

Welcome to the second meeting in Pisa on 8. and 9.3.2012

# Vocational Training in Assessment of Existing Structures

Agreement number: CZ/11/LLP-LdV/TOI/134005

## Draft agenda

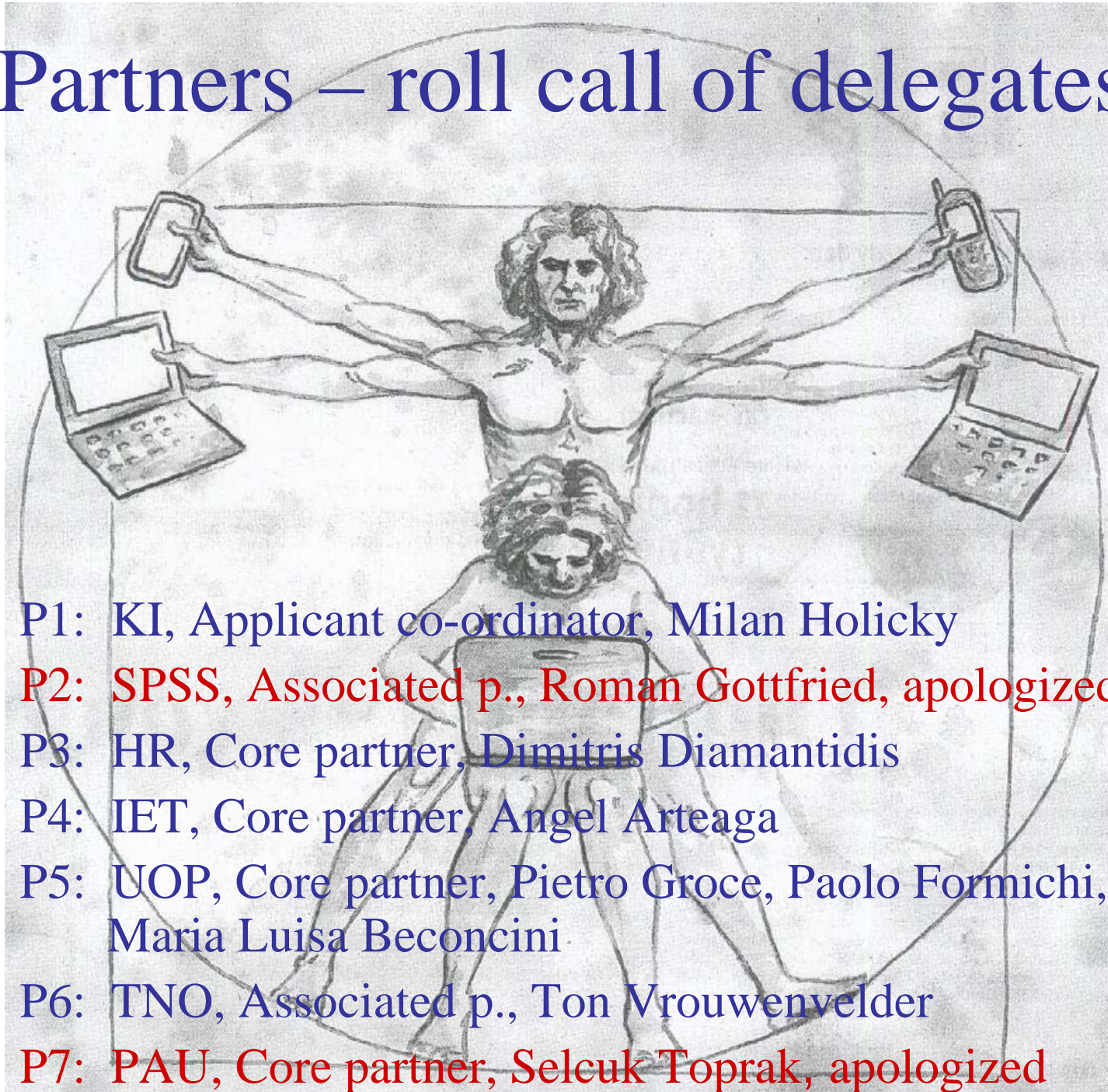
Thursday, March 8 (19:00 to late evening or early morning)

