



Bridge Life Cycle Optimisation

Closing Seminar
14-15 May, 2012
Malmö



ETSI
Opening

Matti Piispanen
Finnish Transport Agency

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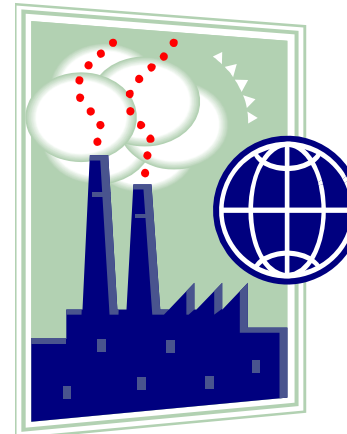
Bridge Life Cycle Optimisation



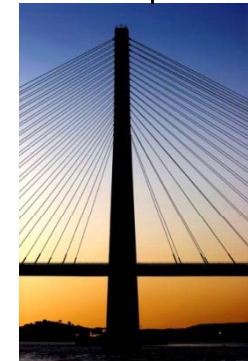
Best Compromise



LCC



LCA

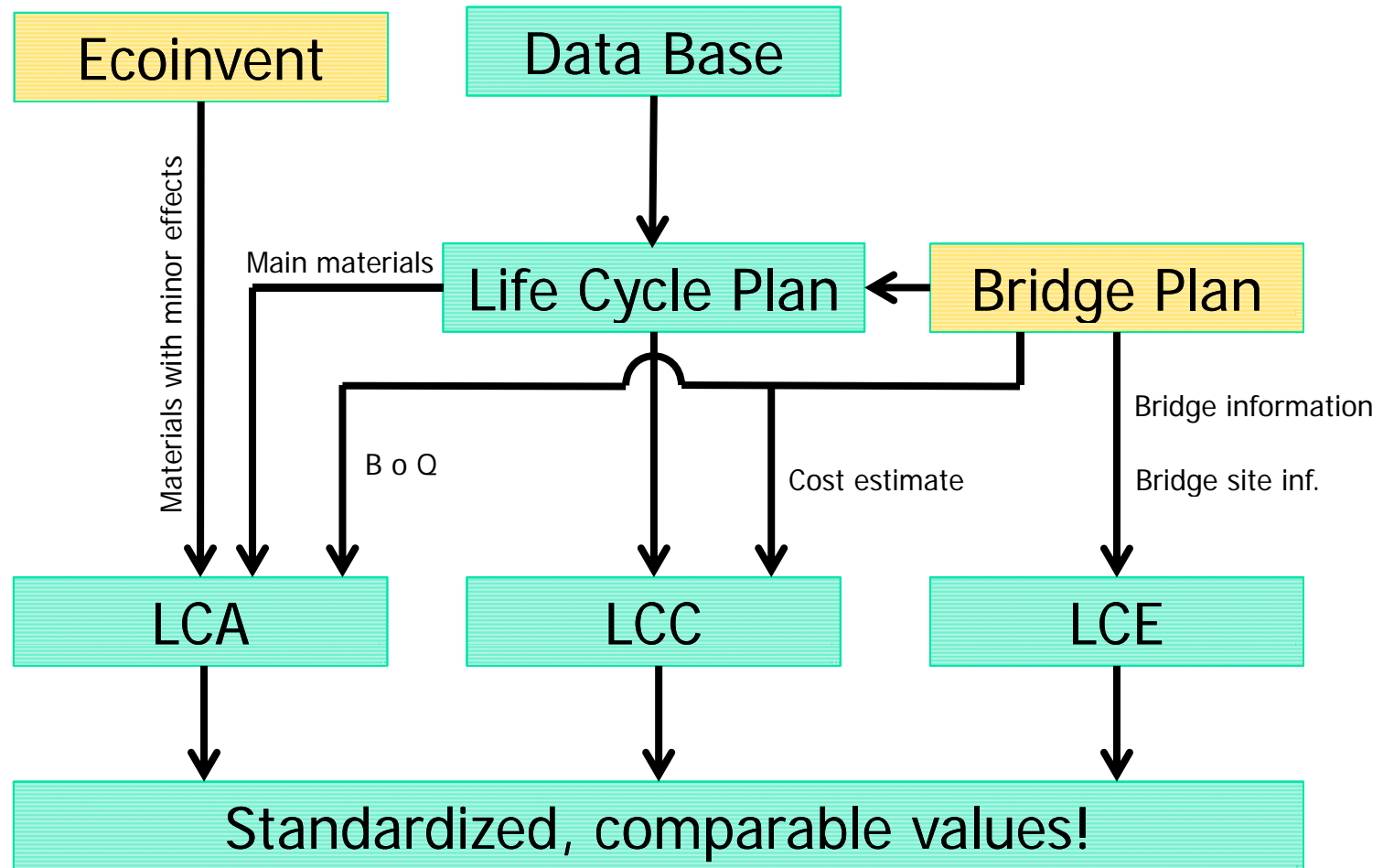


"LCE"

New Design Culture

Bridge designer makes a life cycle plan and calculates the life cycle effects

Bridge Life Cycle Optimisation





Program

Bridge Life Cycle Optimisation

Monday, May 14 (Day 1)

9.30 Registration and coffee

Session 1. ETSI Project (10-12)

10.00 Welcome, *Matti Piispanen*

10.10 Keynote 1: Importance of sustainability within transportation sector, *Stig P. Christensen*

10.40 Keynote 2: CEN standardization on sustainability of construction works, *Pekka Vuorinen*

11.10 ETSI Project, *Lauri Salokangas*
Introduction of new ETSI tools
- Life Cycle Cost, *Håkan Sundquist*
- Life Cycle Assessment, *Helge Brattebø*
- Life Cycle Aesthetics, *Aarne Jutila*

12.00 Lunch

Session 2. Implementation (13-15.30)

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

13.20 Implementation of ETSI tools. National road authorities
- Denmark,
- Sweden,

14.10 Break

14.25 Implementation of ETSI tools (cont.)
- Norway,
- Finland,

15.15 Discussion: *The Future of ETSI*

Session 3. Insight into ETSI tools (16-18)

16.00 Presentations given by program developers, experts and test users
- Life Cycle Cost tool
- Life Cycle Assessment tool
- Life Cycle Aesthetics tool

17.45 Discussion: *Reliability of the results*

Seminar dinner (19.30-22.30)

Tuesday, May 15 (Day 2)

8.30 Registration and coffee

Session 4. Applications and examples (9-12)

9.00 Experiences of the users – applications of ETSI tools in real bridge projects
Use of LCC- and LCA-tools in practical bridge projects, *Birit Buhr Jensen*
Use of LCA-tool in optimisation of environmental impact, *Linda Høiby, Kirsten Eriksen*

10.15 Break

10.30 Examples of the use of ETSI tools in practice
Example calculations using LCC- and LCA - tools in different bridge projects
Evaluation of bridge aesthetics with the aid of LCE-tool

12.00 Lunch

Session 5. Bridge Life Cycle research (13-15)

13.00 Presentations given by researchers, experts and designers about specific topics
- Service life of different bridge parts
- The real life of bridges in Nordic countries
- Intervals of remedial actions of bridges
- LCC analysis for bridge deck surfaces
- LCC analysis for railway bridges

Closing discussion (15-15.30)

Workshop (in conf. room, 13-15)

During the afternoon of the second seminar day the Tools as LCC and LCA programs may be practiced under the guidance of the program developers.

The participants are urged to bring their own laptops for the workshop. Excel is necessary for using the Life Cycle tools, which are delivered to participants.

