# CHAPTER 14 CONTINUING PROFESSIONAL DEVELOPMENT AND LIFE-LONG LEARNING

The aim of this chapter was to ascertain what obligations exist in each member country (be it by national government, public authority or professional body) to ensure that members remain up-to-date with their technical skills and knowledge. We also enquired what efforts the national association makes and what role it plays in ensuring highest possible standards of continuing professional development for its members.

Two questions were asked of members:

- 14.1 Is continuing professional development mandatory in your country following graduation?
- 14.2 How are you promoting life-long learning amongst your members?

COUNTRY	
Croatia	Continuing professional development following graduation is voluntary. Some groups of civil engineers are obliged to pass state examination to become qualified as responsible site managers, Chamber members or public servants. Therefore almost everyone tries to pass this examination after having gained 4-5 years of professional experience. In the past years life-long learning has been organized in the scope of societies of civil engineers. Faculty teachers provide their services in such specialized educational courses. These courses/seminars normally last 3-5 days.
	The obligation of <b>life-long learning</b> has recently been introduced in the new Building Law (2003). Forthcoming regulations are expected to further define this obligation, the principal aim being to ensure continuous education of engineers and their prompt acquaintance with new practices and innovations in the field of civil engineering.
Cyprus	Although <b>Continuing Professional Development</b> is not mandatory in Cyprus, a great effort is made by the local Associations, the Technical Chamber and private Consultancies to provide this opportunity to local engineers.
	<b>Promotion of life-long learning</b> : Life – long learning is promoted by organizing seminars, lectures, site visits, and short specialized courses.
Czech Rep	Continuing Professional Development: CPD is compulsory in the Czech Republic.
	<b>Promotion of life-long learning</b> : The Czech Chamber currently publishes a guidebook for CPD. This is a guide for all members which is also available on the web.
Estonia	Continuing professional development is mandatory in order to obtain the title of Chartered Engineer or European Engineer. The certificate must be updated every 5 years.  During this period the civil engineer who seeks to obtain a certificate should attend various professional courses and seminars.

	<b>Promotion of life-long learning</b> : EEL has a leading role in the process of continuing professional development which involves attendance at a variety of professional courses and seminars.
Finland	No, <b>Continuing professional development</b> is not compulsory but is highly recommended.
	To <b>promote life-long learning</b> amongst our members, we offer tailor-made further education and training to our members and influence and encourage companies to allocate money for life long learning.
France	Continuing professional development is not mandatory as such, but it is of general practice since 1971, when Firms were obliged by law to use around 1% of the salaries mass for Continuous Education (To-day, 1,6 % is mandatory, and the law is under revision).  The Engineer High Schools 'Grandes Ecoles', generally though Engineers Associations, play a major role in Continuous Education (specially "Ecole Nationale des Ponts et Chaussées" and "Ecole Spéciale des Travaux Publics").  With regard to this topic, a vote is in progress at the Parliament for a new law. Nowadays, new means of Continuous Education are developed by Contractors or Design Offices, for their own staff (Engineers and other professionals), in order to improve the qualifications of the firm's employees.  It deals only with a few with technical matters or none at all, the focus is more on other matters which are not always treated sufficiently in establishment of further education ('Grandes Ecoles'), "Ecole Nationale des Ponts et Chaussées" is managing actions such as "Université Colas", "GTM Management", etc).  The "Instituts des Techniques d'Ingénieurs de l'Industrie (ITTI)" deliver an Engineer Diploma either to young candidates (26 years old) following a 3-year period of training, or to recently employed candidates (3 years) engaged in a specific continuous education programme. For Civil Engineering, ITII in Nantes is linked with the Ecole Centrale de Nantes, then delivers the title of "Ingénieur Diplomé de EC Nantes".  Promotion of life-long learning: CNISF has no specific role in Continuous Education, but Engineers Associations, CNISF members, are particularly active in
	this matter.
Germany	<b>Continuing Professional Development</b> is not mandatory but is highly recommended. For specialised civil engineers e.g. Prüfingenieur a number of years of experience combined with CPD is necessary.
	<b>Promotion of life-long learning:</b> All chambers, institutions, associations etc organise seminars, congresses and symposiums for their members e.g. UBID, ZBI, VDI, Ingenieur-Kammern (Chambers of Engineers) etc.
Hungary	<b>Continuing Professional Development:</b> For the moment, CPD is not mandatory in Hungary.
	<b>Promotion of life-long learning:</b> Life-long learning is promoted by organising professional presentations. Symposiums, publications of proceedings etc
Ireland	Continuing Professional Development: CPD is not mandatory in Ireland.

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**Promotion of life-long learning:** The IEI promotes life-long learning through a CPD Employers' Scheme as part of its pro-active policy of Continuing Professional Development. The overall IEI CPD Programme has a number of mutually reinforcing elements:

- CPD Accreditation Scheme for Engineering Employers: a scheme designed to stimulate and recognise good organisational performance in the area of professional development
- Training Courses & Seminars designed to meet the needs of engineers in Ireland.
- CPD Events Technical Lectures and Seminars run by the IEI's 31 Regions/Divisions/Societies
- Register of Training Providers a one-stop shop for sourcing training of relevance to engineers
- Best Practice Sharing identifying organisations that have good CPD practices in place and that are willing to share such practices with others

The IEI's CPD Programme is supported by the Department of Enterprise, Trade & Employment under the National Training Fund.

