

Updating the ECCE book

“Civil Engineering Profession in Europe”

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

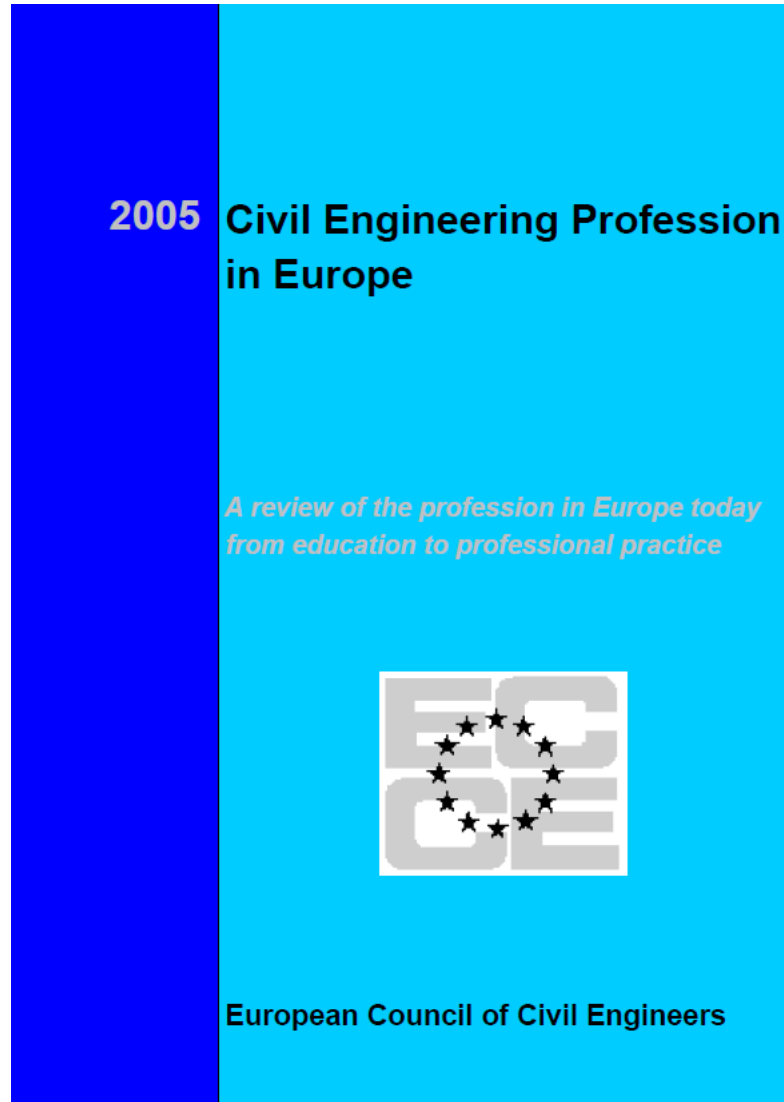
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ECCE President

79th ECCE General Meeting
Athens, Greece, October 2024

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 (40 Years of ECCE)**
- ❑ **Regular online Update afterwards (e-version)**

Scope of the project

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

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 review, re-organization and introduction of new chapters and elements.

- ❑ Data collection

- ❑ Creation of the Deliverables format

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

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

- ❑ Review of the data received... **by the national representatives\volunteers? (TBC) – early 2025**
- ❑ Good response from many Countries.
- ❑ Hard work from all members of the working group to meet the deadlines.

Data collection and methodology

- ❑ Each country to appoint a representative/coordinator to coordinate the data collection (done 09.2023 and names confirmed on 09.2024).
- ❑ Creation of specific guidelines for the type, length, and quality of data to be collected (done).
- ❑ Online questionnaires for each chapter / section (done).

