

Updating the ECCE book

“Civil Engineering Profession in Europe”

A review of the profession in Europe today from education to professional practice

Platonas Stylianou

ECCE Vice President \ President elected

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Vilnius, Lithuania, 06 October 2023

Civil Engineering Profession in Europe (2005)

A review of the profession in Europe today from education to professional practice



First edition in the early 1990s

Second edition in 1998

Third edition in 2005

Fourth edition in 2025?

Regular Update afterwards?

Scope of the project

- ❑ Constant Learning, exchange of data and Enrichment of Knowledge.
- ❑ Record the data per country and keep them in a common platform accessible to all.
- ❑ Record the various activities per country in order to be beneficial for the Society and the Profession and Create Communication Channels.
- ❑ Share data and raise Awareness in various aspects of the profession.
- ❑ Protect and upgrade the Profession of Civil Engineer.
- ❑ Regular update and review of the data (especially in Europe) regarding our Profession.

Civil Engineering Profession in Europe (2025)

Proposal for review and update of the book and creation of an e-book.

- ❑ Working Group members:
 - Platonas Stylianou – WG Co-Ordinator
 - Andreas Brandner
 - Jeanette Muñoz Abela
 - Maria Karanasiou

- ❑ Chapter re-organization and introduction of new chapters

- ❑ Data collection and methodology

- ❑ Deliverables format

- ❑ Consultation and special meeting with the curators of the 2005 edition:
 - Yrjö Matikainen (President in 2005)
 - Carsten Ahrens (Vice President in 2005)

- ❑ Various virtual and in person meetings and discussion of the working group.

CIVIL ENGINEERING PROFESSION IN EUROPE (New Format)

1. Professional Organizations information (A.B.)

- 1.1. Title of the organization (in English and in native language)
- 1.2. Short history of the organization (100 words)
- 1.3. Activity
 - 1.3.1. Types of engineers represented in the organization
 - 1.3.2. Number of registered civil engineers
 - 1.3.3. Duties of the organization in the whole state organization
- 1.4. Contact information
 - 1.4.1. Address
 - 1.4.2. Phone number
 - 1.4.3. Email address
 - 1.4.4. Website address
 - 1.4.5. Logo

2. The Education System (J.M.A.)

- 2.1. The General Education System at present
- 2.2. Training within Civil Engineering Education
- 2.3. Number of Undergraduates in Civil Engineering (per year)
- 2.4. Number of Post Graduate Students in Civil Engineering (per year)
- 2.5. Undergraduate Training
- 2.6. Foreign Language Learning

3. Registration, Recognition and Protection of Professional Title (M.K.)

- 3.1. Legislation
- 3.2. Registration
- 3.3. Grades of Membership
- 3.4. Protection of Title
- 3.5. Professional Training
- 3.6. CPE and CPD Schemes
- 3.7. Mobility and Recognition

4. Legal Background to the Profession and Code of Conduct/ Ethics (P.S.)

- 4.1. Legal restrictions
- 4.2. Law governing professionals
- 4.3. Regulations and building laws
- 4.4. Regulation regarding ethics
- 4.5. Code of Conduct and Disciplinary Committee

5. Contracts

- 5.1. Type of contract
- 5.2. Construction Law
- 5.3. ADR (Arbitration, Adjudication, Mediations, Conciliation etc)
- 5.4. Particular types of contracts used (private – semipublic)
- 5.5. Most common system for tendering for public projects
- 5.6. Criteria for tendering
- 5.7. Other criteria for tendering
- 5.8. Electronic tendering

6. Fee Scales, Salaries and Taxation

- 6.1. Fee scales
- 6.2. Calculation rules in tendering
- 6.3. Civil Engineers and the national taxation system
- 6.4. Average salary and percentage of tax paid on that salary

7. Insurances and Professional Liability

- 7.1. Mandatory Insurances for civil engineers – PII (mandatory or net)
- 7.2. Responsibility for professional liability insurances
- 7.3. Liability insurance for companies

8. Civil Engineering Practice

- 8.1. In which sectors do Civil Engineers work?
- 8.2. Government\Semi Government\Private sector etc
- 8.3. Other sector;
- 8.4. Figures to indicate percentage in employment of civil engineers in various sectors

9. Promotion of the Profession / Changing Working Practices

- 9.1. Eurocodes
- 9.2. Environmental Impact Assessments
- 9.3. Use of Information and Communication Technology
- 9.4. Health & Safety
- 9.5. Green Policy / Resilience and Sustainability
- 9.6. Climate Change / De-carbonization

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- **Any Comments\ Suggestions;**

Chapter 1


Template designed as a fillable form. This format restricts users to only inputting data in the designated fields, preventing unintended alterations.

