



IALCCE 2012

Third International Symposium
on Life-Cycle Civil Engineering

3 - 6 October 2012
Hofburg Palace, Vienna, Austria

IALCCE

The Symposium is organized on behalf of International Association for Life-Cycle Civil Engineering (IALCCE) under the auspices of the University of Natural Resources and Life Sciences. IALCCE (www.ialcce.org) is a young Association founded in October 2006. Its activities encompass all aspects of life-cycle assessment, design, maintenance, rehabilitation, and monitoring of civil engineering systems.

The International Symposium on Life-Cycle Civil Engineering is a biennial event. In 2012, Austria will host the Symposium for the first time. The IALCCE 2012 Symposium provides an opportunity for academics, engineers, architects, and builders from Austria, Europe, and around the world to keep themselves up to date with latest developments in the field of life-cycle civil engineering.

Special - Sessions SS 1-3:

Actions and Interventions upon Existing Structures

Robby Caspeele, Ghent University, Ghent, Belgium

Stuart Matthews, BRE (Building Research Establishment), Garston, United Kingdom

Giuseppe Mancini, Politecnico di Torino, Torino, Italy

Current practice on the assessment of existing structures - subject to e.g. deterioration, damage, etc. - lacks thorough evaluation of the safety level. The assessment is often performed on the basis of guidelines which rely on the (subjective) experience of the investigator and the way field or laboratory investigations are incorporated in the safety assessment can be improved. Contradictory to new structures, the required safety level of existing structures is not well defined, so that decision making is less benchmarked by objective criteria.

The overall aim of fib SAG7 is the development of a Model Code for the assessment of present structural performance and the prediction of future structural performance of existing concrete structures with or without damage and/or revised operational requirements, together with any associated interventions required to extend their service life.

Among others, the following topics are covered by this group:

- A proposition of target safety levels for existing concrete structures;
- Structural models and reliability procedures in order to assess the actual structural performance of existing concrete structures, including the incorporation of prior information and field investigations into the assessment procedure;
- Methods for predicting the evolution of the actual structural performance with time;
- Development of decision making techniques for selecting appropriate interventions required to preserve or establish the desired safety level or to extend the service life of the concrete structures that are considered.