Asko Sarja is the Coordinator of a new CIB Working Commission W105 – Life Time Engineering in Construction that succeeds the former Joint CIB – RILEM Task Group TG22. The objectives and scope of this new Working Commission as well as the Curriculum Vitae of Asko Sarja and his views on the Working Commission are explained in further detail below.

**Introduction of the new Working Commission**

**Objectives and Scope**

The scope of the Working Commission is lifetime engineering, including lifetime design and management. The field of application is building and civil engineering.

The general objective is to develop and disseminate processes, systems and methods for lifetime engineering of buildings and civil engineering structures.

A special objective is to introduce into design, operation and management of buildings and civil infrastructures the methodology and methods for modeling, optimisation and decision making, including:

- Life time performance
- Life time safety and health risks
- Service life
- Life time environmental impact and
- Life time cost calculations
The Working Commission will contribute the Priority Themes of CIB on Sustainable Construction and Performance Based Building.

Work Programme
Tasks in the first Work Programme, that will run until the end of 2004, are the following:

- **Task 1.** Collect available information on the current knowledge on lifetime costing, lifetime performance modelling, safety and health risk analysis and modeling, environmental impact analysis and modeling and service life modeling: 2002-2003.
- **Task 2.** Use the current knowledge, create improvements of applied methodology and methods, and collect new basic data on lifetime costs of buildings and civil infrastructures: 2002-2004.
- **Task 3.** Use the current knowledge, create improvements of applied methodology and methods, and collect new basic data on modelling and optimisation of lifetime performance, safety and health risk and service life of buildings and civil infrastructures: 2002-2004.
- **Task 4.** Collect and systematise the results of tasks 1 to 3 into final reports, which will build the three outputs of the current Work Programme: 2004.
- **Task 5.** Participate in organising the Second International ILCDES Symposium on Integrated Life Cycle Design and Management of Buildings and Civil Engineering Structures, Finland, on 1.-3. December 2003. The Symposium will be organised in cooperation between CIB, RILEM, IABSE, EU Commission DLG XII and Local Organisers (Association of Finnish Civil Engineers and VTT, Technical Research Centre of Finland).
- **Task 6.** Identify and systematise proposals for the next phase of the Work Programme for the years 2005-2008.

Planned Output
Main output to be delivered in the years 2002 and 2004:


Interim reports will be delivered as a result of tasks 1 – 3:

- Task 1. Interim Report in 2003
- Task 2. Interim Report in 2004
- Task 3. Interim Report in 2004

External Relationships
Asko Sarja is co-ordinating a project of EU Growth Program on the theme “Life Cycle Management of Concrete Infrastructures for improved sustainability” (LIFECON), which will start the work at the begin of 2001. The work of this EU-funded project overlaps the work of the Working Commission.

In a Cluster “LIFETIME” of several EU Growth projects, a generic European guide for life time design and management of civil infrastructures and buildings will be produced. It will be possible to combine the work of the new CIB /RILEM Group into the work of LIFETIME-Network. The
Euro-International Network will get also some financing from EU thus helping for co-ordination and travels.

**Membership**
Members of this Task Group should be either a Representative of a CIB Member Organisation, an Individual CIB Member or a RILEM representative or a IABSE representative.

**Meetings**
Provisional schedule of meetings:
1. Explanatory meeting in co-operation with EU Network “Lifetime”, June 2001, Norway
2. Kick-off meeting: January 2002, (in connection to EU Lifetime Network Meetings), Germany
3. Working meeting : 1. August , 2002 (in connection to EU Network Meetings), Hämeenlinna, Finland
4. Working meeting: June 2003 (in connection to EU Network Meetings), Sweden
5. Working meeting in connection with ILCDES 2003 Symposium, 4. December 2003, Finland
6. Working meeting, May 2004 (place open)
7. Closing meeting for current Work Programme.: November 2004 (place open)

**Status**
It is envisaged that the Working Commission will be developed into a Joint CIB-RILEM Commission. Furthermore, it is envisaged that also representatives of IABSE will be able to participate in this commission.

**Curriculum Vitae Asko Sarja**
Prof. Dr. Tech. Asko Erkki Sarja, Research Professor in structural engineering at Technical Research Centre of Finland, VTT Building Technology, received his civil engineering degree at Oulu University in 1967 and his doctor of technology degree in 1979 at Helsinki University of Technology.

Asko has published more than 200 articles and publications, many of them in international journals and congresses. He has edited and partly written two books, which are published by international publishers. Most of the publications are dealing with structural technology, open industrialisation in building and environmental issues in buildings design and structural engineering.

Asko Sarja is active in the following Committees:

- 1981 - 1984 CEB (Comitee Europeen du Beton), Working Group Two Dimensional Analysis of Concrete Structures
- 1980-1984 Nordic Committee for Concrete Research, member
- 1981 FIP, Element Commission IABSE (International Association of Bridge and Structural Engineering)
- 1999 Working Commission 7 “Sustainable Engineering”
- 1989-1993 Technical Committee
- 1994-1996 RILEM TC 130 CSL “Service Life Design of Concrete Structures”
- 1994-1996 RILEM TAC (Technical Advisory Committee), member
— 1996-cont RILEM TC EDM/CIB TG 22 “Environmental Design Methods of Materials and Structures”
— 1997-2000 IACORD (International Association of Cold Regions Development Studies), Vice President
— 1994-1997 President

Coordinator’s view on the Commission Statement
During last decade there have been a lot of discussion on principles and goals of sustainable construction and sustainable build environment. Now it is time to start creation of real technical content for filling the gap between general discussions, strategies, goals and building and civil engineering practice.

Lifetime engineering is an innovative idea and a concretisation of this idea for solving the dilemma between a very long term product and a short term design, management and maintenance planning. The integrated lifetime engineering methodology is aiming at regulating, optimising and guaranteeing the life cycle human conditions, economy, cultural compatibility and ecology of buildings and civil infrastructures with parameters of technical performance and economy.

The scope of the Working Commission W105 is lifetime engineering, including lifetime design and management. The field of application is building and civil engineering.

The general objective is to develop and disseminate processes, systems and methods for lifetime engineering of buildings and civil engineering structures.

A special objective is to introduce into design, operation and management of buildings and civil infrastructures the methodology and methods for modelling, optimisation and decision making regarding to life time performance, lifetime safety and health risks, service life, lifetime environmental impact and lifetime costs. The Working Commission will contribute the Priority Themes of CIB on: Sustainable Construction and Performance Based Building.

W105 will work through Website and database information, meetings and Workshops. Deliverables will be reports and database information.