

5th COST TU1402 Workshop

Objective and Aims

The 5th Workshop of the COST Action TU1402 is focussed on the further development and provision of factsheets and of the STSM strategy. The factsheets are intended to provide an overview about actual research, developments, approaches and tools to perform a Value of Structural Health Monitoring Information analysis. This workshop also aims at the further development of the interfaces between the WGs and especially to support WG4 on Case Studies. The objective of the STSM session is the further development of the STSM strategy and the alignment with the other networking activities.

According to the Memorandum of Understanding, the Working Groups 1, 2, 3 and 4 are active. The individual Working Group wise foci are:

- Theoretical Framework (WG1): Communication of theory
- SHM Strategies and Structural Performance (WG2): Structural Health Monitoring and structural performance categorisation and modelling platform
- Methods and Tools (WG3): Databases and modelling toolboxes
- Case study Portfolio (WG4): Selection and preparation of case studies

Organisation

The workshop is organised in mainly consecutive plenum sessions. All Action sessions will be audio and video recorded. The key presentations and contributions will be uploaded and disseminated through the Action website. The fact sheets will be compiled to a workshop report.

Dates

24. and 25.08.2016

Venue

Technical University of Denmark
Conference Room 1 (1st floor), Building 101, Entrance 101A
Anker Engelunds Vej 1
2800 Kgs. Lyngby
Denmark

Local Organisers

Sebastian Thöns, Joy Schou Vestenfeldt, DTU Civil Engineering

Agenda Day 1: 24.08.2016

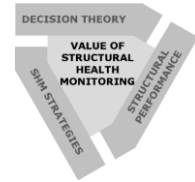
09:00-09:30	Workshop Opening	
09:30-10:15	Keynote Lecture by Michael H. Faber: On Decision Support for Sustainability and Resilience of Infrastructure	
Coffee Break		
10:45-12:00	WG 1 Session: Theoretical Framework , Chairs: Michael H. Faber and Dimitri Val	
	Authors/Speakers	Topic of presentation
	Sebastian Thöns Michael Faber	Test case for offshore wind park operation
	Henning Brüske Sebastian Thöns	Factsheet on wind park cost benefit analyses
	Piotr Omenzetter	Optimal SHM system topology for maximising Vol
Lunch Break		
13:00-15:00	WG 2 Session: SHM Strategies and Structural Performance , Chair: Michael Döhler	
	Authors/Speakers	Topic of presentation
	Jan Winkler	Structural Health Monitoring using Digital Image Correlation
	António Barrias, Joan Casas	Concrete structures monitoring with Optical Backscatter Reflectometry based Distributed Optical Fiber Sensors
	Ander Zornoza	Vol related to composite reparations
	Herbert Friedmann P. Kraemer, C. Ebert	Introduction of Wölfel-Engineering and the UnderwaterINSPECT research project
	Rafał Sieńko, Tomasz Howiacki, Rafał Szydłowski, Mariusz Maślak, Michał Pazdanowski	Application of distributed optical fiber sensor technology for strain measurements in concrete structures
	Radenko Pejovic, Ivana Tesovic, Meri Cvetkovska, Prof. Milos Knezevic, Mladen Gogic	Structural monitoring of high arch dams
Coffee Break		

Agenda Day 1: 24.08.2016 cont.

15:30-17:30	WG 3 Session: Methods and Tools , Chairs: Eleni Chatzi	
	Authors/Speakers	Topic of presentation
	Daniel Straub, Jesus Luque, Elisabeth Bismut	Optimal inspection strategies in structural systems
	Boutros El-Hajj, Franck Schoefs	POD/PFA/ROC/Quality of monitoring models
	Costas Papadimitriou	Bayesian analysis methods
	Bernt Leira	Bayesian updating of the statistical parameters and probability model for ice peak loads
	Eleni Chatzi	A Partially Observable Markov Decision approach to decision-making
	General discussion	
19:00	Workshop Dinner	

Agenda DAY 2: 25.08.2016

09:00-10:00	Presentation by Lazaros Nalpantidis: Robotic Technologies for Structural Health Monitoring	
10:00-10:20	Ana Mandic	Factsheet on Research Questions
10:20-10:40	Jónas Þór Snæbjörnsson	The Societal Value of Monitoring Seismic Hazard
	Coffee Break	
11:00-12:00	STSM session , Chairs: Alan O'Connor and Helder Sousa	
	Authors/Speakers	Topic of presentation
	Dominik Skokandić	Application of Bridge Weigh-in-Motion measurements in assessment of existing road bridges
	Simona Bogoevska	A novel bi-component SHM strategy for deriving global models of operational Wind Turbines
	Simona Miraglia	Value of Information in System Resilience Modelling
	Alan O'Connor and Helder Sousa	Further development of STSMs strategy
	Lunch Break	
13:00-13:30	Parallel WG Meetings: Discussion, Planning and Preparation of Agendas Chairs: Individual WG Leaders	
13:30-15:00	7th Steering Committee and Advisory Board Meeting	



TU 1402 COST 5th Workshop in Copenhagen

Hotels

Cabinn Metro

Arne Jacobsens Allé 2, 2300 Copenhagen S, Phone: +4532465700, metro@cabinn.com
DKK 635.00 incl. breakfast/per night

<https://www.hotel.info/en/cabinn-metro/hotel-256082/>

Please note, to fill in the reservation form and send this to the hotel.