Country:	
Organization (English):	
Organization (native language):	
Logo Please insert the logo of the organization:	
History Please provide a short paragraph with the brief history of the organization (up to 1000 characters)	
Activity Please provide a brief description (up to 2000 characters) of the main activities of the organization making sure to include the following information: <ol style="list-style-type: none"> 1. Kind of engineers represented by the organization. 2. Number of civil engineers registered in the organization. 3. Role and duties of the organization within the state. 	
Organization Contact details	
Address:	Phone number:
Email:	Website:



SAMPLES

A. MALTA


Country: Malta
Organization (English): Chamber of Architects and Civil Engineers
Organization (native language): Kamra Tal-Periti (KTP)
Logo Please insert the logo of the organization:

History Please provide a short paragraph with the brief history of the organization (up to 1000 characters)
The Kamra tal-Periti has a significant history reflecting the development of these professions on the island. Founded in 1920 during British colonial rule, its purpose was to regulate and standardize architectural and engineering practices. The First World War and post-war reconstruction influenced its early years. Malta's independence in 1964 brought new regulations which the EU membership in 2004 introduced EU standards. In recent years, it has advocated for sustainability, including energy-efficient designs and sustainable materials. The Kamra has faced challenges but also modernized, emphasizing innovative and sustainable practices in architecture and engineering.
Activity Please provide a brief description (up to 2000 characters) of the main activities of the organization making sure to include the following information: 1. Kind of engineers represented by the organization. 2. Number of civil engineers registered in the organization. 3. Role and duties of the organization within the state.
The Kamra tal-Periti is the professional organization representing architects & civil engineers. It serves as a regulatory & advisory body, overseeing the activities & standards of these professions, playing a vital role in ensuring the competence & ethical conduct, as well as contributing to the development & sustainability of the built environment. KTP represents Architects: Advocating for & regulating the practice of architects, ensuring that they adhere to the highest standards of design, aesthetics & functionality; Civil Engineers: Supporting & regulating their work, especially in the design & construction of civil infrastructure projects, ensuring safety & quality; with over 700 architects & civil engineers including professionals from various specializations within fields such as structural engineers, environmental engineers & urban planners, etc. KTP plays a pivotal role in setting & enforcing professional standards & ethical guidelines for architects & civil engineers through its Conduct Board. It promotes continuous professional development among its members by organizing workshops, seminars & training sessions to keep members updated with the latest industry trends, technologies & best practices. KTP acts as a voice for professionals in discussions related to construction policies, regulations & sustainable practices. It advocates for the interests of its members & the broader community, aiming to contribute positively to the built environment. It engages with the public to raise awareness about the importance of architecture & civil engineering in society, while bringing awareness to the public on matters related to construction, sustainability & the role of professionals in ensuring safe & functional buildings & infrastructure.

KTP collaborates with governmental bodies, local authorities, & other stakeholders in the construction & infrastructure sectors providing expert input & guidance on various policies & initiatives related to the built environment.

Organization Contact details


Address: The Professional Centre 127, Triq tas-Sliema Il-Gżira GZR 1633 MALTA	Phone number: 00356 2131 4265
Email: info@kamratalperiti.org	Website: www.kamratalperiti.org

B. AUSTRIA

Country: Austria
Organization (English): Federal Chamber of Architects and Chartered Engineering Consultants
Organization (native language): Bundeskammer der ZiviltechnikerInnen
Logo Please insert the logo of the organization:

