



TU1406

COST ACTION

QUALITY SPECIFICATIONS FOR ROADWAY BRIDGES,
STANDARDIZATION AT A EUROPEAN LEVEL



ESF provides the
COST Office through a
European Commission contract



COST is supported by
the EU Framework
Programme



Summer School – University College Dublin

Performance-based assessment of Existing Road Bridges

24th – 25th July, 2018

Room 204, School of Mechanical and Materials Engineering
University College Dublin

ACTION CONTACTS

Chair of the Action
Vice Chair of the Action
School Organizer
Local organizers

Prof. José C. Matos
Prof. Joan R. Casas
Dr. Vikram Pakrashi
Dr. Paul Cahill

chair@tu1406.eu
vicechair@tu1406.eu
Vikram.Pakrashi@ucd.ie
Paul.Cahill@ucd.ie

Action websites
School webpage

<http://www.tu1406.eu>
<http://www.tu1406.eu/ucd>

<http://www.cost.eu>

CONTENTS

1.	Summer School – UNIVERSITY COLLEGE DUBLIN, IRELAND	4
1.1.	Objectives.....	4
1.2.	Scope	4
1.3.	Programme.....	5
1.4.	Location, Dates and Travelling	6
1.4.1.	Location and Date	6
1.4.2.	How to get to UNIVERSITY COLLEGE DUBLIN.....	6
1.5.	Accommodation.....	7
1.6.	Committees	7
1.6.1.	Scientific Committee	7
1.6.2.	Organizing Committee	8
1.6.3.	Secretariat.....	8
1.6.4.	Local Organizers	8
2.	How to Apply.....	9
2.1.	Application.....	9
2.2.	Funding and Reimbursement	9

1. SUMMER SCHOOL – UNIVERSITY COLLEGE DUBLIN, IRELAND

1.1. OBJECTIVES

The objective of the COST TU1406 Summer School – University College Dublin is to spread the latest knowledge and developments acquired by the action in the topic of performance-based assessment of existing road bridges.

The school aims at teaching the most recent developments of COST Action TU1406 on performance indicators and performance goals, focusing on the training on some contemporary topics around this field and findings of various Working Groups (WGs) leading to the development of WG5 on guidelines and recommendations.

In the first year of COST Action TU1406 the main focus was on the screening process of existing European documents and establishing a database for PIs. The goal was to explore performance indicators of bridge structures, in the course of international research cooperation, which capture the mechanical and technical properties and its degradation behaviour, already partly covered by code specifications. Considerations also include: natural aging, quality of the material; service life design methods; sustainable indicators; environmental, economic and social based indicators, performance profiles. The findings of this process are incorporated in a PI-KPI database which will be available to the user for its practical use.

The second year focused on technical and non-technical bridge performance goals. The aim was to identify existing performance goals (where the term goal pertains to quantifiable requirement and/or threshold value) for the indicators previously indicated in WG1. The performance goals vary according to technical, environmental, economic and social factors. These goals are already in a report which is now the basis for the objective performance assessment.

The third year of COST TU1406 is focused on establishing a quality control (QC) plan for different types of bridges and the development of guidelines and recommendations assimilating the findings of various working groups, resulting in some of the key activities of WG5.

In this summer school participants will be familiarized with some contemporary topics and will introduce them to a range of bridge management, inspection, performance indicators and assessment approaches along with a clear idea around the different aspects of risk. The summer school will provide targeted training for doctoral researchers in these topics, including hands-on problem-solving sessions. Participants will be able to use the knowledge and training for their research and are expected in future to influence how they interact with and contribute to the risk and management aspects of roadway bridges.

1.2. SCOPE

The event is organised by the Dynamical Systems and Risk Laboratory, School of Mechanical and Materials Engineering, University College Dublin, Ireland. It will cover the findings of various working groups (WGs) of the COST Action TU1406 with a focus around WG5 on recommendations and guidelines along with contemporary topics around the Action including hazards, inspection quality and equipment, resilience and sustainability and environmental indicators.

Venue: School of Mechanical and Materials Engineering, University College Dublin, Ireland.

