Special Activity Group 5

New Model Code

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Recent Meetings:	Lausanne (Feb. 04), Avignon (Apr. 04), Zurich (Sept. 04), Delft (Feb. 05), Lausanne (June 05), Copenhagen (Nov. 05), Geneva (March 06), Zurich (Sept. 06), Lausanne (Jan. 07), Ghent (Sept. 07), Amsterdam (May 08), Tokyo (Oct. 08)

Terms of reference

The new ***fib*** Model Code is bound to be a future oriented code, which can be a basis for national and international codes to be refined, improved or newly developed. The SAG5 began its work of updating and enhancing the 1990 CEB-FIP Model Code in 2004. Publication of the first draft is currently targeted for 2010.

The new ***fib*** Model Code incorporates integrated life cycle perspective. Structures should not only be designed and built ensuring sufficient safety and serviceability, but their future use and final dismantlement should as well be duely considered. Therefore, the factor time will be introduced in the new Model Code and clear demands are formulated with regard to durability of structures. Another important innovation in the new Model Code will be the introduction of environmental and societal through-life issues. Accordingly, in design of new structures a defined service life for the structure shall be considered, an appropriate inspection and maintenance plan shall be developed and the aspect of dismantling of the structure shall be regarded already in the design stage of the structure. In this way, the design of structures according to the new Model Code becomes a holistic approach, based on defined performance requirements, with regard to safety, serviceability, durability and sustainability.

The structural design in the new ***fib*** Model Code is regulated on the basis of reliability: it may be carried out according to a probabilistic, semi-probabilistic or deterministic approach. The new ***fib*** Model Code addresses new types of high performance materials for the design of structures. In this respect defined performance design is introduced. The resistance of concrete structures against various extreme loading cases is considered. Fire, fatigue and dynamic types of loading like impact or explosions are dealt with. The code is more open to the design of hybrid structures, where concrete is used in combination with other materials like steel and timber. To this aim a special chapter on interface behaviour is introduced. The new Model Code is not only written for new structures, but as well for existing structures which have to be upgraded, strengthened or adapted. For the assessment of existing structures, the various aspects of service life are integrated into a consistent system based on defined performance requirements and consideration of residual service life.