1. Opening at 19:00.
2. Adoption of the agenda.
3. Administrative issues (Jana Pallierova, Milan Holicky).

Friday March 9 (09:00 – 14:00)

4. Discussion of Handbook 1 (Dimitris Diamantidis).
5. Meeting and seminar in Barcelona, 05/2012 (Angel Arteaga).
6. Meeting in Regensburg, 10/2012 (Dimitris Diamantidis).
7. Subsequent meetings and seminars in Pisa, Denizli and Prague.
8. Closure of the meeting on Friday at about 14:00.

# Partners – roll call of delegates



P1: KI, Applicant co-ordinator, Milan Holicky

P2: SPSS, Associated p., Roman Gottfried, apologized

P3: HR, Core partner, Dimitris Diamantidis

P4: IET, Core partner, Angel Arteaga

P5: UOP, Core partner, Pietro Groce, Paolo Formichi,  
Maria Luisa Beconcini

P6: TNO, Associated p., Ton Vrouwenvelder

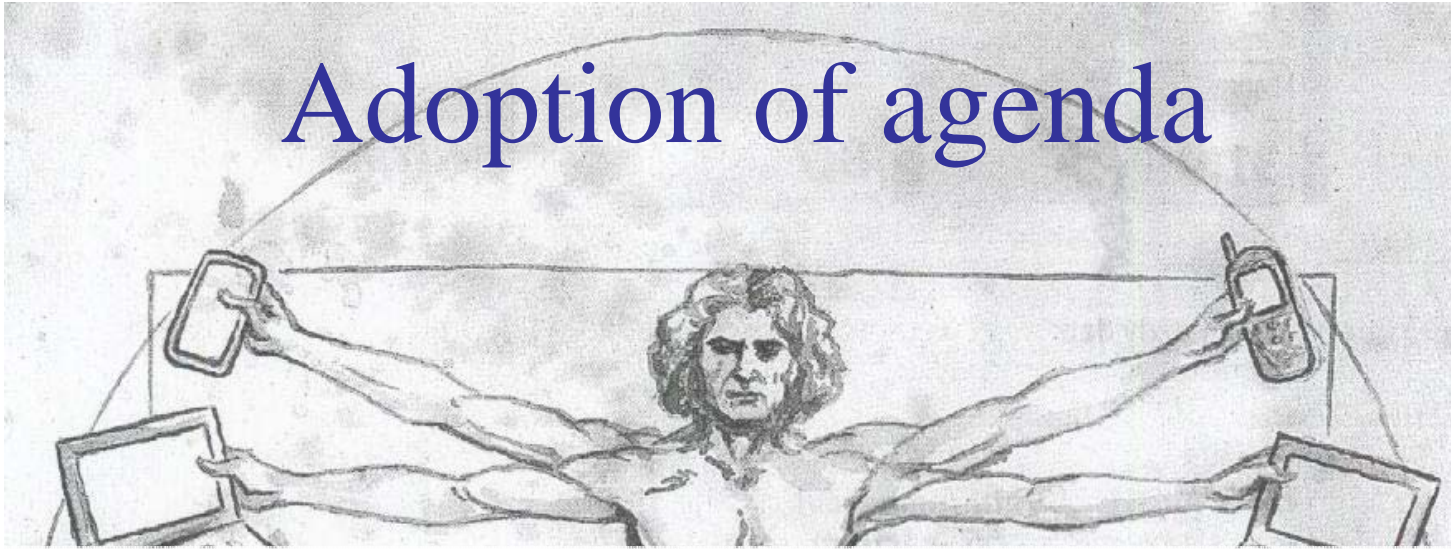
P7: PAU, Core partner, Selcuk Toprak, apologized



