use in dealing with media.
Mine awareness	7.5	<ul style="list-style-type: none"> • Realization of the danger of mines and IEDs in mission areas and take correct actions.
Supply and communication	15.0	<ul style="list-style-type: none"> • Issue of orders and actions taken referring to supply on Platoon level • Issue of orders and actions taken referring to communication on Platoon level.
Total	120	

MECTS calculation	
•	Total amount = 120 WH.
•	Subtraction of time (WH) for administration, meals and exams → $120 - 30 = 90 \text{ WH}$.
•	Estimated average of self-studies for exams = 5 WH .
•	$90 \text{ WH} + 5 \text{ WH} = 95 \text{ WH}$.
•	$95 \text{ WH} / 30 = 3.166 \text{ MECTS}$ → rounded up to 3.2 MECTS .
•	Course is on Platoon level → factor 1.00 → $3.2 \text{ MECTS} \times 1.00 = 3.2 \text{ MECTS}$ (no change).
•	Course is in English (not native language) → factor 1.25 → $3.2 \times 1.25 = 4.0 \text{ MECTS}$.

Annex 4b

Empty form for a Module description (page 1)

Example (important parts are highlighted in blue)

Country	Institution	Module	Amount of MECTS
---------	-------------	--------	-----------------

Level	Minimum Qualification of Instructors •
Language	

Prerequisites for international participants •	Goal of the Module
---	--------------------

Learning outcomes	Know- ledge	•
	Skills	•
	Compe- tences	•

Empty form for a Module description (page 2)

Example

<p>Verification of learning outcomes</p> <ul style="list-style-type: none">

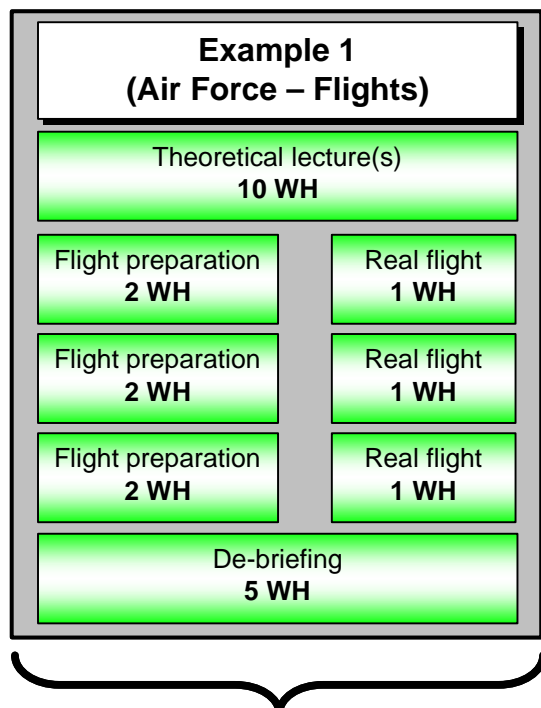
Course details		
Topic	Working Hours	Details
		•
		•
		•
		•
		•
		•
		•
		•
Total		

<p>MECTS calculation</p> <ul style="list-style-type: none">

Annex 5

Calculating MECTS

Examples



Total: 24 WH (working hours)

Calculation:

$$\frac{24}{30} = 0,8 \text{ MECTS}$$



Total: 51 WH (working hours)

Calculation:

$$\frac{51}{30} = 1,7 \text{ MECTS}$$

Annex 6

Calculating Factors

Examples

Factors (Training level is listed for Army-echelons; other services are to use equivalent level):

Training Level	Multiplier
Personal or Team	0.50
Squad	0.75
Platoon	1.00
Company	1.25
Battalion	1.50

Language	Multiplier
Mother tongue	1.00
Other language than mother tongue	1.25

Host-institution:

1. The **host**-institution calculates the MECTS for a Module.
2. The **host**-institution multiplies the MECTS with a training level factor according to the own (national) training goal for the overall basic officer education.
 - a. Example 1: The own training goal is Platoon level; the offered Module is on Platoon level → use factor **1.00** (no change).
 - b. Example 2: The own training goal is Squad level; the offered Module is on Platoon level → use factor **1.25** (1 step higher).
 - c. Example 3: The own training goal is Squad level; the offered Module is on Company level → use factor **1.5** (2 steps higher).
 - d. Example 4: The own training goal is Company level; the offered Module is on Squad level → use factor **0.5** (2 steps lower).
3. The result of the training level calculation is to multiply with the language factor by the **host**-institution.
 - a. Example 1: The Module is offered in native language → use factor **1.00** (no change).

- b. Example 2: The **guest trainee** has to talk in a foreign language (not a native language for him/her) → use factor **1.25** (only for guest trainees!)
- c. Example 3: **All the trainees** have to talk in a foreign language → use factor **1.25**.
- d. Example 4: Most of the trainees have to talk in a foreign language (e.g.: in English) → use factor **1.25** for them. For some of the guest trainees English is their native language → use **only for them** factor **1.00**.

