



Deliverable D 3.2: National and local applied technical models and descriptions of lifetime engineering of buildings, civil and industrial infrastructures

Final NDG Activity Reports 2002 - 2005

Editor:

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ACRONYM : LIFETIME

TITLE : Lifetime Engineering of Buildings and Civil Infrastructures

PROJECT CO-ORDINATOR : Technical Research Centre of Finland (VTT),

VTT Building Technology

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PARTNERS :

Principal Contractors:

Taylor Woodrow Construction ltd	
Centre Scientifique et Technique du Batiment,	
Imperial College of Science Technology and Medicine, (T H Huxley School of Environment, Earth Sciences and Engineering)	
Universitaet Karlsruhe (University of Karlsruhe) Facility Management and Institut f. Maschinenwesen im Betrieb	

Members: Totally 92 Members

Observers: Totally 2 Observers

PROJECT TIME : 01. 06. 2002 - 31. 07. 2005

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Dissemination works of National Dissemination Groups (NDG`s) of Thematic Network Lifetime

The principles of lifetime engineering are currently, and will still be in the future an important driving force at a wide area of building and civil engineering. It will work as an important forum in realisation of sustainability in the civil engineering and real estate branches. It will have a high impact in design, contracting and management of buildings and civil infrastructures:

- Design process and methods will be changed
- Contracting and procurement will increasingly be based on construction plus long term (15 to 30 years) responsibility on service and maintenance of the facilities
- A lot of new service firms will be established for specialised MR&R planning and executing works

All this means that there is a high interest and a very large potential market for knowledge in Lifetime Engineering. As usual in new issues the real market of Lifetime Engineering is growing gradually. The critical issues for accelerating this development are: the development of knowledge of all stakeholders in this issue, and distribution of information on experiences and results of applications (success stories). This has to be done both on international level and national level in each participating country. The Network "Lifetime" has been actively participating this work, both in international Working Package groups, Lifetime Cluster Project Group and in National Dissemination Groups.

The activities of National Dissemination Groups (NDG) have been an essential part of the dissemination of Lifetime Engineering into praxis in participating countries. There have been totally 28 NDG`s, of which about 20 have been active. The active NDG`s have been meeting and activating dissemination, training and education of lifetime engineering issues in their countries. Totally 14 posters on national demonstration projects were reported in posters at the last Lifetime Workshop in Lyon. The demonstration projects are presented in the Lifetime Website under a separate title, and described and concluded in details in Lifetime Deliverable D5.1.

Final Reports of NDG`s have been collected, and their results are summarised in this report and in Final Technical Report. Especially interesting was to see the answers into the question, how different issues of Lifetime Engineering are ranked in the practice of each country just at the end of the Lifetime-project. In the question of Final Activity Report of NDG`s, the NDG leaders made the evaluation of the interest in different issues of Lifetime Engineering in their countries (Table1). These evaluations can probably help in planning the national strategies, education and training and R&D programs for dissemination and exploitation of Lifetime Engineering issues into praxis.

Organisation	Country	Interest in the fields of Lifetime				
		Lifetime Investment planning	Integrated Lifetime design	Lifetime procurement and contracting	Lifetime Management	End-of Life Management
TU Vienna, Department of Civil Engineering	A	High	High	Moderate	High	High
University of Karlsruhe Facility Management	D	High	Moderate	Moderate	High	Moderate
Centre Scientifique Technique Batiment, Energy, Indoor, Environments&Automation Department	F	Moderate to minor	High	Moderate	High	High
Belgian Road Research Centre	B	High	Moderate	Minor	Moderate	High
Centrum dopravního výzkumu	CZ	Moderate	Moderate	Minor	High	Moderate
Danish Technological Institute, Concrete Centre	DK					
National Technical University of Athens, Department of Chemical Engineering	EL	Moderate	Moderate	Moderate	Moderate	Moderate
CARSA	E	High	Moderate	High	High	Moderate
Finnish Association of Civil Engineers (RIL)	FIN	High	High	High	Moderate	Moderate
University College Dublin, School of Architecture, Energy Research group	IRL	Moderate	Moderate	Moderate	Moderate	Moderate
Instituto Giordano S.p.A	I					
Road and Hydraulic Engineering Division, Ministry of Transport, Public Works and Water Management	NL					
Laboratório Nacional de Engenharia Civil (LNEC)	P					
Centre for Built Environment/University of Gävle	S	Moderate	High	High	Moderate	Minor
Laboratory of Traffic Facilities, Swiss Federal Institute of Technology	CH					
The Icelandic Building Research Institute	IS	High	High	High	High	Moderate
Norwegian Institute for Building Research	NO					
Federation of the Cyprus Building Contractors; Association (OSEOK)	CY					
Transport research Centre	CZ	Moderate	Moderate	Minor	Minor	Moderate
Estonian Agricultural University	EE					
Vilnius Geminas Technical University	LT	Moderate	Moderate	Minor	Minor	Minor
Institute for Transport Sciences LTD	HU					
Building Research Institute, Warsaw	PL	Moderate	Moderate	Minor	High	High
National Building Research Institute	RO	High	Moderate	Moderate	Moderate	Minor
CARSA Institute	SP	High	Moderate	High	Moderate	Moderate
University of Ljubljana	SI	Moderate	Moderate	Moderate	High	Minor
Building Research Establishment	UK	High	Moderate	Moderate	High	High
TOTAL SCORES of RANKINGS	All	High: 9 Moderate : 81/2 Minor: 1/2	High: 5 Moderate ..: 13 Minor: 0	High: 5 Moderate ..: 8 Minor: 5	High: 9 Moderate ..: 7 Minor: 2	High: 5 Moderate ..: 9 Minor: 4