# 1<sup>st</sup> meeting in Prague, 26.10.2011



# Adoption of agenda



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# Administrative and financial rules

- Liabilities of all partners:
  - to inform P1 on a 3month basis about activities and outcomes, articles, lectures, seminars.... **next by April 14**
  - to provide P1 with the documentation for Interim Report, covering 1.10.2011-30.9.2012 – **by 31/10/2012**
  - to provide P1 with the documentation for Final Report, covering all project period 1.10.2011 to 30.9.2013 - **by 31/10/2013**
- All rules are given in Lifelong Learning Programme Guide for 2011 [http://ec.europa.eu/education/llp/doc848\\_en.htm](http://ec.europa.eu/education/llp/doc848_en.htm) and in PPT Financial Management (e-mailed)
- In an uttermost case, contact please  
**[jana.pallierova@klok.cvut.cz](mailto:jana.pallierova@klok.cvut.cz)**

# Production of Handbook 1

- Innovative methods for the assessment of existing structures
- book + CD (200 pages), 400 pieces
- version ENG, CZ
- available 30/9/2012
- responsibility:

P3 (D. Diamantidis) – book completion, printing  
ENG version, sending to partners

P1 (M. Holicky) – translation + printing CZ version

# Production of Handbook 2

- Operational techniques for the assessment of existing structures
- book + CD (200 pages), 400 pieces
- version ENG, CZ
- available 31/5/2013
- responsibility:
  - P5 (P. Croce) – book completion, printing ENG version, sending to partners
  - P1 (M. Holicky) – translation + printing CZ version



# Production of Handbook 3

- Basis for assessment of existing structures
- book + CD (120 pages), 400 pieces
- version ENG, CZ
- available 31/5/2013
- responsibility:  
P2 (R. Gottfried) – book completion, translation,  
printing ENG + CZ version, sending to partners

# Budget

	direct costs							
	staff	travel	subctr	other	indirect	Total	Grant (75%)	Own funds
P1 (KI)	51990	5500	<b>8850</b>	<b>1500</b>	2660	70500	52741	17759
P2 (SPSS)	17450	4500	<b>4325</b>	<b>500</b>	1069	27844	20830	7014
P3 (HR)	47067,5	4655	<b>3554</b>	<b>750</b>	2277,5	58304	43617	14687
P4 (IETCC)	43705	5675	<b>2000</b>	<b>500</b>	2023	53903	40325	13578
P5 (UOP)	44187,5	4650	<b>2000</b>	<b>500</b>	2024,5	53362	39920	13442
P6 (TNO)	2017	4517,5	-	-	247	6781,5	5073	1708
P7 (PAU)	26032,5	4582,5	<b>2750</b>	<b>500</b>	1350	35215	26344	8871

# Unavoidable subcontracts

- P1 - printing of HB1,2 (CZ version)
  - translations of HB1,2
  - seminar in Prague
- P2 - printing of HB3 (CZ+ENG version)
  - translation of HB3
  - distribution of HB3 to partners
- P3 - printing of HB1 (ENG version)
  - distribution of HB3 to partners
  - seminar in Regensburg

# Unavoidable subcontracts

- P4 - seminar in Barcelona
- P5 - printing of HB2 (ENG version)
  - distribution of HB2 to partners
  - seminar in Pisa
- P6
- P7 - seminar in Denizli

