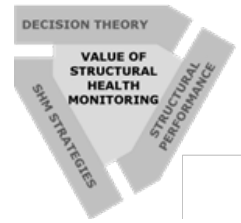
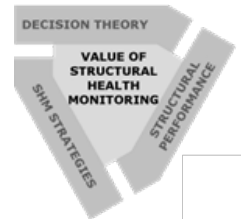


COST TU1402: Quantifying the Value of Structural Health Monitoring  
2<sup>nd</sup> Workshop, 28.-29.09.2015, Boğaziçi University, Turkey



# 2<sup>nd</sup> Workshop Opening Presentation

Sebastian Thöns



## Contents

Where are we?

- Action Network and progress

What should we have in mind?

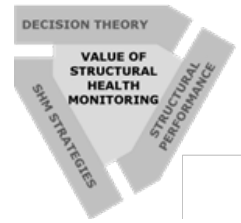
- Reporting deadlines, scientific program and deliverables

Workshop aims and organisation

## Action Network



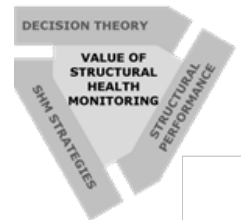
- 112 participants from 25 countries
- Progress according to plan
- Budget according to plan



## 1<sup>st</sup> Workshop, DTU, Denmark

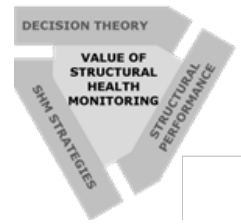
### Achievements:

- Common understanding of the ideas, aims and challenges of the COST Action TU1402 within the network
- Dissemination of the state of research and application in all involved fields
- Progress in Scientific Working Plan



## 1<sup>st</sup> Workshop, DTU, Denmark

- 65 participants (researchers, structural engineers, SHM engineers and infrastructure operators and owners) from 23 countries
- 23 presentations (plenary sessions) + 5 presentations (parallel sessions), 8 posters
- Proceedings of the COST TU1402 1<sup>st</sup> Workshop on Quantifying the Value of Structural Health Monitoring, 04.-05.05.2015, DTU, Denmark. ISBN: 978-8-77-877426-2, DTU Civil Engineering Report: R-336
- Proceedings, presentations, audio and videos records of plenary sessions online (<http://www.cost-tu1402.eu>)
  - Username: COST\_TU1402\_user
  - Password: KRuw6k

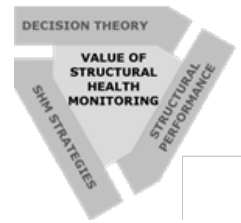


## Actual challenge: STSMs

Short Term Scientific Missions (STSM) are exchange visits aimed at supporting individual mobility, strengthening existing networks and fostering collaboration between researchers.

- Should specifically contribute to the scientific objectives
- Allowing learn new techniques, gain access to specific data, instruments and / or methods not available in their own institutions / organisations.
- From one to another participating COST country

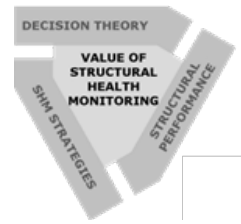
Source: COST Vademecum, Section 7



## Actual challenge: STSMs

How does it work?

- Applications: <https://e-services.cost.eu/w3/index.php?id=91>
- TU1402 Participant
  - Up to EUR 2.500 for missions between 5 and 90 days
  - Up to EUR 160 per day for accommodation and meal expenses
- Early Stage Investigators (ECIs: up to 8 years after finishing PhD.)
  - Up to EUR 3.500 for missions between 91 and 180 days
  - Up to EUR 160 per day for accommodation and meal expenses
- Questions: Alan O'Connor (OCONNOAJ@tcd.ie)



## Contents

Where are we?

