Commission 9 – Dissemination of knowledge

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Terms of Reference

Motivation and background (in brief)

Up to date technical information is needed to construct the best concrete structures. The newest information is necessary on material properties, design methods as well as construction methods.

respectively. By recognizing its importance, the *fib* decided to create a separate commission on the dissemination of knowledge.

fib COM9, Dissemination of knowledge, develops, co-ordinates and uses appropriate means to disseminate the knowledge available within *fib* and the results of the work by its commissions and task groups. The various means of dissemination are detailed below. All of the *fib* commissions and task groups contribute, either directly or indirectly, through their activities.

fib courses

fib courses deal with advanced knowledge on structural concrete in general or on specific topics. The courses are conducted by experts from *fib* commissions and task groups and may last a few days or up to one week. Such courses have been held regularly since 2003 and include topics such as:

- Codes and guidelines for sustainable development (Italy 2012)
- Concrete structures in fire (South Africa 2012)
- Design and construction of concrete bridges (Turkey 2012)
- Design of pre-stressed concrete bridges (Croatia 2008; Israel 2009);
- Durability of concrete structures (Croatia 2010; Cyprus 2011, Portugal 2014).
- Earthquake resistance of precast concrete structures (Greece, 2011)
- *fib* Model Code 2010 for Concrete Structures (Italy 2012, Argentina 2013, Austria 2013, India 2014, Brazil 2014)
- Fibres in concrete structures (Italy 2011)
- Modern concrete technology (Australia 2011)
- Prefabrication for low-cost and seismic resistant housing (India 2003 and 2004)
- Prestressed concrete bridges –materials, technologies and design (Croatia 2008)
- Retrofitting with externally bonded FRPs, with emphasis on seismic applications (Greece 2003, Turkey 2005, Mexico 2006)
- Service life design of concrete structures (India 2011)
- Strut-and-tie models (India 2003)

Further *fib* courses can be developed in any field of activities of *fib* commissions and task groups. The *fib* website includes an updated list of *fib* courses.

fib Summer schools

The *fib* has started offering one or two week courses during the summer in collaboration with universities; therefore, they are called "summer school". Similar to *fib* courses, these summer school programs are organized for young (post-graduate) engineers and researchers. The courses are appropriate for engineers in practice and teachers in engineering schools of any level. The *fib* website includes an updated list of *fib* summer schools.

fib Textbook: Structural Concrete - Advanced Design of Concrete Structures

The *fib* Structural Concrete Textbook was published as *fib* Bulletins 51, 52, 53 and 54, as well as 62. This second edition was an extensive revision that reflects advances in knowledge and technology over the past decade and presents the state of knowledge between MC1990 and MC2010. A new edition of the Structural Concrete textbook is intended to be prepared in order to reflect all of the developments incorporated within the *fib* MC2010.

A bulletin is planned to provide design examples and practical applications of MC2010 rules. This will be significant work will to further develop MC2010 applications.

PhD Symposia

The *fib* has a long tradition (dating back to CEB) of organizing PhD symposia in civil engineering. They are organized for PhD candidates who have already started their PhD research, but who have not yet submitted their theses. The intention of this special forum is to support young colleagues in proceeding with their research work and successfully defending their theses. The *fib* PhD Symposium in Civil Engineering is a very special series of symposia, which have the following characteristics:

Only PhD candidates are allowed to give the presentations and not their supervisors.

- Ample time is given for discussions after every presentation. Discussions are essential parts
 of these symposia in order to go into details of the presented research. Chairpersons are
 professors and they are responsible for stimulating discussions after every presentation.
- The PhD symposia provide good opportunities to meet researchers from all over the world working on the same fields of research.
- The registration fees for the PhD symposia must be low.

Publications

COM9 intends to provide background support to the *fib Structural Concrete* journal, published quarterly, and to the *fib* bulletins prepared as a result of the various task group programmes.

Publication policy is one of the key issues within fib.

Electronic dissemination

COM9 intends to take advantage of the most current technology for the dissemination of knowledge. This will be done in close cooperation with the *fib* headquarters in Lausanne.

Collaboration with other groups

All of the *fib's* commissions and task groups can offer *fib* courses on their activities as part of COM9's dissemination of knowledge programme.

Target audience

In addition to young (post-graduate) engineers and researchers, the courses are designed for engineers in practice and teachers in engineering schools of any level.

Expected outcome and delivery dates

It is expected that several *fib* courses will be held per year, according to demand.