wu: ΕκθΕΣΗ ΠΑΠΑΓΙΑΝΝΙΔΗ ΔΗΜΗΤΡΗ ΚΑΙ ΧΑΙ ΖΗΔΑΚΗ ΑΡ...

Θέμα: Fwd: ΕΚΘΕΣΗ ΠΑΠΑΓΙΑΝΝΙΔΗ ΔΗΜΗΤΡΗ ΚΑΙ ΧΑΤΖΗΔΑΚΗ ΑΡΙΣΤΟΔΗΜΟΥ

Από: TEE $\Delta/N\Sigma$ H ΘΕΕ & Δ ΙΕΘΝΩΝ ΣΧΕΣΕΩΝ <greok@central.tee.gr>

Ημερομηνία: 20/2/2017 1:44 μμ

Προς: tee@central.tee.gr

----- Forwarded Message ------

Θέμα:ΕΚΘΕΣΗ ΠΑΠΑΓΙΑΝΝΙΔΗ ΔΗΜΗΤΡΗ ΚΑΙ ΧΑΤΖΗΔΑΚΗ ΑΡΙΣΤΟΔΗΜΟΥ

Ημερομηνία:Mon, 20 Feb 2017 11:33:27 +0200

Από:EYΔE KYY - ΔΙΕΥΘΥΝΤΗΣ <eyde.kyy.dir@ggde.gr>

Προς:ΤΕΕ INT AFFAIRS <greok@central.tee.gr>, ANAGNOSTAKI Liana ΤΕΕ ΔΘΕΕΚΔΣ

<aanag@tee.gr>

ΕΚΘΕΣΗ

ΠΑΠΑΓΙΑΝΝΙΔΗ ΔΗΜΗΤΡΗ ΚΑΙ ΧΑΤΖΗΔΑΚΗ ΑΡΙΣΤΟΔΗΜΟΥ

ΓΙΑ ΤΗ ΣΥΜΜΕΤΟΧΗ ΤΟΥΣ στην ημερίδα / Workshop- Conference) του ECEC (European Council of Engineers Chambers --Ευρωπαϊκό Συμβούλιο Επιμελητηρίων Μηχανικών με θέμα: Κοινές Αρχές Εκπαίδευσης για Μηχανικούς, στις 27 Οκτωβρίου 2016 και στην συνάντηση ανασκόπησης των συμπερασμάτων των συμπληρωθέντων ερωτηματολογίων των συμμετεχόντων, στις 28 Οκτωβρίου 2016 με εγκεκριμένες ημέρες ταξιδίου από 26/10 έως 29/10 (τέσσερις ημέρες).

Στα πλαίσια του Προγράμματος της Ευρωπαϊκής Επιτροπής: «Κοινές αρχές Εκπαίδευσης για τους μηχανικούς» ΣΤΗΝ ΒΙΕΝΝΗ ΑΥΣΤΡΙΑΣ

Προς: ΤΕΧΝΙΚΟ ΕΠΙΜΕΛΗΤΗΡΙΟ ΕΛΛΑΔΑΣ

Διεύθυνση ΔΙΕΘΝΩΝ ΣΧΕΣΕΩΝ Κ ΘΕΜΑΤΩΝ ΕΥΡΩΠΑΙΚΗΣ ΕΝΩΣΗΣ

κα Αναγνωστάκη Λ.

κ. Ζαμπατή Γ.

Σε συνέχεια της μετάβασής μας στην Βιέννη στις 26 Οκτωβρίου 2016 έως τις 29 Οκτωβρίου 2016, με εγκεκριμένες ημέρες ταξιδίου από 26/10 έως 29/10/2016 (τρεις ημέρες) σας υποβάλλω την **ΕΚΘΕΣΗ** με τα κάτωθι συνημμένα:

1. ECEC 1 - 2016 ECEC Agenda_WS2710 Final Stakeholder Conference on CTP for ENG. 27-10-16 συνημ. 1

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- 2. ECEC 2 2016 ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤΡΗΣ ECEC CTP BIENNH 27-10-2016, Sent 31-08-16 συνημ. 2
- 3. ECEC 3 ECEC Draft_CTP Proposal 15 September_2016 συνημ. 3
- 4. ECEC 4 ECEC_CTP_Survey-Report_Draft_15_September_2016 160 pages συνημ. 4
- 5. ECEC 5 ECEC_CTP_FINAL-REPORT-21Dec συνημ. 5

ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤΡΗΣ

ΠΟΛΙΤΙΚΟΣ ΜΗΧ. Με Β' β. ΔΙΕΥΘΎΝΤΗΣ ΕΥΔΕ ΚΥΥ

Πανόρμου 22 ΑΘΗΝΑ 11523

Τηλ: 210 6412430-1-2 Fax: 210 6450782 Κινητό: 6978 484898

Email 1: eyde.kyy.dir@ggde.gr

Email 2: dpapagi@tee.gr

Συνημμένα:	
2016 ECEC Agenda_WS2710 Final Stakeholder Conference on =?iso-8859-7?Q?_CTP_for_ENG27-10-16_=	329 KB
2016 ECEC Discussion-Topics_WS2710, 27-10-16 συνημpd%6	233 KB
2016 ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤ =?UTF- 8?B?zqHOl86jIEVDRUMgQ1RQIM6SzpnOlc6dzp0gPT9p	24,1 KB
2017 DP - ACH to TEE STAKEHOLDER CONFERENCE 27-28-OCT 2016 =?iso-8859-7?Q?_=C5=CA=C8=C5=D3=C7_=CC=	492 KB
ECEC Draft_CTP_Proposal_15_September_2016 συνημpdf	588 KB
ECEC_CTP_FINAL-REPORT-21Dec συν. 5.pdf	627 KB
ECEC_CTP_Survey-Report_Draft_15_September_2016 =?iso- 8859-7?Q?_160_pages_=F3=F5=ED=E7=	5,4 MB

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AGENDA

Final Stakeholder Conference on Common Training Principles for Engineers 27 October 2016, 10:00-15:00

9.00 – 10.00	Registration and Coffee
10.00	Opening and Welcome
	Crtomir Remec, ECEC President
	Administrative Overview by the moderator
10.20	CTP for Engineers – characteristics and implications
	Sophie Weisswange, European Commission
10.50	Draft CTP proposal – latest version
	Background and results from the stakeholder consultation
	Cornelia Hammerschlag, Project Manager
	Klaus Thürriedl, Project Director and ECEC Secretary General

Clarifications and instructions for the Workshop by the moderator

11.40 – 12.00	Workshop Part 1: Answering the questions on the posters (white parts) with the distributed stickers (one answer/ organisation)
12.00 – 12.45	Workshop Part 2: Discussion in 6 groups (please choose the topic that you are most passionate about ©)

- Individual assessment of knowledge, skills and competences versus automatic recognition?
 - Rapporteur: Katy Turff, Engineering Council UK
- Two level system based on a common scope of authorization?
 Rapporteur: Jose Saez Rubio, CICCP Spain
- Compensation of academic training (University degree "or equivalent")?

Rapporteur: Barbara Skraba-Flis, Slovenian Chamber of

Engineers





Common Training Principles for Engineers 491/PP/GRO/IMA/15/15123 Stakeholder Conference 27 October 2016

ECTS/EQF and the application of EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences?

Rapporteur: Bernard Remaud, ENAEE

 Assessment and certification in the home country and questions in regard to the movement between regulated/nonregulated (profession) countries?

Rapporteur: Natalia Österman, Swedish Council for Higher Education / National Coordinator PQD

Additional requirements?
 Rapporteur: Hansjörg Letzner, CNI Italy

12.45 – 13.45	Lunch (in-house)
13.45 – 14.45	Presentation of discussion groups results by rapporteurs + possibility for comments from the audience
14.15 - 15.00	Conclusions and next steps Klaus Thürriedl, Project Director and ECEC Secretary General Sophie Weisswange, European Commission
15.30 – 16.00	Common Bus Transport from Haus der Ingenieure to Schreiberhaus

The Austrian Chamber of Architects and Chartered Engineering Consultants would like to invite all participants to a common evening at the Schreiberhaus (= typical Austrian "Heuriger") http://www.dasschreiberhaus.at/

Transportation back to the city / to the airport can be organised individually by taxi (Traveltime from Workshop Venue to "Schreiberhaus" approx. 20-30 minutes)

unnecessary?

Individual assessment of knowledge, skills and competences versus automatic recognition?

Rapporteur: Katy Turff, Engineering Council UK

1) Do you in principle support the establishment of a CTF for Civil Engineers provide automatic recognition?	ing
Yes / No / Comment	
2) Do you support the establishment of CTF for other engineering professions with sufficient percentage of regulation (profession or education has to be regulated in of the Member States according to Art. 49 a 2. b)?	
Yes / No / Comment	
3) If an agreement on CTF cannot be reached/if you are against the CTF approach, would you support Common Training Tests for Engineers as an alternative solution	ı?
Yes / No / Comment	
4) Do you regard individual assessment of knowledge, skills and competences at he country level as absolutely necessary?	ost
Yes / No / Comment	
Discussion on 'Individual assessment of knowledge, skills and competences versu	
automatic recognition':	
Is individual assessment of an applicant by the host country possible/necessary within a CTF?	
Is there an added value of a CTF in regard to the general system if such individual assessment is applied?	
Is there a way of defining criteria for requirements that makes such individual assessment	

Two level system based on a common scope of authorization?

Rapporteur: Jose Saez Rubio, CICCP Spain

1)	Do y	/ou	support	the	two	level	system?
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Yes / No / Comment

2) Would you support a title of "European Licensed Engineer Master Level"/"European Licensed Engineer Bachelor Level?"

Yes / No, I would suggest another title / No, there should be no title at all

3) Do you think it is possible/necessary to define a common scope of authorization for each level that is applicable for all CTF countries?

Yes, it is necessary / Yes, it is possible / No, it is not necessary / No, it is not possible / Comment

Discussion on 'Two level system based on a common scope of authorization':

Within the proposed CTF – how would engineers move from a country with two or more levels to a country with only one level (and vice versa)?

Could/should a common scope of authorizations be defined for each level?

Compensation of academic training (University degree "or equivalent")?

(according to Art. 49 a 2. c of Directive 2005/36/EC it is irrelevant whether knowledge, skills and competences have been acquired as a part of a course at university or as a part of a vocational training course)

Rapporteur: Barbara Skraba-Flis, Slovenian Chamber of Engineers

1) Are you aware of Art 49 a.	2.c as a legal	requirement for the	implementation of	a
CTF?				

Yes / No / Comment

2) Do you agree with the legal requirement of Art 49 a. 2.c (compensation) for the Master degree level?

Yes, very much / Yes / No / Not at all

3) Do you agree with this requirement of Art 49 a. 2.c (compensation) for the Bachelor degree level?

Yes, very much / Yes / No / Not at all

4) Do you prefer not to get a CTF for Civil Engineers to fulfilling this legal requirement?

Yes / No / Comment

Discussion on 'Compensation of academic training (University degree "or equivalent") (according to Art. 49 a 2. c of Directive 2005/36/EC it is irrelevant whether knowledge, skills and competences have been acquired as a part of a course at university or as a part of a vocational training course):

Is there a commonly acceptable way – other than general system of recognition currently in force - to ensure that a person not fulfilling the academic requirements of a CTF really has the same knowledge, skills and competences? Is it preferable to reject a CTF due to the possibility of compensation?

Does the notification procedure based on Article 49 a 6. of Directive 2005/36/EC provide a possibility to overcome this problem (e.g. by further development in the implementing act)?

ECTS/EQF and the application of EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences?

Rapporteur: Bernard Remaud, ENAEE

1) Do you agree with	the use of ECTS as	indicator for the	academic education?
----------------------	--------------------	-------------------	---------------------

Yes / No / Comment

2) Do you agree with a requirement of minimum 300 ECTS for Master Level?

Yes / No / Comment + suggested change

3) Do you agree with a minimum of 180 ECTS for Bachelor Level?

Yes / No / Comment + suggested change

4) Do you agree with a requirement of a minimum of 70% technical and scientific ECTS within the required amount of ECTS?

Yes / No / Comment + suggested change

5) Do you agree with the application of the EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences?

Yes / No / Comment

Discussion on 'ECTS / EQF and the application of EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences':

Are the EUR-ACE Framework standards and guidelines are applicable for the assessment of knowledge, skills and competences on national level?

What additional support tools would be necessary to support this assessment on national level?

Alternative solutions to applying the EUR-ACE Framework standards and guidelines?

Assessment and certification in the home country and questions in regard to the movement between regulated/non-regulated (profession) countries?

Rapporteur: Natalia Österman, Swedish Council for Higher Education / National Coordinator PQD

rapported. Natalia Osternali, owedish obdiren for riightir Education / realistics / ED
1) Do you see any difficulties for the requirement of a home country certification on the fulfilment of the CTF by the applicant?
Yes / No / Comment
2) Do you see any difficulties for the requirement of a home country certification on the fact if the applicant is subject to an occupational ban or a disciplinary procedure?
Yes / No / Comment
3) Do you see any difficulties for the requirement of a home country certification on the fulfilment of national professional access requirements or certification of right to practise?
Yes / No / Comment
Discussion on 'Assessment and certification in the home country and questions in regard to the movement between regulated/non-regulated (profession) countries':
Could the assessment of the fulfilment of a CTF by the home country authorities and its certification be a problem? Are any additional tools/clarifications necessary?
Are any clarifications for the procedure of movement between regulated and non-regulated countries necessary?