Home-institution:

- 4. The **home-institution** compares the level of the own overall training goal for basic officer education with the level written in the form for a Module description (see Annex 4a).
- 5. The **home-institution** includes again the **training level factor** only.
 - a. Example 1: The Module offered abroad is on Platoon level; the own training goal is on Platoon level → use factor **1.00** (no change).
 - b. Example 2: The Module offered abroad is on Platoon level; the own training goal is on Squad level → use factor **1.25** (because the value is 1 step higher than the own training goal).
 - c. Example 3: The Module offered abroad is on Platoon level; the own training goal is on Company level → use factor **0.75** (because the value is 1 step lower than the own training goal).
 - d. Example 3: The Module offered abroad is on Team level; the own training goal is on Company level → use factor **0.25** (because the value is 3 steps lower than the own training goal).

For better transparency of calculations the different steps of calculations for a respective Module are to be described in the form for a Module description (see Annex 4a, last line).

Annex 7a

Proposal for an application form

Example for the purpose of easier administration of incoming trainees

Remarks: - Please fill in yellow fields only - Fill in 1 form for 1 person - When ready, send this application form to: abcdefg@eu.com	I want to participate Module (please fill in name of the Module below) Course for PSO (Module D)
--	--

Arrival at "name" Airport X	Arrival at "name" location	Other	On (arrival date) 14 Mar, 2010	At (arrival time [if available]) 1500 hrs
Departure from "name" Airport	Departure from "name" location	Other X	On (departure date) 28 Mar, 2010	At (departure time [if available]) 0900 hrs

Male X	Female	Rank Cadet (Cdt)	Family name ABECIDOF	First name Guhaj
------------------	--------	--------------------------------	--------------------------------	----------------------------

Date of birth 01 Mar, 1987	Nationality UNITED KINGDOM	Passport number P1234567	Passport validity until 24 Dec, 2018
--------------------------------------	--------------------------------------	------------------------------------	--

Branch of Service (if available) Army – Infantry	Sending institution Royal Military Academy Sandhurst	I want to participate as		
		Student X	Instructor	Observer

My phone number (if available) +44-123-456789	My e-mail address guhaj.abecidof@co.uk
---	---

Special dietary or food requirements due to medical or religious reasons		If yes, please specify food you cannot eat Due to religious reasons I am not allowed to eat pork
No	Yes X	

Additional remarks (need for special equipment, special travel arrangements,)	
I would need rain protection, departure from "name" I will arrange on my own.	

If you are not the point of contact (POC) or if more than one person will participate from your country please fill in POC's data below (if you are the POC please fill in your data again)				
Male	Female X	Rank Maj	Family name KELIMON	First name Puqaresi
POC's phone number +44-987-654321			POC's e-mail address puqaresi.kelimon@co.uk	

Annex 7b

Proposal for an empty application form

Example for the purpose of easier administration of incoming trainees

Remarks: - Please fill in yellow fields only - Fill in 1 form for 1 person - When ready, send this application form to:	I want to participate Module (please fill in name of the Module below)
---	---

Arrival at	Arrival at	Other	On (arrival date)	At (arrival time [if available])
Departure from	Departure from	Other	On (departure date)	At (departure time [if available])

Male	Female	Rank	Family name	First name

Date of birth	Nationality	Passport number	Passport validity until

Branch of Service (if available)	Sending institution	I want to participate as		
		Student	Instructor	Observer

My phone number (if available)	My e-mail address

Special dietary or food requirements due to medical or religious reasons		If yes, please specify food you cannot eat
No	Yes	

Additional remarks (need for special equipment, special travel arrangements,)

If you are not the point of contact (POC) or if more than one person will participate from your country please fill in POC's data below (if you are the POC please fill in your data again)				
Male	Female	Rank	Family name	First name
POC's phone number			POC's e-mail address	

Annex 8a

Annex 8b

**The next 2 pages are proposals for
a certificate which trainees are handed over after having participated
in an event within the exchange programme**



Theresan Military Academy
AUSTRIA



European initiative on
the exchange of young
officers inspired by
Erasmus

Certificate of Achievement

valid for 4.0 MECTS

Cadet

ABECIDOF Guhaj

passed the

**Officer Cadets' Course
for
Peace Support Operations
(Module D)**

1752

Wiener Neustadt, the 30th of March, 2010

Course Director:

Head of Institute:

(LAMPL, Maj)

(Mag. PICHLKASTNER, BrigGen)

Logo of host-
institution

Name of Host-Institution
COUNTRY



European initiative on
the exchange of young
officers inspired by
Erasmus

Certificate of Achievement

valid for X.X MECTS

Rank

SURNAME First Name

passed the

Name of Event
Name of Event
Name of Event
(other Name of Event)

City, the DD of MMMM, YYYY

Course Director:

Head of Name:

(SURNAME, Rank)

(SURNAME, Rank)

Annex 9

List of abbreviations

ECTS	European Credit Transfer and Accumulation System
EFQ	European Qualifications Framework
EMILYO	Exchange of MILitary Young Officers
ESDC	European Security and Defence College
EU	European Union
IED	Improvised Explosive Device
IG	Implementation Group
LoD	Line of Development
MDMP	Military Decision Making Process
MECTS	Military European Credit Transfer and Accumulation System (Military-ECTS)
NCO	Non Commissioned Officer
NFQ	National Qualifications Framework
OCC	Officer Cadet Course
PSO	Peace Support Operation
ROE	Rules of Engagement
STANAG	Standardization Agreement
TTP	Tactics, Techniques and Procedures
WH	Working Hours (1 WH = 60 Minutes)
EOT	