Country Representatives

	Country	Name	Organization
1	Austria	Andreas Brandner*	Federal Chamber of Architects and Chartered Engineering Consultants
2	Bulgaria	Dimitar Natchev	Union of Civil Engineers in Bulgaria (UCEB)
3	Croatia	Nina Drazin Lovrec	Croatian Chamber of Civil Engineers
4	Cyprus	Kyriakos Tsioupanis*	Cyprus Association of Civil Engineers
5	Czech Republic	Karel Kabele	Czech Chamber of Chartered Engineers and Technicians
6	Estonia	Andres Piirsalu*	Estonian Association of Civil Engineers
7	Georgia	Iuri Svanidze	Georgian Society of Civil Engineers (GSCE)
8	Greece	Paris Charlaftis	Association of Civil Engineers of Greece
9	Hungary	Gabor Szollossy*	Hungarian Chamber of Engineers
10	Ireland	Murt Coleman	Civil Division, Engineers Ireland
11	Latvia	Raimonds Eizensmits*	Latvian Association of Civil Engineers (LACE)
12	Lithuania	Žymantas Rudžionis*	Lithuanian Association of Civil Engineers
13	Malta	Jeanette Muñoz Abela*	Kamra Tal-Periti (KTP)
14	Montenegro	Olga Radulovic*	Chamber of Engineers of Montenegro
15	North Macedonia	Meri Cvetkovska	Chamber of Certified Architects and Certified Engineers of North Macedonia
16	Poland	Andrzej Pawlowski*	Polish Chamber of Civil Engineers
17	Portugal	Humberto Varum	Ordem dos Engenheiros
18	Serbia	?	Serbian Chamber of Engineers
19	Slovakia	Ľuboš Moravčík	Slovak Chamber of Civil Engineers
20	Slovenia	Dejan Prebil	Slovenian Chamber of Engineers
21	Turkey	?	Turkish Chamber of Civil Engineers (TCCE)
22	Ukraine	Ivan Nazarenko*	Kyiv National University of Construction and Architecture
23	United Kingdom	John Laverty	Institution of Civil Engineers (ICE)

Action Plan

Description	Assigned to	Status / Deadline
Template for the introductory page (Chapter 1)	MK	Completed
Survey for Chapter 2	AB	Completed
Survey for Chapter 3	JMA	Completed
Survey for Chapter 4	PS	Completed
Survey for Chapter 5	MK	Completed
Survey for Chapter 6	PS	Completed
Survey for Chapter 7	JMA	Completed
Survey for Chapter 8	MK	Completed
Survey for Chapter 9	WG	TBD
Review and evaluation of the data (by 03.2025)	PS	Completed
List of country representatives and volunteers for the WG	MK	Completed
Letter to the ECCE member organizations introducing the initiative (to be sent with the inquiry for the first chapter)	MK and AB	Done
Letter to a list of organizations which are not ECCE members yet	MK	Done
Letter to the non-ECCE organizations introducing the initiative	MK and AB	Done
Editorial and creation of the ebook (06/2025)	TBD

LATEST CHAPTERS

Chapter 8. Civil Engineering Practice (M.K.)

8.1. Employment Sectors of Civil Engineers

8.1.1. In which sectors do civil engineers work in your country?

- Private Sector: Consulting
- Private Sector: Contracting
- Private Sector: Materials Industry
- Public Sector: Local Authorities
- Public Sector: National Authorities
- Government/Semi-Government Agencies
- Self-employed (Freelancer)
- Other (please specify) (100 characters)

LATEST CHAPTERS

8.2. Overall Employment Distribution

8.2.1. Please provide an overall percentage breakdown of civil engineers working in the following sectors in your country:

- Private Sector: [Text Box] %
- Public Sector: [Text Box] %
- Other (please specify): [Text Box] %

8.2.2. What are the emerging fields or sectors where civil engineers are increasingly finding employment in your country? Please specify any new or growing industries. (2000 characters)

LATEST CHAPTERS

8.3. Private Sector Employment

8.3.1. Do you have figures to indicate the percentage of civil engineers employed in the following private sector fields in your country? (Please provide percentages)

- Consulting: [Text Box] %
- Contracting: [Text Box] %
- Materials Industry: [Text Box] %
- Self-employed (freelancer): [Text Box] %
- Other (please specify): [Text Box] %
- Information not available at the moment

