



TU1402 Industry Innovation Days

Objective

The objective of COST TU1402 Industry Innovation Days is to demonstrate the benefit in using SHM systems applied in Civil Engineering structures, based on a set of case studies, from all over Europe. The decision to invest on a SHM systems is being set based on a quantifiable value - the Value of SHM, particularly beforehand its implementation, and by using these real case studies to demonstrate it.

Organisation

This workshop is aiming at a non-expert audience and interested infrastructure authorities and operators, engineers and researchers who want to know more about the quantification of the Value of SHM by having a case studies portfolio presented. Hearing opinion, impressions, views, perspectives from this more generic audience is essential to strengthen a common language towards the successful utilization of SHM systems, with clear benefits for all parts involved infrastructure integrity management.

The event will be audio and video recorded.

Deliverables

The deliverables include:

- (1) Website documentation with the presentations, audio and video coverage of the event including the discussions.
- (2) Workshop Report containing papers of the presentations.

Dates and Venue

19.04.2018 and 20.04.2018, Hotel Olissippo Marquês de Sá, Lisbon, Portugal (see Sections “How to get to the workshop venue”).



Local Organisers

Dr. Helder Sousa (mail@hfmsousa.com)

Acknowledgement

BRISA is gratefully acknowledged for supporting the Industry Innovation Days.





Industry Innovation Day 1 Agenda

09:00-09:30	Opening and welcome <ul style="list-style-type: none"> Welcome by Prof. Sebastian Thöns (Chair of TU1402) Welcome by Eng. António Sousa (Executive Board Member, BRISA) Introduction of to the Industry Innovation Days (IIDs) by Dr. Helder Sousa (IIDs organiser and TU1402 Innovation Committee Leader) 														
09:30-10:00	Introduction to the COST Action TU1402 (Prof. Sebastian Thöns)														
10:00-10:30	Presentation of case study highlights (Prof. Jochen Köhler)														
Coffee Break															
11:00-12:00	Presentation of case studies <table> <tr> <th>Speaker</th><th>Topic</th></tr> <tr> <td>Prof. Dimitris Diamantidis</td><td>Optimizing monitoring: application to assessment of roof snow load risks</td></tr> <tr> <td>Jorge Mendoza</td><td>Risk based design of an offshore wind turbine support structure using Value of Information</td></tr> <tr> <td>Prof. Sebastian Thöns</td><td>Value of SHM Information for the operation of wind parks</td></tr> </table>	Speaker	Topic	Prof. Dimitris Diamantidis	Optimizing monitoring: application to assessment of roof snow load risks	Jorge Mendoza	Risk based design of an offshore wind turbine support structure using Value of Information	Prof. Sebastian Thöns	Value of SHM Information for the operation of wind parks						
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Lunch break															
13:00-15:00	Presentation of case studies <table> <tr> <th>Speaker</th><th>Topic</th></tr> <tr> <td>Prof. Franck Schoefs</td><td>Chlorides induced corrosion on TMDC5 Wharf - St Nazaire</td></tr> <tr> <td>Dr. Dominik Skokandic</td><td>Value of bridge weight in motion information</td></tr> <tr> <td>Wouter Jan Klerk</td><td>Structural Health Monitoring for flood defences</td></tr> <tr> <td>Dr. Wim Courage</td><td>Monitoring of concrete bridges</td></tr> <tr> <td>Dr. Helder Sousa</td><td>Novel pro-active SHM tool devoted to bridge maintenance based on damage identification</td></tr> <tr> <td>Prof. Sebastian Thöns</td><td>Assessment of Risk Mitigation Strategies for Attacks on Bridges</td></tr> </table>	Speaker	Topic	Prof. Franck Schoefs	Chlorides induced corrosion on TMDC5 Wharf - St Nazaire	Dr. Dominik Skokandic	Value of bridge weight in motion information	Wouter Jan Klerk	Structural Health Monitoring for flood defences	Dr. Wim Courage	Monitoring of concrete bridges	Dr. Helder Sousa	Novel pro-active SHM tool devoted to bridge maintenance based on damage identification	Prof. Sebastian Thöns	Assessment of Risk Mitigation Strategies for Attacks on Bridges
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Coffee Break															
15:30-17:00	Plenary discussion on Values of SHM														
20:00	Industry Innovation Days networking dinner Casa do Bacalhau, Rua do Grilo 54, Lisbon 1950-145, Portugal														



