

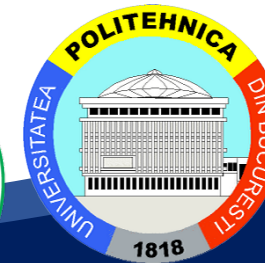


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Management of Capacity Building in Field of Higher Education: Operation and Financial Aspects

Pisut Koomsap



Curriculum Development
of Master's Degree Program in
Industrial Engineering for Thailand Sustainable Smart Industry

Agenda

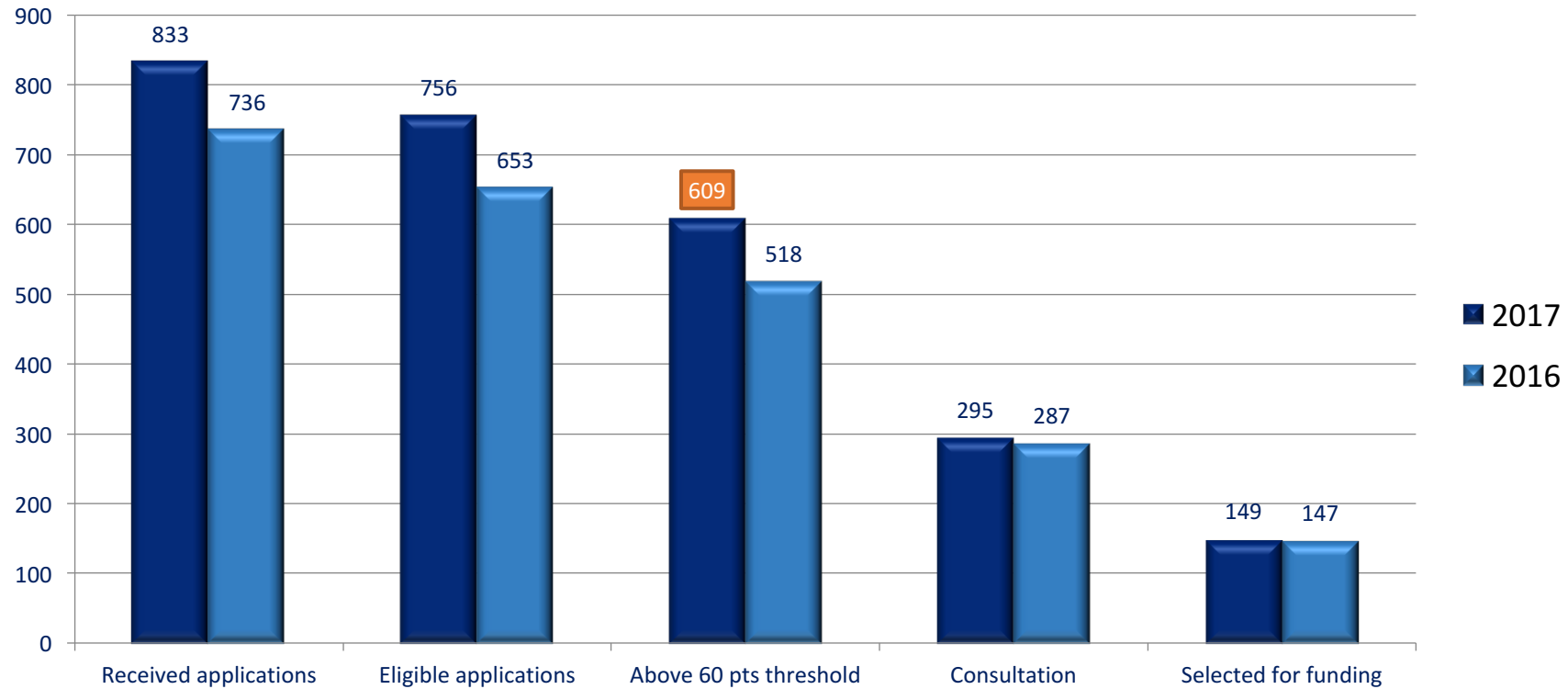
- **Welcome**
- **Confirm of Project Executive Committee**
- **Presentation of Project's Objectives, Scope and Deliverables**
- **Partnership Agreement Update**
- **Work Plan and Budget**
- **Administrative & Financial Management**
- **Approval of Next Meeting**
- **Other Business**

Summary of Results for CBHE 2017

- Received applications: **833** (compared to 736 in 2017, **+13%** increase)
- Recommended for funding: **149** (*17,6% from 833 submitted proposals*)
- *Countries represented in the selected projects: **103** (out of 147) Partner Countries and **32** (out of 33) Programme Countries*
- *Average consortium size: **12 partners** (min. 6 , max. 32)*
- *Average budget: **879.850 €***