8.3.2. Please provide any additional information regarding civil engineers' employment in the private sector in your country if necessary. (2000 characters)

LATEST CHAPTERS

8.4. Public Sector Employment

8.4.1. Do you have figures to indicate the percentage of civil engineers employed in the following public sector fields in your country? (Please provide percentages)

- Local Authorities: [Text Box] %
- National Authorities: [Text Box] %
- Government/Semi-Government Agencies: [Text Box] %
- Other (please specify): [Text Box] %
- Information not available at the moment

8.4.2. Please provide any additional information regarding civil engineers' employment in the public sector in your country if necessary. (2000 characters)

LATEST CHAPTERS

Chapter 9 – Promotion of the Profession / Changing working practices (P.S.)

9.1. Eurocodes

9.1.1. Is the use of Eurocodes mandatory for the design of buildings and infrastructure in your country? Y/N

9.1.2. If No, please specify which design codes are used instead (2000 characters).

9.1.3. Is your country working towards implementing the new Eurocodes? Y/N

9.1.4. If Yes, please describe how the implementation is being approached (2000 characters).

9.1.5. Are Eurocodes EC1-9 taught to civil engineering students at universities in your country? Y/N

9.1.6. If No, please specify which codes are being taught instead (2000 characters).

9.1.7. Which organization in your country is responsible for selling and promoting Eurocodes or national codes? (1000 characters).

LATEST CHAPTERS

9.2. Environmental Impact Assessments

- 9.2.1. Is environmental pollution (e.g., carbon footprint, noise, dust, etc.) caused by the built environment a concern in your country? Y/N
- 9.2.2. If Yes, please outline the primary sources of environmental pollution (3000 characters).
- 9.2.3. What measures are in place in your country to prevent or control pollution caused by the built environment? (2000 characters).
- 9.2.4. Please provide details on how these measures address the following specific areas:
 - a) Water
 - b) Soil
 - c) Noise
 - d) Air

LATEST CHAPTERS

9.3. Use of Information and Communication Technology (ICT)

9.3.1. Do universities in your country incorporate ICT in education? Y/N

9.3.2. If Yes, please explain how ICT is used in education (2000 characters).

9.3.3. Does the construction industry in your country support the following technologies? (Multiple Choice)

- a. Artificial Intelligence (**AI**)
- b. Building Information Modelling (**BIM**)
- c. Geographic Information Systems (**GIS**)
- d. Digital Construction?

9.3.4. If none of the above is supported, what future plans are in place to promote these technologies? (2000 characters)

9.3.5. Does the government support or fund the private sector in the digital transformation of the construction industry? Y/N

LATEST CHAPTERS

- 9.3.6. If Yes, please describe how this support is provided (2000 characters).
- 9.3.7. What percentage of **BIM technology** is used in building design in your country? (Multiple choice)
- a. <25%
 - b. 25%-50%
 - c. 50%-75%
 - d. >75%
 - e. Information not available at the moment
- 9.3.8. What percentage of **BIM technology** is used in infrastructure design in your country? (Multiple choice)
- a. <25%
 - b. 25%-50%
 - c. 50%-75%
 - d. >75%
 - e. Information not available at the moment

LATEST CHAPTERS

9.4. Health & Safety

- 9.4.1. Is construction health and safety in your country regulated under the European Directive 92/57/EEC for mobile or temporary construction sites? Y/N
- 9.4.2. If Yes, please specify the relevant legislation or procedures followed by the construction industry (2000 characters).
- 9.4.3. If No, please explain how occupational safety and health risks in the construction industry are managed (2000 characters).
- 9.4.4. Is construction safety and health for maintenance work regulated under the European Directive 92/57/EEC in your country? Y/N
- 9.4.5. If Yes, please specify the relevant legislation or procedures followed for maintenance work (2000 characters).