Additional requirements?

Rapporteur: Hansjörg Letzner, CNI Italy

1) How many years of professiona	l experience should be required?
----------------------------------	----------------------------------

None / 1year / 2 years / 3 years / More / Comment

2) Do you think that the professional experience or professional examination requirement needs to be defined in regard to knowledge, skills and competences?

Yes / No / Comment

3) Is the possibility to list special regional requirements necessary?

Yes / No / Comment

Discussion on 'Additional requirements':

Is it necessary to define the output requirements in regard to professional experience/professional examination and if yes how could this be achieved?

How can the possibility to list special regional requirements be defined/limited to necessary cases? How should it be assessed and what does it mean for automatic recognition?

ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤΡΙΟΣ

ΠΟΛΙΤΙΚΟΣ ΜΗΧ. Με Α΄ β. ΔΙΕΥΘΎΝΤΗΣ ΕΥΔΕ ΚΥΥ ΜΕΛΟΣ ΑΝΤΙΠΡΟΣΩΠΕΙΑΣ ΤΕΕ

Πανόρμου 22 ΑΘΗΝΑ 11523

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Email 1: eyde.kyy.dir@ggde.gr

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AOHNA 31-08-2016

ΠΡΟΣ: ΤΕΕ

Δ/ΝΣΗ ΔΙΕΘΝΩΝ

ΣΧΕΣΕΩΝ και

ΘΕΜΑΤΩΝ ΕΥΡ

ΕΝΩΣΗΣ

ΘΕΜΑ: Συμμετοχή εκπροσώπων ΤΕΕ στο τελικό "CTP workshop / CONFERENCE στη ΒΙΈΝΝΗ στις 27 και 28 Οκτωβρίου 2016 με θέμα: ΚΟΙΝΕΣ ΑΡΧΕΣ ΕΚΠΑΙΔΕΥΣΗΣ ΓΙΑ ΜΗΧΑΝΙΚΟΥΣ

Κα Αναγνωστάκη

Όπως σας έχω γνωστοποιήσει στις 28 Ιουλίου 2016 με το μειλ μου, στις 27 Οκτωβρίου 2016 θα γίνει το τελικό "CTP workshop / CONFERENCE στη ΒΙΈΝΝΗ με θέμα : ΚΟΙΝΕΣ ΑΡΧΕΣ ΕΚΠΑΙΔΕΥΣΗΣ ΓΙΑ ΜΗΧΑΝΙΚΟΥΣ.

Η ημερομηνία συμφωνήθηκε με την Ευρωπαϊκή Επιτροπή (βλ.. ΣΧΕΤ ΜΕΙΛ), ενώ στις 28/10/2016 οι εθνικοί εκπρόσωποι θα συναντηθούν σε άτυπη ανταλλαγή απόψεων και με παρουσιάσεις θα τοποθετηθούν για το τελικό κείμενο.

Μου έχει ήδη ζητηθεί να επιβεβαιώσω την παρουσία μου την οποία και θεωρώ απαραίτητη.

Για λόγους συνέχειας και επειδή ο συν. **Αρης Χατζιδάκης** από μακρού χρόνου ασχολείται με τα θέματα εκπαίδευσης και επιμόρφωσης των μηχανικών κρίνω την δική του παρουσία επίσης απαραίτητη για να προωθηθούν με τον καλύτερο τρόπο οι απόψεις του ΤΕΕ που όπως γνωρίζετε δεν είναι πάντα στο ίδιο εκπαιδευτικό πλαίσιο με τα άλλα Επιμελητήρια στην Ευρώπη.

Επειδή δε το τελικό "CTP workshop / CONFERENCE" χωρίζεται σε διάφορες υποομάδες κρίνω ότι η παρουσία του θα βοηθήσει για την καλύτερη δυνατή παρουσία της Ελληνικής Αντιπροσωπείας και την υπεράσπιση των ελληνικών θέσεων.

Σας ζητώ την έγκριση της δαπάνης (αεροπορικά εισιτήρια και ξενοδοχείο) για την κάλυψη των εξόδων.

Δεν ζητάμε ημερήσια αποζημίωση.

ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤΡΗΣ ΠΟΛΙΤΙΚΟΣ ΜΗΧ.

Email 1: eyde.kyy.dir@ggde.gr

Email 2: dpapagi@tee.gr

ΠΑΡΑΡΤΗΜΑ 1^O ΕΠΙΣΤΟΛΗ / ΠΡΟΣΚΛΗΣΗ ΓΙΑ ΤΗΝ ΤΕΛΙΚΗ ΗΜΕΡΙΔΑ Dear members of the ECEC EB!

See below the mail of the European Commission. They seem to be quite happy with the way the project is going and have thus now offered to give us more time (we had already asked for this at the project start but they had denied it).

As we always had the problem that the written consultation process for the draft proposal would have taken place during the holiday period this gives us now the possibility to move that for a month and have it in September. As a lot of people already approached us because they have difficulties to discuss / comment a proposal during the summer time this will hopefully improve the chances to get to a common proposal. It means that we also have to change the timetable for the final project workshop / conference (originally planned for 20 September). We have discussed the possibility to hold it together with the ECEC GAM but due to the fact that the FEANI GAM is at the same weekend this would not be a very good idea.

The suggestion would now be - already checked with the EC - Thursday, 27 October 2016 in Vienna.

Please let me know as soon as possible (best with copy to all) if this date is acceptable.

Thanks a lot, Cornelia

PS: This might also change the EB timetable, as there was a meeting planned in connection with the conference on 19 September - I will get in contact with President/SG about this and get back to you with an extra mail



ΠΑΡΑΡΤΗΜΑ 2° ΕΠΙΣΤΟΛΗ Ε.Ε. ΓΙΑ ΤΗΝ ΤΕΛΙΚΗ ΗΜΕΡΙΔΑ

EC

Von:

Sophie.Weisswange@ec.europa.eu

[mailto:Sophie.Weisswange@ec.europa.eu] Gesendet: Montag, 04. Juli 2016 16:45

An: Office ECEC

Cc: Martin.Frohn@ec.europa.eu; Raluca-Nicoleta. IONESCU@ec.europa.eu;

thue.klaus@kulturtechnik.at; Konstantinos.Tomaras@ec.europa.eu

Betreff: *****SPAM***** ECEC CTP Project - deadline

Dear Cornelia,

Thank you again for the good organisation of the workshop. It was very interesting.

I think there is definitely a will from all to move forward.

Considering the scope of the project and in order to be sure to get a quality result, I have discussed here internally and we could accept a 2 months extension as it is possible in the contract.

We could then subsequently discuss the possible changes in dates this might imply.

Kind regards, Sophie Weisswange

European Commission

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs Unit E5 Professional Qualifications and Skills

1049 Brussels, Belgium

office: N105 1/42, tel.: +32-2-29-94784 e-mail: sophie.weisswange@ec.europa.eu

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ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤΡΗΣ ΠΟΛΙΤΙΚΟΣ ΜΗΧ. Με Β' β. ΔΙΕΥΘΎΝΤΗΣ ΕΎΔΕ ΚΥΥ Πανόρμου 22 AOHNA 11523

Τηλ: 210 6412430-1-2 Fax: 210 6450782 Κινητό: 6978 484898

Email 1: eyde.kyy.dir@ggde.gr

Email 2: dpapagi@tee.gr



Κα Αναγνωστάκη

Προς επιβεβαίωση των όσων σας έστειλα ότι στις 27 Οκτωβρίου 2016 θα γίνει το τελικό "CTP workshop /CONFERENCE στη ΒΙΈΝΝΗ σας προωθώ το κείμενο της Γραμματείας του ECEC.

Von: Office ECEC

Gesendet: Donnerstag, 07. Juli 2016 15:44

An: crtomir.remec@izs.si; Thürriedl Klaus, Lohberger - Thürriedl - Mayr thue.klaus@kulturtechnik.at); <a href="mailto:thue.klaus@kulturtechnik.at); <a href="mailto:th

'meyer@zut.edu.pl'; szollossy.gabor@mmk.hu

Cc: <u>barbara.skraba@izs.si</u>; 'wz@piib.org.pl'; Thomas Noebel (<u>Noebel@bingk.de</u>); Mair Eva; Leder Daphne; 'kolbe@kolbe.at' (<u>kolbe@kolbe.at</u>); Joachimsthaler Renate; <u>righetti@fondazionecni.it</u>;

Ehrnhöfer Felix

Betreff: ECEC dates: CTP workshop and Executive Board Meetings

Wichtigkeit: Hoch

Dear members of the ECEC Executive Board!

As all EB members have confirmed the 27 October 2016 as a possible date for the final CTP workshop / conference I have confirmed that with the European Commission.

As the originally planned EB meeting on 19 September was connected with the old Workshop date it will - in agreement of President and SG - be cancelled.

So the next ECEC EB meetings shall take place

- on Thursday, 28 July 2016, 12.00 in Vienna (as agreed in the last EB meeting on 29 June 2016 at this meeting there will also be a discussion of the revision of the draft ECEC proposal) and
- on Friday, 14 October 2016 in Budapest

Please don't hesitate to contact us for any questions.

Best regards, Cornelia Hammerschlag

European Council of Engineers Chambers (ECEC) 1040 Wien, Karlsgasse 9/2

Tel.: +43 (0) 1 505 58 07 - 51

Fax: +43 (0) 1 505 32 11 mailto: office@ecec.net

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ΕΚΘΕΣΗ

ΠΑΠΑΓΙΑΝΝΙΔΗ ΔΗΜΗΤΡΗ ΚΑΙ ΧΑΤΖΗΔΑΚΗ ΑΡΙΣΤΟΔΗΜΟΥ

ΓΙΑ ΤΗ ΣΥΜΜΕΤΟΧΗ ΤΟΥΣ στην ημερίδα / Workshop- Conference) του ΕCEC (European Council of Engineers Chambers –Ευρωπαϊκό Συμβούλιο Επιμελητηρίων Μηχανικών με θέμα: Κοινές Αρχές Εκπαίδευσης για Μηχανικούς, στις 27 Οκτωβρίου 2016 και στην συνάντηση ανασκόπησης των συμπερασμάτων των συμπληρωθέντων ερωτηματολογίων των συμμετεχόντων, στις 28 Οκτωβρίου 2016 με εγκεκριμένες ημέρες ταξιδίου από 26/10 έως 29/10 (τέσσερις ημέρες).

Στα πλαίσια του Προγράμματος της Ευρωπαϊκής Επιτροπής: «Κοινές αρχές Εκπαίδευσης για τους μηχανικούς» ΣΤΗΝ ΒΙΕΝΝΗ ΑΥΣΤΡΙΑΣ

Προς:

ΤΕΧΝΙΚΟ ΕΠΙΜΕΛΗΤΗΡΙΟ ΕΛΛΑΔΑΣ

Διεύθυνση ΔΙΕΘΝΩΝ ΣΧΕΣΕΩΝ Κ ΘΕΜΑΤΩΝ ΕΥΡΩΠΑΙΚΗΣ ΕΝΩΣΗΣ

κα Αναγνωστάκη Λ.

κ. Ζαμπατή Γ.

Σε συνέχεια της μετάβασής μας στην Βιέννη στις 26 Οκτωβρίου 2016 έως τις 29 Οκτωβρίου 2016, με εγκεκριμένες ημέρες ταξιδίου από 26/10 έως 29/10/2016 (τρεις ημέρες) σας υποβάλλω την ΕΚΘΕΣΗ με τα κάτωθι συνημμένα:

- 1. ECEC 1 2016 ECEC Agenda_WS2710 Final Stakeholder Conference on CTP for ENG. 27-10-16 συνημ. 1
- 2. ECEC 2 2016 ΠΑΠΑΓΙΑΝΝΙΔΗΣ ΔΗΜΗΤΡΗΣ ECEC CTP BIENNH 27-10-2016, Sent 31-08-16 συνημ. 2
- 3. ECEC 3 ECEC Draft_CTP_Proposal_15_September_2016 συνημ. 3
- 4. ECEC 4 ECEC_CTP_Survey-Report_Draft_15_September_2016 160 pages συνημ. 4
- 5. ECEC 5 ECEC_CTP_FINAL-REPORT-21Dec συνημ. 5

Προς:

ΤΕΧΝΙΚΟ ΕΠΙΜΕΛΗΤΗΡΙΟ ΕΛΛΑΔΑΣ

- 1. ΔΙΟΙΚΟΥΣΑ ΕΠΙΤΡΟΠΗ ΤΕΕ
- 2. Διεύθυνση ΔΙΕΘΝΩΝ ΣΧΕΣΕΩΝ Κ ΘΕΜΑΤΩΝ ΕΥΡΩΠΑΙΚΗΣ ΕΝΩΣΗΣ

κα Αναγνωστάκη Λ.

κ. Ζαμπατή Γ.

