Programme at a glance (26 june)

Time	Congress Hall	Harlekin - ground floor	Columbine - ground floor	Pjerrot - ground floor	Arkaden 4+5 - 2nd floor	Arkaden 6 - 2nd floor	Arkaden 7 - 2nd floor	Arkaden 8 - 2nd floor	Dansetten - 2nd floor	Glassalen - 1st floor	Arkaden 2+3 - 2nd floor
WEDNESDAY 26 JUNE											
08:30-10:00	**Keynote Speaker** ***Chairs:*** *Jacob Wittrup Schmidt and Nigel Powers* Sustainability and digitalization in bridge management: How far we are? ***Presenter:*** *Joan Ramon Casas* From empirical and subjective O&M to statistical and objective asset management. ***Presenter:*** *Silas Christian Nørager* Assessment of post-tensioned bridges in Norway. ***Presenter:*** *Lise Bathen*										
10:00-10:30	Coffee Break										
10:30-12:00	**MS 03**	**MS 02**	**SS 05**	**GS 19**	**SS 46**	**SS 31**	**SS 47**	**SS 08**	**SS 02**	**SS 42**	**SS 22**
	Life-Cycle Performance Assessment of existing bridges in an Aggressive environment ***Chairs:*** *M. Akíyama and H. Matsuzaki*	Field testing of existing bridges ***Chairs:*** *G. Sas and J.W. Schmidt*	Underground and above-ground infrastructure resilience and sustainability ***Chairs:*** *M. Domaneschi and V. Villa*	BRIDGE SAFETY - assessment and evaluation ***Chairs:*** *E. Brühwiler and M. Plos*	BRIDGITISE an EU network on the digitalization of bridge integrity management ***Chairs:*** *M.P. Limongelli and J. H. Roldsgaard*	O&M of Major Bridges ***Chairs:*** *J. L. Jensen and K.A. Nielsen*	Life-Cycle of RC/PC Bridges: Advances on Experimental Testing and Computational Methods from the BRIDGE|50 Research Project ***Chairs:*** *F. Biondini and F. Tondolo*	Posttension Analysis, Design, and Assessment in Bridge Construction ***Chairs:*** *U. Attanayake and M. LaViolette*	Bridge Weigh-in-Motion: recent experiences, technology developments, and new applications ***Chair:*** *D. Cantero*	Community Resilience and Decision-Support systems ***Chairs:*** *R. Makhoul, R. Kromanis and J.v.d. Lindt*	Advancements in Intelligent Monitoring and Maintenance of Bridge Infrastructure ***Chairs:*** *S. Setunge*
	Degradation prediction of FRP bars within concrete bridge decks in service. ***Presenter:*** *X-L. Zhao*	Integrated Utilization of Infrared and Ultrasound Technologies for Bridges. ***Presenter:*** *N. Catbas*	The Seismic Response and Resilience of Nearby Underground Infrastructures ***Presenter:*** *M. Civera*	Development of a New Abutment Connection for Rapid Construction. ***Presenter:*** *F. Sigurjónsson*	Drone-Based Photogrammetric Indoor Inspection of Box Girder Bridges. ***Presenter:*** *J. C. Avendaño*	Sustainability monitoring of Cable Systems. ***Presenter:*** *J. Laigaard*	Nonlinear structural analysis of 50-year-old PC bridge deck beams under load testing. ***Presenter:*** *M. Anghileri*	Finite Element Analysis of Over-height Vehicle Collisions on Prestressed Girder Bridges. ***Presenter:*** *M. Whelan*	Challenges of implementing bridge weigh-in-motion on a century-old steel railway bridge. ***Presenter:*** *D. Hekič*	Physics-based Earthquake-tsunami Fragility Surfaces for Risk and Resilience Analysis. ***Presenter:*** *J. Van de Lindt*	Analysis of monitoring data on PC bridges under construction. ***Presenter:*** *T. Ohno*
	Load-bearing capacity estimation of RC beams using corrosion crack widths. ***Presenter:*** *T. Adachi*	Determining load distribution in a riveted railway bridge through controlled field testing. ***Presenter:*** *B. Imam*	Development of a Novel Bridge Deck-to-Pier Connection for Improved Tsunami Resilience. ***Presenter:*** *R. Pagel*	NDT for damage detection in FRP reinforced/ strengthened concrete elements. ***Presenter:*** *A. Mehrabi*	Decision algorithms for the managing of steel railway bridges. ***Presenter:*** *F. J. Jordan Garcia*	Moisture monitoring in cable anchorages before and after dehumidification. ***Presenter:*** *A. Parodi*	Corrosion investigations on PC deck beams of a 50-year-old decommissioned viaduct. ***Presenter:*** *M. Carsana*	Selection of posttensioned tie girders for the 2nd Avenue tied network arch bridge. ***Presenter:*** *M. LaViolette*	Radio-interferometry based continuous bridge deformation monitoring – a case study. ***Presenter:*** *K. Leppänen*	Bridge Maintenance Methodology Accounting for Climate Change Dependent Parameters. ***Presenter:*** *S. A. Keo*	Piezo-Electric Dampers (PiDs) for energy harvesting purposes. ***Presenter:*** *M. Francioli*

