



## Bridge Management Systems – A Crucial Link to BIM

**Vanja Samec**

*Independent Bridge and BIM Consultant, Austria*

*Chair of IABSE Task Group “BIM for Structure Management”*

**Mário Coelho**

*University of Minho, Guimarães, Portugal*

**Sachidanand Joshi**

*Chair Emeritus @IDDC Engineers Pvt. Ltd for IBMS/ UBMS- India*

**Guido Morgenthal**

*Bauhaus University Weimar, Germany*

**Chang-Su Shim**

*Chung-Ang University, Seoul, Korea*

*Vice-Chair of IABSE Task Group “BIM for Structure Management”*

**Contact:** [vsamec7@gmail.com](mailto:vsamec7@gmail.com)

### Abstract

Fatal bridge collapses and accidents, climate change effects and critical maintenance condition of many bridges recently increased the interest among bridge owners worldwide to transition from preventive to more proactive bridge maintenance and support by digitalization. Analyzing maintenance information systematically contributes to successful maintenance management. Inspections and maintenance require organized, automated, open, and transparent digital processes. Worldwide Bridge Management Systems evolve, associated with the technological evolution, but are in urgent need for a digital upgrade, especially considering BIM technology. Existing BIM models must be enriched by assets obtained from inspection and maintenance processes. An Open BIM platform should be the goal and to this end IABSE Task Group 5.6 "BIM for Existing Structures" has defined its aim as helping to stimulate debate on this topic and give recommendations on how to address the issues raised.

**Keywords:** Bridge Management System (BMS); Building Information Modelling (BIM); open source, open BIM; cloud-platforms; visualization.