ΕΚΘΕΣΗ

ΠΑΠΑΓΙΑΝΝΙΔΗ ΔΗΜΗΤΡΗ ΚΑΙ ΧΑΤΖΗΔΑΚΗ ΑΡΙΣΤΟΔΗΜΟΥ

ΓΙΑ ΤΗΝ ΣΥΜΜΕΤΟΧΗ ΤΟΥΣ ΣΤΟ ΤΕΛΙΚΟ "CTP workshop /
CONFERENCE του ECEC (European Council of Engineers Chambers –
Ευρωπαϊκό Συμβούλιο Επιμελητηρίων Μηχανικών

ΣΤΗΝ ΒΙΕΝΝΗ ΑΥΣΤΡΙΑΣ

Ο Δημήτρης Παπαγιαννίδης, Μέλος της Αντιπροσωπείας ΤΕΕ και ο Αριστόδημος Χατζηδάκης, εκλεγμένος Πρόεδρος του ΕССΕ (Ευρωπαϊκό Συμβούλιο Πολιτικών Μηχανικών) συμμετείχαν στο τελικό "CTP workshop / CONFERENCE του ECEC (European Council of Engineers Chambers – Ευρωπαϊκό Συμβούλιο Επιμελητηρίων Μηχανικών στη ΒΙΕΝΝΗ στις 27 και 28 Οκτωβρίου 2016 με θέμα: ΚΟΙΝΕΣ ΑΡΧΕΣ ΕΚΠΑΙΔΕΥΣΗΣ ΓΙΑ ΜΗΧΑΝΙΚΟΥΣ με εγκεκριμένες ημέρες ταξιδίου από 26/10 έως 29/10 (τέσσερις ημέρες).

Ο ECEC είναι η οργάνωση ομπρέλα των Ευρωπαϊκών Επιμελητηρίων Μηχανικών. Αντιπροσωπεύει το επαγγελματικό συμφέρον των

διπλωματούχων μηχανικών στο ευρωπαϊκό επίπεδο. Τα εθνικά Επιμελητήρια μέλη του ή άλλοι νόμιμα ιδρυμένοι σύλλογοι ή ενώσεις αντιπροσωπεύουν τους διπλωματούχους μηχανικούς. Αυτήν την περίοδο το ΕСΕС αντιπροσωπεύει 16 Επιμελητήρια και πάνω από 300.000 υψηλά καταρτισμένους ευρωπαίους διπλωματούχους μηχανικούς που είναι μέλη σε αυτά τα Επιμελητήρια.

Σκοπός του ECEC είναι ο συντονισμός των δράσεων των μελών του για την ανάληψη πρωτοβουλιών σε Εθνικό και Ευρωπαϊκό επίπεδο και την προώθηση των θέσεων των διπλωματούχων μηχανικών στα όργανα της Ευρωπαϊκής Ένωσης, σε ότι αφορά την εξασφάλιση της ποιότητας, της ασφάλειας και της αειφορίας στις Μελέτες και Κατασκευές, την ενδυνάμωση της διεθνούς κινητικότητας των Ευρωπαίων Διπλωματούχων Μηχανικών, την εκπαίδευση και την άσκηση του επαγγέλματος.

Στο τελικό "CTP workshop / CONFERENCE του ECEC –Ευρωπαϊκό Συμβούλιο Επιμελητηρίων Μηχανικών στην Βιέννη την Πέμπτη 27 Οκτωβρίου 2016 που πραγματοποιήθηκε στα γραφεία του Haus der Ingenieure, στην οδό Eschenbachgasse 9 / 2nd floor και στην συνάντηση ανασκόπησης των συμπερασμάτων των συμπληρωθέντων ερωτηματολογίων των συμμετεχόντων την επόμενη ημέρα Παρασκευή 28 Οκτωβρίου 2016, στον ίδιο τόπο συμμετείχαν οι κάτωθι:

Από το Διοικητικό Συμβούλιο του ΕCEC:

Crtomir Remec (President), Hansjörg Letzner (Vice-President), Dragoslav Sumarac (Vice-President), Gabor Szöllössy (Treasurer), Klaus Thürriedl, Branko Markovic (Serbian Chamber), Martina Rhigetti (Italian Chamber), Barbara Skraba-Flis (Slovenian Chamber) Cornelia Hammerschlag (ECEC Secretariat) και οι Dimitrios Papagiannidis και Aris Chatzidakis, representatives of Technical Chamber of Greece.

Participants Stakeholder

Conference 27.& 28. 10.2016

Total Participants: 61

Name	Organisation	Country
Irene LINKE Mag.	Bundesministerium für Wissenschaft, Forschung und Wirtschaft	Austria
Ulrike LEDÓCHOWSKI Dr.	Fachverband Ingenieurbüros	Austria
Walter PAINSI DI	Fachverband Ingenieurbüros	Austria
Klaus THÜRRIEDL	ECEC Secretary General	Austria
Cornelia HAMMERSCHLAG	ECEC Project Manager	Austria
STEFANOVA Maria	Chamber of Engineers in the Investment Design KIIP/CEID	Bulgaria
Hedviga KLEPACKOVA	Czech Chamber of Chartered Engineers and Technicians	Czech Republic
Alois MATERNA	Czech Chamber of Chartered Engineers and Technicians	Czech Republic
Marketa HOLEČKOVA	Ministry of Education, Youth and Sports	Czech Republic
Claes HAGN-MEINCKE	Ministry of Higher Education and Research	Denmark
Anne-Marie JOLLY	Commission des titres d'ingénieur	France
Thomas NOEBEL	Bundesingenieurkammer	Germany
Ingolf KLUGE	Bundesingenieurkammer	Germany
Thomas KIEFER Dr.	Verein Deutscher Ingenieure e.V.	Germany
Dimitrios PAPAGIANNIDIS	Technical Chamber of Greece	Greece
Aristodimos CHATZIDAKIS	Technical Chamber of Greece	Greece
Gábor SZŐLLŐSSY	Hungarian Chamber of Engineers	Hungary
Damien OWENS	Engineers Ireland	Ireland
Ailish TIERNEY	Engineers Ireland	Ireland
Hansjörg LETZNER	Consiglio Nazionale degli Ingegnieri	Italy
RIGHETTI Martina	Consiglio Nazionale degli Ingegnieri	Italy
Inese STŪRE	The Ministry of Education and Science of the Republic of Latvia	Latvia
Helena ENDRIKSONE	Latvian Association of Civil Engineers	Latvia

Sandra KVARACIEJIENE	Ministry of Economy of Lithuania	Lithuania
Robertas ECR???	SPSE	Lithuania
Alex TORPIANO Prof.	Perriti Warranting Board	Malta
Anthony CACHIA	Engineering Board Malta	Malta
Zygmunt MEYER	Polish Chamber of Civil	Poland
, 5	Engineers	
Gianina CHIRAZI	Ministry of national	Romania
	Education and scientific	
	research	
Jan HARDOS	Chamber of Surveyors and	Slovakia
	Cartographers	
Michal MINÁR Ing. PhD.	Slovak Chamber of Civil	Slovakia
C	Engineers	
Linda ZATKALIKOVA Mgr.	Slovak Chamber of Civil	Slovakia
5	Engineers	
FODOROVÁ Alena	Ministry of education SR	Slovakia
ZVONÁROVÁ Dominika	Ministry of education SR	Slovakia
Crtomir REMEC Mag.	Slovenian Chamber of	Slovenia
5	Engineers	
Barbara SKRABA FLIS Mag.	Slovenian Chamber of	Slovenia
	Engineers	
Matjaz GRILC	Slovenian Chamber of	Slovenia
•	Engineers	
Pablo LINDE PUELLES	Colegio de Ingenieros de	Spain
	Caminos, Canales y Puertos	
Gerardo ARROYO HERRANZ	Consejo General de	Spain
	graduados en Ingeniería	
	rama industrial e Ingenieros	
	Técnicos Industriales de	
	Espana	
Juan BLANCO LINO	Consejo Ingenieros	Spain
	Industriales	
Ana Belen BELLO PATRICIO	National Chamber of	Spain
	Geodetic Engineers	
José Francisco SÁEZ RUBIO	Colegio de Ingenieros de	Spain
	Caminos, Canales y Puertos	
Natalia ÖSTERMAN	National Agency for Higher	Sweden
	Education	
Miska TARMA	National Agency for Higher	Sweden
	Education	
Frédéric BERTHOUD	State Secretariat for	Switzerland
	Education, Research and	
	Innovation	
RÜGGLI Hans Peter	Konferenz der Höheren	Switzerland
	Fachschulen Technik KHF-T	
	Switzerland	
John PRICHARD	Engineering Council	UK
Dave CLARK Dr.	Engineering Council	UK
Katy TURFF	Engineering Council	UK

Susan CLEMENTS	Institution of Civil Engineers	UK
Eva MAIR	ECEC Project Team	
Daphne LEDER	ECEC Project Team	
Bernard REMAUD Prof. Dr.	European Network for	
	Accreditation of Engineering	
	Education	
Iolanda SAVIUC	Fédération Européenne	
	d'Associations Nationales	
	d'Ingénieurs	
Dirk BOCHAR	Fédération Européenne	
	d'Associations Nationales	
	d'Ingénieurs	
Alejandro MARIN ARCAS	Council of Association of	
	long cycle Engineers of a	
	University or higher school	
	of Engineering of the	
	European Union	
Jean-Yves PIRLOT	Comité de Liaison des	
	Géomètres Européens	
José Manuel PEREIRA VIEIRA	Fédération Européenne	
	d'Associations Nationales	
	d'Ingénieurs	
NATCHEV Dimitar	European Council of Civil	
	Engineers	
Manfred KOJAN	ECEC Project	
	Team/Moderation	
Sophie WEISSWANGE	European Commission	European Commission

Πρόγραμμα Ευρωπαϊκής Επιτροπής: Κοινές Αρχές Εκπαίδευσης για τους μηχανικούς: Εκτεταμένη περίληψη της ημερίδας /Workshop Ιστορικό

Η οδηγία 2005/36 για την αναγνώριση των επαγγελματικών προσόντων, που τροποποιήθηκε από την οδηγία 2013/55 ΕΚ, καθιέρωσε το γενικό σύστημα των προσόντων αναγνώρισης για τον Ευρωπαϊκό Οικονομικό Χώρο - ΕΟΧ (ΕΕ + Νορβηγία, Ελβετία και Λιχτενστάιν) και παρείχε τη δυνατότητα για ένα αυτόματο σχέδιο αναγνώρισης βάσει των Κοινών Αρχών Εκπαίδευσης. Το «Κοινό Πλαίσιο Εκπαίδευσης» είναι ένα κοινό σύνολο ελάχιστου γνώσης, δεξιοτήτων και ικανοτήτων απαραίτητου για την άσκηση ενός συγκεκριμένου επαγγέλματος. Για τους σκοπούς της πρόσβασης στο επάγγελμα, τα Κράτη Μέλη θα χορηγήσουν τα επαγγελματικά προσόντα που απαιτούνται στη χώρα προέλευσης μέσω αυτού του κοινού πλαισίου με την ίδια ικανότητα με οποιουσδήποτε εθνικούς επαγγελματίες, υπό τον όρο ότι τέτοιο πλαίσιο καλύπτει τις ακόλουθες απαιτήσεις:

- 1. Επιτρέπει μια μεγαλύτερη κινητικότητα μεταξύ των επαγγελματιών των κρατών μελών,
- 2. Ότι το επάγγελμα που ρυθμίζεται από το Κοινό Πλαίσιο Κατάρτισης ή η εκπαίδευση και η κατάρτιση που οδηγούν στη πρόσβαση στο επάγγελμα είναι ρυθμισμένο τουλάχιστον στο ένα τρίτο των Κρατών Μελών.
- 3. Το κοινό σύνολο γνώσης, δεξιοτήτων και ειδικοτήτων συνδυάζει τη γνώση, τις δεξιότητες και τις ειδικότητες που απαιτούνται στην εκπαίδευση και στα συστήματα κατάρτισης, εφαρμόζεται τουλάχιστον στο ένα τρίτο των κρατών μελών,
- 4. Είναι βασισμένες στα επίπεδα EQF-,
- 5. Έχει προετοιμαστεί μετά από μια διαφανή διαδικασία, και ιδιαίτερα με τους σχετικούς συμμέτοχους/ ενδιαφερόμενους, στα κράτη μέλη όπου το επάγγελμα δεν είναι ρυθμισμένο
- 6. Ότι το Κοινό Πλαίσιο εκπαίδευσης επιτρέπει στους υπηκόους οποιουδήποτε κράτους μέλους να είναι επιλέξιμοι για να λάβουν το προσήκον επαγγελματικό επίπεδο από αυτό το κοινό πλαίσιο χωρίς

άλλη απαίτηση πλην από την ιδιότητα μέλους μιας επαγγελματικής οργάνωσης ή την καταχώρηση σε αυτήν την οργάνωση

Η Ευρωπαϊκή Επιτροπή εξουσιοδοτήθηκε να διερευνήσει την δυνατότητα να θεσπίσει «Κοινό Πλαίσιο Εκπαίδευσης» για κάθε ένα επάγγελμα. Εν προκειμένω, η Ευρωπαϊκή Επιτροπή ζήτησε από το Ευρωπαϊκό Συμβούλιο των Επιμελητηρίων Μηχανικών (ECEC), να πραγματοποιήσει μια μελέτη και να εκπονήσει μια πρόταση, για την εφαρμογή του Κοινού Πλαισίου Εκπαίδευσης για την επιστήμη του μηχανικού, το οποίο τελικά περιορίσθηκε στο επάγγελμα του Πολιτικού Μηχανικού.