	Probabilistic structural identification using time-dependent deflection of prestressed concrete bridges. ***Presenter:*** *S. Jia*	Field assessment of a Vibration-Based damage identification procedure. ***Presenter:*** *J. Raedersdorff*	Blockchain technology conception in digital data collection for damage assessment and LCA. ***Presenter:*** *V. Villa*	Calibration of constitutive model parameters of bridge steels using particle swarm optimization. ***Presenter:*** *Y. Zhang*	Lightweight Vehicles in Indirect Structural Health Monitoring: Current Advances and Future Prospects. ***Presenter:*** *M. P. Limongelli*	Analysing ultrasonic testing data to optimise cable stay maintenance. ***Presenter:*** *A. Boyez*	Load tests on dismantled 50-year-old prestressed concrete bridge deck beams. ***Presenter:*** *F. Tondolo*	Assessment of Internal Condition of a Post-tensioned Tie Girder During Construction. ***Presenter:*** *U. Attanayake*	A regression based B-WIM Method for railway bridges. ***Presenter:*** *S. Lachinger*	Enhancing Urban Resilience and Sustainability under Wind Disasters with Carbon Emission as an Indicator. ***Presenter:*** *C-Y. Lin*	Structural Health Monitoring of a Bridge using Polarimetric Radar Sensor. ***Presenter:*** *L. Zou and A.M. Alani*
	Advanced framework for degradation modeling of operating structures. ***Presenter:*** *M. E. A. Ben Seghier*	Road overpasses with Gerber half-joints: Field tests and numerical models. ***Presenter:*** *D. De Domenico*	Analytical Seismic Resilience Identifiers of Bridges. ***Presenter:*** *D. Hajializadeh*	Modal Identification for Rapid Assessment of Short Span Reinforced Concrete Bridges. ***Presenter:*** *S. Levia-Maldonado*	Simultaneous WET and WIT with Q-Learning for Wireless Bridge Sensors Network. ***Presenter:*** *M. T. Mushtaq*	Fatigue Crack Propagation Simulation of HaiBach Hole for Orthotropic Steel Bridge Deck. ***Presenter:*** *Y. Wang*	Dynamic response of damaged precast bridge girders. ***Presenter:*** *A. Quattrone*	Reliability Analysis of End Cracking in Continuous Prestressed Concrete Girders. ***Presenter:*** *A. Okeil*	A deep learning-based BWIM system of a cable-stayed bridge. ***Presenter:*** *B. Szinyéri*	Identification of a suitable case study for the development of accessibility based vulnerability score for bridge maintenance decision making. ***Presenter:*** *M. Lydon*	Refined Modeling of Inhomogeneous Medium for Ground-Penetrating Radar Simulation ***Presenter:*** *Y. Zheng*
			Dynamic measurements for assessing bridge response to foundation scour. ***Presenter:*** *M. Aimar*	Retroreflective Sheeting Materials as SHM Passive Strain Sensors. ***Presenter:*** *H. Power*	Probabilistic Digital Twin for continuous bridge performance modelling. ***Presenter:*** *I. Alovisi*	Digital fatigue test of steel truss girders in long-span suspension bridge with double-deck. ***Presenter:*** *J. Li*	Integrating BIM in experimental tests on bridge beams. ***Presenter:*** *D. Rodriguez Polania*	Post-tensioning tendons under strand breakages: numerical validation and predictive alarms. ***Presenter:*** *B. Vecino Muñoz*	Load estimation precision for moving forces with position uncertainties through AKF. ***Presenter:*** *C. Demartino*		A framework for bridge condition assessment using Graph Neural Network. ***Presenter:*** *G. Marasco*
12:00-13:00	Lunch										
13:00-15:00	**MS 03**	**MS 13**	**SS 12**	**GS 19**	**SS 11**	**GS 01**	**SS 41**	**SS 13**	**SS 32**	**SS 44**	**SS 22**