Industry Innovation Day 2 Agenda

09:00-09:30	Summary of Day 1 (Prof. Sebastian Thöns)
09:30-10:00	Presentation of TU1402 standardisation activities (Prof. Dimitris Diamantidis)
Coffee Break	
10:30-11:30	Feedback from the stakeholders / audience Moderation by Prof. Dimitris Diamantidis
11:30-12:00	Workshop Conclusion: Lessons learnt <ul style="list-style-type: none"> ▪ Dr. Helder Sousa (Industry Innovation Days organiser and TU1402 Innovation Committee Leader) ▪ Prof. Sebastian Thöns (Chair of TU1402)

TU1402 Workshop

Lunch break	
13:00-15:00	How can the Industry Innovation Days feedback be implemented in the TU1402 Working Groups for case studies and standardisation? Parallel Sessions: WG4 (lead: Prof. Jochen Köhler) and WG5 (lead: Prof. Dimitris Diamantidis)
Coffee Break	
15:00-16:00	TU1402 Steering Committee meeting



Travel information

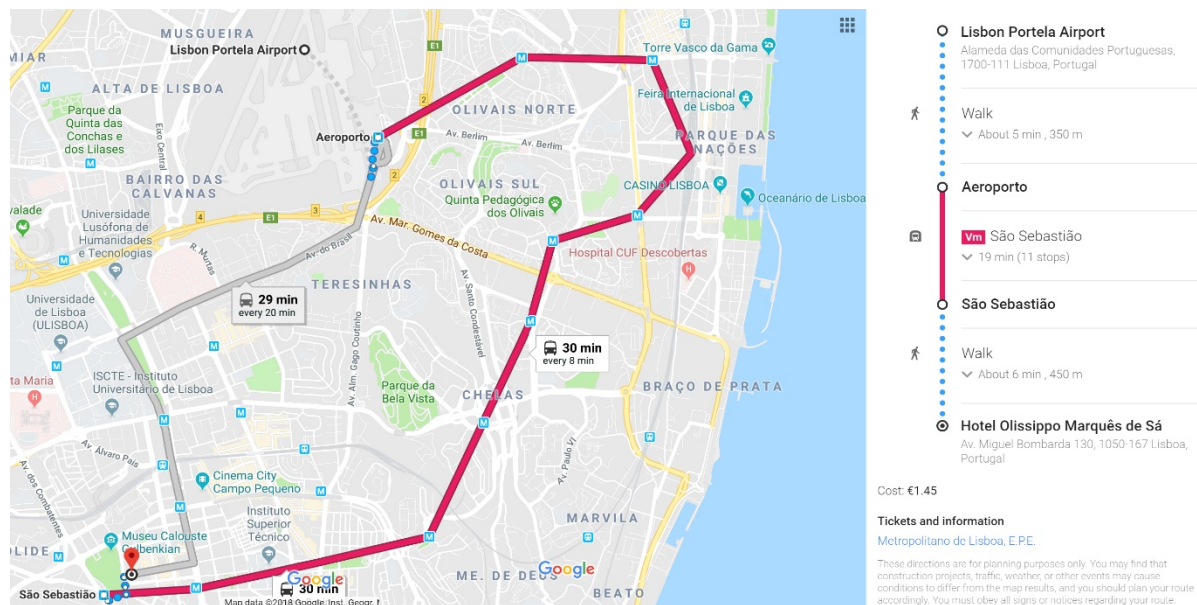
Getting from Humberto Delgado Airport (Lisbon Airport) to the venue of the workshop is quite straightforward (Figure 1.a).

When leaving Terminal 1 of the airport (all arrivals are handled there), follow the signs towards the underground station which should take about 5 min by walk to get there (Figure 1.b).