Οι κ.κ. Παπαγιαννίδης Δημήτρης Μέλος της Αντιπροσωπείας ΤΕΕ και Χατζιδάκης Αριστόδημος εκλεγμένος Πρόεδρος του Ευρωπαϊκού Συμβουλίου Πολιτικών Μηχανικών (ECCE), προσκλήθηκαν να παρευρεθούν σε αυτή τη δεύτερη ημερίδα /workshop, από το Ευρωπαϊκό Συμβουλίου των Επιμελητηρίων Μηχανικών (ECEC) για να παρουσιάσουν τις απόψεις της Ελλάδας για την πρόταση της Ειδικής Ομάδας των εμπειρογνωμόνων του ECEC. Η Ελληνική Αντιπροσωπεία έλαβε μέρος στην ανταλλαγή απόψεων και ισχυρισμών στα ζητήματα που είναι πλέον αμφισβητούμενα ή με τις πλέον αντικρουόμενες θέσεις μεταξύ των διαφορετικών εκπροσώπων ώστε να διαμορφωθεί μία κοινή τελική συμβιβαστική πρόταση.

Η τελική πρόταση του ECEC για την εφαρμογή του Κοινού Πλαισίου Εκπαίδευσης θα περιληφθεί μαζί με τη μελέτη του επαγγελματικού πλαισίου των μηχανικών στα διάφορα μέλη και θα υποβληθεί στις χώρες της Ευρωπαϊκής Επιτροπής. Αυτό το Κοινό Πλαίσιο Κατάρτισης αφορά την αποδοχή της ουσιαστικής ισοδυναμίας των διαφορετικών ακαδημαϊκών προσόντων για την άσκηση του επαγγέλματος Πολιτικού Μηχανικού με πλήρη δικαιώματα σε οποιοδήποτε χώρα οικοδεσπότη σε όλη τον Ευρωπαϊκό Οικονομικό Χώρο (Ευρωπαϊκή Ένωση, + Ελβετία, Νορβηγία και Λιχτενστάιν).

Ημερίδα Κοινές Αρχές Εκπαίδευσης για τους μηχανικούς 27-10-2016

Μετά από συζήτηση, εκτεταμένη ανταλλαγή απόψεων, συμπληρώθηκαν από τους εθνικούς και κλαδικούς εκπροσώπους επιτόπου τα ανηρτημένα ερωτηματολόγια. Εν συνεχεία, όλοι οι υπεύθυνοι εισηγητές παρουσίασαν τα συμπεράσματά τους στο ακροατήριο. Αναλυτικά πραγματοποιήθηκαν παρουσιάσεις από:

- 1. Τον Γεν. Γραμματέα κ. Thürriedl,
- 2. Την κα Hammerschlag εκ μέρους της Γραμματείας του ECEC,
- 3. Την κα Sophie WEISSWANGE εκ μέρους της Ευρωπαικής Επιτροπής /European Commission
- 4. **Την κα Katy Turff,** Engineering Council UK για το **Group I**: Individual assessment of knowledge, skills and competences versus automatic recognition?
- Tov κ. Jose Francisco Saez Rubio, CICCP Spain για το Group II:
 Two level system based on a common scope of authorization
- 6. Barbara Skraba-Flis, Chamber of Engineers of Slovenia Group III: Compensation of academic training, University degree "or equivalent" (option contained in Article 49 to 2. c of Directive 2005/36 / EC is irrelevant whether the knowledge, skills and competences have been acquired as part of a college course or as part of a vocational course).
- 7. Tov k. Bernard Remaud, ENAEE Group: IV. ECTS/EQF and the application of EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences
- 8. Την κα Natalia Osterman, Swedish Council for Higher Education / Coordinator PQD Nacional Group V: Assessment and certification in the home country and questions in regard to the movement between regulated/non-regulated (profession) countries
- 9. Hansjorg Letzner, CNI Italia Group VI: Additional requirements

Μόλις ολοκληρώθηκαν οι παρουσιάσεις, η ομάδα του προγράμματος εξέθεσε το χρονοδιάγραμμα υλοποίησης μέχρι την τελική παράδοσή στην Ευρωπαϊκή Επιτροπή. Αναθεώρησε το Πρόγραμμα Ευρωπαϊκής Επιτροπής: Κοινές Αρχές Εκπαίδευσης για τους μηχανικούς με τα περιεχόμενα αυτής της ημερίδας και ανέλαβε την υποχρέωση διανομής στους συμμετέχοντες της τελικής πρότασης μαζί με την επαγγελματική πρότυπη μελέτη άσκησης του επαγγέλματος του μηχανικού στο τέλος του 2016.

Συμπεράσματα, Μελλοντικές δράσεις. Συνάντηση 28-10-2016

Το συμπέρασμα της ημερίδας με θέμα: ΚΟΙΝΕΣ ΑΡΧΕΣ ΕΚΠΑΙΔΕΥΣΗΣ ΓΙΑ ΜΗΧΑΝΙΚΟΥΣ αφορά ένα κοινό σύνολο ελάχιστου γνώσης, δεξιοτήτων και ικανοτήτων, απαραίτητου για την άσκηση ενός συγκεκριμένου επαγγέλματος. Ισοδυναμεί με την αποδοχή της ουσιαστικής ισοδυναμίας των διαφορετικών ακαδημαϊκών προσόντων για την άσκηση του επαγγέλματος Πολιτικού Μηχανικού με πλήρη δικαιώματα σε οποιοδήποτε χώρα οικοδεσπότη σε όλη τον Ευρωπαϊκό Οικονομικό Χώρο (Ευρωπαϊκή Ένωση, + Ελβετία, Νορβηγία και Λιχτενστάιν).

Για τους σκοπούς της πρόσβασης στο επάγγελμα, τα Κράτη Μέλη θα χορηγήσουν τα επαγγελματικά προσόντα που απαιτούνται στη χώρα προέλευσης μέσω αυτού του κοινού πλαισίου με την ίδια ικανότητα με οποιουσδήποτε εθνικούς επαγγελματίες, υπό τον όρο ότι τέτοιο πλαίσιο καλύπτει συγκεκριμένες απαιτήσεις όπως αναλύθηκαν στην ημερίδα.

Ο προγραμματισμός της μελλοντικής δράσης

Η αποδοχή της συντριπτικής πλειοψηφίας των προτάσεων της Ελληνικής Αντιπροσωπείας (και της ECCE) σχετικά με το πεδίο της δραστηριότητας των μηχανικών βασισμένων σε ένα κοινό σύνολο ελάχιστου γνώσης, δεξιοτήτων και ικανοτήτων.

Αυτό μπορεί να τεκμηριωθεί στις ακόλουθες συγκεκριμένες προτάσεις:

- 1. Η υποβολή μιας νέας πρότασης ανά συγκεκριμένη ειδικότητα πολιτικού μηχανικού για παραγωγή πιστοποιημένου έργου που θα υλοποιηθεί με την συνεισφορά της ό τις συνεισφορές της Επιτροπής on International and Education CICCP.
- 2. Η δημιουργία μιας έρευνας που θα αναληφθεί από όλα τα μέλη ΕССΕ για να προσδιορίσει το αντίστοιχο είδος των απαιτούμενων εγκρίσεων σε κάθε μια από τις χώρες του Ευρωπαϊκού Οικονομικού Χώρου.
- 3. Η δημιουργία μιας πρότασης όπου θα εξεταστεί με μεγαλύτερη λεπτομέρεια, ο καθορισμός των προϋποθέσεων για την βελτίωση του περιορισμένου πεδίου άσκησης επαγγελματικών δραστηριοτήτων που οφείλεται σε πιθανή έλλειψη γνώσεων, μέσω της εμπειρίας.

Αυτές οι προτάσεις πρέπει να συζητηθούν σε μία διημερίδα που θα πραγματοποιηθεί στις αρχές του 2017.

Όλα τα ανωτέρω που αφορούν την άσκηση του επαγγέλματος Πολιτικού Μηχανικού, με πλήρη δικαιώματα σε οποιοδήποτε χώρα οικοδεσπότη σε όλη τον Ευρωπαϊκό Οικονομικό Χώρο αποτελούν μια συνεπή υπεράσπιση των συλλογικών συμφερόντων από την θεσμική του ηγεσία.

Στο τέλος του Δεκεμβρίου 2016 υποβλήθηκαν από το ECEC τα συμπεράσματα του Workshop όπου διαπιστώνεται ότι δεν υπήρξε κοινή άποψη όλων των παρισταμένων σε βασικά ζητήματα άρα δεν διατυπώθηκαν συμπεράσματα.

Η πρόταση του ΕCEC για συνέχιση της διαδικασίας περιλαμβάνει δύο σκέλη:

Ένα βραχυπρόθεσμο όπου μια μικρή ομάδα χωρών που φάνηκε να συμφωνούν σε αρκετά θέματα θα δοκιμάσει να διατυπώσει κοινή πρόταση στα πρότυπα των ρυθμίσεων που ισχύουν για τους αρχιτέκτονες, δηλαδή με απαρίθμηση των βασικών ελαχίστων γνώσεων που πρέπει να κατέχουν οι πολιτικοί μηχανικοί και

Ένα πιο μακροπρόθεσμο όπου μια ομάδα ειδικών από όλες τις χώρες θα προσπαθήσει να συμφωνήσει σε κοινούς ορισμούς και βασικών εννοιών και να ομογενοποιήσει τις διαφωνίες.

Το κείμενο του ΕCEC επισυνάπτεται.

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Revised draft proposal - Common Training Principles for Civil Engineers - based on results of stakeholder workshop on 30 June 2016

1. Minimum Requirements of a Common Training Framework for Civil Engineers (= for automatic recognition of Civil Engineers)

Level 1: European Chartered Civil Engineer Master level (EQF descriptors see Annex I)

- University Master degree (EQF Level 7) or equivalent in the field of Civil Engineering
- 300 ECTS with a minimum of 70% technical ECTS (mathematics, natural science, technology, informatics)
- 2 years of post-graduate professional experience or professional examination (in the home country)
- For applicants from member states in which the profession is regulated: Certification of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering by the competent authority this only refers to professional requirements (e.g. education, practice, exam) and not to additional administrational requirements such as membership/registration in a professional organisation).

For applicants from member states in which the profession is not regulated: Confirmation from the competent authority (see 2.) that the applicant has the right to provide services on the field of Civil Engineering in the home country.

Level 2: European Chartered Civil Engineer Bachelor level (EQF descriptors see Annex I)

- University Bachelor degree (EQF Level 6) or equivalent in the field of Civil Engineering
- Minimum 180 ECTS with a minimum of 70% technical ECTS (mathematics, natural science, technology, informatics)
- 2 years of post-graduate professional experience or professional examination (in the home country)
- For applicants from member states in which the profession is regulated: Certification of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering; by the competent authority this only refers to professional requirements (e.g. education, practice, exam) and not to additional administrational requirements such as membership/registration in a professional organisation).

For applicants from member states in which the profession is not regulated: Confirmation from the competent authority (see 2.) that the applicant has the right in his to provide services on the field of Civil Engineering in the home country.





2. Responsibilities in regard to the verification of fulfilment of the minimum requirements of a CTF for Civil Engineers by the applicant

A competent authority in the home member country establishes a certificate (to be further defined) stating that the applicant fulfils the requirements of the Common Training Framework for European Civil Engineer MSc or European Civil Engineer BSc and that the applicant is not subject of an occupational ban or disciplinary procedure in the home country.

For this assessment – which is the responsibility of the home member country – the EUR-ACE® Framework Standards and Guidelines (EAFSG) by the European Network for accreditation of Engineering Education (see Annex II) are regarded as common orientation basis for the general programme output requirements of engineering education programmes.

PLEASE NOTE: The European Commission is currently still checking in which form the EAFSG can be taken over for a CTF in order to ensure easy procedures for later amendments/updates

The Project Expert Team believes that the assessment for the CTF certificate can also be done in non-regulated countries (e.g. by national coordinators, authorised professional organisations etc.) without causing considerable additional administrative costs/efforts.

3. Procedure in case of special regional requirements in the host country

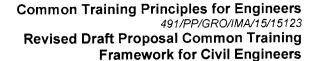
Special regional demands (e.g. seismic engineering) can be listed by participating countries. In these cases applicants either have to prove – by presenting curriculum/CPD certificate – that this aspect has been sufficiently covered by his/her academic education/by former CPD measures or he/she has to attend a CPD measure within a certain time period. If a CPD requirement is listed, an adequate CPD measure has to be available. It has to be reasonable in regard to necessity and costs.

Until the fulfilment in regard to the listed special demand is recognized by the host country, the applicant will receive automatic recognition for all fields of Civil Engineering **except** the one for which the special demand is listed.

 Scope of authorization of European Civil Engineer Master level / European Civil Engineer Bachelor level in the host member country

The European Civil Engineer Master level/European Civil Engineer Bachelor level are authorized to provide the same services as the Civil Engineers of the same level in the host country.







This means that in a country where the Bachelor level is sufficient for full authorization both the European Civil Engineers Master level and the European Civil Engineers Bachelor level will have full authorization.

In a country where the Master level is required for full authorization as Civil Engineer only the European Civil Engineers Master level can get full authorization automatically. If other professions/professional forms/professional forms with limited authorizations are existing for Civil Engineers Bachelor level in this country the European Civil Engineers Bachelor level is automatically authorized for these professions/professional forms.

European Civil Engineers Bachelor level also have the possibility **not** to apply for recognition based on the Common Training Framework for Engineers, but based on the general system of recognition according to the Professional Qualifications Directive (= individual assessment of equivalence by the host country/compensation measures if necessary) in order to get full authorization as Civil Engineer in the host country.

Recognition based on the general system according to the Professional Qualifications Directive (= individual assessment of equivalence by the host country/compensation measures if necessary) will of course still be possible for all professionals that do not fulfil the requirements of the Common Training Framework for Civil Engineers.