Introducing Lifetime Engineering into praxis means a real renewal of entire paradigm of building and civil engineering. Therefore the long term development is highly needed. Especially for the activation of European common market are needed European and international standardisation works, mainly in CEN and ISO. Thematic Network "Lifetime" was also aiming at delivering some usable results for the work of these standardisations. It is highly wished, that the people who are actively working and developing new agendas for

standardisation in this field, would carefully study these results (Website: <http://lifetime.vtt.fi/index.htm>) in order to transfer this knowledge into standardisation works.

Espoo 29th September, 2005

Asko Sarja

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: **AUSTRIA**

NDG Leader Organisation: **TU Vienna, Department of Civil Engineering**

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

1. National Dissemination Group (NDG) *has* been established
 - as a separate group: **No**
 - as a joint group with some other groups of the same issue: **Yes**
2. If NDG has been working, the number of members of NDG at the end of the period: **6** members
3. Tasks and actions, which have been carried out during this period:
 - Meetings of NDG: total number of meetings :**12**
 - National (local) seminars or workshops of NDG on Lifetime Engineering: total number: **_**
 - International workshops and seminars: total number: **__**
 - Other events: **__** (*please define the type!*):**_**
4. Contribution to T. N. Lifetime work: (*type of the contribution:*)
 - Participation in Workshops:
 - *Oslo, September 2002:* **Yes**
 - *Kuopio, December 2003:* **Yes**
 - *Lyon, April 2005:* **Yes**
 - *Other Lifetime meetings (please define place and time):* **London, May 2003**
 - Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University):* **Yes**
 - *WP2 (PC: ICSTM):* **Yes**
 - *WP3(PC: VTT):* **Yes**
 - *WP4 (PC: Tywood):* **Yes**
 - *WP5 (PC: CSTB):* **Yes**
5. Other tasks or contributions to the Lifetime Work (*short explanation*):
6. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximately estimate*): **0.25** Person Months
7. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Enginee ring</i>	<i>Grade of the interest (Please tick the relevant)</i>		
	<i>Hig h</i>	<i>Moderat e</i>	<i>Mino r or no</i>
Lifetime investme nt planning and decision- making	X		
Integrate d lifetime design	X		
Lifetime Procurem ent and Contracti ng: Integrate d lifetime constructi on		X	
Integrate d lifetime managem ent and maintena nce, repair, rehabilita tion and Modernis ation (MRR& M) planning and actions	X		
End of	X		

Life
managem
ent:
Recovery
, reuse,
recycling
and
disposal

8. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person: DI Petra Simanek, University of Technology Vienna,
Institute for Road Construction and Maintenance

Country: *Belgium*

NDG Leader Organisation: *Belgian road Research Centre (BRRC)*

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

9. National Dissemination Group (NDG) *has* been established

- as a separate group: *no*
- as a joint group with some other groups of the same issue: *Yes*

10. If NDG has been working, the number of members of NDG at the end of the period: 15 members

11. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 5
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 0
- International workshops and seminars: total number: 0
- Other events: 0 (*please define the type!*):_

12. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes (+ Poster exhibition)*
 - *Other Lifetime meetings (please define place and time): _*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): Yes*
 - *WP3(PC:VTT): no*
 - *WP4 (PC:Tywood): no*
 - *WP5 (PC: CSTB): Yes*

13. Other tasks or contributions to the Lifetime Work (*short explanation*):

14. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 1 Person Months

15. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making	X		
Integrated lifetime design		X	
Lifetime Procurement and Contracting: Integrated lifetime construction			X
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning		X	

and
actions

End of
Life
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Recovery
, reuse,
recycling
and
disposal

x

16. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person: ir. Luc De Bock,
Coordinator for Environment – Recycling
Belgian Road Research Centre
Boulevard de la Woluwe, 42
B – 1200 Brussels
Belgium

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: Czech Republic

NDG Leader Organisation: Centrum dopravního výzkumu

Please answer the following information

National Dissemination Group (NDG) has been established

- as a joint group with some other groups of the same issue: *Yes*

17. If NDG has been working, the number of members of NDG at the end of the period: 6 members of the Centre for integrated design of advanced structures

18. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings: 1
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 1 (Concrete construction and sustainable development, Prague 5.11.2004)
- International workshops and seminars: total number: 1 (Life Cycle assessment, behaviour and properties of concrete and concrete structures, Brno, November, 9-11. 2004)
- Other events: *Platform of PhD students on sustainable construction_ (Research projects of Czech Technical University in Prague)*

19. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings: London, 13th Mai 2003, meeting of leaders of NDGs*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): no*
 - *WP3(PC:VTT): /no*
 - *WP4 (PC:Tywood): Yes*
 - *WP5 (PC: CSTB): Yes*

20. Other tasks or contributions to the Lifetime Work (*short explanation*):

None

21. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 8 Person Months

22. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> <i>(Please tick the relevant)</i>		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		X	
Integrated lifetime design		X	
Lifetime Procurement and Contracting: Integrated lifetime construction			X
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning and actions	X		
End of Life management: Recovery, reuse, recycling and disposal		X	

23. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

The exploitation of Lifetime Engineering in the Czech Republic is on the high-level thanks group of teachers on the Czech Technical University in Prague. The research centre named Centre for integrated design of advanced structures was established at the beginning of the year 2005. This centre associates three Czech Universities and three building companies. One of the main goals of this centre is to promote integrated lifetime planning and design.

The help of Thematic Network Lifetime in the dissemination and exploitation of the LIFETIME engineering is significant but can be fully assessed after the finding all final deliverables and results.

Name of the contact person:

Vaclav Fencel

Transport Research Centre, Brno, Czech Republic fenclv@cdv.cz

FINAL REPORT OF Lifetime NDG

20. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: **FRANCE**

NDG Leader Organisation: **CSTB- Sustainable Development Department**

Please answer the following information :

National Dissemination Group (NDG) *has* been established (*end of 2002*)

- as a separate group: *no*
- as a joint group with some other groups of the same issue: *Yes: the working group acting as NDG is as well the French mirror group of the ISO/TC59/SC14 “design life”, and the National platform for PeBBu TN*

24.If NDG has been working, the number of members of NDG at the end of the period: *15 members*

25.Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : *8, from 11-2002 to 9-2005*
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: *3:*
- International workshops and seminars: total number: *2*
- Other events: *__ (please define the type!):_*

26.Contribution to T. N. Lifetime work: (*type of the contribution:)*

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time):_*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): Yes*
 - *WP3(PC:VTT): no*
 - *WP4 (PC:Tywood): Yes*
 - *WP5 (PC: CSTB): Yes*

27.Other tasks or contributions to the Lifetime Work (*short explanation*):

28.Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): *total 2.7 Person Months*

1-6-2002 to 31-5-2003: 0.6 PM

1-6-2003 to 31-5-2004: 0.6 PM

1-6-2004 to 31-7-2005: 1.5 PM

29. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>Hig h</i>	<i>Moderat e</i>	<i>Mino r or no</i>
Lifetime investment planning and decision-making		X	X
Integrated lifetime design	X		
Lifetime Procurement and Contracting: Integrated lifetime construction		X	
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&	X		

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End of
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Recovery
, reuse,
recycling
and
disposal

X

30. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*

Main efforts before any detected interest:

- *translate documents into French*
- *translate theoretical and conceptual approach into examples and facts*

Main impact: *through specific events (workshop, information meeting) with cross presentations*

- *the help of Thematic Network Lifetime in the dissemination and exploitation*

*The help from the TN is **noticeable now** (i.e. at the end of the network!) with finalized and synthetic documents to be translated, presented and distributed. The efficient dissemination national work is actually beginning now, when the network ends, as well as the funding for doing it!*

Name of the contact person:

Jean-Luc CHEVALIER

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: *FINLAND*

NDG Leader Organisation: *Association of Finnish Civil Engineers RIL*

Please answer the following information (*in case of alternatives, please cut the unrelevant alternative!*):

31. National Dissemination Group (NDG) *has* been established

- as a separate group: *No*
- as a joint group with some other groups of the same issue: *Yes*

32. If NDG has been working, the number of members of NDG at the end of the period: *34 members*

33. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : *10*
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: *10*
- International workshops and seminars: total number: *1*
- Other events: *__ (please define the type!):_*

34. Contribution to T. N. Lifetime work:

- *Reports at Lifetime Workshops of Finnish activities in lifetime engineering*
- *Glossary of Lifetime Engineering Terminology (english-german-finnish-swedish)*
- *Presenting "best-practice"-projects*
- *Defining a Task List for the Structural Engineer in Lifetime Engineering*
- *Dissemination of Lifetime Engineering Knowledge*
- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time):_*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): No*
 - *WP3(PC:VTT): Yes*
 - *WP4 (PC:Tywood): No*
 - *WP5 (PC: CSTB): Yes*

35. Other tasks or contributions to the Lifetime Work (*short explanation*):

36. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): *1 Person Months*

37. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>Hig h</i>	<i>Moderat e</i>	<i>Mino r or no</i>
Lifetime investment planning and decision-making	X		
Integrated lifetime design	X		
Lifetime Procurement and Contracting: Integrated lifetime construction	X		
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&		X	

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actions

End of
Life
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Recovery
, reuse,
recycling
and
disposal

X

38. Other comments into:

The interest in Lifetime Engineering is gradually increasing. Lifetime Performance criterias are used by owners and investors. Many designers have good knowledge in Lifetime Engineering. Lifetime construction methods are used in e.g. road projects.

The Thematic Network Lifetime has been very helpful in providing information and know-how on the subject from other countries.