When arriving there, you must purchase the '7 Colinas' / 'Viva Viagem' electronic travel card, which you can then top up with balance for your journeys and can be used both for the Metro and for Carris (Figure 1.c). Usually, you have a tube every ≈ 8 minutes departing from the airport station.

For more information about the underground network, please visit <http://www.metrolisboa.pt/>

Finally, if you prefer to travel by taxi, there will be signs directing you once you reach the airport Terminal 1.



a) route from Airport to the workshop venue (© Google Maps).



b) entry of the underground station at the Lisbon airport



c) ticket machine

Figure 1 – Travelling details from the Lisbon Airport to the workshop venue.



Accommodation information

The **venue** of the workshop, **Hotel Olissippo Marquês de Sá**, is in the centre of the city and so there are a large range of accommodation possibilities.

Some suggestions are given bellow (from the boking website). The criteria used here was to suggest some options near of the workshop venue (walk distance up to 10-15 min).

Other options exist of course, which in that case we only advise you to book near of an underground station along the red line (see Figure 1.a), so you may easily arrive to the workshop venue also with 10 to 15 minutes.

- **HOTEL: Hotel 3K Barcelona**

Address: Rua Laura Alves, 10, Avenidas Novas, Lisbon



Booking rate: 7.7/10

Prices from: 115 €/night

Distance walk to the venue: 9 min

- **HOTEL: Hotel Acores Lisboa**

Address: Av. Columbano Bordalo Pinheiro 3, Campolide, Lisbon



Booking rate: 8.5/10

Prices from: 130 €/night

Distance walk to the venue: 14 min

- **HOTEL: Residencial Horizonte**

Address: Avenida Antonio Augusto De Aguiar 42, Avenidas Novas, Lisbon



Booking rate: 7.3/10

Prices from: 85 €/night

Distance walk to the venue: 11 min



- **HOTEL: Santos Hostel - Lisbon**

Address: Avenida António Augusto de Aguiar nº90 4º andar, Avenidas Novas, Lisbon



Booking rate: 8.4/10
Prices from: 85 €/night
Distance walk to the venue: 11 min

- **HOTEL: Gulbenkian Apartment**

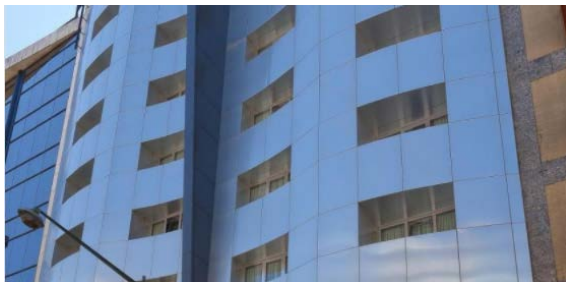
Address: Rua Marquês Sá da Bandeira 118 1ºesq., Avenidas Novas, Lisbon



