WG2 and WG3 Workshop

20-21 October 2016
Delft, The Netherlands

J. Campos e Matos – Chair – University of Minho, Portugal
OUTLINE

1. Aim
2. Organization
3. Scientific Programme
4. Impacts
5. Representation
6. Members
7. Dissemination
8. Future Events
1. AIM

The overall intention of the Action is to

**develop a guideline for the establishment of Quality Control (QC) plans in roadway bridges**

Reachable by taking 5 specific steps:

(i) Systematize knowledge on QC plans for bridges, which will help to achieve a state-of-art report that includes performance indicators and respective goals;

(ii) Collect and contribute to up-to-date knowledge on performance indicators, including technical, environmental, economic and social indicators;

(iii) Establish a wide set of quality specifications through the definition of performance goals, aiming to assure an expected performance level;

(iv) Develop detailed examples for practicing engineers on the assessment of performance indicators as well as in the establishment of performance goals, to be integrated in the developed guideline;

(v) Create a database from COST countries with performance indicator values and respective goals, that can be useful for future purposes.
2. ORGANIZATION

Management Committee

Including:
- MC Chair
- MC Vice-Chair
- WG’s Leaders and Vice-Leaders
- General Secretariat
- STSM Leader and Vice-Leader
- M&E Leader and Vice-Leader
- Innovation Leader and Vice-Leader
- R&D Leader and Vice-Leader

Core Group

- MC Chair
- MC Vice-Chair
- WG’s Leaders
- General Secretariat
- STSM Leader
- M&E Leader *
- Innovation Leader *
- R&D Leader *

Advisory Board

- Industry/Owners/Operators
- External Advisors (MC Observers)

MC Observers

- Australia
- Japan
- North America
- South America
- South Africa

* under an “ad-hoc” basis
2. ORGANIZATION

WG5. Drafting of guidelines/recommendations

- Existing documentation (format and content)
- Document preparation
- Easy to use document

WG4. Implementation in a case study

- Benchmarking
- Validation
- Discussion

WG1. Performance indicators
- Technical indicators
- Environmental indicators
- Others

WG2. Performance goals
- Technical goals
- Environmental goals
- Others

WG3. Establishment of a QC plan
- Bayesian nets
- Procedure to develop a QC plan for a single bridge
3. SCIENTIFIC PROGRAMME

It is organized based on the division of tasks (and subtasks) allocated according to a timetable.

<table>
<thead>
<tr>
<th>WG</th>
<th>Technical indicators</th>
<th>Environmental indicators</th>
<th>Other indicators</th>
<th>Technical goals</th>
<th>Environmental goals</th>
<th>Other goals</th>
<th>Survey of European roadway QC plans</th>
<th>Procedures for the establishment of a QC plan</th>
<th>Selection of case studies</th>
<th>Benchmarking</th>
<th>Application on a QC plan</th>
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General plan

- One Workshop per year (end of each year);
- One Training School per year (end of each year);
- STSMs occur throughout the entire project;
- WG meeting dates will usually coincide with Workshops and MC meetings.

### 3. SCIENTIFIC PROGRAMME

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**TU1406 COST ACTION**
3. SCIENTIFIC PROGRAMME

Milestones

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M1: WG1 – Performance indicators
   Elaborate a report of performance indicators

M2: WG2 – Performance goals
   Elaborate a report of performance goals

M3: WG3 – Establishment of a QC plan
   Prepare recommendations for the establishment of Quality Control plan

M4: WG4 – Implementation in a Case Study
   Prepare database from benchmarking

M5: WG5 – Drafting of guideline/recommendations
   Prepare guideline/recommendations for the establishment of QC plan
5. REPRESENTATION

COST Countries

36 Action represented countries

Missing Country
  - Romania
5. REPRESENTATION

Near Neighbour Countries

- Belarus
- Moldova
- Montenegro
- Albania*
- Morocco
- Tunisia
- Algeria
- Lybia*
- Egypt*
- Russia
- Ukraine
- Georgia
- Azerbaijan
- Armenia
- Syria
- Lebanon
- The Palestinian Authority
- Jordan

COST Countries
NN Countries
* Represented
5. REPRESENTATION

International Partner Countries

- Costa Rica
- Brazil
- Nicaragua
- Mexico
- South Africa
- Australia
- China
- Japan
- Chile
- USA

COST Countries

International Partner Countries

* MC Observer
6. MEMBERS

- All participants: 222
- MC Member: 62
- MC Substitute: 26
- MC Observers: 5
- WG Members: 190
- Countries: 49
6. MEMBERS

![Bar chart showing membership by country.](chart.png)
6. MEMBERS

[Bar chart showing membership counts for various countries, with categories for MC Members, MC Substitute, and WG Members.]