Name of the contact person: *Gunnar Åström*

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: Germany

NDG Leader Organisation: Universität Karlsruhe, TMB, Facility Management, contractor no. 5

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

39. National Dissemination Group (NDG) *has* been established

- as a separate group: *Yes*
- as a joint group with some other groups of the same issue: *no*

40. If NDG has been working, the number of members of NDG at the end of the period: 10 members

41. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 4
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 2
- International workshops and seminars: total number:
- Other events: 6 (*please define the type!*): 6
 - Presentation at FM-Symposium at Universität Karlsruhe, 2004
 - Presentation at FM Congress in Düsseldorf, 2004
 - Presentation at EXPO Real, Germany 2004
 - Presentation at EXPO Real, Germany 2003
- Presentation at ITECOM International Conference, Athens, 16th/17th of december 2003
 - Presentation at EXPO Real, Germany 2002
 - Presentation at FM-Symposium at Universität Karlsruhe, 2002

42. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time):*
 - *Karlsruhe, 10/2003*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): Yes*
 - *WP3(PC:VTT): Yes*
 - *WP4 (PC:Tywood): no*
 - *WP5 (PC: CSTB): Yes*

43. Other tasks or contributions to the Lifetime Work (*short explanation*):

44. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 2 Person Months

45. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making	High		
Integrated lifetime design		Moderate	
Lifetime Procurement and Contracting: Integrated lifetime construction		Moderate	
Integrated lifetime management and maintenance, repair, rehabilitation and Moderniastion (MRR&M) planning and actions	High		
End of Life management: Recovery, reuse, recycling and disposal		Moderate	

46. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person: Kunibert Lennerts

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: Greece

NDG Leader Organisation: National Technical University of Athens

Please answer the following information (*in case of alternatives, please cut the unrelevant alternative!*):

47. National Dissemination Group (NDG) *has* been established

- as a separate group: Yes
- as a joint group with some other groups of the same issue: Yes, interconnected with Technical Chamber of Greece, which is connected with *all the construction sectors in Greece* (Ministries -Culture & Environment and Public Works, Assoc. of Consulting Companies, Assoc. of Contracting Companies, Assoc. of Construction Companies class H, Assoc. Civil. Arcitec, Chemic. Mechanical., Surveyor Engineers, ELOT/Standarisation) and represents 100000 engineers

48. If NDG has been working, the number of members of NDG at the end of the period:

8 members (core group)

49. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings: 2
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number:
- International workshops and seminars: total number: 2 (Sustainable Construction Round Tables in the Framework of HELECO'03 and HELECO'05)
- Other events: Stand in HELECO'03 (*please define the type!*)

50. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time): London, May 2002, Karlsruhe, October 2004*
- Contributions into WP activities and reports:
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): No*
 - *WP3(PC:VTT): No*
 - *WP4 (PC:Tywood): No*
 - *WP5 (PC: CSTB): Yes*

51. Other tasks or contributions to the Lifetime Work (*short explanation*):

Publishing of the proceedings of round tables at the Technical Chamber of Greece Web Page, as well as at the Scientific Journal :Technica Chronika, Vol.2, Year 2004

52. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximate estimate*): 3 Person Months

53. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		X	
Integrated lifetime design		X	
Lifetime Procurement and Contracting: Integrated lifetime construction		X	
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning and actions		X	
End of Life management: Recovery, reuse, recycling and disposal		X	

54. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country.*

Technical Chamber of Greece has taken the initiative to organise and establish the National Construction Technology Platform (NCTP) in the framework of the European Construction Technology Platform (ECTP). Main focus areas of Greek NCTP will be Sustainable Construction (in the context of Lifetime engineering) and protection of Cultural Heritage. To this direction many meeting will take place and this will ameliorate the dissemination and exploitation of Lifetime Engineering in Greece.

European Union should encourage all these efforts both at National and European Level.

Name of the contact person: Antonia Moropoulou

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: Iceland

NDG Leader Organisation: The Icelandic Building Research Institute

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

55. National Dissemination Group (NDG) *has/has not* been established

- as a separate group: ~~Yes~~/no
- as a joint group with some other groups of the same issue: Yes/~~no~~

56. If NDG has been working, the number of members of NDG at the end of the period: 11 members

57. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 3
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 3
- International workshops and seminars: total number: 2 (in addition to items under #4)_
- Other events: (*please define the type!*):

58. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - Oslo, September 2002: ~~Yes~~/~~no~~
 - Kuopio, December 2003: ~~Yes~~/~~no~~
 - Lyon, April 2005: ~~Yes~~/~~no~~
 - Other Lifetime meetings (*please define place and time*): Karlsruhe
- Contributions into WP activities and reports :
 - WP1(PC: Karlsruhe University): ~~Yes~~/~~no~~
 - WP2 (PC: ICSTM): ~~Yes~~/no
 - WP3(PC: VTT): ~~Yes~~/~~no~~
 - WP4 (PC: Tywood): ~~Yes~~/~~no~~
 - WP5 (PC: CSTB): ~~Yes~~/no

59. Other tasks or contributions to the Lifetime Work (*short explanation*):

Two open meetings in Iceland for designers and public actors where Lifetime Work was discussed

60. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 0.75 Person Months

61. The development and implementation activities of different areas of the Lifetime Engineering in this country:

Lifetime engineering has been used in one project in Iceland concerning a big road tunnel and probably, at least partly, in two more projects but it is very difficult to get information about

these. In last 2-5 years a fast increasing interest, partly due to increased interest in PPP (public-private partnership) projects.

