

**Preliminary programme** 

V2 2022-04-10



DAY 1 – Wednesday, May 11 <sup>th</sup>			
15:00 - 20:00	Registration of the Participants		
19:00 - 21:00	A welcome cocktail for participants and guests		

DAY 2 - Thursday, May 12 <sup>th</sup>					
08:00 - 09:00	Registration of the participants				
Conference hall	Hall A	Hall B	Hall C		
09:00 - 09:45	Opening ceremony				
09:45 - 10:00		Coffee Break			
10:00 - 11:30	Keynote lectures				
11:30 - 12:00		Coffee break			
12:00 - 13:30	A1 Road infrastructure design and safety	B1 Geotechnical modelling, management, and optimization	C1 Facilities and vehicles design		
13:30 - 14:30		Lunch break			
14:30 - 16:00	A2 Pavement innovations and new technology	B2 Rail infrastructure optimization and condition assessment	C2 Structures design, re(construction), monitoring and management		
16:00 - 16:30		Coffee break			
16:30 - 18:00	Round table (discussion)				
20:30 - 23:00		Gala dinner			

DAY 3 - Friday, May 13 <sup>th</sup>				
Conference hall	Hall A	Hall B	Hall C	
10:00 - 11:30	A3 Rail infrastructure design and safety	B3 Pavement laboratory testing	C3 Sustainable mobility	
11:30 - 12:00		Coffee break		
12:00 - 13:30	A4 Rail infrastructure monitoring and maintenance	B4 Pavement design, management and re(construction)	C4 Road infrastructure and traffic planning and modelling	
13:30 - 14:30		Lunch break		
14:30 - 16:00	A5 Geotechnical design and monitoring	B5 Pavement planning, modelling, and monitoring	C 5Rail infrastructure and traffic planning and modelling	
16:00 - 16:30		Coffee break		
16:30 - 17:00	Conference closure			

Time slot	Session 1 topics	Submission ID	Submission by Authors
	A1 Road infrastructure	1426	Road safety assessment in curves based on a road embedded tire to road friction sensor by Alex Coiret & Pierre-Olivier Vandanjon
		1444	Roundabout approaching speed analyses by Mirna Klobučar, Aleksandra Deluka-Tibljaš, Sanja Šurdonja, Tiziana Campisi & Robert Maršanić
		1348	Investigation of the clear sight areas on suburban roundabouts by Saša Ahac & Petra Kipa
	design and safety	1368	Effect of geometric road characteristics on deceleration rate in transition from tangent to horizontal curve for two-lane rural roads by Biljana Maljković, Dražen Cvitanić & Tomislav Radić
		1389	Rehabilitation of an accident spot with Human Factors by Sibylle Birth, Žiga Boh, Samo Krajnc & Jure Kukovič
		1403	Relationship between ages of children riding bicycles involved in traffic accidents and violations of traffic laws and ordinances in Ishikawa Prefecture by Hiroki Onishi, Makoto Fujiu & Junichi Takayama
		1433	Statistical analysis of fluvial trajectories based on AIS database for the construction of a bridge by Pierre-Olivier Vandanjon, Alex Coiret & Trisan Lorino
	B1 Geotechnical modelling,	1474	Flood risks to critical infrastructure — case study of city of Karlovac by Irina Stipanović, Sandra Škarić Palić, Mario Bačić, Meho Saša Kovačević, Kenneth Gavin & Emir Ganić
		1471	Classification of a flood protection infrastructure based on its vulnerability to various loads by Mario Bačić, Meho Saša Kovačević, Danijela Jurić Kaćunić, Lovorka Librić, Marijan Car, Kenneth Gavin, Irina Stipanović & Cormac Reale
12:00 - 13:30	management, and	1484	Methodology of flood risk assessment on the main road network in the Federation of Bosnia and Herzegovina by Suada Sulejmanovic, Žanesa Ljevo, Mirza Pozder, Ammar Šarić & Sanjin Albinović
	optimization	1483	Innovative geotextile contaminant barriers in infrastructure applications – Environmental protection without surface sealing by Thomas Hasslacher, Victor Poberezhnyi & Stefan Niewerth
		1477	A basic study on automatic detection of voids on mortar-sprayed slopes using deep learning by Taiki Suwa & Makoto Fujiu
	C1 Facilities and vehicles design	1409	Dual locomotives for regional freight trains by Martin Chýle & Michal Drábek
		1437	Project of the Platform-container for Intermodal Transport  by Wieslaw Krasoń & Grzegorz Slawinski
		1440	Selected functional and utility applications of the platform-container in intermodal transport by Grzegorz Sławiński & Wiesław Krasoń
		1462	Road infrastructure requirements to accommodate autonomous vehicles by Ana Čudina Ivančev, Vesna Dragčević Krasoń Tamara Džambas
		1449	Innovative solutions for shared E-taxi services in a green and efficient urban transport system by Tibor Princz-Jakovics & István Kovács
		1376	Front, mid and rear drive comparison of an electric bicycle using e-bike conversion kits on a circular route by Hrvoje Kristek
		1480	Basic analysis of the number of self-driving cars in use and the timing of the start of evacuation assistance - Assuming the evacuation of vulnerable person evacuation action in the event of flooding by Yuta Moriwaki & Makoto Fujiu