Selection progress 2017 vs 2016



SUSTAINABLE SMART INDUSTRY

ACQUISITION
ANALYSIS
EXECUTION



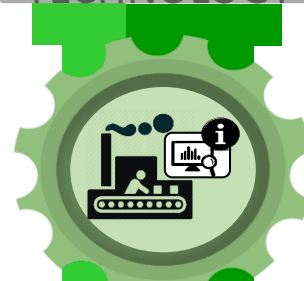
SUSTAINABILITY
STRATEGY
TECHNOLOGY



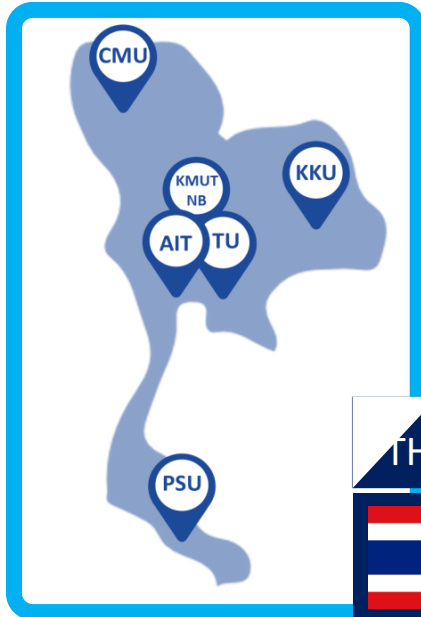
CO-CREATED
PRODUCT DESIGN



ADVANCED
MANUFACTURING
PROCESSES



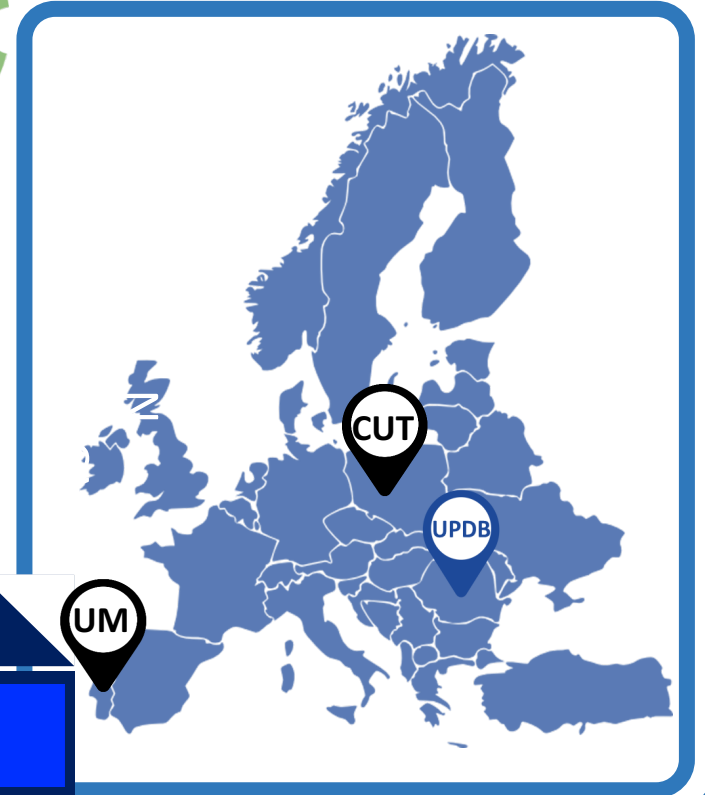
SMART
PRODUCTION



THESIS CONFERENCE

STUDENT-CENTERED
LEARNING

IE COLLOQUIUM



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Project Facts

- Project value: 981,628 EUR
- Project period: Oct 15, 2017 – Oct 14, 2020
- 9 Members: 3 Universities from EU and 6 Universities from Thailand
- 6 Work packages
- Co-leading work packages between EU and Thai partners





Objectives

- enhance the capacity and ability of universities in Thailand for the delivery of a high quality competence-based curriculum for Master's degree in industrial engineering that
 - supports sustainable smart industry (Industry 4.0);
 - conforms to European Qualifications Framework (EQF);
 - is applicable to EU partner universities;
 - strengthens a partnership between participating European and Thai universities.