# Changes to the budget

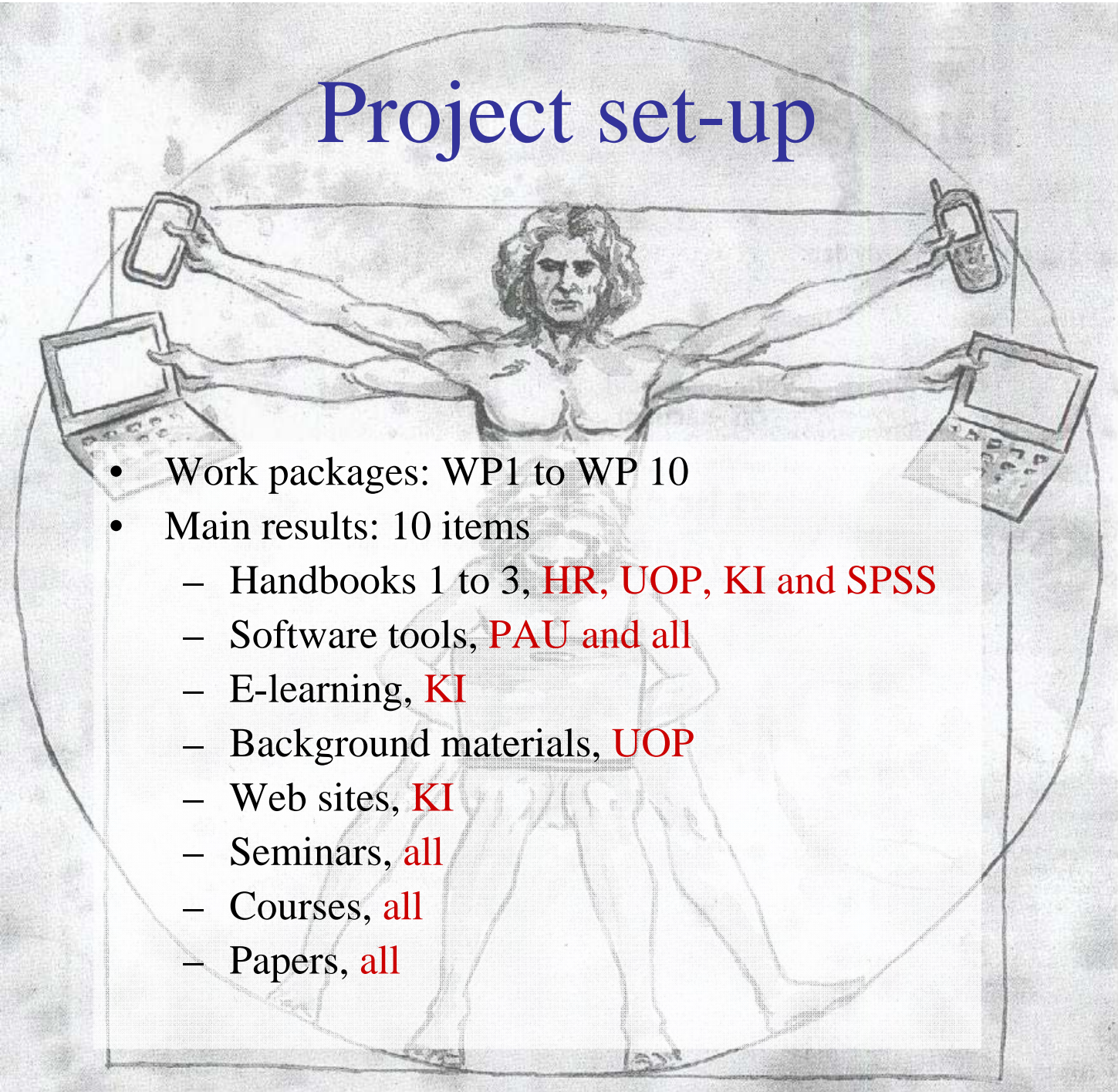
- re-allocations of money between direct cost categories – allowed up to 10% of the smaller amount – necessary to ask and explain the reason to NA (P1)
- more than 10% between direct cost categories – approved only exceptionally, contract amendment must be made
- **NO!** re-allocations between direct and indirect costs

# Technical aspects: key referenced materials



- EN 1990, Basis of structural design, 2002
- ISO 2394, General principles ..., 1998
- ISO 13822, Assessment of existing ..., 2010
- ISO 3898, Names and Symbols, 2010
- ISO 8930, List of terms, 2010
- ICC: International Existing Building Code, 2009
- RILEM, Probabilistic Assessment ..., 2000
- JCSS PMC, present version 2001  
<http://www.jcss.ethz.ch/>
- JRC-ECCS-Joint report, 2008
- Fib Bulletins, new expected in 2012
- CEN TC250/WG2 Existing Structures, since July 2011