Room: 204

Time: 24 – 25 July 2018

Local Organizer	Co-Organizer
Prof. Vikram Pakrashi <i>Dynamical Systems and Risk Laboratory, School of Mechanical and Materials Engineering, University College Dublin, Ireland</i>	Prof. José C. Matos <i>Minho University, School of Engineering, Civil Engineering Department, Guimarães, Portugal.</i>
Dr. Paul Cahill <i>Dynamical Systems and Risk Laboratory, School of Mechanical and Materials Engineering, University College Dublin, Ireland</i>	

Organisers: COST Action TU1406 "Quality specifications for roadway bridges, standardization at a European level (BridgeSpec)" (http://www.cost.eu/COST_Actions/tud/TU1406)

Dynamical Systems and Risk Laboratory
 School of Mechanical and Materials Engineering
 University College Dublin, Dublin 4
 Ireland

Trainers list of experts:

- Dr. Vikram Pakrashi, Dynamical Systems and Risk Laboratory, School of Mechanical and Materials Engineering, University College Dublin, Ireland
- Prof. Maria Pina Limongelli, Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano, Italy.
- Mr. Poul Linneberg, Chief Specialist, Operation and Maintenance & Steel, COWI A/S, Denmark
- Dr. Helena dos Santos Gervásio, European Commission, Joint Research Centre, Safety and Security of Buildings Unit, Ispra, Italy
- Prof. Michael Havbro Faber, Department of Civil Engineering, Aalborg University, Denmark

1.3. PROGRAMME

Tuesday, 24 July 2018

When	What
09:00 – 10:00	Opening and Overview
10:00 – 10:15	Coffee-break
10:15 – 12:00	Lecture and Exercise Introduction
12:00 – 13:00	Lunch
13:00 – 15:00	Lecture and Exercise Introduction
15:00 – 15:15	Coffee-break
15:15 – 16:00	Discussions around Exercises

Wednesday, 25 July 2018

When	What
09:00 – 10:00	Group exercise

10:00 – 10:15	Coffee-break
10:15 – 12:00	Lecture and Exercise Introduction
12:00 – 13:00	Lunch
13:00 – 15:00	Lecture and Exercise Introduction
15:00 – 15:15	Coffee-break
15:15 – 16:00	Reflection on the topics and end of Summer School

1.4. LOCATION, DATES AND TRAVELLING

1.4.1. LOCATION AND DATE

The training school is hosted by Dynamical Systems and Risk Laboratory, School of Mechanical and Materials Engineering, University College Dublin and it will be held between the 24th and 25th July 2018. The venue is located in south of Dublin, a global hub of innovation and research and University College Dublin is at the forefront of engineering innovation in Ireland.

There is plenty to see and do in Dublin and in Ireland – right from historical walks to the Great Atlantic Way. Some relevant websites in this regard are: www.failteireland.ie; www.irishtourism.com; www.visitdublin.com

The daytime temperature of Dublin in July is typically around +20 degree Celsius during daytime and around +9 and +11 degree Celsius at night. Rain is a part and parcel of Ireland, but when the sun shines, it is stunning. Therefore, it is highly recommended to check weather forecasts before you pack or bring warm clothes and umbrella/rain jacket with you.

1.4.2. HOW TO GET TO UNIVERSITY COLLEGE DUBLIN

The venue of our Summer School is the south of Dublin. The closest airport is Dublin airport, with extensive international connections.

The university is on the national road N11 and is well-served by the bus routes (Bus 145, 46a are popular). From Dublin Airport, you can take the Aircoach Route 700 to come to the venue. You can buy tickets online or on the bus. A more expensive option is to take a taxi from Dublin Airport to UCD. The venue is also a short walk from Sydney Parade and Booterstown Dart (Dublin Area Rapid Transit, train station) stops. For public transport, you can use ticketing machines for Dart and coins on buses.

However, an easier option sometimes is to obtain a Leap Card for visitors. Check for details in: <https://about.leapcard.ie/leap-visitor-card>

There are the following options for travel:

1. By Plane

The closest airport is Dublin Airport (about 20km via city and 38km via the ring road M50). Dublin Airport offers public transportation (rail and bus) as well as taxi and rent a car facility.