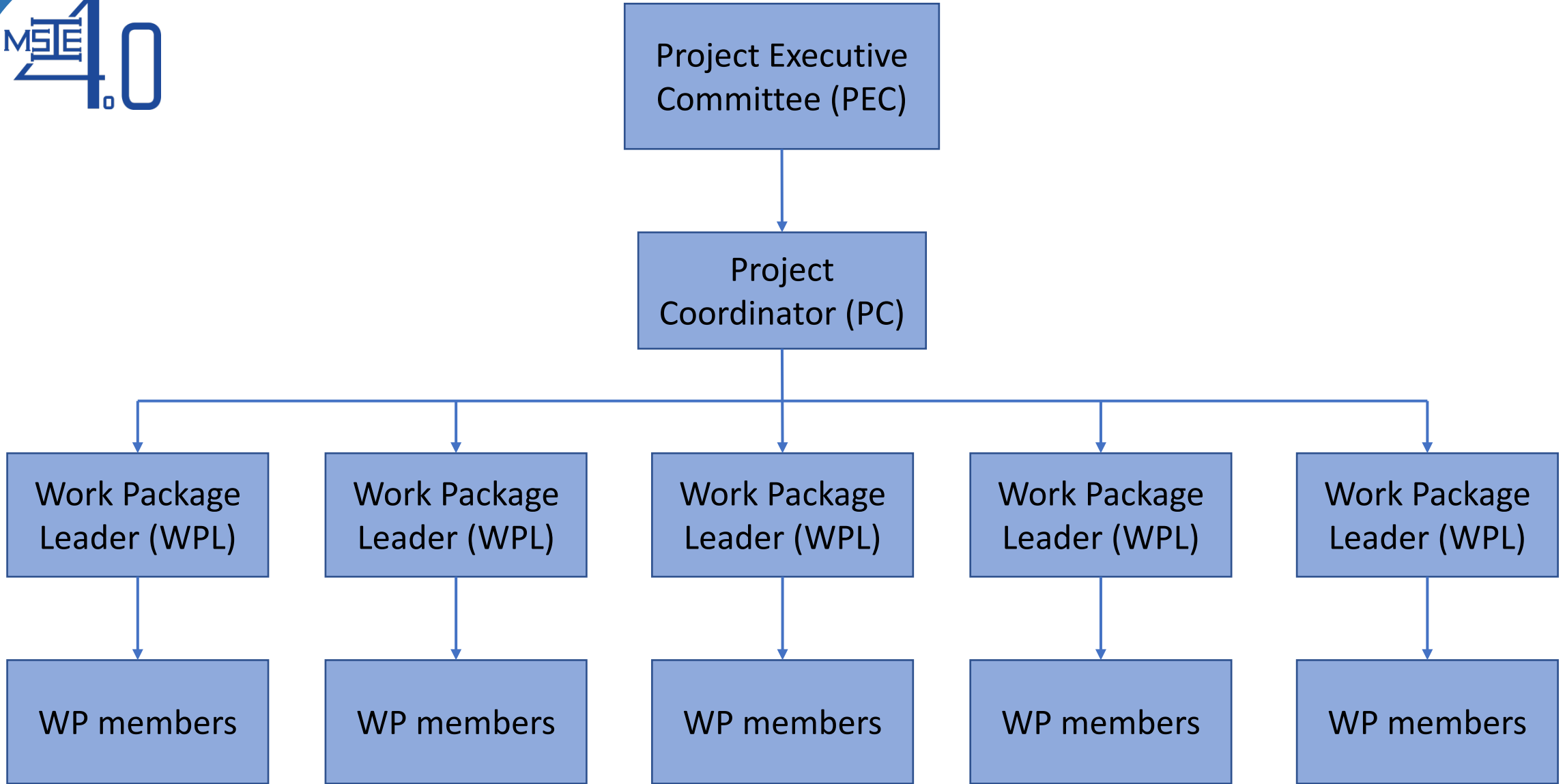




Project Focus

- Modernization of the education of industrial engineering discipline in Thailand by the development of a curriculum for Master's degree in industrial engineering to support sustainable smart industry,
- Development of courses, learning and teaching tools, delivery processes and platform for student-centered learning of the curriculum,
- Implementation of modern ICT tools and methodologies for effective student-centered learning of the curriculum,
- Introductions of quality assurance and of the EQF approach for the delivery of the curriculum meeting international accepted education requirements,
- Establishment and continuation of partnerships among partner universities





Project Executive Committee

Partner	Role	Name	Email
AIT	PC	Pisut Koomsap	pisut@ait.asia
CMU	Com	Wichai Chattinnawat	chattinw@gmail.com
KMUTNB	Com	Athakorn Kengpol	athakorn.kengpol@gmail.com
TU	Com	Apiwat Muttamara	mapiwat@engr.tu.ac.th
KKU	Com	Kanchana Sethanan	ksethanan@gmail.com
PSU	Com	Thanate Ratanawilai	thanate.r@psu.ac.th
UPB	Com	Tom SAVU	tomsavu@gmail.com
UMinho	Com	Rui Lima	rml@dps.uminho.pt
CUT	Com	Tomasz NITKIEWICZ	tomasz.nitkiewicz@wz.pcz.pl