5. Considerations of the Project Expert Team

First draft proposal (old):

Based on the findings of the survey on Common Training Principles the Project Expert Team has produced a first preliminary draft to be presented at the stakeholder workshop on 30 June 2016 (see Annex III).

The preference of a CTF – instead of a CTT - approach was already clear from the survey results as the authorities as well as the engineering organisations have expressed this with a high majority. Also the Project Expert Team stressed that this approach provides the possibility of an agreement on a very basic level without the necessity of going into curricula details, is a low cost approach and can be implemented fast and easily. In contrast do this, the Common Training Test approach would require an in-depth comparison of curricula and the authorization of institutions to hold the tests. It would lead to lengthy procedures with high administrative costs and coordination efforts and without the certainty that an agreement will ever be reached.

For the Project Expert Team it soon became clear that not only the CTT approach but all solutions based on the comparison of curricula details are problematic. There are so many different





Common Training Principles for Engineers 491/PP/GRO/IMA/15/15123

Revised Draft Proposal Common Training Framework for Civil Engineers

engineering courses and programmes existing that the work of comparing them in detail would be an enormous effort. Additionally, it would be very unrealistic to find a common understanding soon.

For the Project Expert Team it also was important to find an approach that is **not** based on an individual assessment of qualification by the host country as such an approach would provide almost no added value to the general system of professional recognition currently in force for engineers.

As the survey showed that a majority of regulated countries have different levels of the professions the Project Expert Team decided to present an approach with different levels. This was also a way of covering more of the national requirements that — as the survey once again confirmed — differ considerably in different countries/for different professional levels.

The content of the requirements of the first draft proposal derived from some basic common results of the survey:

- A majority of three quarters requires the EQF levels 6 or 7 as academic education requirements for access to the profession;
- a majority requires 4 or 5 years of academic education, one quarter 3 years;
- a majority requires professional experience for access to the profession/use of the professional title or alternatively/additionally a professional examination

The first proposal was based on these clear communalities. With the level approach, it was possible to get a solution that is largely in compliance with the national requirements in a high number of countries without scarifying high level requirements.

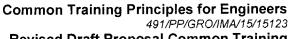
Second draft proposal (current status):

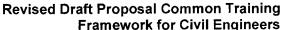
The project team has now taken into consideration all comments and points of criticism that were discussed/brought up by the participants of the stakeholder workshop on 30 June 2016.

Main topics of discussion/criticism:

- Level system: The three level system was seen critically by many participants. There was strong opposition against including the level" technician". By some participants the suggested names of Senior/Junior Engineers were regarded as inadequate. It was suggested to orient the levels towards the Bologna levels. By some participants the level system as such was seen as inadequate.
- Academic education requirement: The approach based mainly on academic education was seen critically by some participants. A majority of the participants expressed the priority of an academic education requirement.
- Some asked for a more output-orientated approach, some wanted individual assessment of
 applicants by the host country. The question if it should be possible to compensate academic
 education requirements was regarded and discussed very controversial by the participants.









- The requirements within the levels: Many participants pointed out that 300 ECTS in 4 years for Senior Engineers will have to be changed as this is not possible to achieve (300 in 5 years or 240 in 4 years). The use of (technical) ECTS was queried. A list of authorizations for the different levels was demanded. Some participants expressed the wish to implement additional requirements (e.g. special regional requirements) that would demand individual assessment of the host country.
- Other topics/questions: The wish for a malpractice check was expressed by a participant. Questions were raised in regard to the definition of Technical ECTS and in regard to practical procedures of recognition. The opinions were expressed that the proposal in this form can't be transferred to other professions/that for other professions at least details of the proposals would have to be changed. A participant raised the question what happens if the majority of countries does not agree on the proposed CTP approach. Some participants expressed that the current general system of recognition is preferable to automatic recognition as it does not lower the requirements in high-level countries and allows for individual assessment of the host country.

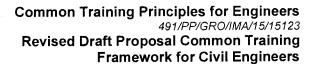
The Project Expert team has decided to present – as a first step – a proposal for a Common Training Framework for Civil Engineers only. Within the team there is a strong believe that the principal system of this proposal is easily transferable to other engineering professions even if it might require some individual amendments per profession. In order to make a common understanding easier and based on the fact that the interest in CTP for Civil Engineers was considerably higher than for other engineering professions it nevertheless decided to propose a draft for Civil Engineers only.

As it was a clear result of the workshop that the approach of a **Common Training Framework is indeed the preferred approach by the stakeholders,** there was no further discussion on the possibility of a Common Training Test.

The Project Expert Team has decided to stay with the level system in principle as a majority of participants agreed with it and as it is the one solution that is largely in compliance with the national requirements in many countries and considers the fact that a level system is in existence in a majority of the countries. However, based on the discussion results the level of "technician" has been deleted and the approach was more streamlined with the Bologna System: According to some of the suggestions in the workshop, the names of the levels were changed into "European Civil Engineer Master level" and "European Civil Engineer Bachelor level".

Defining a list of authorizations for the different levels was demanded by some workshop participants, but after some consideration the Project Expert Team came to the decision that due to the fact that the scope of authorization differs so much on national level such an universally applicable list can't be established. According to the general principle of the Professional Qualifications Directive the European Civil Engineer Master level/European Civil Engineer Bachelor level should be authorized to provide the same services as the Civil Engineers of the same level in the host country.







The Project Expert team has very intensively discussed the wish for a more output-oriented approach that was expressed by some participants whereas at the same time a minimum level of academic requirements was strongly supported by others. It finally came to the decision that a fully output-oriented approach with individual assessment of the host country is not acceptable for a Common Training Framework. It would not lead to automatic recognition – which is the aim of the CTF – and thus would bring more or less no added value compared to the system of general recognition currently in force.

Nevertheless, the Project Expert Team understood the necessity for defining the requirements not only in regard to input (degree of academic education), but also in regard to output. With the EUR-ACE Framework Standards and Guidelines (EAFSG) established by the European Network for accreditation of Engineering Education (see Annex II) a definition of required programme outcomes is already available and in use in many countries. Therefore, the Project Expert Team has decided to suggest the EAFSG as a guideline in regard to the assessment of the question if an applicant fulfills all necessary requirements of the Common Training Framework for Civil Engineers by the home country.

PLEASE NOTE: The European Commission is currently still checking in which form the EAFSG can be taken over for a CTF in order to ensure easy procedures for later amendments/updates

The Project Expert Team is of the opinion that by fulfilling an engineering education according to these standards plus the fulfilment of 2 years of professional practice (or professional examination in the home country after the degree) an applicant should be regarded as acceptable for automatic recognition.

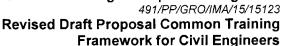
It also stresses again that – based on the principle of mutual trust – the responsibility of the assessment should be in the responsibility of the home country.

If countries see the need for further requirements based on special regional demands (e.g. seismic engineering) this can't be a prerequisite for automatic recognition based on the Common Training Framework for Civil Engineers. Nevertheless, the countries could be given the possibility to list such special regional demands and require that the applicant either shows — by presenting curriculum/ CPD certificate — that this aspect is already covered by his/her academic education/by former CPD measures or that he/she attends a CPD measure within a certain time period. If a CPD requirement is listed, an adequate CPD measure has to be available. It has to be reasonable in regard to necessity, and costs. Until the fulfilment in regard to the listed special demand is recognized by the host country, the applicant will receive automatic recognition for all fields of Civil Engineering except the one for which the special demand is listed.

The possibility of compensation of a lack of academic education was intensively discussed in the workshop and also within the Project Expert Team. It originally came to the decision that the general recognition system currently in force already provides sufficient possibility for compensation based on an individual assessment by the host country. Nevertheless, based on Article 49 a (c) of Directive









2005/36/EC saying that "...it shall be irrelevant whether knowledge, skills and competences have been acquired as part of a general training course at a university or higher education institution or as a part of a vocational training course" it had to follow the legal opinion of the European Commission and include the possibility to compensate a lack of academic education (Master /Bachelor degree "or equivalent").

Quality will be still be safeguarded by the following procedure:

After a CTF having been adopted by delegated act, Member States in a second step will notify to the Commission and to the other Member States the national qualifications, and where applicable the national professional titles, that comply with the adopted CTF (according to article 49 a paragraph 6(a)].

The Commission may then adopt an implementing act listing the national profession qualifications and national professional titles benefiting from automatic recognition under the CTF adopted. In this process, the Commission will work with a committee composed of Member States representatives (national coordinators) and will need to get its approval according to the examination procedure. So if qualifications should not be considered compliant with the CTF, the committee could ultimately refuse them.

If a country has the system of validation of learning outcomes that would allow people having acquired their qualifications through non-formal or informal learning (like France for example), this would still not be a qualification that a country could notify as such (unless the title would then be awarded but that would not be the case for France for example) and then general system of recognition would apply.

If a country would notify a vocational training qualification, then another Member State could ask for clarification during the adoption process as to its level.

In regard to the requirements within the levels the Project Expert Team has decided to stay with the definition of ECTS as they are very widely used already and to delete the requirement of a certain number of academic years. A very basic definition of technical ECTS was included in the requirement. A more detailed definition did not seem necessary to the Project Expert Team and could lead to unnecessary restrictions.

The Project Expert Team has taken up the idea of a malpractice check in the way that the CTF certificate (to be further defined) from the home country has to stake also that the applicant is not subject of an occupational ban or disciplinary procedure in the home country.

In order to prevent circumvention of national requirements the prerequisite of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering in the home country was added (similar to the existing automatic recognition system for architects).





ANNEX I to the CTP Proposal

The framework of qualifications for the European Higher Education Area

The Bergen Conference of European Ministers Responsible for Higher Education 19-20 May 2005 adopted the overarching framework for qualifications in the EHEA, comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the first and second cycles. Ministers committed themselves to elaborating national frameworks for qualifications compatible with the overarching framework for qualifications in the EHEA by 2010, and to having started work on this by 2007.

	Outcomes	ECTS Credits
First cycle qualification	Qualifications that signify completion of the first cycle are awarded to students who: • have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study; • can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study; • have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues; • can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; • have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.	Typically include 180-240 ECTS credits







Revised Draft Proposal Common Training Framework for Civil Engineers

Second avale	Qualifications that signify completion of the second suple	Typically
Second cycle	Qualifications that signify completion of the second cycle	include 90-
qualification	are awarded to students who:	120 ECTS
	have demonstrated knowledge and understanding that	credits, with a
	is founded upon and extends and/or enhances that	
	typically associated with the first cycle, and that	minimum of
	provides a basis or opportunity for originality in	60 credits at
	developing and/or applying ideas, often within a	the level of
	research context;	the 2nd cycle
	 can apply their knowledge and understanding, and 	
	problem solving abilities in new or unfamiliar	
	environments within broader (or multidisciplinary)	
	contexts related to their field of study;	
	 have the ability to integrate knowledge and handle 	
	complexity, and formulate judgments with incomplete	
	or limited information, but that include reflecting on	
	social and ethical responsibilities linked to the	
	application of their knowledge and judgments;	
	can communicate their conclusions, and the knowledge	
	and rationale underpinning these, to specialist and	
	nonspecialist audiences clearly and unambiguously;	
	have the learning skills to allow them to continue to	
	study in a manner that may be largely self-directed or	
Thind and	autonomous.	Not opposited
Third cycle	Qualifications that signify completion of the third cycle are	Not specified
qualification	awarded to students who:	
	have demonstrated a systematic understanding of a	
	field of study and mastery of the skills and methods of	
	research associated with that field;	
	 have demonstrated the ability to conceive, design, 	
	implement and adapt a substantial process of research	
	with scholarly integrity;	
	 have made a contribution through original research that 	
	extends the frontier of knowledge by developing a	
	substantial body of work, some of which merits	
	national or international refereed publication;	
	are capable of critical analysis, evaluation and synthesis	
	of new and complex ideas;	
	can communicate with their peers, the larger scholarly	
	community and with society in general about their	
	areas of expertise;	
	can be expected to be able to promote, within	
	academic and professional contexts, technological,	
	social or cultural advancement in a knowledge based	
	society.	





ANNEX II to the CTP Proposal

Excerpt EUR-ACE® Framework Standards and Guidelines (EAFSG) European Network for accreditation of Engineering Education: http://www.enaee.eu

2.3.1 Programme Outcomes for Bachelor Degree Programmes

Knowledge and Understanding

The learning process should enable Bachelor Degree graduates to demonstrate:

- knowledge and understanding of the mathematics and other basic sciences underlying their engineering specialisation, at a level necessary to achieve the other programme outcomes;
- knowledge and understanding of engineering disciplines underlying their specialisation, at a level necessary to achieve the other programme outcomes, including some awareness at their forefront;
- awareness of the wider multidisciplinary context of engineering.

Engineering Analysis

The learning process should enable Bachelor Degree graduates to demonstrate:

- ability to analyse complex engineering products, processes and systems in their field of study; to select and apply relevant methods from established analytical, computational and experimental methods; to correctly interpret the outcomes of such analyses;
- ability to identify, formulate and solve engineering problems in their field of study; to select and apply relevant methods from established analytical, computational and experimental methods; to recognise the importance of non-technical —societal, health and safety, environmental, economic and industrial - constraints.

Engineering Design

The learning process should enable Bachelor Degree graduates to demonstrate:

- ability to develop and design complex products (devices, artefacts, etc.), processes
 and systems in their field of study to meet established requirements, that can include
 an awareness of non-technical societal, health and safety, environmental,
 economic and industrial considerations; to select and apply relevant design
 methodologies;
- ability to design using some awareness of the forefront of their engineering specialisation.