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> <i>(Please tick the relevant)</i>		
	<i>Hig h</i>	<i>Moderat e</i>	<i>Mino r or no</i>
Lifetime investment planning and decision-making	X		
Integrated lifetime design	X		
Lifetime Procurement and Contracting: Integrated lifetime construction	X		
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning	X		

and
actions

End of
Life
managem
ent:
Recovery
, reuse,
recycling
and
disposal

X

62. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person: Björn Marteinson

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: IRELAND

NDG Leader Organisation: Energy Research Group, UCD

Please answer the following information (*in case of alternatives, please cut the unrelevant alternative!*):

63. National Dissemination Group (NDG) *has* been established

- as a separate group: *No*
- as a joint group with some other groups of the same issue: *Yes*

64. If NDG has been working, the number of members of NDG at the end of the period: 5 members

65. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 1
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 1
- International workshops and seminars: total number: 0
- Other events: (*please define the type!*):

66. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: no*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time): Karlsruhe, 2004*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): no*
 - *WP3(PC:VTT): no*
 - *WP4 (PC:Tywood): Yes*
 - *WP5 (PC: CSTB): Yes*

67. Other tasks or contributions to the Lifetime Work (*short explanation*):

68. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 2 Person Months

69. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> <i>(Please tick the relevant)</i>		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		X	
Integrated lifetime design		X	
Lifetime Procurement and Contracting: Integrated lifetime construction		X	
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning and actions		X	
End of Life management: Recovery, reuse, recycling and disposal		X	

70. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person:

Prof. J Owen Lewis

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: *Lithuania*

NDG Leader Organisation: *Vilnius Gediminas Technical University*

Please answer the following information (*in case of alternatives, please cut the unrelevant alternative!*):

71. National Dissemination Group (NDG) *has* been established

- as a separate group: *Yes*
- as a joint group with some other groups of the same issue: */no*

72. If NDG has been working, the number of members of NDG at the end of the period: *7 members*

73. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : *12*
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: *4*
- International workshops and seminars: total number: *5*
- Other events: *__ (please define the type!):_*

74. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time):_*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): Yes*
 - *WP3(PC:VTT): Yes*
 - *WP4 (PC:Tywood): Yes*
 - *WP5 (PC: CSTB): Yes*

75. Other tasks or contributions to the Lifetime Work (*short explanation*):

- *A. Kaklauskas and E. Zavadskas have prepared books "Multiple Criteria Analysis of Building Life Cycle" in Lithuanian (290 pages) and Russian (235 pages) languages. The books partially exhibit the outcomes obtained during the Lifetime project. Book in Russian language likely will be published in Moscow and devoted for Russian universities students.*
- *Two versions of Multiple Criteria Decision Support System for Building's Life Cycle (DSS-BLC) have been developed. The first version was created in the beginning of project and described in different authors publications. Now a second Web-based DSS-BLC version is under development (see <http://dss.vtu.lt/lifecycle/>).*

- Multimedia (electronic format of the book, video, audio, intelligent testing system) have been developed for module "Multiple Criteria Analysis of Building Life Cycle" in Lithuanian language.
- Multimedia (electronic format of the book, video, audio, intelligent testing system) is under preparation for module "Multiple Criteria Analysis of Building Life Cycle" in Russian language.
- Developing module and multimedia "Multiple Criteria Analysis of Building Life Cycle" in Lithuanian and Russian, the outcomes of the project LIFETIME would be disseminated even on a larger scale.
- Six papers have been published concerning Lifetime Work in international conferences and journals.

76. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 8 Person Months

77. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		X	
Integrated lifetime design		X	
Lifetime Procurement and Contracting: Integrated lifetime construction			X
Integrated lifetime management and maintenance, repair, rehabilitation and Moderniastion (MRR&M) planning and actions			X
End of Life management: Recovery, reuse, recycling and disposal			X

78. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*

Since 1999 the distance (Internet) Master degree studies "Property Management" have been introduced in Vilnius Gediminas Technical University (VGTU), and Master degree studies "Construction Economics" from 2000 as well. There are currently 191 master students from all over Lithuania studying in these two e-learning master programs. All students study module "Multiple Criteria Analysis of Building Life Cycle" in the "Construction Economics" Master degree studies. Some students study this module in the "Property Management" Master degree studies.

- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person:

Prof. PhD. DrSc. A.Kaklauskas

Chairman of the Department of Construction Economics and Property Management
Vilnius Gediminas Technical University

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Lithuania

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Tel. +370 5 2745234,

Fax. +370 5 270 0112

Mobile tel: +370 685 12218

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: **POLAND**

NDG Leader Organisation: *Building Research Institute Warsaw (ITB)*

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

79. National Dissemination Group (NDG) has been established

- as a separate group: **Yes**¹
- as a joint group with some other groups of the same issue: **No**

80. If NDG has been working, the number of members of NDG at the end of the period: 4 members

81. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 2
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 2³
- International workshops and seminars: total number: 0
- Other events: 0 (*please define the type!*):

82. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002*: **Yes**
 - *Kuopio, December 2003*: **Yes**
 - *Lyon, April 2005*: **Yes**
 - *Other Lifetime meetings (please define place and time)*:
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University)*: **Yes**
 - *WP2 (PC: ICSTM)*: **No**
 - *WP3(PC:VTT)*: **Yes**
 - *WP4 (PC:Tywood)*: **No**
 - *WP5 (PC: CSTB)*: **Yes**

83. Other tasks or contributions to the Lifetime Work (*short explanation*):

¹ Group that consisted from Polish participants of LIFETIME project

² There were no physical meetings. All problems that arose were discussed electronically

³ There were no separate seminars for the LIFETIME. Problems connected with the LIFETIME were presented on seminars that covered broader domain.

ITB set up www.ITB.pl/LIFETIME.htm (www.ITB.pl/spis_no.htm) web page where are publicized information from LIFETIME activity that are of interest for Polish readers.

84.Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximate estimate*): 8⁴ Person Months

85.The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		√	
Integrated lifetime design		√	
Lifetime Procurement and Contracting: Integrated lifetime construction			√
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning and actions	√		
End of Life management: Recovery, reuse, recycling and disposal	√		

86.Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*

The main problem in the awakening of the interest in Lifetime Engineering (in the building industry) is that up to date, in most of the cases, there are no scientifically based methods for estimating of the lifetime for building products and materials. But just this lays at the base of lifetime engineering. Methods that are admitted by ISO15686 are giving for the designer possibility of practically unrestricted estimation (within very wide range) of the value of coefficients influencing the value of lifetime of the products. Designers know that and not expressing their opinion in the formal way are militating against the implementation of the lifetime principles that in their opinion are causing only additional useless work.

I think that resolving this problem, in the near future, by elaborating scientific base for the estimation of the value of lifetime for building products exploited in variety environments is simply impossible. Just for that we ought to focus our activity on

⁴ 3.8MM paid from EU founds and the rest from own resources

collecting information on the lifetime of existing products. This will (probable) enable us to narrow the given in ISO 15686 range of coefficients value.

- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person:

Marian Suchan

FINAL REPORT OF Lifetime NDG

21. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: Romania

NDG Leader Organisation: **NATIONAL BUILDING RESEARCH INSTITUTE**

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

87. National Dissemination Group (NDG) ~~has~~~~has not~~ been established

- as a separate group: ~~Yes~~/~~no~~
- as a joint group with some other groups of the same issue: ~~Yes~~/~~no~~

88. If NDG has been working, the number of members of NDG at the end of the period: 4 members

89. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 6
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 2
- International workshops and seminars: total number: -
- Other events: - (*please define the type!*): -

90. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - Oslo, September 2002: ~~Yes~~/~~no~~
 - Kuopio, December 2003: ~~Yes~~/~~no~~
 - Lyon, April 2005: ~~Yes~~/~~no~~
 - Other Lifetime meetings (*please define place and time*): -
- Contributions into WP activities and reports :
 - WP1(PC: Karlsruhe University): ~~Yes~~/~~no~~
 - WP2 (PC: ICSTM): ~~Yes~~/~~no~~
 - WP3(PC: VTT): ~~Yes~~/~~no~~
 - WP4 (PC: Tywood): ~~Yes~~/~~no~~
 - WP5 (PC: CSTB): ~~Yes~~/~~no~~

91. Other tasks or contributions to the Lifetime Work (*short explanation*):

92. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximate estimate*): 1
Person Months

93. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Enginee ring</i>	<i>Grade of the interest (Please tick the relevant)</i>		
	<i>Hig h</i>	<i>Moderat e</i>	<i>Mino r or no</i>
Lifetime investme nt planning and decision- making	X		
Integrate d lifetime design		X	
Lifetime Procurem ent and Contracti ng: Integrate d lifetime constructi on		X	
Integrate d lifetime managem ent and maintena nce, repair, rehabilita tion and Modernis ation (MRR& M) planning and actions		X	
End of			X

Life
managem
ent:
Recovery
, reuse,
recycling
and
disposal

94. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Starting from the generous and important ideas of the Lifetime Engineering, our Institute has proposal two years ago and it was accepted a national project regarding life cycle cost of the highways. This creates an excellent way of dissemination and exploitation the Lifetime Engineering in our country of the level of research, enterprises, authorities, etc.

Name of the contact person: dr.Dan Georgescu

Country: Slovenia

NDG Leader Organisation:

University of Ljubljana, Faculty of Civil and Geodetic Engineering

Please answer the following information (*in case of alternatives, please cut the irrelevant alternative!*):

95. National Dissemination Group (NDG) has been established

- as a joint group with some other groups of the same issue.