Quality Control & Monitoring Board

Partner	Role	Name	Email
UPB	WPL	Livia Veronica LAZAR	livia_veronica_lazar@yahoo.com livia.lazar2014@gmail.com
PSU	CWPL	Supapan Chaiprapat	supapan.s@psu.ac.th
AIT	Com	Huynh Trung Luong	luong@ait.asia
CMU	Com	Wasawat Nakkiew	wasawat@eng.cmu.ac.th
KMUTNB	Com	Warapoj Meethom	athakorn.kengpol@gmail.com
TU	Com	Anintaya Kumkalya	kanintay@engr.tu.ac.th
KKU	Com	Komkrit Pitiruek	komkri@kku.ac.th
UMinho	Com	Teresa Monteiro	tm@dps.uminho.pt
CUT	Com	Robert ULEWICZ	ulewicz@zim.pcz.pl

WP1 Gap Analysis

WP Leader: CMU / UMinho

- Task 1.1 Developing a gap analysis working plan (CMU)
- Task 1.2 Analysing of MSIE curricula & of learning and teaching methods (UMinho)
- Task 1.3 Assessing needs of industry and students (CMU)
- Task 1.4 Identifying gaps (UMinho)
- Task 1.5 Identifying competitive factors for the curriculum (CMU)
- Task 1.6 Developing recommendations for the curriculum (CMU)

WP1 Gap Analysis

Deliverables:

- WP1-1.1 Gap Analysis working plan (at the end of M1)
- WP1-1.2 Comprehensive analysis of MSIE curricula in Thailand and in EU partner countries (M6)
- WP1-1.3 Assessment of learning and teaching tools and methods in Thailand and in EU partner countries (M6)
- WP1-1.4 Analysis of needs of industry and students (M9)
- WP1-1.5 Gaps between the needs and graduates' competences (M10)
- WP1-1.6 Competitive factors for the curriculum (M11)
- WP1-1.7 Recommendations for specifications and areas of specialization for the curriculum(M12)





WP2 Curriculum Development I: Curriculum Structure and Courses

WP Leader: CUT/ AIT

- Task 2.1 Developing curriculum structure & academic program learning outcomes (CUT)
- Task 2.2 Developing courses & course learning outcomes (CUT)
- Task 2.3 Conducting pilot test of the key courses (AIT)
- Task 2.4 Assessment of pilot test & finalize the curriculum (CUT)
- Task 2.5 Preparation for accreditation of the curriculum (KKU)
- Task 2.6 Accreditation of the curriculum by the national accreditation institution in Thailand (KKU)





WP2 Curriculum Development I: Curriculum Structure and Courses

Deliverables:

- WP2-2.1 A modernized curriculum for Master's degree in IE (M30)
- WP2-2.2 Syllabuses for all courses in the curriculum (M18)
- WP2-2.3 Pilot teaching in modernized MSc at partner universities (M21-M29)
- WP2-2.4 Assessment of pilot test of the key courses and improved courses (M30)
- WP2-2.5 Accreditation of the curriculum submitted (M31)





WP3 Curriculum Development II: Modernisation of Teaching Methods and Tools for Innovative MSc Programmes

WP Leader: AIT/ UMinho

- Task 3.1 Developing teaching materials (Uminho)
- Task 3.2 Translating teaching materials (TU)
- Task 3.3 Developing a web-portal for online learning (AIT)
- Task 3.4 Training of staffs (Uminho)
- Task 3.5 Adapting learning materials to the online learning (AIT)
- Task 3.6 Purchasing and installing of teaching equipment (AIT)
- Task 3.7 Developing a laboratory and on line remote access of the laboratory works (AIT)





WP3 Curriculum Development II: Modernisation of Teaching Methods and Tools for Innovative MSc Programmes

Deliverables:

- WP3-3.1 Teaching materials for instructors (M29)
- WP3-3.2 Learning materials for students (M29)
- WP3-3.3 A platform for online learning (M11)
- WP3-3.4 Trained Instructors and Staffs on New Teaching Tools and Methods. **Three workshop will be organised when the three meetings organised in EU and seminars will be organised when the meetings organized in Thailand.**
- WP3-3.5 Online Learning Materials (M29)
- WP3-3.6 Installed Hardware and Software (M24)
- WP3-3.7 Laboratory equipped with online remote access from partner locations (M29)





WP4 Quality Plan for the Implementation of the Project

WP Leader: UPB/ PSU

Tasks:

- Task 4.1 Developing a quality control & monitoring system (UPB)
- Task 4.2 Implementing the internal quality control & monitoring of the project (UPB)
- Task 4.3 Inviting external evaluation of the project results (PSU)
- Task 4.4 Inviting external financial audit (PSU)

Deliverables:

- WP4-4.1 Quality control & monitoring system (M4)
- WP4-4.2 Internal quality control & monitoring conducted (on a regular basis until the end of the project)
- WP4-4.3 External quality control & monitoring (M18 and M35)
- WP4-4.4 External financial audit (M36)





WP5 Dissemination and Exploitation of Project Results

WP Leader: KKU/ UPB

- Task 5.1 Development of a Dissemination, Exploitation & Sustainable plan,
- Task 5.2 Creating a project website to support the dissemination strategy, and communication and collaboration among partners, (AIT)
- Task 5.3 Production of dissemination materials, (KKU)
- Task 5.4 Publications in journals, etc., (UMinho)
- Task 5.5 Developing joint short-term courses,(KMUTNB)
- Task 5.6 Organizing dissemination events with relevant stakeholders,
- Task 5.7 organising the final dissemination-sustainability conference. (AIT)





WP5 Dissemination and Exploitation of Project Results

Deliverables:

- WP5-5.1 A Dissemination, Exploitation and Sustainable Plan (M3)
- WP5-5.2 A project website (M2)
- WP5-5.3 Dissemination materials (M6)
- WP5-5.4 Publications in professional journals, newspapers, magazines, brochures and social media (every six months after M18)
- WP5-5.5 Short-term courses in the field of Industrial Engineering for professionals (offered in the third year)
- WP5-5.6 Dissemination events organized (after the completions of key activities for preparation and development phases and more often during the last six months)
- WP5-5.7 A dissemination-sustainability conference (M35)
- WP5-5.8 Sustainable network between project partners & IE enterprise (M35)



WP6 Project Management

Tasks:

WP Leader: AIT

- Task 6.1 Finalizing management structure
- Task 6.2 Organizing kick-off & regular consortium meetings
- Task 6.3 Monitoring & controlling the project
- Task 6.4 Closing the project

Deliverables:

- WP6-6.1 Project Management & Communication Plan (M1)
- WP6-6.2 Kick-off & regular consortium meetings (M1, M6, M12, M18, M24, M30, and M35)
- WP6-6.3 Documents on daily project administration and coordination (between the meetings)
- WP6-6.4 Project reports (every six months)
- WP6-6.5 Documentation for mid-term reporting and project closing (M18 and M36)
-





Partnership Agreement Update

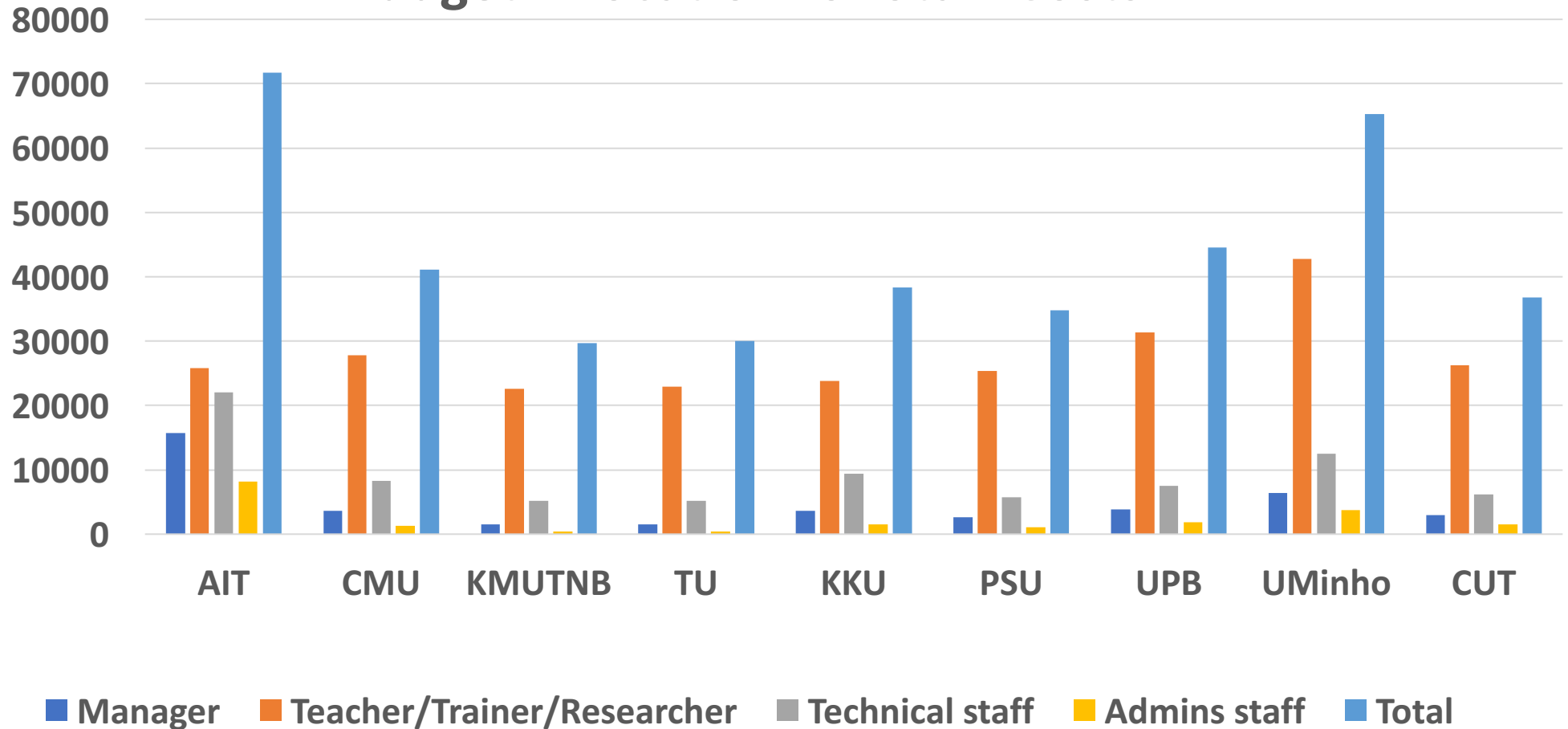
- All Partnership Agreements have been sent to all partners
- The one with UPB has already been signed by both parties
- The one with KMUTNB has been sent to President's Office
- The one with UMinho and CUT have been signed by their Rectors