Investigations

The learning process should enable Bachelor Degree graduates to demonstrate:

- ability to conduct searches of literature, to consult and to critically use scientific databases and other appropriate sources of information, to carry out simulation and analysis in order to pursue detailed investigations and research of technical issues in their field of study;
- ability to consult and apply codes of practice and safety regulations in their field of study;
- laboratory/workshop skills and ability to design and conduct experimental investigations, interpret data and draw conclusions in their field of study.

Engineering Practice

The learning process should enable Bachelor Degree graduates to demonstrate:

- understanding of applicable techniques and methods of analysis, design and investigation and of their limitations in their field of study;
- practical skills for solving complex problems, realising complex engineering designs and conducting investigations in their field of study;
- understanding of applicable materials, equipment and tools, engineering technologies and processes, and of their limitations in their field of study;
- ability to apply norms of engineering practice in their field of study;
- awareness of non-technical -societal, health and safety, environmental, economic and industrial - implications of engineering practice;
- awareness of economic, organisational and managerial issues (such as project management, risk and change management) in the industrial and business context.

Making Judgements

The learning process should enable Bachelor Degree graduates to demonstrate:

- ability to gather and interpret relevant data and handle complexity within their field of study, to inform judgements that include reflection on relevant social and ethical issues;
- ability to manage complex technical or professional activities or projects in their field of study, taking responsibility for decision making.

Communication and Team-working

The learning process should enable Bachelor Degree graduates to demonstrate:

- ability to communicate effectively information, ideas, problems and solutions with engineering community and society at large;
- ability to function effectively in a national and international context, as an individual and as a member of a team and to cooperate effectively with engineers and nonengineers.





Lifelong Learning

The learning process should enable Bachelor Degree graduates to demonstrate:

ability to recognise the need for and to engage in independent life-long learning;
 ability to follow developments in science and technology.

2.3.2 Programme Outcomes for Master Degree Programmes

Knowledge and Understanding

The learning process should enable Master Degree graduates to demonstrate:

- in-depth knowledge and understanding of mathematics and sciences underlying their engineering specialisation, at a level necessary to achieve the other programme outcomes;
- in-depth knowledge and understanding of engineering disciplines underlying their specialisation, at a level necessary to achieve the other programme outcomes;
- critical awareness of the forefront of their specialisation;
- critical awareness of the wider multidisciplinary context of engineering and of knowledge issues at the interface between different fields.

Engineering Analysis

The learning process should enable Master Degree graduates to demonstrate:

- ability to analyse new and complex engineering products, processes and systems
 within broader or multidisciplinary contexts; to select and apply the most
 appropriate and relevant methods from established analytical, computational and
 experimental methods or new and innovative methods; to critically interpret the
 outcomes of such analyses;
- ability to conceptualise engineering products, processes and systems;
- ability to identify, formulate and solve unfamiliar complex engineering problems that
 are incompletely defined, have competing specifications, may involve considerations
 from outside their field of study and non-technical societal, health and safety,
 environmental, economic and industrial constraints; to select and apply the most
 appropriate and relevant methods from established analytical, computational and
 experimental methods or new and innovative methods in problem solving;
- ability to identify, formulate and solve complex problems in new and emerging areas
 of their specialisation.

Engineering Design

The learning process should enable Master Degree graduates to demonstrate:

 ability to develop, to design new and complex products (devices, artefacts, etc.), processes and systems, with specifications incompletely defined and/or competing, that require integration of knowledge from different fields and non-technical societal, health and safety, environmental, economic and industrial commercial -





- constraints; to select and apply the most appropriate and relevant design methodologies or to use creativity to develop new and original design methodologies.
- ability to design using knowledge and understanding at the forefront of their engineering specialisation.

Investigations

The learning process should enable Master Degree graduates to demonstrate:

- ability to identify, locate and obtain required data;
- ability to conduct searches of literature, to consult and critically use databases and other sources of information, to carry out simulation in order to pursue detailed investigations and research of complex technical issues;
- ability to consult and apply codes of practice and safety regulations;
- advanced laboratory/workshop skills and ability to design and conduct experimental investigations, critically evaluate data and draw conclusions;
- ability to investigate the application of new and emerging technologies at the forefront of their engineering specialisation.

Engineering Practice

The learning process should enable Master Degree graduates to demonstrate:

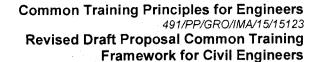
- comprehensive understanding of applicable techniques and methods of analysis, design and investigation and of their limitations;
- practical skills, including the use of computer tools, for solving complex problems, realising complex engineering design, designing and conducting complex investigations;
- comprehensive understanding of applicable materials, equipment and tools, engineering technologies and processes, and of their limitations;
- ability to apply norms of engineering practice;
- knowledge and understanding of the non-technical societal, health and safety, environmental, economic and industrial - implications of engineering practice;
- critical awareness of economic, organisational and managerial issues (such as project management, risk and change management)

Making Judgements

The learning process should enable Master Degree graduates to demonstrate:

- ability to integrate knowledge and handle complexity, to formulate judgements with incomplete or limited information, that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgement;
- ability to manage complex technical or professional activities or projects that can require new strategic approaches, taking responsibility for decision making.







Communication and Team-working

The learning process should enable Master Degree graduates to demonstrate:

- ability to use diverse methods to communicate clearly and unambiguously their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences in national and international contexts;
- ability to function effectively in national and international contexts, as a member or leader of a team, that may be composed of different disciplines and levels, and that may use virtual communication tools.

Lifelong Learning

The learning process should enable Master Degree graduates to demonstrate:

- ability to engage in independent life-long learning;
- ability to undertake further study autonomously.





ANNEX III to the CTP Proposal

First draft CTP for Engineers proposal presented and discussed at the stakeholder workshop on 30 June 2016 (old):

European Senior (Civil and Environmental) Engineer

4 years of academic education (EQF Level 7) in the field of Civil and Environmental Engineering 300 ECTS (minimum 70% technical ECTS) 2 years of post-graduate professional experience or professional examination (in the home country)

European Junior (Civil and Environmental) Engineer

3 years of academic education (EQF Level 6) in the field of Civil and Environmental Engineering Minimum 180 ECTS (minimum 70% technical ECTS-within defined basic set of subjects) or 240 (minimum 70% technical ECTS)
2 years of post-graduate professional experience or professional examination (in the home country)

European (Civil and Environmental) Technician

Technical education in the field of construction and environmental technologies (EQF Level 5)





Common Training Principles for Engineers

(491/PP/GRO/IMA/15/15123)

Final Project Report

Vienna, 21 December 2016

European Council of Engineers Chambers (ECEC)

ECEC Secretariat, office Vienna Karlsgasse 9/2, 1040 Wien/Vienna, Austria Tel: +43 1 5055807-51, E-mail: office@ecec.net

This project was undertaken on behalf of the European Union, DG GROW



Project Synopsis

Project Name:

Common Training Principles for Engineers

Project ref. no:

(491/PP/GRO/IMA/15/15123)

Contracting Authority:

EC, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Directorate modernising the internal market, Unit Professional qualifications and skills,

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Name of contact person (CA):

Mr. Joaquim Nunes de Almeida / Hubert Gambs

DG GROW.E

Contractor:

European Council of Engineers Chamber (ECEC),

Karlsgasse 9/2, 1040, Vienna

Name of contact person (Contractor):

Mr. Crtomir Remec, President ECEC

Project starting date:

April 2016

Project end date:

January 2016 (including prolongation phase)

Overall Project Objectives

The objective of the project was to allow actors in the field of professional qualifications (e.g. professional organisations and/or competent authorities from Member States) to present proposals for Common Training Principles for the engineering profession in view of having those further developed into a Common Training Framework or a Common Training Test. The proposals were developed on the basis of a mapping done in the Member States as well as after broad consultation with relevant stakeholders

Project Results

- Inventory of engineering education and profession in all EU Member States, Member States of the EEA and Switzerland: The mapping presents different national regulatory frameworks and their commonalities.
- Analysis of the positions of national and European professional organisations regarding Common Training Principles for Engineers: The mapping also presents the interest of stakeholders in working on a suggestion for Common Training Principles for Engineers
- Proposal of Common Training Principles for Engineers: The first draft proposal for a Common Training Framework for Civil Engineers was based on the results of the survey and the outcome of a stakeholder workshop on 30 June 2016; it was amended after a broad stakeholder consultation procedure and rediscussed in a final stakeholder workshop on 27 October 2016. As a common agreement was not reached, the project team drafted recommendations for further steps towards CTP for Engineers.



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1. Executive Summary

The European Commission (Directorate-General for Internal Market, Industry; Entrepreneurship and SMEs) has contracted ECEC to look into the developments of (a) proposal(s) for Common Training Principles for Engineers covering all EEA countries.

The objective of the project was to allow actors in the field of professional qualifications (e.g. professional organisations and / or competent authorities from members States for given professions) to present proposals for Common Training Principles for the engineering profession in view of having those further developed into a Common Training Framework or a Common Training Test.

The proposals were developed on the basis of a mapping done in the Member States and a broad consultation with relevant stakeholders. The focus was on the five professional groups of Civil and Environmental Engineers, Mechanical and Industrial Engineers, Electrotechnology Engineers, Mining Engineers and Geodetic Surveyors.

- An inventory of engineering education and profession in all EU Member States,
 Member States of the EEA and Switzerland has been conducted in May and June
 2016
- A first presentation of the results plus a stakeholder workshop with European stakeholders (competent authorities, national coordinators, and engineering organisations) on possible approaches to CTP for engineers has taken place on 30 June 2016 in Vienna.
- Based on the main findings of the survey a draft report on the regulatory situation of
 the five professional groups including a list of survey respondents, a list of contact
 persons per country, factsheets for each country and fact sheets for each profession
 and a draft proposal for a Common Training Framework for Civil Engineers were
 submitted to the European Commission together with a progress report.
- After agreement of the European Commission the drafts were sent out to all stakeholders for a broad consultation procedure. Based on the results an adapted proposal was presented at a stakeholder conference on 27 October 2016 in Vienna.

Final survey report, final project report and final recommendations are submitted to the European Commission in December 2016.



2. Project Activities

2.1 CTP Project Schedule – Milestones:

M 1	Project kick-off meeting (Brussels)	5 April 2016
M 2	Internal project team kick-off meeting (Vienna)	8 April 2016
M 3	Project Website went on-line	10 April 2016
M 4	Questionnaire/Survey test phase for resource team + partner organizations	14-22 April 2016
M 5	1st information wave about the project sent to European and national engineering organizations; start of survey test phase and validation of contact list of national competent authorities	15 April 2016
M 6	Transmission of inception report and final questionnaire to EC	2 May 2016
M 7	Questionnaire to European Engineering organizations	4 May 2016
M 8	Questionnaire to national competent authorities	4 May 2016
M 9	Forwarded questionnaire + national contact lists (for validation) to National Coordinators for PQD	4 May 2016
M 10	Meeting with partner organizations of CTP project (Brussels)	19 May 2016
M 11	Preparation of a preliminary draft proposal for CTP for Engineers based on the first viewing of the survey result as a discussion basis for the first stakeholder workshop	19 May – 30 June 2016
M 12	First stakeholder workshop (Vienna)	30 June 2016
M 13	Validation phase 1 of questionnaire answers	June - August 2016



Meeting with project team/Discussion of CTP draft proposal	28 July 2016
Progress report, survey report and draft proposal to EC	1 September 2016
Stakeholder consultation: Survey report (for corrections) and draft CTP proposal (for comments) to all project stakeholders	15/16 September 2016
Validation phase 2 of survey results	September – October 2016
Reminder - Survey report (for corrections) and draft CTP proposal (for comments) to all project stakeholders that had not replied	11 October 2016
Second stakeholder conference (Vienna)	27 October 2016
Last call for validation to all countries that have submitted answers to the survey	8 November 2016
Final validation phase of survey results; elaboration of a potential way forward	November – December 2016
Submission of final survey report, final project report and ECEC recommendations to the EC	21 December 2016
	Progress report, survey report and draft proposal to EC Stakeholder consultation: Survey report (for corrections) and draft CTP proposal (for comments) to all project stakeholders Validation phase 2 of survey results Reminder - Survey report (for corrections) and draft CTP proposal (for comments) to all project stakeholders that had not replied Second stakeholder conference (Vienna) Last call for validation to all countries that have submitted answers to the survey Final validation phase of survey results; elaboration of a potential way forward Submission of final survey report, final project report and ECEC

2.2 Project Activities in Detail:

Milestones 1 - 6

5 April - 2 May 2016

Project Kick-off Meeting - Brussels, 5th of April 2016

The project kick-off meeting took place in Brussels on the 5th of April 2016.

From the EC side participants were Mr Frohn, Ms Weisswange and Ms Ionescu, from ECEC side Mr Thürriedl, Mr Meyer and Ms Hammerschlag.

Basic details about the project were agreed (general approach, project sheets, dates)

Internal project-team kick-off meeting, 8 April 2016

In a kick-off meeting of the ECEC Resource Team on 8th of April 2016 in Vienna the definition of the typical scope of activities were defined for the five focus professional groups within the project. This was necessary, as the name of the professions and also their allocation to the ISCO differs very much in the different country. On the basis of this very basic definition of the professional activities the project team tried to get together comparable groups.



Communication

A project information leaflet for communication purposes has been prepared immediately after contracting the project (beginning of April)

This project information sheet gives short information about the background of the project, the concept of Common Training Principles, the objectives and the envisaged outcomes of the project as well as its methodology and the project team.