2. By Rail

The closest train stations are Booterstown DART station and Sydney Parade DART station. It is about 20-25 minutes walk from either of these stations.

3. By Bus

The university is on the national road N11 and is well-served by the bus routes (Bus 145, 46a are popular). From Dublin Airport, you can take the Aircoach Route 700 to come to the venue. The link to Aircoach is: <https://www.aircoach.ie/timetables/route-700-dublin-airport-leopardstownsandford>

You can buy tickets online or on the bus. Note that you need coins to use in bus. An easier option sometimes is to obtain a Leap Card for visitors. Check for details in: <https://about.leapcard.ie/leap-visitor-card>

4. By Car

You can use a rent-a-car facility from Dublin airport and can park in UCD. During the Summer School, there is no parking fee in UCD.

5. By Taxi

The taxi charge from the Dublin airport to UCD is approximately 40-45 € per car. The taxi stands are located right outside the exit.

6. Local Travel

You might want to consider obtaining a Leap Card for visitors that will allow you to take Dart and Bus in Dublin for local travel (not applicable for Aircoach). Check for details in: <https://about.leapcard.ie/leap-visitor-card>

1.5. ACCOMMODATION

There are several hotels and Bed and Breakfasts in Dublin near UCD or in the city centre. Visitors might also want to consider the seaside location of Dun Laoghaire for their stay. UCD is well-connected by bus from City Centre and Dun Laoghaire.

Standard websites like www.hotels.com, www.booking.com or www.bandbireland.com provide information, rates, availabilities and amenities in relation to accommodation.

1.6. COMMITTEES

An executive scientific committee as well an organizing committee were defined.

1.6.1. SCIENTIFIC COMMITTEE

<i>Name</i>	<i>TU1406 Position</i>	<i>E-mail</i>
José C. Matos	Chair	chair@tu1406.eu
Alfred Strauss	WG1 Leader	wg1@tu1406.eu
Irina Stipanovic	WG2 Leader	wg2@tu1406.eu
Rade Hajdin	WG3 Leader	wg3@tu1406.eu
Vikram Pakrashi	WG5 Leader	wg5@tu1406.eu , vikram.pakrashi@ucd.ie

1.6.2. ORGANIZING COMMITTEE

<i>Name</i>	<i>TU1406 Position</i>	<i>E-mail</i>
José C. Matos	Chair	chair@tu1406.eu
Vikram Pakrashi	WG5 Leader	wg1@tu1406.eu

1.6.3. SECRETARIAT

<i>Name</i>	<i>TU1406 Position</i>	<i>E-mail</i>
Eleni Chatzi	Technical Secretariat	tecsec@tu1406.eu
Paul Cahill	Member, WG5	paul.cahill@ucd.ie
Lara Leite	Administrative Secretariat	adminsec@tu1406.eu

1.6.4. LOCAL ORGANIZERS

<i>Name</i>	<i>TU1406 Position</i>	<i>E-mail</i>
Vikram Pakrashi	WG5 Leader	wg5@tu1406.eu , vikram.pakrashi@ucd.ie
Paul Cahill	Member, WG5	paul.cahill@ucd.ie

2. HOW TO APPLY

2.1. APPLICATION

Interested applicants should submit their personal information and a short Curriculum Vitae through the form available for this purpose at <https://goo.gl/kBKAX6>.

Registrations should be submitted until the 15th June 2018.

Communication of Acceptance will be sent by the 22th June 2018. Earlier expression of interest with a relevant CV can lead to early communication of acceptance.

2.2. FUNDING AND REIMBURSEMENT

COST supports the participation of Trainees for their attendance at approved Training Schools. 15 Trainees approved by Organization/Management Committee, based on technical curriculum and on the COST policies on ESR (early stage researcher), gender and inclusiveness country, are entitled to receive a fixed Grant of 650,00 € and free registration.

Trainee grants do not necessarily cover all expenses related to attending the Training School. The Trainee Grant is a contribution to the overall travel, accommodation and meal expenses of the Grantee. Different grants amount can be attributed to each trainee.

The grant will be paid up to one month after the training school and no proof of expenses will be required to make the payment. The only requirement is to sign the attendance list.



TU1406
COST ACTION

WWW.TU1406.EU