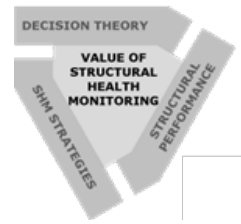
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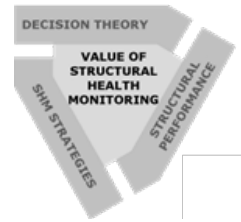
Workshop aims and organisation






## COST Action TU1402: Reporting deadlines

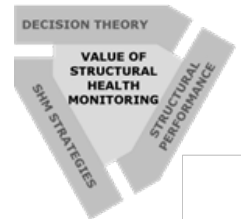
- Intermediate Report 1: May 2016 (Month 18)
- Intermediate Report 2: Month 36
- Final Report: Month 48



## COST Action TU1402: Scientific Program

Tasks		Year															
		2015				2016				2017				2018			
		Quarter				Quarter				Quarter				Quarter			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Task 1: Theoretical Framework</b>																	
a	Clarification of the theory	■	■	■	■												
b	Formulation of theory for applications			■	■	■	■										
c	Communication of the theory						■	■	■								
M1	Dissemination								■								
<b>Task 2: SHM Strategies and Structural Performance</b>																	
a	SHM and structural performance Categorisation	■	■	■	■												
b	SHM information and structural performance modelling platform			■	■	■	■	■	■								
M2	Dissemination								■								
<b>Task 3: Methods and Tools</b>																	
a	Databases and modelling toolboxes for engineers and researchers					■	■	■	■								
b	Advancement of algorithms for efficient computation						■	■	■	■							
M3	Dissemination												■				

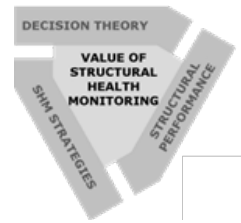
We are here 



## COST Action TU1402: Scientific Program

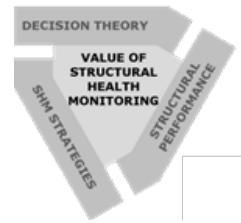
Tasks		Year															
		2015				2016				2017				2018			
		Quarter				Quarter				Quarter				Quarter			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Task 4: Case Studies Portfolio</b>																	
a	Selection of case studies																
b	Case study calculation and documentation																
M4	Dissemination																
<b>Task 5: Development of Guidelines</b>																	
a	Chapter of JCSS Probabilistic Model Code (PMC)																
b	Guideline on the quantification of the value and optimization of SHM																
M5	Dissemination of guidelines																

We are here



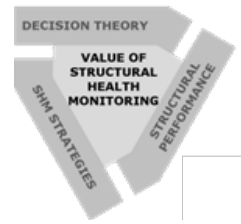
## COST Action TU1402: Key deliverables

1. A chapter to the Probabilistic Model Code of the JCSS covering the theoretical and methodological aspects of the quantification of the value of SHM.
2. A library of tools and algorithms developed or tailored for support of the quantification of the values of SHM before its implementation.
3. A guideline on the quantification of the value and optimization of SHM with detailed examples aimed specifically at practising engineers.



## COST Action TU1402: Key deliverables

4. A well-developed homepage including video streams of keynote presentations from workshops and conferences, written material produced within the Action as well as information about the Action and its participants in general.
5. Dedicated dissemination activities, including training courses for practicing engineers and researchers, regular workshops and special sessions at international conferences



## Contents

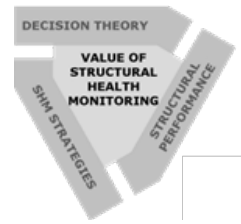
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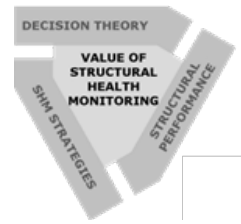
Workshop aims and organisation



## Aims of the 2<sup>nd</sup> Workshop

1. Clarification of the theory for practical applications
2. Progress on developing the SHM and structural performance categorisation and to document their modelling

Keywords: principal procedure, test cases, factsheets, flowcharts



## Agenda of the 2<sup>nd</sup> Workshop

### Day 1

- WG1 to 3 progress in terms of the development (1) of test cases, (2) flowcharts and (3) factsheets
- Preparation of a questionnaire

### Day 2

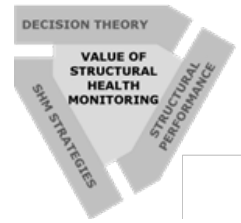
- Work on the questionnaire
- Presentation of the results

### Steering Committee and Management Committee Meetings

- Planning of further activities

### Dissemination





Thank you for your attention.

I wish you a good workshop.