

Program Monday, May 14

09.30 Registration and coffee

Session 1. ETSI Project (Chair *Lauri Salokangas*)

10.00 A Welcome, *Lauri Salokangas*, Aalto University; *Timo Tirkkonen*, FTA

10.10 B “Importance of sustainability within transportation sector”,
AnneMette Benzon, R&D, COWI Denmark (keynote lecture)

10.40 C “CEN standardization on sustainability of construction works”,
Pekka Vuorinen, director, RTT Finland (keynote lecture)

11.10 “ETSI Project”, *Lauri Salokangas*, Aalto University
Introduction of new ETSI tools:

D “Life Cycle Cost”, *Håkan Sundquist*, KTH

E “Life Cycle Assessment”, *Helge Brattebø*, NTNU

F “Life Cycle Aesthetics”, *Aarne Jutila*, Extraplan Oy

12.00 Lunch

Session 2. Implementation (Chair *Matti Piispanen*)

13.00 A “New ways to include life cycle issues into design, decision making and
procurement”, *Matti Piispanen*, FTA

13.20 “Implementation of ETSI tools” National Road Authorities
B -Denmark, *Iben Maag*, Danish Road Directorate

C -Sweden, *Mats Karlsson*, Trafikverket

14.10 Break

14.25 “Implementation of ETSI tools” (cont.)

D - Norway, *Otto Kleppe*, Norwegian National Road Administration

E - Finland, *Matti Piispanen* FinnishTransport Agency

15.15 F Panel Discussion: “The Future of ETSI” (Chaired by *Timo Tirkkonen*)

Session 3. Insight into ETSI Tools (Chair: *Matti Piispanen*)

16.00 Presentations given by program developers,

A Life Cycle Cost tool

B Life Cycle Assessment tool

C Life Cycle Aesthetics tool

17.45 Discussion: *Reliability of the results*

Seminar Dinner (19.30-22.30)

19.30 Rådhuskällaren, Kompanigatan 5, Malmö Central

Program Tuesday, May 15

08.30 Registration and coffee

Session 4. Applications, Examples and Database (Chair: Matti Piispanen)

09.00 A "Use of LCC- and LCA tools in practical bridge projects"

Birit Buhr Jensen

09.30 B "Use of LCA-tool in optimization of environmental impact"

Linda Hoibye, Kirsten Eriksen

10.00 C "Lövä Bridge Life - cycle analysis using ETSI tools"

Anne Nieminen

10.15 Break

10.30 D "LCA of Selected Norwegian Bridges"

Johanne Hammerwold, Helge Brattebo

11.15 E "Methodology for Presentation of Unit Data for Extended LCC-Estimates"

Risto Kiviluoma

11.45 F "Service life of different bridge parts"

Riku Kytö

12.00 Lunch

Session 5. Bridges Life Cycle Research (Chair: Lauri Salokangas)

13.00 A "LCC Aspects on Infrastructure Investment" Håkan Sundqvist

13.10 B "Towards Sustainable Construction: Life Cycle Assessment of Railway Bridges"

Guangli Du

13.25 C "BaTMan-LCC"

Mohammed Safi

13.40 D "Design of Short-Span Bridges with Regard to Life Cycle Costs!"

Niklas Larsson, Dan Nilsson

14.00 E "LCC Calculation of Concrete Bridge Deck Surface Structures"

Sami Noponen

14.15 F "Evaluation of bridge aesthetics with the LCE tool"

Yishu Niu

14.45 Discussion

15.00 Closing the Seminar