# Project set-up

- 
- Work packages: WP1 to WP 10
  - Main results: 10 items
    - Handbooks 1 to 3, **HR, UOP, KI and SPSS**
    - Software tools, **PAU and all**
    - E-learning, **KI**
    - Background materials, **UOP**
    - Web sites, **KI**
    - Seminars, **all**
    - Courses, **all**
    - Papers, **all**

# Main results

N	Short description of result	
1	Handbook 1 - Innovative methods for the assessment of existing structures	30.9.2012
2	Handbook 2 - Operational techniques for the assessment of existing structures	31.5.2013
3	Handbook 3 - Basis for assessment of existing structures	31.5.2013
4	Software tools for practising engineers	31.5.2013
5	E-learning	30.11.2012
6	Background materials for new Eurocode on the assessment of existing structures and ISO 13822	31.7.2012
8	Web sites	31.12.2011
10	Contributions to technical journals	30.9.2013
7	National seminars	30.9.2013
9	National short-term courses	30.9.2013 <sup>16</sup>



# Partners involvement

## Main outcomes

		1	2	3	4	5	6	7	8	9	10	11
		HB1	HB2	HB3	Soft	Elearn	Backg	Semin	Web	Cours	Papers	Transl
P1	KI	×	×	●	×	●		●	●	●	×	×
P2	SPSS	×	×	●	×	×		×		×	×	●
P3	HR	●	×	×	×	×	×	●	×	●	×	
P4	IET	×	×	×	×	×	×	●		●	×	
P5	UOP	×	●	×	×	×	●	●	×	●	×	
P6	TNO	×	×	×				×			×	
P7	PAU	×	×	×	●			●		●	×	