96. If NDG has been working, the number of members of NDG at the end of the period 12 members

97. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 3
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 1
- Other events: 3 (*please define the type!*): reporting on LIFETIME Project at national professional conferences of Structural Engineers and Concrete Association

98. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - Oslo, September 2002: Yes
 - Kuopio, December 2003: No
 - Lyon, April 2005: Yes
 - Other Lifetime meetings (*please define place and time*): _
- Contributions into WP activities and reports :
 - WP1(PC: Karlsruhe University): Yes/no
 - WP2 (PC: ICSTM): No
 - WP3(PC: VTT): No
 - WP4 (PC: Tywood): No
 - WP5 (PC: CSTB): No

99. Other tasks or contributions to the Lifetime Work (*short explanation*):

The idea of LIFETIME project and its outcomes were included in the university under and postgraduate study at University of Ljubljana as a part of lectures on Building materials, Solid waste management, Building material decay, Experimental analysis of structures and Maintenance and repair of buildings. The input that LIFETIME project made possible significantly contributed to upgrade of curriculum.

Dissemination of LIFETIME results was also carried out through meetings of members of Slovenian Construction Cluster (<http://www.sgg.si>) where many of Slovenian SMS are joined to foster R&D&I activities. The interest for Lifetime approach is growing and it is expected that significant number of activities in next years will be supported with this approach.

On October 2004 the Slovenian Construction Technology Platform (<http://www.sgtp.si>) was launched and Lifetime NDG Leader is in charge of the coordinator of SGTP. He is also a member of Support Group of European Construction Technology Platform. On both levels the spirit of Lifetime idea is very present and number of planned project proposals will integrate also the Lifetime aspects in European construction sector.

100. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximate estimate*): 5 Person Months

101. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> <i>(Please tick the relevant)</i>		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		✓	
Integrated lifetime design		✓	
Lifetime Procurement and Contracting: Integrated lifetime construction		✓	
Integrated lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&M) planning and actions	✓		
End of Life management: Recovery, reuse, recycling and disposal			✓

102. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*

The members of LIFETIME group in Slovenia became very active during the last year in organisation of Slovenian Construction Technology Platform (SCTP) and spreading the ideas of LIFETIME project among the members of SGTP on national level and also among the members of European Construction Technology Platform.

Name of the contact person:

Dr. Roko Žarnić, Assoc.Prof.

University of Ljubljana

Faculty of Civil and Geodetic Engineering

Chair for Research in Materials and structures

Jamova 2, 1000 Ljubljana, Slovenia

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: SPAIN

NDG Leader Organisation: CARSA

Please answer the following information (*in case of alternatives, please cut the unrelevant alternative!*):

103. National Dissemination Group (NDG) *has* been established

- as a separate group: *no*
- as a joint group with some other groups of the same issue: *Yes*

104. If NDG has been working, the number of members of NDG at the end of the period: 35 members

105. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 4
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 3
- International workshops and seminars: total number: 3
- Other events: 2 (*please define the type!*):_

106. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:

- *Oslo, September 2002: Yes*
- *Kuopio, December 2003: Yes*
- *Lyon, April 2005: Yes*
- *Other Lifetime meetings (please define place and time): International Seminar: "Promoting Innovation in Construction Industry SMEs" Manchester (UK); May 17-18th 2004. International Brokerage event "Innovation Scope in the Construction Sector"; Bilbao (SP) April 20th, 2004*

- Contributions into WP activities and reports :

- *WP1(PC: Karlsruhe University): Yes*
- *WP2 (PC: ICSTM): Yes/no*
- *WP3(PC:VTT): Yes*
- *WP4 (PC:Tywood): Yes/no*
- *WP5 (PC: CSTB): Yes*

107. Other tasks or contributions to the Lifetime Work (*short explanation*):

Cross actions between LIFETIME network, CONSTRINNONET project and RICAM cluster. Brokerage activities, information exchange and synergies have been promoted between several regional and EU initiatives.

108. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*):9
Person Months

109. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> (Please tick the relevant)		
	<i>Hig h</i>	<i>Moderat e</i>	<i>Mino r or no</i>
Lifetime investment planning and decision-making	X		
Integrate d lifetime design		X	
Lifetime Procurement and Contracting: Integrate d lifetime construction	X		
Integrate d lifetime management and maintenance, repair, rehabilitation and Modernisation (MRR&	X		

M)
planning
and
actions

End of
Life
managem
ent:
Recovery
, reuse,
recycling
and
disposal

X

110. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*

Several regional seminars have been hold by CARSA to increase awareness of Spanish construction SMEs and promote the adoption of Innovation and LIFETIME principles. Most active areas have been Canary Islands and the Basque Country. An international Brokerage Event was hold in Bilbao (Spain⁵) to promote EU SMEs co-operation for RTD& exploitation purposes.

- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

An article entitled “Challenges of the construction sector in the global economy and the knowledge society”⁶ wrote by M.A. García (CARSA) was published by the International Journal of Strategic Property Management. In this article it has been referenced some LIFETIME principles.

LIFETIME network and activities were referenced and explained in the International Seminar hold in Manchester in the CUBE Building (Centre for the Understanding of the Built Environment) in Manchester, United Kingdom.

Information on all LIFETIME events has been distributed among Spanish NDG and other EU entities which established relationships with CARSA in the frame of innovation in the Civil engineering and Construction fields.