The project information site within the ECEC Website went on-line on 10 April 2016:

http://www.ecec.net/common-training-principles-for-engineers/news/

It was supporting the information flow during all phases of the project and gave continuously updated basic information on the project.

A first information wave with detailed project information and the request to test the questionnaire was sent to all ECEC member organisations and ECEC project partners (ECCE, EFCA, FEANI, CLGE, CEPLIS) on 15th of April 2016. It included the information leaflet, a PPP about the steps of the project, the ECEC offer, the draft questionnaires and an online test - link and all relevant mailing lists to check for mistakes in regard to their national competent authorities.

Development of survey design and questionnaires

As a core project activity the expert team has been defining an appropriate survey design and developing a questionnaire.

As agreed with the European Commission the survey was focused on 5 engineering professional groups:

- · Civil and Environmental Engineers
- Mechanical and Industrial Engineers
- Electro technology Engineers
- Mining Engineers
- Geodetic Surveyors

Questionnaire I: The questionnaire focused on aspects that are relevant for the development of Common Training Principles for Engineers and could be expected to show a certain degree of commonality in a significant number of member states. This was mainly based on the analysis of the regulated professions data base and other available information. Recipients of the questionnaires were the national competent authorities of the professions.

The draft questionnaire with an online test link has been sent out on 15 April 2016 to ECEC member organisations and ECEC project partners and was distributed by FEANI to the FEANI members with the request for feedback.



The project team received a lot of interest and feedback in regard to the mapping activity and over hundred partly very detailed comments on the questionnaire design from the testers (from Austria, Germany, Hungary, Italy, United Kingdom, FEANI).

As the project team regarded the optimized comprehensibility of the questionnaire as a very important factor for the comparability of the collected data the comments were very carefully evaluated and implemented in the final text where appropriate.

Questionnaire II: Additionally to the questionnaires on the national regulatory frameworks of the five professional groups a short questionnaire has been prepared for national and European engineering organisations (members of the ECEC project partners that very broadly cover the survey countries) in order to provide an early collection of their basic views on CTP for Engineers. It was sent out to them in addition to the above mentioned information.

The final drafts of both questionnaires have been submitted to the contracting authority on 2 May 2016.

Milestones 7 – 13

4 May - 30 June 2016

Online survey on national regulatory frameworks for engineering professions and online questionnaire on stakeholders' views on CTP for Engineers

The competent authorities for the focus professions in the EU and EEA Member States and Switzerland – as recipients of the questionnaires - were contacted with separate but identical questionnaires for each professional group on 4 May 2016.

Their contact data were gained from the regulated professions database and with the help of the ECEC member organisations. In order to secure that the competent authorities would receive the questionnaires also in cases where there are mistakes in the database (e.g. no entry in the database although a regulated profession is existing, wrong competent authority etc.) the national coordinators for the Professional Qualifications Directive were contacted as well and were informed about the recipients of the questionnaires in their country so that they could make corrections where necessary.

Involving the coordinators proved to be an important approach because many of them engaged themselves very much in the project. As the situation in regard to competence of authorities for the focus professions in quite a number of countries has turned out to be very complicated and even unclear, without the help of the coordinators it would not have been possible to get as much feedback as was received. Even for the coordinators this was often difficult to solve and especially the validation period showed that different authorities felt competent and often gave contradicting answers. Thus in several countries the coordinators took over the national coordination of answers to the survey and the clarification of competence uncertainties.



Additionally the national and European Engineering organisations (members of the ECEC project partners that very broadly cover the survey countries – about 100 recipients) were contacted with the small questionnaire that provided an early collection of their basic views on the principle of Common Training Principles for Engineers.

Both questionnaires were agreed with the European Commission before they were sent out to the recipients on 4 May 2016.

The initial deadline for answers of 22 May 2016 could not be met by a number of countries. This was partly due to the above mentioned problem of uncertainties in regard to the authority to answer for the professions.

A first overview of the draft results was presented at the stakeholder workshop on 30 June 2016, but also after that date further responses were received from several countries.

Start of first validation of survey results and preparation of Survey Report

In order to present a reliable and undisputable basis for the further development of Common Training Principles, the findings and conclusions of the survey needed to go through several steps of validation (quality control mechanism).

The first step was that experienced academic experts in the project team were checking the validity and plausibility of the collected information. In several cases of doubts or missing clarity consultations with national authorities and coordinators were necessary. On this basis of critically reviewed data the first drafts of survey report and preliminary CTP proposal were prepared.

The ECEC resource team in an internal discussion has contributed its critical expert feedback based on the wide experience of its members with the respective situation in Europe and the participating countries.

Based on the first viewing of results a preliminary draft proposal for CTP for Engineers was prepared as a discussion basis for the stakeholder workshop.

Preparation of a preliminary draft for a proposal for CTP for Engineers based on the first viewing of the survey result as a discussion basis for the first stakeholder workshop

In a project partner meeting on 19 May 2016 project partners were informed about the status of the survey and asked for support in regard to still missing information. Additionally possibilities for a draft CTP proposal based on the preliminary survey results were discussed. The preparation of such a discussion basis for the first stakeholder workshop on 30 June 2016 was ongoing until shortly before the workshop as data kept coming in much later than expected.



1st Stakeholder Workshop on Common Training Principles on 30 June 2016

On 30 June 2016 a stakeholder conference on Common Training Principles was held in Vienna. The preliminary survey results were presented to over 60 representatives from national engineering competent authorities, national and European engineering organisations and national coordinators for the PQD. The main elements and the critical aspects concerning a preliminary draft for a proposal for CTP for Engineers based on the preliminary survey results were presented by the project director and discussed in working groups. The results of these working group discussions built an important basis for the further elaboration of the proposal by the project team. (for details see **Annex I**)

Milestones 13 - 15

June - August 2016

Intensified validation

After the discussion in the stakeholder workshop all the received survey answers on the regulatory situation of the five professional groups were presented to – in the form of country fact sheets – and checked with the national competent bodies in each of the countries to assure highest possible accuracy of the documented information and acceptance of findings for all countries. As already mentioned during the validation period unclear competences proved to be a problem in several countries. Different authorities felt competent and often gave contradicting answers.

Therefore, the expert team decided to prolong the validation period in order to solve these problems and keep the possibility for corrections open until the end of the whole CTP for Engineers project.

Elaboration of draft expert proposal

According to the project design the main activities in this phase were the elaboration and discussion of the most suitable approach for CTP for the engineering professions. Based on the results of the discussion on 30 June 2016 the preliminary approach had to be adapted. A very intense discussion process took place within the expert team and finally led to the submission of a draft proposal for a Common Training Framework for Civil Engineers – based on the findings of the draft survey report and the results of the discussion in the stakeholder workshop – together with the draft survey report and the progress report to the European Commission on 1 September 2016.

Milestones 16 - 19

September – October 2016

Broad stakeholder discussion process

The draft survey report (for further validation/correction) and the draft proposal for a Common Training Framework for Civil Engineers (see <u>ANNEX III</u>) were – after agreement with the



European Commission - circulated among national competent authorities and other relevant stakeholders in all EEA 32 countries on 15 September 2016.

A Reminder to all project stakeholders that had not replied until then was send out on 11 October 2016.

A broad amount of partly very detailed and profound feedback on the CTP proposal was received (for details please see <u>ANNEX IV</u>) that already showed that in some detail the national positions were controversial.

2nd stakeholder conference on 27 October 2016

On the basis of the described stakeholder discussion process the draft CTP proposal was amended for the discussion and presented at the 2nd stakeholder conference on 27 October 2016 in Vienna (see <u>ANNEX V</u>) with over 60 participants from competent authorities and engineering organisations.

Due to the fact that the stakeholder consultation has brought to light a number of controversies, the project team has designed the workshop in a way that allowed collecting the views of participants on a broad number of relevant and controversial topics:

The discussion took place in 6 groups:

- Individual assessment of knowledge, skills and competences versus automatic recognition? Rapporteur: Katy Turff, Engineering Council UK
- Two level system based on a common scope of authorization? Rapporteur: Jose Saez Rubio, CICCP Spain
- Compensation of academic training (University degree "or equivalent")? Rapporteur: Barbara Skraba-Flis, Slovenian Chamber of Engineers
- ECTS/EQF and the application of EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences? Rapporteur: Bernard Remaud, ENAEE
- Assessment and certification in the home country and questions in regard to the movement between regulated/non-regulated (profession) countries? Rapporteur: Natalia Österman, Swedish Council for Higher Education / National Coordinator PQD
- Additional requirements? Rapporteur: Hansjörg Letzner, CNI Italy

Additionally, participants were asked to answer a number of questions on the 6 discussion topics on posters with distributed stickers (one answer/organisation).

Although there were broad majorities on some topics it became obvious that – due to some basic controversies – it would not be possible to reach a common agreement (for details on the workshop results see **ANNEX II**)



Last call for validation to all countries that have submitted answers to the survey

The process of validation of the received survey data by the competent authorities went slowly and partly the feedback was contradicting the previously given answers. Thus a lot of clarifications by direct contacts became necessary. In order to check the correctness and quality of the answers again a last call for validation of the data was sent to all countries. Recipients were the national competent authorities; all other stakeholders received the data for information in copy.

Final validation phase of survey results and elaboration of a potential way forward

During the final validation process for the survey results the problem of identifying the correct competent authorities for the focus professions became obvious again: Corrections and clarifications were done by different authorities in different ways, showing that the national situations are not always regarded identically by the different national stakeholders. There were also cases where other stakeholders criticised the correctness of the answers from competent authorities.

So in several countries this required further clarification by the project team that was ongoing until December 2016. The survey report states in which countries the results were (not) validated.

During the final validation phase the opinions received in the 2nd stakeholder conference on 27 October 2016 were analysed by the project expert team. It was quite clear that the process had slithered in a dead-lock situation. The outcome of the working groups' discussion on controversial topics had very often been the suggestion of further definitions of terms and procedures, immediate decisions had been avoided.

In order to find a way out and put the process back on track and at the same time not to overrule the different positions, concerns and approaches in regard to CTP for engineers, the project team has decided to recommend a two-piece approach.

A short-term approach for a smaller number of countries prepared to participate in a pilot project – based on the (academic) requirements on which a majority of countries has already agreed during the project and very closely oriented on the system of automatic recognition currently in effect for the architects profession – is the main focus of the recommendations. Additionally, the project team recommends establishing a working group on the definition of the most basic terms and procedures that could lead to an agreement of a broader number of countries (for details please see **ANNEX VI**).

Submission of final survey report, final project report and ECEC recommendations to the European Commission

This final project report + the final survey report with all results of the survey + the ECEC recommendations are submitted to the European Commission on 21 December 2016.



3. Project Experiences

The project team was impressed by the degree of support, feedback and participation in the project. This proved the broad interest in the topic of CTP for Engineers.

The national coordinators for the PQD were extremely helpful and did their best to lead the project team through the sometimes quite difficult structures in their countries. Some of them even initiated or conducted broad coordination processes in regard to their national positions. So altogether they were an essential pillar of this project.

The project team was also impressed that many stakeholders were prepared to put a lot of work into participating in this project and into working out very profound analyses of the elements of a CTF. The project team is convinced that these contributions will prove to be very helpful also for the further development of a CTF that will take place after this project.

Discussing automatic recognition obviously touches the foundation of national systems and is therefore a sensible issue especially because engineering services are often related to topics of public safety and living quality. The sensitivity of some of the raised issues is most probably also the reason why this process proved to be not only an intellectual one but also an emotional one. The controversial question of the possibility of compensation of academic education is a good example for this and it is not the only one. So it became quite clear that without mutual awareness and respect for the very foundations of national systems it is difficult to reach a broad agreement in the CTF negotiations.

4. Administrative issues

In July 2016, the European Commission has offered to extend the duration of the contract for further two months. This possibility was already foreseen in the contract.

This contract extension proved to be important as the high interest and engagement of relevant stakeholders for CTP required leaving more time for their national discussion processes and substantiated feedbacks.

In November 2016, the contract was extended for further two month, the possibility was foreseen in the contract, the prolongation was signed by the European Commission and the European Council of Engineers Chambers in the end of November 2016.

The necessity arose because in the final validation phase the problem of complicated structures of competence in regard to the engineering profession in member states became obvious again: Corrections and clarifications were partly done by different authorities in contradicting ways, showing that the national situations are not always regarded identically by the different national stakeholders. There were also cases in which other stakeholders questioned the correctness of the answers from competent authorities. So based on this in several countries further clarification by the project team was required. The clarification process was going on until December 2016.



5. ECEC Recommendations – A short retrospective

5.1 Preliminary Draft (30 June 2016):

Based on some basic common results of the survey on the regulatory situation of the focus engineering professions (a majority of professions require the EQF levels 6 or 7 as academic education requirements for access to the profession; a majority requires 4 or 5 years of academic education; a majority requires professional experience for access to the profession/use of the professional title or alternatively/additionally a professional examination) the project team has produced a first preliminary draft proposal to be presented at the stakeholder workshop on 30 June 2016:

European Senior (Civil and Environmental) Engineer: 4 years of academic education (EQF Level 7) in the field of Civil and Environmental Engineering, 300 ECTS (minimum 70% technical ECTS) and 2 years of post-graduate professional experience or professional examination (in the home country);

European Junior (Civil and Environmental) Engineer: 3 years of academic education (EQF Level 6) in the field of Civil and Environmental Engineering, minimum 180 ECTS (minimum 70% technical ECTS- within defined basic set of subjects) or 240 (minimum 70% technical ECTS) and 2 years of post-graduate professional experience or professional examination (in the home country);

European (Civil and Environmental) Technician: Technical education in the field of construction and environmental technologies (EQF Level 5)

The preference of a CTF – instead of a CTT – approach was already clear from the survey results as the authorities as well as the engineering organisations have expressed this with a high majority. Also the project team stressed that this approach provides the possibility of an agreement on a very basic level without the necessity of going into curricula details, is a low cost approach and can be implemented fast and easily.