	Life-Cycle Performance Assessment of existing bridges in an Aggressive environment ***Chairs:*** *M. Akiyama and H. Matsuzaki*	Bridge Loading – Measurement and Modelling ***Chairs:*** *C. Caprani and E. O'Brien*	Realising the extension of BIM for existing bridges ***Chairs:*** *N. Powers and V. Samec*	BRIDGE SAFETY - assessment and evaluation ***Chairs:*** *E. Brühwiler and M. Plos*	Approaches to Bridge Management / Bridge Management Systems in Response to Today's Challenges ***Chairs:*** *R.M. Ellis and R. Hajdin*	BRIDGE MAINTENANCE - Application of new tools ***Chairs:*** *I.F. Alcover and N. Makhoul*	Management and maintenance of urban bridges ***Chairs:*** *D. Honfi and J. Vig*	Design, Construction and Evaluation of Steel/FRP & Concrete Composite Bridge Structures ***Chairs:*** *J. He*	Data-driven asset management ***Chairs:*** *M. Saberi and J. Winkler*	AI and Optimization Methods for Bridge Management under Uncertainty ***Chairs:*** *D. Yang and K.G. Papakonstantinou*	Advancements in Intelligent Monitoring and Maintenance of Bridge Infrastructure ***Chairs:*** *S. Setunge*
	Modeling the deterioration of road bridges at the provincial level in Lao PDR. ***Presenter:*** *H. Silimanotham*	Braking Effects on vehicle-bridge Interaction. ***Presenter:*** *A. Aloisio*	Overview of the use of BIM for bridges across Australia and New Zealand. ***Presenter:*** *N. Powers*	Assessment method for arch bridges affected by HS2 tunnel settlement, UK. ***Presenter:*** *A. Saavedra Justo*	Forecasting the condition of British railway bridges via a hindcast. ***Presenter:*** *M. Hamer*	Super-Resolution Enhanced Vehicle Recognition Method for Long-span Bridge. ***Presenter:*** *Y. Pan*	Cause Identification for Uplifting Behavior of a Truss Bridge. ***Presenter:*** *K. Suzuki*	Cyclic behavior of replaceable LYP steel coupling beam with corrugated web. ***Presenter:*** *J. He*	Change detection using Bayesian multivariate linear regression. ***Presenter:*** *R. Hollamby*	Data-derived train classification and monitoring of masonry bridge. ***Presenter:*** *J. Cheng*	Øresund Bridge: Case study of a monitoring system for movement of bridge bearings. ***Presenter:*** *A. Paciacconi*

	Experimental investigation on shear behaviour of corroded and repaired prestressed concrete beams. ***Presenter:*** *S. Ravasini*	Distributed fiber optic sensing during static and dynamic bridge loading. ***Presenter:*** *L. Strasser*	BIM-data of baseline digital twins for a new bridge maintenance system. ***Presenter:*** *C. Shim*	Parametric evaluation and design of prestressed concete beam bridges. ***Presenter:*** *T. E. T. Buttignol*	Vulnerability of Network Infrastructure due to potential extreme weather in PEI, Canada. ***Presenter:*** *D. Evans*	Bayesian non-linear load estimation in long-span bridges via physics-informed Gaussian processes. ***Presenter:*** *G. R. Tondo*	Aerial-demolition method for bridges above intersections with heavy traffic. ***Presenter:*** *R. Nakata*	Fatigue life extension for cracked OSDs using semi-rigid pavement layer. ***Presenter:*** *B. Wang*	Scoring System for Technical Evaluation of Technologies for Remote Monitoring of Bridges. ***Presenter:*** *A. Anžlin*	Deep reinforcement learning-driven life-cycle management of bridge and pavement systems. ***Presenter:*** *K. Papakonstantinou*	Thermal response prediction of the MX3D Bridge's operational dataset. ***Presenter:*** *T. Glashier*