⁵ Visit

<http://www.vtt.fi/virtual/constrinnet/material/country%20seminar%20reports/annexes/005%20spain.pdf>

⁶ García, M.A. (2005); “Challenges of the construction sector in the global economy and the knowledge society”. International Journal of Strategic Property Management. Volume 9, Number 2.

Name of the contact person:

Miguel Ángel García

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: Sweden

NDG Leader Organisation: Centre for Built Environment

Please answer the following information:

National Dissemination Group (NDG) has been established

- as a separate group: *no*
- as a joint group with some other groups of the same issue: *Yes*

If NDG has been working, the number of members of NDG at the end of the period: \approx 15 members

111. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 4
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 6
- International workshops and seminars: total number: 6
- Other events: __ (please define the type!):_

112. Contribution to T. N. Lifetime work: (type of the contribution:)

- Participation in Workshops:
 - Oslo, September 2002: *Yes*
 - Kuopio, December 2003: *Yes*
 - Lyon, April 2005: *Yes*
 - Other Lifetime meetings (please define place and time): *Karlsruhe, autumn 2004*
- Contributions into WP activities and reports :
 - WP1(PC: Karlsruhe University): *Yes*
 - WP2 (PC: ICSTM): *Yes*
 - WP3(PC:VTT): *Yes*
 - WP4 (PC:Tywood): *Yes*
 - WP5 (PC: CSTB): *Yes*

113. Other tasks or contributions to the Lifetime Work (short explanation):

114. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (an approximative estimate): 2 Person Months

115. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i> <i>(Please tick the relevant)</i>		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making		X	
Integrated lifetime design	X		
Lifetime Procurement and Contracting: Integrated lifetime construction	X		
Integrated lifetime management and maintenance, repair, rehabilitation and Moderniastion (MRR&M) planning and actions		X	
End of Life management: Recovery, reuse, recycling and disposal			X

116. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person: Prof Christer Sjöström,

FINAL REPORT OF Lifetime NDG

14. 09. 2005

Working period: 01. 06. 2002 - 31. 07. 2005

Country: UK

NDG Leader Organisation: BRE

Please answer the following information (*in case of alternatives, please cut the unrelevant alternative!*):

117. National Dissemination Group (NDG) *has* been established

- as a separate group: *Yes*
- as a joint group with some other groups of the same issue: *Yes/no*

118. If NDG has been working, the number of members of NDG at the end of the period: 7 members

119. Tasks and actions, which have been carried out during this period:

- Meetings of NDG: total number of meetings : 0
- National (local) seminars or workshops of NDG on Lifetime Engineering: total number: 0
- International workshops and seminars: total number: 0
- Other events: many (*please define the type!*): *BRE has run a number of events relevant to lifetime engineering over the course of the project and held ad hoc discussions with industry, academia etc (including NDG members). However, specific events on lifetime engineering, linked directly to the Lifetime Thematic Network could not be held as no funding was available to support them.*

120. Contribution to T. N. Lifetime work: (*type of the contribution:*)

- Participation in Workshops:
 - *Oslo, September 2002: Yes*
 - *Kuopio, December 2003: Yes*
 - *Lyon, April 2005: Yes*
 - *Other Lifetime meetings (please define place and time): May 2003 Imperial College London*
- Contributions into WP activities and reports :
 - *WP1(PC: Karlsruhe University): Yes*
 - *WP2 (PC: ICSTM): Yes*
 - *WP3(PC:VTT): Yes/no*
 - *WP4 (PC:Tywood): Yes*
 - *WP5 (PC: CSTB): Yes*

121. Other tasks or contributions to the Lifetime Work (*short explanation*):

- Contribution to questionnaires and requesting information from NDG members.
- Formal presentation on BRE work on service life design and related topics to the Lifetime workshop in Oslo in September 2002. Other contributions

made at other workshops via discussions in sessions and with participants from other countries.

- Presentations on UK NDG activities at workshops and at meeting in London in May 2003.
- Discussions with UK companies to establish lifetime engineering network, including NDG – however, UK government support required for this was not forthcoming.
- Developing a ‘workshop’ consisting of a series of presentations on aspects of lifetime engineering (under a subcontract to Taywood Engineering).

122. Total number of Person months of the NDG Leader organisation used for the work of T. N. Lifetime, described above (*an approximative estimate*): 1 Person Months

123. The development and implementation activities of different areas of the Lifetime Engineering in this country:

<i>Sector of the Lifetime Engineering</i>	<i>Grade of the interest</i>		
	<i>High</i>	<i>Moderate</i>	<i>Minor or no</i>
Lifetime investment planning and decision-making	X		
Integrated lifetime design		X	
Lifetime Procurement and Contracting: Integrated lifetime construction		X	

Integrate
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Modernia
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(MRR&
M)
planning
and
actions

X

End of
Life
managem
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Recovery
, reuse,
recycling
and
disposal

X

124. Other comments into:

- *the dissemination and exploitation of Lifetime Engineering in this country*
- *into the help of Thematic Network Lifetime in the dissemination and exploitation*

Name of the contact person: Keith Quillin