# Italy

Whilst professional updating is not required by law in Italy, the tendency is in this direction as the interest in this field is increasing more and more. In fact, CNI has recently asked its Centro Studi to prepare some hypotheses to introduce a compulsory CPD for the Members of the Albo.

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Both CNI and the Ordini are, however, very active in offering updating conferences, seminars, lectures, etc.

### Lithuania

**Continuing professional development** is mandatory to obtain the certificate for supervision of design and construction works.

**Promotion of life-long learning:** Certificates must be updated every 5 years. During this period the person seeking to obtain a certificate should attend various professional refresher courses. The Lithuanian Association is involved in this process.

#### **Poland**

**Continuing professional development** following graduation is mandatory, but only for members of the Polish Chamber of Civil Engineers in the form of professional experience and practice, attendance at courses, seminars and scientific-technological conferences.

**Promotion of life-long learning**: Life-long learning is promoted amongst our members by a 'Promoting system' which includes the possibility of:

- (1) reaching the succeeding specialization rank in civil engineering, and
- (2) leading the independent technical activity

#### **Portugal**

**Continuing professional development:** No, in Portugal continuing professional development is not mandatory following graduation

**Promotion of life-long learning**: No, in Portugal we do not promote life-long learning amongst our members in a consistent way. Universities have usually programs for continuing education, based on short technical courses. OE is now promoting the evaluation of post-graduation courses to come up with a credit system for life-long learning of its members.

Romania	Continuing professional development: There is no mandatory continuing education after graduation. However, a variety of further qualifications following a five-year degree provide specialist or further education.
	The top 20% of civil engineering graduates from the five-year education programme, may continue a university education in the form of the 'Programme of Advanced Studies'. This programme lasts one year and leads to a 'Diploma of Advanced Studies' in fields such as structures, geotechnical engineering, transportation works, hydro-informatics etc.
	Another form of post-graduate education is the Doctorate program which is also open only to civil engineers who have completed the five-year engineering degree. The normal duration is four years for candidates studying full time or five years for extra-mural activities. The diploma of Advanced Studies is an asset for admission to the Doctoral programme which leads to the scientific degree of Doctor in Engineering after successful publication and defence of the doctoral thesis.
	Programmes for areas pertaining to structural analysis, fluid mechanics, geotechnical engineering, reinforced concrete structures, steel structure, hydraulic structures, roads and airfields, railways, bridges and tunnels, management and construction engineering etc. are organized by the Technical University of Civil Engineering of Bucharest and by the Technical Universities in Timisoara, lasi and Cluj-Napoca.
	<b>Promotion of life-long learning</b> : The same universities and also professional associations mentioned in relation to post-graduate training, organise various forms of continuing education activities such as intensive courses of 1 day to 2 weeks, seminars, practical stages etc. for which fees are supported by the companies or by individuals attending.
Russia	
Slovak Republic	Continuing professional development: Continuing professional development is not mandatory in general, but certain qualification e.g. authorized engineers have compulsory to proof qualifications and continuous professional growth by active participation on schoolings and professional activities. This is approved by the Slovak Chamber of Civil Engineers and by law.
	<b>Promotion of life-long learning</b> : All chambers, professional institutions, universities, associations and other educational institutions are performing Lifelong Learning in accordance with Life-long Learning programmes. The Civil engineering Faculty in Bratislava has developed such a programme for civil engineering graduates.
Turkey	<b>Continuing professional development:</b> No. There are no obligations for professional development after university degree for civil engineers in Turkey. Long-life learning is completely discretionary.

**Promotion of life-long learning**: The Turkish Chamber of Civil Engineers aims to provide countrywide professional development programs for colleagues, with the perspective of having the responsibility to maintain life-long learning system. The branches of the Chamber organise individual educational courses and offers for civil engineers in the region. Also, TCCE realizes general special programmes, applied in specified branches and representative offices. The sustainability of these programmes is one of the most important aims and activities of TCCE.

Some examples of our Chamber's continuing professional development activities are:

- I.a. <u>Congresses</u>: Annual or longer periodic congresses are held by the Chamber on general, specific, divisional and specialisation areas. These have become traditions of the Turkish civil engineering sector.
- I.b. <u>Symposiums</u>: Symposiums on general or specific subjects are being held by the Chamber as one body or as branch activities.
- I.c <u>Seminars</u>: Seminars are held more often in regard to congresses and symposiums.

<u>Regular Courses:</u> Our branches hold regular courses for both students and graduate civil engineers. These can be arranged in any specified topic, according to need and demand. Regular courses last 50-60 hours, over a total period of 2-3 months. They cover subjects deemed essential at the time, or the lack of usage and applications in some areas.

### II. Brief Courses

These are held as discrete short-term activities on subject basis, such as earthquake, rehabilitation and reinforcement, etc.

# United Kingdom

**Continuing professional development:** Continuing professional development is <u>not</u> mandatory in the U.K. However, for ICE members the requirement to maintain CPD and CPD records is obligatory.

Formal checking of people's CPD takes place when a member applies for a change in grade.

**Promotion of life-long learning**: To promote life-long learning amongst members, the ICE currently publishes a guidebook called 'Continuing Professional Development – a guide for all members' which is also available on the ICE web-site. Graduates under structured training are required to record their CPD and submit it for review.

CPD is promoted in a variety of seminars and presentations and the ICE is currently looking at more effective ways to promote the culture of life long learning in partnership with its commercial arm – Thomas Telford (book publishers, Training providers, recruitment consultants).