DAY 2 - Thursday, May 12 <sup>th</sup>				
Time slot	Session 2 topics	Submission ID	Submission by Authors	
	A2 Pavement innovations and new technology	1359	Performance of roller-compacted concrete pavement structure during spring thaw by Rafal Mickevič & Audrius Vaitkus	
		1378	Measurements of asphalt layerdensities concrete in place by nuclear methods - interlaboratory comparison by Marjan Tušar, Mojca Ravnikar Turk & Lidija Ržek	
		1380	Testing of recycled building elements for road construction use by Zsolt Bencze & László Gáspár	
		1383	Characterization of mechanical properties and shrinkage behavior of cold recycled material (CRM) stabilized with different active fillers by Ahmed Al-Mohammedawi & Konrad Mollenhauer	
		1441	Orthographic photogrammetry method for pavement texture characterization  by Ivana Ban, Aleksandra Deluka-Tibljaš & Marijana Cuculić	
		1488	Eco-sustainable solutions for the maintenance of the road pavements in the Republic of San Marino by Andrea Grilli, Alex Balzi, Arianna Ciotti, Matteo Casali & Raoul Chiaruzzi	
		1377	Investigations on the influence of mechanical and thermal load on the clamping force of heating rod clamps  by Markus Schladitz, Max Huter, Robert Adam & Stephan Schlegel	
	B2 Rail infrastructure optimization and condition assessment	1503	Determination of electrical resistance of rail fastening system according to the standard EN 13146_5-2012 by Katarina Vranešić, Ivo Haladin & Stjepan Lakušić	
		1411	FE modelling and geometric parametrization of SKL-type elastic clips  by Maja Baniček, Mario Uroš & Stjepan Lakušić	
14:30 - 16:00		1381	The effectiveness of distributed acoustic sensing (DAS) for broken rail detection by Adrian Wagner, Andrew Nash, Frank Michelberger, Hirut Grossberger & Gavin Lancaster	
		1415	Review of the Artificial Intelligence methods used for permanent way diagnostics by Janusz Madejski	
		1416	Modernization of the tramway infrastructure with the use of vibroisolation mats by Andrey Zaytsev & Andrey Sidrakov	
	C2 Structures design, re(construction), monitoring, and management	1350	Integrated Fibre Bragg Grating sensor for Bridge load measurement and traffic load estimation  by Jan Vcelak, Emil Doupal, Jakub Vanek & Miroslav Juhas	
		1393	Evaluation of training data quality for deep learning-based damage detection  by Tomotaka Fukuoka, Mai Yoshikura & Makoto Fujiu	
		1461	Seismic retrofitting of existing road bridges – current state of practice by Dominik Skokandić, Anđelko Vlašić, Marija Kušter Marić, Mladen Srbić & Ana Mandić Ivanković	
		1371	Steel box girder manufacturing of Pelješac bridge by Xuefeng Wang, Bicheng Tang, Hanzhong Lu & Jun Yuan	
		1402	Assessment of bridge engineers on output display size in automatic detection of free lime using deep learning by Mai Yoshikura, Takahiro Minami, Tomotaka Fukuoka, Makoto Fujiu & Junichi Takayama	
		1431	Impact of Eurocode Load Model 3 on the design of highway and expressway bridges by Anđelko Vlašić, Mladen Srbić, Zlatko Šavor & Ana Mandić Ivanković	
		1396	Sustainable precast concrete products with wood biomass ash — kerbs and drainage channels by Sonja Cerković & Nina Štirmer	
		1361	Replacement of an old steel railway overpass without traffic interruption  by Peter Nikolov	
		1507	Influence of granite aggregate on longitudinal splitting in prestressed concrete members by Adrijana Savic & Robert Peterman	