Resource and Budget Allocations

- Workload among WPs: 16%, 16%, 28%, 11%, 13% and 15%
- Workload among staff categories: Manager 8%, Teacher 58%, Technical staff 26% and admin 8%
- Budget among WPs: 6.7%, 6.5%, 51.2%, 14.3%, 5.2% and 16.1%
- Budget among headings: staff 40%, travel 13.8%, stay 13.3%, equipment 29.8%, subcontracting 3.1%

Budget Allocation for Staff Costs



FUNDING RULE & FINANCING APPROACH

Co-funding principle

Grant \neq Total costs of the project

Grant

(combination of two different financing approaches)

- **AC:** Actual costs (Equipment and Subcontracting)
- **UC:** Unit Costs (Staff, Travel and Costs of stay)



General Provisions

- Not all the activities and the costs planned under the awarded maximum project budget are automatically approved by the Agency.
- Original supporting documents must be kept at the partner institutes. Readable copies must be sent to the PC with the project documentation.
- The list of supporting documents to be kept are available under each budget heading.
- The PC may adjust the estimated budget by transfers between budget headings.
- The total awarded grant is not exceeded.
- A monthly financial reporting is highly recommended.



CEILING FOR BUDGET HEADINGS

			Ours
Staff costs (UC)	Max 40% of grant (Art I.3 of GA)		40%
Travel costs (UC)	<i>no ceiling</i>		13.8%
Costs of stay (UC)	<i>no ceiling</i>		13.3%
Equipment (AC)	Max 30% of grant (Art I.3 of GA)		29.8%
Sub-contracting (AC)	Max 10% of grant (Art I.3 of GA)		3.1%

PC can transfer budget between headings up to 10% of the budget headings even it will exceed the ceiling.
No prior authorization is required.

Amendment is required otherwise.



ELIGIBLE COSTS

- Incurred during the eligibility period
- Foreseen in the application/budget
- In connection with the action/necessary for project implementation
- Identifiable, verifiable, recorded in accounting records
- Comply with requirements of tax and national legislation
- Reasonable, complying with sound financial management (economy and efficiency)

INELIGIBLE COSTS

Costs NOT fulfilling requirements to be eligible costs

examples:

- ✓ equipment such as: furniture, motor vehicles, alarm systems
- ✓ costs linked to the purchase of real estate
- ✓ activities not in project beneficiaries' countries (Annex IV), unless prior authorisation
- ✓ Exchange losses
- ✓ in kind contribution
- ✓ excessive expenditure
- ✓ deductible VAT



EXCHANGE RATE

- 1) From start of eligibility period until receipt of second pre-financing:
monthly rate of reception of FIRST PRE-FINANCING Jan 2018
- 2) From date of receipt of second pre-financing until end of eligibility period:
monthly rate of reception of SECOND PRE-FINANCING

http://ec.europa.eu/budget/contracts_grants/info_contracts/inforeuro/index_en.cfm



STAFF COSTS, TRAVEL COSTS & COSTS OF STAY

Fixed contribution multiplied by number of units, based on "Triggering events" (activities/outputs)

- No need to justify level of spending
- Financial control/audit → declared unit costs supported with proofs of activities implemented
- Not divisible



Grant management cycle	UNIT COST	ACTUAL COSTS
Grant allocation	Based on <u>estimated work programme</u>	Based on the <u>estimated budget</u>
Grant Implementation	Beneficiary's own FINANCIAL "RECIPE"	Record <u>costs actually incurred</u>
Justification of the Grant	Based on <u>activities actually implemented</u>	Based on <u>costs actually incurred</u>

Staff Costs

To keep with project accounts:

- *Joint Declaration (EACEA template)*
- *Time-sheets (EACEA template)*
- Proof of formal contractual relationship
- Any evidence justifying the workload and activities/outputs (e.g. attendance lists for lectures given, tangible outputs / products, salary slips, etc.)