Wakeup Copenhagen

Borgergade 9, 1300 Copenhagen K, Phone: +4544800090, borgergade@wakeupcopenhagen.dk
DKK 1325.00 incl. breakfast/ per night

[https://www.wakeupcopenhagen.com/the-](https://www.wakeupcopenhagen.com/the-hotels/copenhagen/borgergade/?_ga=1.144077429.1912891199.1464700569#/search)

[hotels/copenhagen/borgergade/?_ga=1.144077429.1912891199.1464700569#/search](https://www.wakeupcopenhagen.com/the-hotels/copenhagen/borgergade/?_ga=1.144077429.1912891199.1464700569#/search)

Scandic Hotel Sydhavnen

Sydhavns Plads 15, Copenhagen SV, Phone: +4588333666, sydhavnen@scandichotels.com
DKK 1490.00 incl. breakfast/ per night

https://www.scandichotels.com/hotels/denmark/copenhagen/scandic-sydhavnen?_ga=1.198255407.1861035900.1464592884

How to go from Copenhagen Airport to Cabinn Metro:

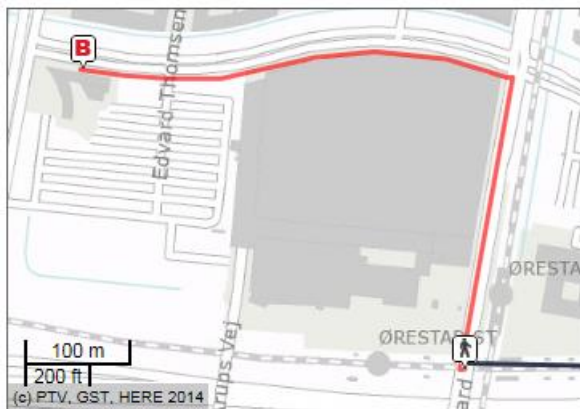
Walk 100 m/ 3 minutes, buy a ticket for DKK 24.00 (2 zones)



Go to track 2, **Train RE 1833** (Nivå St)

Get off the train at **Ørestad St.**

Walk 750 m/ 12 minutes:



Total minutes of travel: 20 minutes

Welcome to Cabinn Metro Hotel.

How to go from Cabinn Metro to DTU Meeting Venue:
Walk 700 m/ 11 minutes) to Ørestad St. (Metro)



Buy a ticket for DKK 60.00 (5 zones) at the Metro station.

Take the **Metro M1** (Vanløse st)
Get off at **Nørreport St.** (Metro)
Walk 5 minutes to train S-tog A (Hillerød st)



Get off at **Lyngby St.**
Walk 7 minutes, to Bus 180 (DTU):



Cross the street and walk towards the big parking space, this is DTU Building 101.
Enter **entrance A**, glass doors on your right and up the stairs.
Total minutes of travel: 62 minutes

Welcome to Meeting Venue of TU 1402.

How to go from DTU Meeting Venue to Copenhagen Airport:

Walk to **Bus 300 S**/ 5 minutes (Turn right when you leave entrance A, pass the parking and turn left up to the main road. Turn right towards the bus stop, stay on this side)

Buy ticket for DKK 72.00 (6 zones)

Take **Bus 300 S** (Ishøj st.)

Get off at **Lyngby St.**

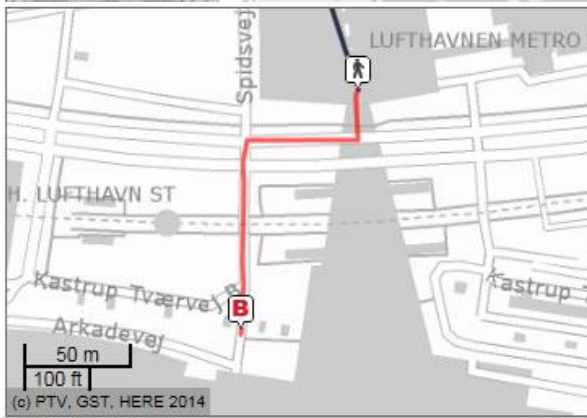
Walk 6 minutes towards the train:



Take **Train S-tog A** (Hundige St.)

Get off at **Nørreport St.**

Walk 5 minutes towards Nørreport st. Metro



Total minutes of travel: 60 minutes

We wish you a safe journey.