As the survey showed that a majority of regulated countries have different levels of the professions the project team decided to present an approach with different levels. This was also a way of covering more of the national requirements that – as the survey once again confirmed – differ considerably in different countries/for different professional levels.

5.2 First draft proposal 15 September 2016 (see ANNEX III)

In the next step the project team has taken into consideration all comments and points of criticism that were discussed/brought up by the participants of the stakeholder workshop on 30 June 2016 (for details see **ANNEX I**) and sent out a first draft proposal on 15 September:

Level 1: European Chartered Civil Engineer Master level: University Master degree (EQF Level 7) or equivalent in the field of Civil Engineering and 300 ECTS with a minimum of 70% technical ECTS (mathematics, natural science, technology,



informatics) and 2 years of post-graduate professional experience or professional examination (in the home country)

For applicants from member states in which the profession is regulated: Certification of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering by the competent authority — this only refers to professional requirements (e.g. education, practice, exam) and not to additional administrational requirements such as membership/registration in a professional organisation). For applicants from member states in which the profession is not regulated: Confirmation from the competent authority that the applicant has the right to provide services on the field of Civil Engineering in the home country.

Level 2: European Chartered Civil Engineer Bachelor level: University Bachelor degree (EQF Level 6) or equivalent in the field of Civil Engineering and minimum 180 ECTS with a minimum of 70% technical ECTS (mathematics, natural science, technology, informatics) and 2 years of post-graduate professional experience or professional examination (in the home country). For applicants from member states in which the profession is regulated: Certification of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering; by the competent authority — this only refers to professional requirements (e.g. education, practice, exam) and not to additional administrational requirements such as membership/registration in a professional organisation). For applicants from member states in which the profession is not regulated: Confirmation from the competent authority that the applicant has the right in his to provide services on the field of Civil Engineering in the home country.

The project team had decided to present – as a first step – a proposal for a Common Training Framework for Civil Engineers only.

As it was a clear result of the workshop that the approach of a Common Training Framework is indeed the preferred approach by the stakeholders there was no further discussion on the possibility of a Common Training Test.

The project team had decided to stay with the level system in principle as a majority of participants agreed with it and as it is the one solution that is largely in compliance with the national requirements in many countries and considers the fact that a level system is in existence in a majority of the countries. But based on the discussion results the level of "technician" has been deleted and the approach was more streamlined with the Bologna System: According to some of the suggestions in the workshop the names of the levels were changed into "European Civil Engineer Master Level" and "European Civil Engineer Bachelor level".

The Project Expert team has very intensively discussed the wish for a more output-oriented approach that was expressed by some participants, whereas at the same time a minimum level of academic requirements was strongly supported by others. It finally came to the decision that a fully output-oriented approach with individual assessment of the host country is not acceptable for a Common Training Framework. It would not lead to automatic



recognition – which is the aim of the CTF – and thus would bring more or less no added value compared to the system of general recognition currently in force.

Nevertheless, the Project Expert Team understood the wish for defining the requirements not only in regard to input (degree of academic education) but also in regard to output. With the EUR-ACE Framework Standards and Guidelines (EAFSG) established by the European Network for accreditation of Engineering Education (see Annex 1) a definition of required programme outcomes is already available and in use in many countries. Therefore, the Project Expert Team has decided to suggest the EAFSG as a guideline in regard to the assessment of the question if an applicant fulfils all necessary requirements of the Common Training Framework for Civil Engineers by the home country.

In regard to the requirements within the levels the Project Expert Team has decided to stay with the definition by ECTS.

The Project Expert Team has taken up the idea of a malpractice check in the way that the CTF certificate (to be further defined) from the home country has to stake also that the applicant is not subject of an occupational ban or disciplinary procedure in the home country.

In order to prevent circumvention of national requirements the prerequisite of fulfilment of the requirements for authorization/ licence to provide services in the field of Civil Engineering in the home country was added (similar to the existing automatic recognition system for architects).

5.3 Revised draft proposal 24 October 2016 (see ANNEX V)

After the broad stakeholder consultation that brought manifold feedback from national stakeholders (for details see <u>ANNEX IV</u>) a review of the proposal based on this feedback became necessary. The project team tried to implement as much of the feedback as possible (changes in red) in order to improve the chances for a broader acceptance although it was already quite clear at that time that some of the controversies would be very difficult to overcome:

Level 1: European Chartered Licenced Civil Engineer Master level: Higher Educational Institution Master degree (EQF Level 7) or equivalent in the field of Civil Engineering and minimum 300 ECTS with a minimum of 70% (reduction to 50%?) technical and scientific ECTS (mathematics, natural science, technology, informatics) and 2 years of post-graduate professional experience or professional examination (in the home country). For applicants from member states in which the profession is regulated: Certification of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering by the competent authority — this only refers to professional requirements (e.g. education, practice, exam) and not to additional administrational requirements such as membership/registration in a professional organisation). For applicants from member states in which the profession is not regulated: Confirmation from the competent authority (see 2.) that



the applicant has the right to provide services on the field of Civil Engineering in the home country.

Information on professional liability insurance

Level 2: European Chartered Licenced Civil Engineer Bachelor level: Higher Educational Institution Bachelor degree (EQF Level 6) or equivalent in the field of Civil Engineering and minimum 180 ECTS with a minimum of 70% (reduction to 50%?) technical and scientific ECTS (mathematics, natural science, technology, informatics) and 2 years of post-graduate professional experience or professional examination (in the home country). For applicants from member states in which the profession is regulated: Certification of fulfilment of the requirements for authorization/licence to provide services in the field of Civil Engineering; by the competent authority — this only refers to professional requirements (e.g. education, practice, exam) and not to additional administrational requirements such as membership/registration in a professional organisation).

For applicants from member states in which the profession is not regulated: Confirmation from the competent authority (see 2.) that the applicant has the right in his to provide services on the field of Civil Engineering in the home country. Information on professional liability insurance

5.4 ECEC Recommendations 20 December 2016 (see ANNEX VI)

During the final validation phase the opinions additionally received in the 2nd stakeholder conference on 27 October 2016 (for details see <u>ANNEX II</u>) were analysed by the project team. It was quite clear that the process had slithered in a dead-lock situation. The outcome of the working groups discussion on controversial topics had mostly been the suggestion to further define terms and procedures. Immediate decisions had thus been avoided.

In order to find a way out and put the process back on track and at the same time not to overrule the different positions, concerns and approaches in regard to CTP for Engineers the project team has decided to recommend a two-piece approach.

Short term approach:

A short term approach for a smaller number of countries prepared to participate in a pilot project — based on the (academic) requirements to which a majority of countries had already agreed in the project and very closely oriented on the system of automatic recognition currently in effect for the architects profession — is the focus of the recommendation.

Academic requirement for Master Level: Total of at least five years – or fulfilment of minimum 300 ECTS – fulltime study at a university or a comparable teaching institution, leading to successful completion of a university level examination.



Academic Requirement for Bachelor Level: Total of at least three years – or fulfilment of minimum 180 ECTS – fulltime study at a university or a comparable teaching institution, leading to successful completion of a university level examination.

Professional experience requirement: The project team believes that these academic requirements would be acceptable for a sufficient number of MS. BUT for an agreement it might be necessary to implement a professional practise requirement or professional examination requirement. The duration of such a requirement should be agreed within the group of the MS participating in the pilot project.

Notification system of curricula that are in accordance with the CTF requirements

Construction of buildings (*) must be the principal component of the study referred to in the above mentioned requirements. The study shall maintain the balance between theoretical and practical aspects of training as the background for future implementation and must guarantee the following knowledge, skills and competences (text as discussion basis):

- a) to have the ability to fill the urban rural space and the environment with buildings satisfying technical requirements, the proper level of safety and friendly for use by people and societies in the modern world;
- b) to have knowledge about the history of civil engineering since the result of their work is to create a material layer of human culture;
- c) to have knowledge about designing and sizing constructions and buildings according to the physical and mechanical principles of its nature, properties of used materials and technologies;
- d) adequate knowledge how to organize and steer investment processes gaining benefit from economic, social and business sciences;
- e) understanding relationships between people and buildings and the environment influencing human relations;
- f) understanding the profession of civil engineers in serving the society especially preparing briefings that include social factors;
- g) to have practical knowledge about structural design, constructional solutions and implementation of modern technology,
- h) to have adequate knowledge to provide the buildings with human comfort and respecting requirements of sustainable development and global climate changes;
- i) to have adequate knowledge to fill users requirements of buildings imposed by cost factors and building regulations;
- j) to have adequate knowledge about building industry , organizations , regulations and procedure integrating their job into over-all planning.
- (*) all forms of civil constructions



The project team suggests this text as a **basis for discussion within a small expert group**. For questions of evaluation the EUR-ACE Framework standards and guidelines for assessment of knowledge, skills and competences can offer further guidance.

Long term approach:

Additionally, the project team recommends establishing an expert working group (with broad representation of the member states) on the definition of the most basic terms and procedures that could lead to an agreement of a broader number of countries. The focus should be on

- the development of common definitions for all forms of training (theoretical/practical);
- the question of a definition of a common scope of authorization and its implications on national and EEA level;
- a definition and evaluation procedure for "equivalence" of learning outcomes

(Focus and aims to be further defined)

6. Conclusion:

With this final report (submitted together with the survey report) the ECEC hands over all collected information to the European Commission in the believe that this project – although it was not possible to reach common agreement on a CTP proposal – provides the EC with a very broad and detailed information basis for any further steps it wants to take towards CTP for Engineers.

The ECEC is going to support any steps towards a solution and is prepared to assist the EC whenever necessary because it is convinced that the establishment of CTP is important for the engineering profession.



7. Annexes

Annex I - CTP Workshop 30 June 2016

Annex II - CTP Workshop 27 October 2016

Annex III - Draft CTP Proposal 15 September 2016

Annex IV - Feedback CTP Proposal 15 September 2016

Annex V - Revised Draft Proposal 24 October 2016

Annex VI - ECEC Recommendations 20 December 2016



va: Fig working week 2017 - Early Bird Registration ends 20 ...

Θέμα: Fwd: FIG Working Week 2017 - Early Bird Registration ends 20 February 2017

Από: TEE $\Delta/N\Sigma$ H ΘΕΕ & Δ IΕΘΝΩΝ Σ XΕΣΕΩΝ <greok@central.tee.gr>

Ημερομηνία: 20/2/2017 1:54 μμ

Προς: tee@central.tee.gr

Ενημέρωση για την εγγραφή στις εργασίες της FIG Working Week 2017 (Ελσίνκι, 29/5-2/6/2017)

----- Forwarded Message ------

Θέμα: FIG Working Week 2017 - Early Bird Registration ends 20 February 2017

Ημερομηνία: Fri, 17 Feb 2017 09:33:45 +0000

Από: FIG Support <figsupport@fig.net>

Προς: FIG Support <figsupport@fig.net>



Register today for the FIG 79th Working Week "Surveying the world of tomorrow – From digitalisation to augmented reality", May 29 to June 2 in Helsinki, Finland.

Dear Colleague

Early-bird Registration fee for the 2017 FIG Working Week on May 29 to June 2 in Helsinki, Finland will end Monday of next week, 20 February. You will have all day and all night to regist before the fee goes from 560 EUR to 640 EUR.

We have more than 500 people have registered so far — some coming from as far as Fiji, Singapore, Canada, Nigeria, Malaysia — so we are getting a good crowd. Let's fill up the place

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To register, please go to www.fig.net/fig2017/registration.htm

Registration to FIG 2017 includes:

- 5 full days brimming with rich, inspirational and highly relevant professional learning opportunities.
- 9 powerful keynote addresses from experts who have worked both within and beyond the surveying/spatial profession
- The opportunity to choose from 80 sessions covering the entire spectrum of the surveying/spatial profession reflected by the range of the FIG ten technical commissions
- Access to an inspiring exhibition featuring the latest products and services
- Unlimited networking opportunities with peers from around the world giving an unrival opportunity to discover how others are doing things, meet people who share your passion as share your own knowledge and experiences.

For more information, please visit www.fig.net/fig2017

PLAN YOUR TRIP

International delegates should be particularly aware of and careful about visa requirements. Please plan your travel well in advance and allow plenty of time to apply for a visa. We would like to make travelling to Finland to as easy as possible. For more travel information and advice please see the website www.fig.net/fig2017/visa.htm

In Helsinki you can choose from a diverse range of accommodation. There is something for every level of comfort and budget. The organisers of the FIG 2017 have negotiated attractive room rates which are equal to, if not better than, corporate rates. The special rates only applifor a limited period of time for participants of FIG 2017. Book early to be sure your first choic accommodation. For more information, please visit http://fig.net/fig2017/accommodation.htm

Register today!

We would appreciate if you would spread the word about this special event to your friends a colleagues!

Thank you to our partners for their kind and generous support for the FIG 2017.









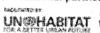


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We look forward to seeing you and your colleague in Helsinki in May

Kind regards Ms. Wu Qiong **FIG Support**



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