● convenor

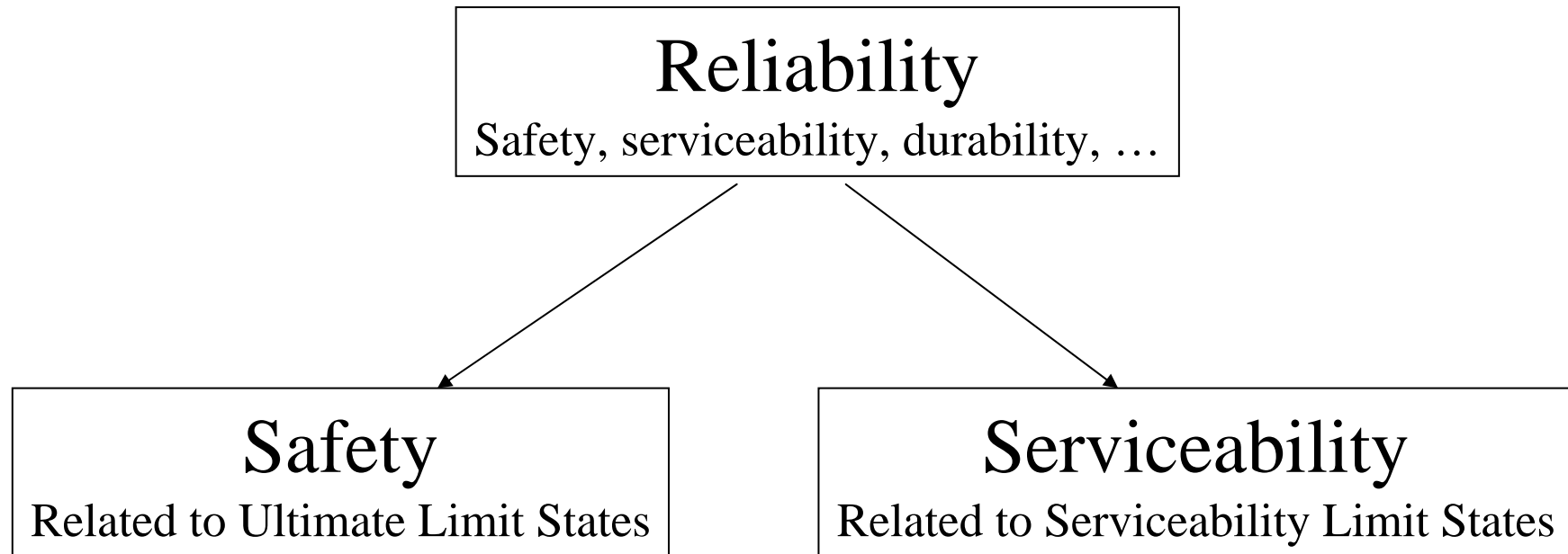
× partner

# Handbook 1: Preliminary contents

P3 – 30.9.2012

1. Basic concepts, terminology – P1, P4
  2. Current standards – P3, P6
  3. Requirements on performance – P1
  4. Reassessment process - P3, P6
  5. Structural reassessment - P5
  6. Probabilistic assessment – P1
  7. Reliability updating – P1, P3
  8. Acceptance criteria – P3, P6
  9. Life cycle optimization – P3
  10. Verification methods – P1, P3
  11. Proof loading – P7, P4
  12. Seismic retrofit – P7, P4
  13. Heritage structures – P5
  14. Concluding remarks – P3
  15. Annex A: Bayesian technique – P1
- P1: 1,3,6,7,10,15  
P2:  
P3: 2,4,7, 8, 9,14  
P4: 1,12  
P5: 5,13  
P6: 2,4,8  
P7: 11,12

# Hierarchy of fundamental terms



- In ISO 8930 „the structural safety is related to the ultimate limit states“ (see ISO clauses 2.3.1, 2.3.6, 2.13.11 and others). The same concept is accepted in existing ISO 2394 and Eurocode EN 1990.
- When used in the sense of „safety of people“, then it should be distinguished, or different terms like “protection” or “security” could be used.

# Software tools

P7 and all partners – 31.5.2013

- EXCEL spread sheets
- Mathcad sheets
- Matlab sheets
- Mathematica sheets
- Computer aided training programs

# Web sites

P1 and all partners – 31.12.2011

- HB translations, CZ - P1,2 (deadline 07/13)
- E-learning (ENG,CZ) – P1, P2,P3,P4,P5, P7 contributions (deadline 04/12)
- Software tools – P7 and all
- FAQ – (exists in CZ, ENG) - P2,P3,P5 contributions (deadline 06/13)

# Background materials

P5, P3, P4

- CEN TC 250/WG2 Development of a new document on Existing structures (deadline 07/12)
- ISO TC 98/SC2/WG 11 – ISO 13822, background materials for a foreseen revision (deadline 07/12)

# Barcelona seminar programme

Thursday June 14, 9:30 a.m.

- Opening and introduction (15 min.) – AA, MH
- Codes and recommendations (20 min.) - DD
- Basic concepts (20 min.) - MH
- Reliability aspects (30 min.) - TV
- Assessment and procedures (20 min.) – DD

*Coffee break (20 min.)*

- Case studies (3 x 20 min.) – PC, PT, ST
- Closure and discussion (30 min.) – AA

# Meetings

- kick-off meeting, Prague, 26.,27.10.2011
- plenary meeting in Pisa, 8.,9.3.2012
- plenary meeting in Barcelona, 14.,15.6.2012
- plenary meeting in Regensburg, 11.,12.10.2012
- plenary meeting in Pisa, 04/2013
- plenary meeting in Denizli, 06/2013
- final plenary meeting in Prague, 09/2013

Additional meetings between P1, and relevant partners will be planned depending on work progress.

Bilateral meetings (for example between P1 and P2) or other upon need.





Thanks for attending the second meeting

Hope to see you all in Barcelona

Heritage structures are difficult to assess

03.11.2010 15:47