	Risk-based retrofit optimization of deteriorating reinforced concrete bridge columns subjected to corrosion and earthquakes. ***Presenter:*** *S. Kim*	Structural Load Modelling of Walking Humans with Gait Cycle-Dependent Model Parameters. ***Presenter:*** *M. J. A. Fritzsche*	Condition integration in BIM for existing bridges. ***Presenter:*** *M. Köhncke.*	Bridge Deterioration Estimation for Small Zones Considering Chemical Attack. ***Presenter:*** *F. Obungtua*	Considerations for Vulnerability and Risk of Bridges Including Extreme Weather Events. ***Presenter:*** *R. Ellis*	A Multi-task Deep Learning-based Framework for Structural Details and Corrosion Detection in Steel Bridges. ***Presenter:*** *M. Halling*	Risk assessment of the K-bridge over the Danube. ***Presenter:*** *D. Kollár*	Experimental and Numerical Study on Static Performance of Steel Cap Beam. ***Presenter:*** *C. Shen*	Regional Impacts of Natural Disasters on Road Bridges in the Philippines. ***Presenter:*** *M. J. Adarne*	Analyzing Uncertainty in Strain Estimation Framework for Bridge Condition Assessment. ***Presenter:*** *G. Marasco*	Identification of main cable shape of suspension bridge based on 3D point cloud. ***Presenter:*** *R. Pan*
	Life-Cycle Assessment of Riverine Bridges under Flood and Corrosion. ***Presenter:*** *R. K. Arora*	CFD Analyses for Wind Load Assessment of the new Bomarsund arch bridge. ***Presenter:*** *F. El Azrak*	Cloud-based asset management for image-based inspections of infrastructures. ***Presenter:*** *G. Morgenthal and M. Von Butler-Helmrich*	Assessment of shear capacity of bridge beams with non-standard anchorage - an experimental study. ***Presenter:*** *E. Nuti*	Province of New Brunswick Bridge Management System. ***Presenter:*** *Z. Kamranian and R. Ellis*	Tests of TIG welded lap joint between Fe-SMA and steel. ***Presenter:*** *Z. Zhang*	Risk assessment of the K-bridge over the Danube. ***Presenter:*** *J. Sandberg*	Real-time multi-objective topology optimization method via deep learning. ***Presenter:*** *C. Xiang*	Improved structural assessment of Newport Bridge using smartphone-based technologies. ***Presenter:*** *J. Winkler*	Managing aging bridges under seismic hazards through deep reinforcement learning. ***Presenter:*** *Z. Metwally*	New trends and possibilities of GPR in bridge inspection. ***Presenter:*** *M. Solla*
	Life-cycle Cost-benefit Analysis of an SMA-Steel Reinforced Bridge. ***Presenter:*** *J. Qian*	Bridge damage evaluation model based on vehicle excitation and ML. ***Presenter:*** Z. Xiong	Linking BrIM to BMS for bridges – validation of concepts. ***Presenter:*** *V. Samec*	Deep Learning for Evaluation of Girder Rotation during Deck Construction. ***Presenter:*** R. Hindi	Bridge Deterioration Prediction Models: A Review of Management Systems in the World. ***Presenter:*** *A. Martins*	A Decision Method for Ship-bridge Collision Pre-Warning Based on Vision and Radar Data Fusion. ***Presenter:*** *H. Zhuang*	Enhancing Dybbølsbro Bridge - Refurbishment and Expansion without New Substructure. ***Presenter:*** *L. Thormann*	A method for stochastic modelling of fatigue stresses in orthotropic bridge decks subjected to local and global traffic loading. ***Presenter:*** *F-I. G. Giske*	Artificial intelligence to identify defects on major bridges inspected by drone. ***Presenter:*** *S. Flawinne*	Objective Risk Assessment for Bridge Management. ***Presenter:*** *D. Y. Yang*	An Innovative Approach for a Sustainable Monitoring of Large Infrastructure Networks. ***Presenter:*** *D. La Mazza*
		Experimental determination of trough bridges pressure distribution. ***Presenter:*** *J. González-Libreros*	Strategies for Effective Bridge Information Management with OpenBIM. ***Presenter:*** *C. Gragnaniello*		Developing a guideline for structural health monitoring of road bridges in Germany. ***Presenter:*** *F. Hille*				Improved bridge management of the Lincent Bridge using innovative camera-based system. ***Presenter:*** *L. Rivituso*		Recent studies on the dynamic behaviour of various bridges in Spain. ***Presenter:*** *J-A. López-Aragón*

15:00-15:30	Coffee Break
15:30-16:30	**Keynote Speaker** ***Chairs:*** *Eugen Brühwiler and Matias Valanzuela* Bridge Management – Past, Present, and Future. ***Presenter:*** *Reed Ellis* Innovations in building and bridge engineering associated with Circular Economy. ***Presenter:*** *Lisbeth M. Ottosen*
16:30-16:45	Break
16:45-17:45	**General Assembly**