DAY 3 - Friday, May 13 <sup>th</sup>				
Time slot	Session 3 topics	Submission ID	Submission by Authors	
	A3 Rail	1465	Vision 2050+ (longterm concept for Slovenian rail network) by Gregor Pretnar, Mihael Blaž, Gregor Kralj & Jernej Vozelj	
		1390	Using Autodesk Civil 3D in railroad infrastructure design by Barbara Belinić	
		1406	Noise protection for designing, construction and operation of subways by Ilya Tsukernikov, Igor Shubin & Tatiana Nevenchannaya	
	infrastructure design and	1382	Fire simulation in railway tunnels: towards the design requirements for emergency exits  by Francesco Martini, Andrea Quattrini & Stefano Riccl	
	safety	1455	Barriers- and half-barriers -violation at level crossings: A case study of drivers behaviour in Croatia by Danijela Barić & Silvestar Grabušić	
		1420	The impact of wildlife on railway track by Slavko Živković, Ivan Barac, Patricia Živković, Ivan Pećina & Bruno Brckan	
		1391	Detailed design of Križevci-Koprivnica corridor by Barbara Belinić	
	B3 Pavement	1384	Fast detection of PAH in reclaimed asphalt using FTIR-ATR spectroscopy  by Jens Wetekam & Konrad Mollenhauer	
		1349	Effects of moisture on the mechanical and viscoelastic behavior of asphalt mixture under cyclic loading by Asres Alamrew & Konrad Mollenhauer	
10:00 - 11:30		1388	Cold recycled mixtures for binder courses - laboratory evaluation of mechanical properties  by Dołżycki Bohdan, Mariusz Jaczewski & Cezary Szydłowski	
	laboratory testing	1439	The effect of crumb rubber on the asphalt mixture properties  by Ovidijus Sernas, Audrius Vaitkus & Deimanté Kilaité	
		1450	Influence of specimen geometry on the complex modulus of cold recycled material mixtures by Vittoria Grilli, Sara Spadoni, Francesco Canestrari & Andrea Graziani	
		1451	Numerical response analysis of structural strength capacity of fly-ash-inverted pavement by Jacob Adedeji, Samuel Abejide & Mohamed Mostafa Hassan	
	C3 Sustainable mobility	1367	Evaluation of urban transport projects with respect to sustainable mobility by Davor Krasić	
		1436	Sustainable urban mobility plans for smaller communities by Katja Miklič, Gregor Pretnar, Matija Nose & David Trošt	
		1438	Sustainable mobility in small and medium-sized cities - the example of the Frankfurt RhineMain metropolitan region by Maximilian Birk, Volker Blees & Anna Jäger	
		1405	How to effectively promote sustainable mobility in social housing areas – results of an evaluation study in the Frankfurt Rhine-Main region by Leon Yessad, André Bruns & Matthias Kowald	
		1372	Sharjah bus rapid transit study (BRT) by Mohsin Balwan, Anurag Thakur, Thomas Varghese & Smitha Nadeera	
		1397	Comparative cost and benefit analysis of parking systems regarding the type of parking offer by Marko Svajda, Marko Šoštarić, Marko Ševrović & Marijan Jakovljević	



DAY 3 - Friday, May 13 <sup>th</sup>				
Time slot	Session 4 topics	Submission ID	Submission by Authors	
	A4 Rail infrastructure monitoring and	1385	Simplified analysis of railway track degradation by mobile applications by Rohit Raj Goswami, Roberto Sañudo Ortega & Stefano Riccl	
		1459	Study of the railway curves geometry under the effect of rail traffic over time by Zsolt Orban, Marius Gocica & Laurentiu Marculescu	
		1404	Use of liDAR and autonomous mobile robots in safety and inspection applications on railways by Marjan Dimec, Mislav Kraljević, Borut Žalik, Mihael Krejan, Sašo Pečnik & David Podgorelec	
	maintenance	1476	In-situ acoustic properties determination of RUCONBAR noise barriers on a railway line by Ivo Haladin & Mate Ivančev	
		1487	Vibroacoustic and noise measurements on the R201 Zaprešić - Zabok railway line by Ivo Haladin, Krešimir Burnać, Mate Ivančev & Janko Košćak	
		1373	Development of a design catalog for bonded concrete overlays in the regional road network  by Martin Peyer, Lukas Eberhardsteiner, Kristina Bayraktarova & Ronald Blab	
	B4 Pavement	1379	Steel deck pavement design and construction of Pelješac bridge by Bicheng Tang, Xuefeng Wang, Yong Chen & Chongming Li	
	design,	1452	Development of an automatic method for the recognition of top-down cracking on asphalt pavements by Davide Chiola, Lorenzo Paolo Ingrassia, Samuel Salini & Francesco Canestrari	
	management and re(construction)	1486	Pavement management system for local governments: case study in the Republic of San Marino by Andrea Grilli, Alex Balzi, Arianna Ciotti, Paolo Tura & Matteo Casali	
12:00 - 13:30		1364	Data analysis applied to airport pavement design by Adelino Ferreira	
		1401	Integrating roughness data to assess greenhouse gas emissions within pavement management decision-making by Christina Plati, Maria Pomoni, Andreas Drainakis & Andreas Loizos	
	C4 Road infrastructure and traffic planning and modelling	1469	Assessment of the effects of traffic infrastructure reconstruction and introduction of a pedestrian island as a traffic calming measure using traffic microsimulations by Irena Ištoka Otković, Aleksandra Deluka-Tibljaš, Sanja Šurdonja & Tiziana Campisi	
		1435	Methodology for analyzing capacity and level of service for urban intersection  by Zlatko Zafirovski, Ivona Nedevska Trajkova, Riste Ristov, Slobodan Ognjenovic & Vasko Gacevski	
		1353	Calibration of the IDM car-following model using trajectory data by Luís Vasconcelos, Francisco Martins & Luísa Cruz-Lopes	
		1424	Challenges of developing traffic masterplans  by Ana Rigo, Igor Majstorović & Željko Stepan	
		1489	Guidelines for BIM approach in infrastructure projects by Zlata Dolaček-Alduk, Denis Šimenić, Dražen Galić, Martina Pavlović Cerinski, Filip Andabaka, Hrvoje Šolman, Anton Ecimović, Mirko Grošić, Igor Džajić, Dina Stober & Nina Dražin Lovrec	
		1355	Turboroundabouts in urban areas – a case study from Croatia  by Tamara Džambas, Vesna Dragčević & Ivan Pavlaković	
		1490	Access roads to the Pelješac bridge by Miroslav Šimun, Ante Goran Bajić, Sandra Mihalinac & Đivo Šapro	