History Please provide a short paragraph with the brief history of the organization (up to 1000 characters)
In his supreme resolution of 6 October 1860, Emperor Franz Joseph laid the foundation for the profession of civil engineers (ZT): The Monarchy outsourced the task of technicians and thus transferred state tasks to freelancers. The result: State-authorized and sworn civil engineers. Since then, civil engineers have stood for the highest quality in planning and control in technical matters. Their tasks are highly complex services. This is one of the reasons why civil engineers are "persons of public trust" and therefore entitled to draw up public deeds within the scope of their authority. These are regarded by the administrative authorities in the same way as official documents. As sworn public notaries, they provide security and guarantee neutral reliability in all areas of planning. Civil engineers are freelance architects and civil engineers who are active in planning in the field of their respective completed studies.
Activity Please provide a brief description (up to 2000 characters) of the main activities of the organization making sure to include the following information:
<ol style="list-style-type: none"> 1. Kind of engineers represented by the organization. 2. Number of civil engineers registered in the organization. 3. Role and duties of the organization within the state.
Tasks of the Federal Chamber of Civil Engineers The Chambers of Civil Engineers are corporations under public law and the legal professional representations of the state-authorized and sworn civil engineers (architects and civil engineers with about sixty competences in engineering and natural sciences, mining and soil culture). The legal basis is the Civil Engineers Act (ZTG 2019). The representation is carried out by elected, honorary professional representatives (elections every 4 years). At the federal level, the Federal Chamber of Civil Technicians is established with its seat in Vienna, whose members are the four provincial chambers. Its local sphere of action covers the entire federal territory. The Federal Chamber is divided into the Federal Section for Architects and the Federal Section for Civil Engineers. The Federal Chamber is responsible for matters that affect the common professional, social and economic interests of the members of two or more regional chambers. Its tasks include: to issue rules of professional conduct, performance profiles and guidelines for the preparation of tenders by civil engineers to maintain relations with other professional organisations at home and abroad. to issue guidelines for expert opinions on the appropriateness of the fees charged by civil engineers and to deal with all matters which a chamber of the Länder submits to the Federal Chamber for a decision to issue guidelines for the issuance of identification cards for the electronic certification signature and the electronic civil engineer signature and to maintain an electronic register for the certification and civil engineer signatures by means of computer-aided data processing. Public relations

Organization Contact details	
Address: Bundeskammer der ZiviltechnikerInnen Karls-gasse 9/2 1030 Wien Austria	Phone number: +43 1 505 5807 fax +43 1 505 3211
Email: office(at)arching.at	Website: www.arching.at

C. CYPRUS

Country: Cyprus	
Organization (English): Cyprus Association of Civil Engineers	
Organization (native language): Σύλλογος Πολιτικών Μηχανικών Κύπρου (ΣΠΟΛΜΗΚ)	
Logo Please insert the logo of the organization:	
	
History Please provide a short paragraph with the brief history of the organization (up to 1000 characters)	
<p>The Cyprus Association of Civil Engineers (CYACE) was founded in 1992. The CYACE's establishment was deemed necessary due to the continuous downgrading and marginalisation of the Civil Engineering profession in both the private and the public sector. CYACE aims to protect, promote and enhance the Civil Engineering profession as well as to promote civil engineering science. CYACE's activities include by educational and informative activities (congresses, seminars, lectures) for its members on topics related to civil engineering and the construction industry. Moreover, through interventions such as press releases and announcements, the organization intends to raise awareness to the public.</p>	
Activity Please provide a brief description (up to 2000 characters) of the main activities of the organization making sure to include the following information:	
<ol style="list-style-type: none"> 1. Kind of engineers represented by the organization. 2. Number of civil engineers registered in the organization. 3. Role and duties of the organization within the state. 	
<p>The Cyprus Association of Civil Engineers has currently more than 2000 active members. The main objectives of CYACE are to increase awareness of the public on the role of the Civil Engineers, to protect all acquired rights covered by Legislation, to educate its members and to create and improve networking between its members and through professionals in the construction industry through social activities.</p> <p>CYACE organizes free educational activities and lectures on topics related to Civil Engineering. The primary purpose of these activities is to educate both the young and experienced Engineers on innovations, developments and trends in Civil Engineering and the construction sector. Moreover, the Association organizes educational seminars, approved by the Human Resource Development Authority of Cyprus.</p> <p>Another important activity contributing to the education and information of its members is the conferences organised by CYACE. Until today, CYACE has organised with great success and participation 8 International Conferences on Health and Safety and is currently organising the 1st Concrete Conference that has ever taken place in Cyprus.</p>	
CYACE	
Organization Contact details	
Address: 64, Griva Digeni Av., Bridge House Block A, Office 2 1080 Nicosia, Cyprus	Phone number: 00357 22 67 28 66
Email: info@spolmik.org	Website: www.spolmik.org

CHAPTER 2 (J.M.A.)