To send with Final Financial statement:

Any prior authorisation from the Agency

TRAVEL COSTS

*From home institution to venue of activity
(project beneficiaries' countries) and return*

Distance	Travel Costs (EUR)
0km - 9km	0
10km - 99km	20
100km – 499km	180
500km – 1999km	275
2000km – 2999km	360
3000km – 3999km	530
4000km – 7999km	820
8000km or longer	1100

SUPPORTING DOCUMENTS

To keep with project accounts:

Travel and Costs of Stay

- *Individual Travel Report (EACEA templates) + Supporting documents*
- (e.g. travel tickets, boarding passes, invoices, receipts, proof of attendance in meetings, agendas, tangible outputs/products, minutes)*

**Non-exhaustive list*

To send with Final Financial statement:

Any prior authorisation from the Agency

PROCUREMENT OF GOODS/SERVICES

Less than 25.000 €

- Best value for money

25.000 € - 134.000 €

- Tendering procedure

More than 134.000 €

- National Legislation



EQUIPMENT

Relevant to the objectives of the project foreseen in the application

- Exclusively for **Partner Country Higher Education Institutions**
- Recorded in **inventory** of institution
- Labelled with **E+ stickers**
- **Installed** (available for project participants) **as soon as possible**



Must Read Document



Education, Audiovisual and Culture Executive Agency

Erasmus+ : Higher Education - International Capacity Building

Erasmus+ Programme

**Capacity-Building projects in the field of Higher Education
(CBHE)**

Guidelines for the Use of the Grant

For grants awarded in 2017 under Call EAC/A03/2016

- **Available on the E+ CBHE Website**

https://eacea.ec.europa.eu/erasmus-plus/beneficiaries-space/capacity-building-in-higher-education_en

VERSION 01: 21DECEMBER 2017

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REPORTING TO EACEA (Art. 1.4)

- **Progress report** (April 14, 2019)
- **Final report** (2 months after the end of the eligibility period - Oct 14, 2020)
 - Cover both the activities implemented and the grant used
 - Joint exercise : to be completed by and shared with all partners
 - Do not underestimate the amount of time necessary to write a report
 - Do not copy and paste information from other reports (/the application/other projects)
 - Answer the questions asked on the reporting template – no more no less
 - Be honest : present problems (and the remedial actions launched) as well as achievements

E-reporting





PENALTIES

- Publicity Art.I.10.9 -10 20% Reduction
- Breach of contractual obligations Art.II.17.2 up to 10%
- Weak Implementation Art.10.6 up to 75%





Penalties for weak implementation (Art. I.10.6)

Reduction of the final grant in the event of weak implementation

When does the performance evaluation take place?

- **During the implementation of the project**
 - *At Progress Report stage*
 - *As a result of a Monitoring visit*

- **After the completion of the project**
 - *At Final Report stage*





How will the project performance be assessed ?

- *Relevance (max. 30 pts)*
- *Quality of the project (design and) implementation (max. 30 pts)*
- *Quality of the project team and cooperation arrangements (max. 20 pts)*
- *Impact and sustainability (max. 20 pts)*

What could be the impact of a weak performance?

25% : performance score between 40 points and below 50 points

35% : performance score between 30 points and below 40 points

55% : performance score between 20 points and below 30 points

75% : performance score below 20 points





Penalties for non-compliance with publicity obligations (Art. I.10.10)

When does the performance evaluation take place?

At the same time as the performance assessment: i.e. at reporting stages as well as during field monitoring visits.

How are the publicity obligations verified?

Verification on project website and on the project documents (studies, reports, promotional material, etc.)

What is verified?

- *Respect of the Visual Identity*
- *Presence of the acknowledgement on the co-funding of the Erasmus+ Programme*
- *Presence of the Disclaimer concerning the content of the product*





Administrative and financial Penalties (Art. II.17 – General Conditions)

When?

When the beneficiary has

- *committed substantial errors, irregularities or fraud; or*
- *made false declarations or failed to submit information; or*
- *been in serious breach of contractual obligations.*

What type of penalties could be applied?