LATEST CHAPTERS

- 9.4.6. If No, how are occupational risks managed for maintenance work in your country? (2000 characters).
- 9.4.7. Does the designer in your country have any responsibility for incorporating prevention principles (including risk assessment) during the design stage of a project? Y/N
- 9.4.8. If Yes, please explain the designer's role in ensuring occupational safety and health (2000 characters).
- 9.4.9. Are clients or contractors in your country required to appoint competent Safety and Health Coordinators for the design and execution stages, and notify authorities? Y/N
- 9.4.10. If Yes, please explain the relevant provisions and industry practices (2000 characters).
- 9.4.11. If No, how is health and safety coordinated in construction projects in your country? (2000 characters).

LATEST CHAPTERS

9.5. Green Policy, Resilience and Sustainability

- 9.5.1. Does your country follow the European Commission's **Green Policy** to reduce environmental pollution and promote sustainable development? (Y/N/Partly)
- 9.5.2. Please explain what measures are being implemented to reduce pollution and promote sustainability in your country (2000 characters).
- 9.5.3. Do you believe that your country will achieve **climate neutrality by 2050**? Y/N
- 9.5.4. Please explain your reasoning (2000 characters).
- 9.5.5. Is your country working towards integrated water resource management and ecosystem protection? Y/N
- 9.5.6. If Yes, please explain how (2000 characters).
- 9.5.7. Does your government implement a **low-carbon, socially inclusive green growth strategy**? Y/N
- 9.5.8. If Yes, please explain how this strategy is being implemented (2000 characters).

- **Any Difficulties preparing the answers?**
 - **Feedback from the Countries??**
- **Any ideas for more chapters / sections?**
 - **Please help us to improve!**

Format / Deliverables

- ❑ Online database (according to European regulation) to allow easy access to the information, easy storage and comparison between countries, and easy to use for regular update of the data provided.
- ❑ Creation of an e-book or digital / editable book by 2025, to be disseminated to all Countries (with provision for limited number of printouts;;).
- ❑ Discussion with experts for final details, editorial issues, etc.
- ❑ **Delivered and disseminated in 2025, together with the celebration of 40 year of ECCE.**

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). **DONE**
- ❑ Data collection by the end of **December 2023 – January 2024** (first lot). **DONE**
- ❑ Launching of the online surveys by **March 2024** (second lot – three chapters). **DONE IN APRIL 2024**
- ❑ Data collection by the end of May – **July 2024** (second lot). **DONE**
- ❑ Launching of the online surveys by **September 2024** (third lot – two chapters). **DONE October 2024**
- ❑ Collection and evaluation of all data, by the end of **December 2024 – early 2025**
- ❑ Finalization of the database and e-book by the **second quarter of 2025;**
- ❑ **Year 2025 → 40 years of ECCE**

Responses received

Country	C1	C2	C3	C4	C5	C6	C7
Austria	Yes	Yes	Yes	Yes			
Bulgaria	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Croatia	Yes						
Cyprus	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Czech Republic	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estonia	Yes		Yes	Yes	Yes	Yes	Yes
Georgia	Yes				Yes	Yes	Yes
Greece	Yes						
Hungary	Yes		Yes				
Ireland	Yes						
Latvia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lithuania							
Malta	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Montenegro	Yes	Yes	Yes	Yes	Yes	Yes	Yes
North Macedonia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Poland	Yes	Yes	Yes	Yes	Yes		Yes
Portugal	Yes	Yes	Yes	Yes	Yes		Yes
Serbia							
Slovakia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Slovenia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Turkey	Yes	Yes	Yes	Yes			
Ukraine	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	Yes	Yes	Yes	Yes			
Non-ECCE Full Members							
<i>Romania</i>	Yes	Yes	Yes	Yes			
Total responses received	22	16	18	17	14	12	14

Your active participation and collaboration are very crucial to the success of the project, and we have confidence that, together we can make this initiative successful.

We warmly welcome your feedback, thoughts, and proposals to contribute to the fruitful development of this project.

**Please help us on this special project to be
ready with the
Celebration of 40 years of ECCE(2025)**

Thank you for your attention.