2. The Education System

2.1 The General Education System at present

2.1.1 Please provide information on the tertiary education system (such as universities, colleges, and vocational courses) for civil engineering students in your country. (2000 characters)

2.1.2 Are there any future changes planned in the education system? Y (go to 2.1.3) / N (go to 2.1.4)

2.1.3 If yes, what changes are envisioned? (2000 characters)

2.1.4 Please provide names and website addresses of universities/colleges/vocational institutions that offer civil engineering degrees.

CHAPTER 2

2.2 Tertiary Education (EQF Levels 6, 7, and 8)

2.2.1 Does the Bologna process apply? Y (go to 2.2.3) / N (go to 2.2.2)

2.2.2 If not, which system is used? (2000 characters)

2.2.3 Are student exchange programmes available? Y (go to 2.2.4) / N (go to 2.3.1)

2.2.4 If so, which ones? (Specify only the name of the programme and website)

2.3 Training within Civil Engineering Education

2.3.1 What are the basic subjects that are required to lead to a professional title in your country?

2.3.2 Apart from the basic subjects that are required to lead to a professional title in your country, please mark any other modules which are taught in related areas.

CHAPTER 2

2.2 Tertiary Education (EQF Levels 6, 7, and 8)

2.2.1 Does the Bologna process apply? Y (go to 2.2.3) / N (go to 2.2.2)

2.2.2 If not, which system is used? (2000 characters)

2.2.3 Are student exchange programmes available? Y (go to 2.2.4) / N (go to 2.3.1)

2.2.4 If so, which ones? (Specify only the name of the programme and website)

2.3 Training within Civil Engineering Education

2.3.1 What are the basic subjects that are required to lead to a professional title in your country?

2.3.2 Apart from the basic subjects that are required to lead to a professional title in your country, please mark any other modules which are taught in related areas.

CHAPTER 2

Checkbox grid

Module	Available at Level 6	Mandatory at Level 6	Available at Level 7	Mandatory at Level 7
Project management				
Architecture				
Conservation				
Environmental Engineering				
Sustainable Engineering				



CHAPTER 2

- 2.3.3 Please share details about additional civil engineering study modules offered in your country, which are not listed above.
- 2.3.4 Is a period of training compulsory as part of the undergraduate study (level 6)? Y (go to 2.3.5) / N (go to 2.3.6)
- 2.3.5 If so, for how long is training required and in what subjects? (1000 characters)
- 2.3.6 Is a period of training compulsory as part of the postgraduate study (level 7)? Y (go to 2.3.7) / N (go to 2.4.1)
- 2.3.7 If so, for how long is training required and in what subjects? (1000 characters)

CHAPTER 2

2.4 Language Learning

- 2.4.1 What is the working language at universities/colleges/vocational institutions?
- 2.4.2 Are other languages used? y/n
- 2.4.3 What other languages are used?
- 2.4.4 Is foreign language learning encouraged? y/n
- 2.4.5 If yes, what language/s?

CHAPTER 2

2.5 Number of students

- 2.5.1 How many undergraduate civil engineering students (level 6) start in one year (per year since 2013)?
- 2.5.2 How many undergraduate civil engineering students (level 6) graduate in one year (per year since 2013)?
- 2.5.3 How many postgraduate civil engineering students (levels 7 and 8) start in one year (per year since 2013)?
- 2.5.4 How many postgraduate civil engineering students (levels 7 and 8) graduate in one year (per year since 2013)?

CHAPTER 2

Year	Number of undergraduate Civ. Eng. Students that enrolled	Number of undergraduate Civ. Eng. Students that graduated	Number of postgraduate Civ. Eng. Students that enrolled	Number of postgraduate Civ. Eng. Students that graduated
2013				
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				
2022				
2023				

CHAPTER 2 - DISCUSSION

The questions within section 2.5 can be addressed in two ways within Google Forms. We may choose to respond to them individually, with each question being answered in a separate paragraph. Alternatively, we offer the option to consolidate all these questions into a single inquiry that necessitates a file upload. It's important to note that a table cannot be included within a paragraph response on Google Forms.

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General Discussion / Comments for Chapter 2

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Data collection and methodology

- ❑ Each country to appoint a representative/coordinator to coordinate the data collection (**done**).
- ❑ Creation of specific guidelines for the type, length, and quality of data to be collected (**almost done**).
- ❑ Online questionnaires for each chapter / section (**under construction**).