- *Administrative penalties: exclusion of all contracts or grants for a max. duration of 5 years*
- *Financial penalties: 2 to 10% of the beneficiary's grant contribution*



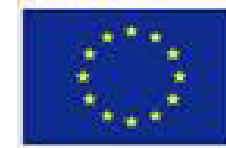


Publicity obligations (Art. I.10.9)

Project publications and results:

Sticker

- Must display this **Logo**:
- Must **mention** "*Co-funded by the Erasmus+ Programme of the European Union*"



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

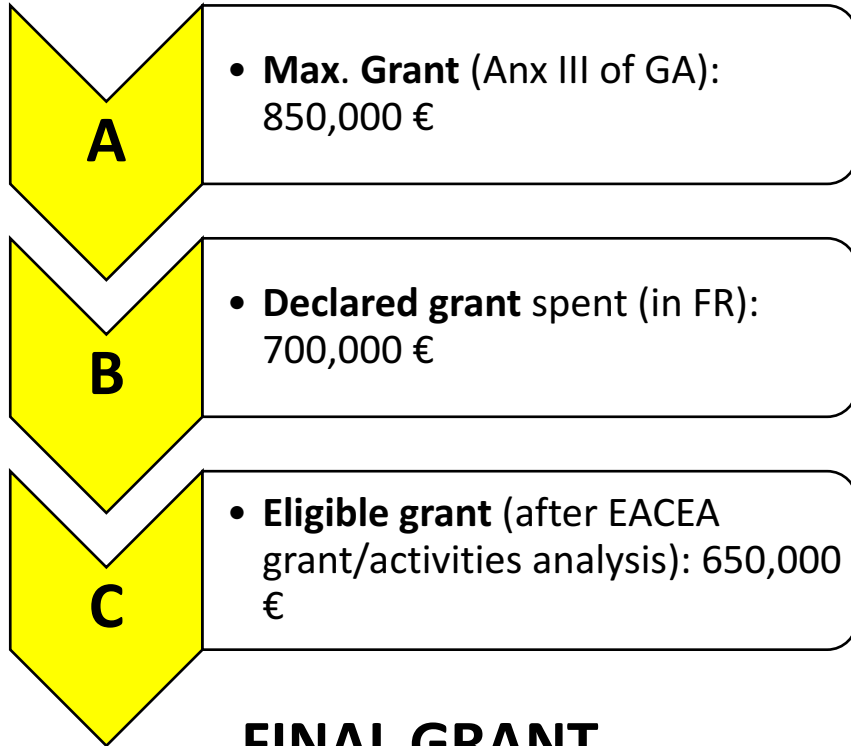
https://eacea.ec.europa.eu/about-eacea/visual-identity_en

- Include **disclaimer**:

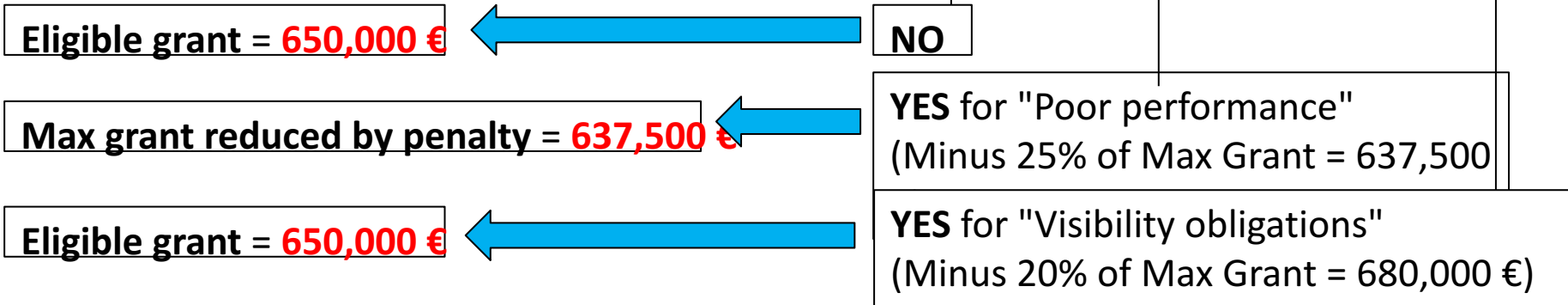
"This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein".

http://ec.europa.eu/dgs/education_culture/publ/graphics/beneficiaries_all.pdf





FINAL GRANT



HOW WILL THE FINAL GRANT AMOUNT BE DECIDED?

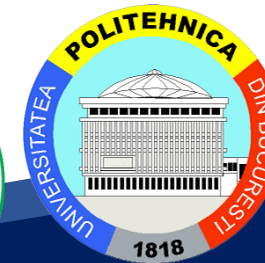


MSE4.0

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Thank You



Curriculum Development
of Master's Degree Program in
Industrial Engineering for Thailand Sustainable Smart Industry