Legend:
- MC Members
- MC Substitute
- WG Members
6. MEMBERS

MC Members

- Male: 83%
- Female: 17%

WG Members

- Male: 79%
- Female: 21%
6. MEMBERS

MC Members
- University: 67%
- Institute: 14%
- Owner: 8%
- Consultant: 11%

WG Members
- University: 64%
- Institute: 11%
- Owner: 15%
- Consultant: 10%
7. DISSEMINATION

• Activities
  – Workshops/Conferences
  – STSM (especially promoted to early-stage researchers)
  – Dissemination meetings (e.g. conferences, etc.)
  – Training schools

• Publications
  – Journal special issues
  – Peer-reviewed articles
  – Reports issued by the Action
  – E-book
  – Guideline and link to standardization
7. DISSEMINATION

Website

www.tu1406.eu

Facebook page

https://www.facebook.com/tu1406ca
7. DISSEMINATION

LinkedIn page

https://www.linkedin.com/company/tu1406

YouTube channel

https://www.youtube.com/channel/UCwxn7su9Bjm_D5xsuExRg8Q
7. DISSEMINATION

Poster

Leaflet/Brochure

Roll-up
8. FUTURE EVENTS

Title: COST Action TU1406: Quality specifications for roadway bridges, standardization at a European level (BridgeSpec) – Performance indicators

Date: Wednesday, November 23rd, 2016

Group: Session 11 – Bridge Structures

Note: TU1406 Meeting will take place on Wednesday, November 23rd
8. FUTURE EVENTS

Zagreb Joint Workshop
02-03 March, 2017

Title: The Value of Structural Health Monitoring for the Reliable Bridge Management

Date: 02-03 March 2017

Venue: Faculty of Civil Engineering, University of Zagreb

Organizers:
- COST 1402 - Quantifying the value of structural health monitoring
- COST 1406 - Quality specifications for roadway bridges, standardization at EU level
- IABSE WC1 - Structural performance, safety and analysis
8. FUTURE EVENTS

Zagreb Joint Workshop
02-03 March, 2017

Topics:
- Performance assessment of existing bridges for their reliable management (COST Action TU1406)
- Framework, strategies and tools towards the quantification of the value of structural health monitoring (COST TU1402)
- Management and Performance-assessment of existing structures (IABSE WC1)

Call for short papers: November 20th, 2016
8. FUTURE EVENTS

29th International Baltic Road Conference
Tallin, Estonia
28-30 August, 2017

Topic: Bridges
Venue: Eesti Näitused – Estonian Fairs Ltd
Call for abstracts: October 1st, 2016
Scientific Committee notice: December 1st, 2016
Paper submission: May 10th, 2017
Note: TU1406 Meeting will take place
8. FUTURE EVENTS

Title: COST TU1406 – Quality Control for the efficient management of existing bridges
Sponsoring Group: WC4 + COST TU1406
Symposium Theme: Existing Structures into the Future
Session Format: Traditional paper + Discussion number of 90 minutes
8. FUTURE EVENTS

Title: BESTInfra – Building up Efficient and Sustainable Transport Infrastructure
Date: 21-22 September 2017
Venue: Faculty of Civil Engineering, Czech Republic University
Organizers: Ministry of Transport
COST 1406 – Quality specifications for roadway bridges, standardization at EU level
TA ČR – Technology Agency of the Czech Republic
8. FUTURE EVENTS

Prague, Czech Republic
21-22 September, 2017

Abstract Submission Deadline: November 30th, 2016
Full Paper Submission Deadline: February 28th, 2017
Final Manuscript Submission Deadline: May 21st, 2017

Selected papers will be published in extended form in Scopus indexed journal Acta Polytechnica, Journal of Advanced Engineering published by the CTU in Prague.
8. FUTURE EVENTS

2nd International Bridge Congress
Santiago, Chile
18-21 October, 2017

Title: Design, construction and maintenance
Organizers: Chilean Association of Roads and Transport (ACCT & Chile PIARC National Committee)
National Roads Administration of Chile
Sponsor: COST TU1406
Call for abstracts: January 15th, 2017
Note: TU1406 Central and South American WG meeting will take place on October 17th, 2017
THANK YOU FOR YOUR ATTENTION!

WWW.TU1406.EU