Country Representatives

A/A	Country	Name	Organization	Position in the organization
1	Austria	Andreas Brandner*	Federal Chamber of Architects and Chartered Engineering Consultants	
2	Cyprus	Evangelitsa Tsoulofta*	Cyprus Association of Civil Engineers	President of CYACE
	Cyprus	Erato Koukotsika*	Cyprus Association of Civil Engineers	Civil Engineer / Office Administrator
3	Czech Republic	Alois Materna*	Czech Chamber of Chartered Engineers and Technicians	1st vice chairman
4	Estonia	Andres Piirsalu*	Estonian Association of Civil Engineers	President
5	Greece	Paris Charlaftis	Association of Civil Engineers of Greece	ExBo member
6	Hungary	Gabor Szollossy*	Hungarian Chamber of Engineers	vice president
7	Ireland	Murt Coleman	Civil Division, Engineers Ireland	Committee Member
8	Latvia	Raimonds Eizensmits*	Latvian Association of Civil Engineers (LACE)	Chairman of the board
9	Lithuania	Žymantas Rudžionis*	Lithuanian Association of Civil Engineers	President
10	Malta	Thomas Fenech*	Kamra Tal-Periti (KTP)	Member of Permanent Committee on Engineering, KTP
11	Montenegro	Olga Radulovic*	Chamber of Engineers of Montenegro	President of the professional Chamber of Civil Engineer
12	Poland	Andrzej Pawlowski*	Polish Chamber of Civil Engineers	Chairman of the Foreign Cooperation Committee
13	Portugal	Humberto Varum	Ordem dos Engenheiros	President of Civil Engineering Speciality
14	Slovakia	Ľuboš Moravčík	Slovak Chamber of Civil Engineers	Member of Chamber management
15	Slovenia	Dejan Prebil	Slovenian Chamber of Engineers	System law and engineering consultant
16	Turkey	Ceylan Özkul	Turkish Chamber of Civil Engineers (TCCE)	Assistant of General Secretary
17	Ukraine	Ivan Nazarenko*	Kyiv National University of Construction and Architecture	Head of Department, professor
18	United Kingdom	Katie Momber	Institution of Civil Engineers (ICE)	Climate Community Manager

Format / Deliverables

- ❑ Online database (according to European regulation) to allow easy access to the information, easy storage and comparison between countries and regular update of the data provided.
- ❑ Creation of a digital / editable book to be used by all Countries accordingly (with provision for limited number of print outs if necessary).

Action Plan

Description	Assigned to	Status / Deadline
Template for the introductory page (Chapter 1)	MK	Completed
Introductory page for Austria	AB	Completed
Introductory page for Malta	JMA	Completed
Introductory page for Cyprus	PS	Completed
Draft survey for Chapter 2 (The education system)	JMA	Completed
Draft survey for Chapter 3 (Registration, Recognition and Protection of Professional Title)	MK	Pending - 20/10/2023
Draft survey for Chapter 4 (Legal Background to the Profession and Code at Ethics)	PS	Pending - 20/10/2023
List of country representatives and volunteers for the WG	MK	Completed
Draft letter to the ECCE member organizations introducing the initiative (to be sent with the inquiry for the first chapter)	MK and AB	Pending - 10/10/2023
Draft letter to a list of organizations which are not ECCE members yet	MK	Pending - after Vilnius meeting
Draft letter to the non-ECCE organizations introducing the initiative	MK and AB	Pending - after Vilnius meeting

Timeline of the project

- ❑ Appointment of countries representatives/coordinators by **September 2023 (done)**.
- ❑ Launching of the online surveys by early **November 2023** (first lot – four Chapters).
- ❑ Data collection and first evaluation of data by the end of **December 2023 – January 2024** (first lot).
- ❑ Launching of the online surveys by **March 2024** (second lot – three chapters).
- ❑ Data collection and evaluation of data by the end of **May-June 2024** (second lot)
- ❑ Launching of the online surveys by **September 2024** (third lot – two chapters).
- ❑ Data collection and evaluation of data by the end of **November-December 2024** (third lot)
- ❑ Preparation of the database and e-book by the **second quarter of 2025;**

Thank you for your attention.