DAY 3 - Friday, May 13 <sup>th</sup>				
Time slot	Session 5 topics	Submission ID	Submission by Authors	
		1493	GUARD - smart flexible protection systems against natural hazards by Vjekoslav Budimir, Helene Lanter & Sascha Schultes	
		1432	Facing options for geosynthetic reinforced retaining structures in infrastructure projects  by Thomas Hasslacher, Victor Poberezhnyi & Stefan Niewerth	
	A5 Geotechnical design and	1386	Foundation engineering structure  by Zvonimir Šepac	
	monitoring	1407	3-dimensional bearing capacity envelopes of bridge shallow foundations on cohesionless soils and scour effects by Konstantina Papadopoulou	
		1394	Bi-Directional load test: To remove uncertainty in pile load test results interpretation by Akshay Sakhuja, Vignesh R, Visakan R & B.Dhana Sekaran	
		1357	Structural and geotechnical review of piers on foundations with pile integrity uncertainties by Roberto Gomez, Alberto Escobar, Victor Cecilio, Marco Mendoza & Hector Guerrero	
		1468	The response of flexible pavement roads to loading frequency by Huseyin Karadağ & Seyhan Firat	
		1428	Flexible pavement with SMA as anti-fatigue layer by Josipa Domitrovic, Luka Krišto & Tatjana Rukavina	
44.00	B5 Pavement planning,	1494	Required properties of mastic asphalt for use in road construction by Kerim Hrapović	
14:30 - 16:00	modelling, and monitoring	1473	Impact of different wood ash fractions on the load-bearing capacity of sand mixtures by Sanja Dimter, Martina Zagvozda, Tea Tonc & Matija Zvonarić	
	J	1423	Influence of data acquisition speed on pavement layer thickness determined by GPR by Šime Bezina, Ivica Stančerić, Tatjana Rukavina & Josipa Domitrović	
		1502	Measuring pavement deflections with sensors: A review by Tatjana Rukavina, Josipa Domitrović, Šime Bezina & Ivica Stančerić	
		1413	Implementation technology of augmented reality in railway freight transport in Slovakia by Zdenka Bulkova, Milan Dedík, Jozef Gašparík, Lumír Pečený & Vladislav Zitrický	
	C5 Rail	1400	Challenges for organisation of container trains between China and European Union by Borna Abramović & Kristijan Šugić	
	infrastructure and traffic	1430	Proposal of methodology for stability evaluation of clock schedules in railway passenger transport from the operational-infrastructural point of view by Milan Dedík, Zdenka Bulková, Jozef Gašparík, Lukáš Čechovič & Peter Kurenkov	
	planning and	1429	Modal shift modelling on the TEN-T corridor in Bosnia and Herzegovina  by Nedžad Branković, Aida Kalem, Azra Ferizović & Smajo Salketić	
	modelling	1347	Design of railway infrastructure with OpenTrack in Austria by Andreas Schöbel, Helmut Schreiner & Stefan Baltram	
		1427	Passenger data complexity in tram stop dwell time modelling by Maja Ahac, Leonard Cvitić, Igor Majstorović, Saša Ahac & Silvio Bašić	