Booking rate: 9.5/10
Prices from: 155 €/night
Distance walk to the venue: 11 min

- **HOTEL: Hotel Alif Avenidas**

Address: Av. Duque De Ávila 189, Avenidas Novas, Lisbon



Booking rate: 8.5/10
Prices from: 120 €/night
Distance walk to the venue: 6 min

- **HOTEL: America Diamonds Hotel**

Address: Rua Tomás Ribeiro 47, Avenidas Novas, 1050-226 Lisbon



Booking rate: 8.1/10
Prices from: 150 €/night
Distance walk to the venue: 12 min



- **HOTEL: Guesthouse Charminn**

Address: Avenida 5 de Outubro, 114 rc esq, Avenidas Novas, Lisbon



Booking rate: 8.3/10

Prices from: 60 €/night

Distance walk to the venue: 7 min

- **HOTEL: LxRoller Guesthouse Gardens**

Address: Av. 5 de Outubro, 142, Avenidas Novas, Lisbon



Booking rate: 8.0/10

Prices from: 65 € / night

Distance walk to the venue: 8 min

- **HOTEL: VIP Executive Zurique Hotel**

Address: Rua Ivone Silva, 18, Avenidas Novas, Lisbon



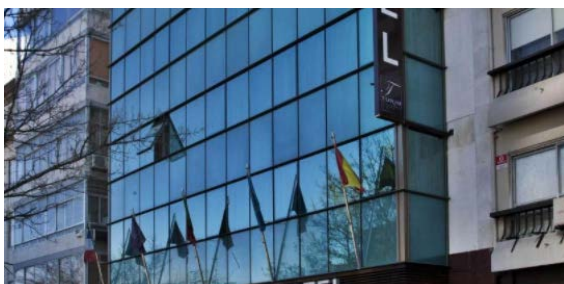
Booking rate: 7.0 /10

Prices from: 90 € / night

Distance walk to the venue: 13 min

- **HOTEL: TURIM Alameda Hotel**

Address: Av. Rovisco Pais, 34, Arroios, Lisbon



Booking rate: 7.9/10

Prices from: 125 € / night

Distance walk to the venue: 17 min



Networking dinner – Casa do Bacalhau

It is said that this location was the old stables of the palace of the Duke of Lafões (1718). The dining room, with nearly 90 places, highlights the original ceiling of the 18th century, built in vault with a typical brick (Figure 2.a). This is where cod is served in harmony with the best tradition of Portuguese cuisine. A *Casa do Bacalhau* is a themed restaurant where Portuguese food, as the name implies *cod is king* (Figure 2.b). This dedication is revealed through a menu with 25 different ways to enjoy cod, more than a hundred brands of wines (Figure 2.c), beyond the typical desserts.

For more details, please visit the restaurant website: <http://acasadobacalhau.com/>

To get to the restaurant *Casa do Bacalhau*, from the workshop venue (São Sebastião), is also straightforward (Figure 3). You need to catch a bus (#742), which crosses every $\cong 20$ minutes.



Figure 2 – Restaurant for the networking dinner (© Casa do Bacalhau, Lisbon).

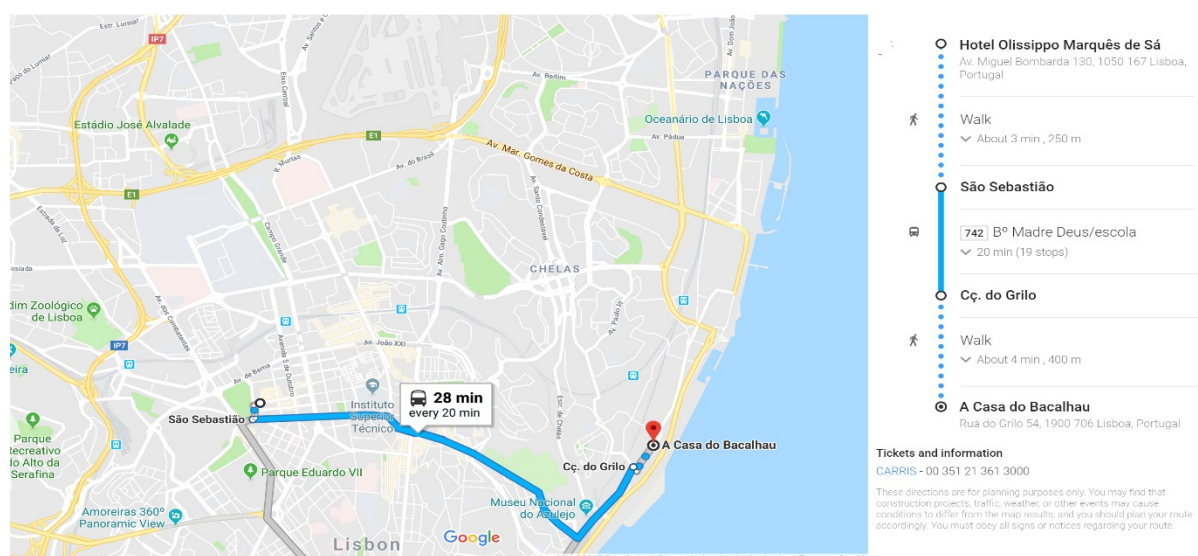


Figure 3 – Travelling details from the workshop Venue to the *Casa do Bacalhau* (© Google Maps).