

NEW HORIZONS 2019



www.novihorizonti.sf.ues.rs.ba

VII International Symposium **NEW HORIZONS 2019** of transport and communications 29 - 30 November

University of East Sarajevo
Faculty of Transport and Traffic Engineering Doboj



PROGRAM



www.novihorizonti.sf.ues.rs.ba

ORGANIZER**Faculty of Transport and Traffic Engineering Dobož, University of East Sarajevo****CO-ORGANIZERS**

- **Faculty of Transport and Traffic Engineering**, University of Belgrade;
- **Faculty of Technical Sciences**, University of Novi Sad,
- **Faculty of Technical Sciences Bitola**, University of St. Kliment Ohridski
- **Department of Engines, Vehicles and related Technologies, Institute of Nuclear Sciences VINČA**, University of Belgrade

PROGRAM COMMITTEE*Alphabetically:*

Jiří AMBROS	Transport Research Centre, Czechia
Boris ANTIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Ibrahim Ahmed BADI	University of Misurata, Department of Mechanical Engineering, Libya
Milan BANIĆ	University of Niš, Faculty of Mechanical Engineering, Serbia
Vuk BOGDANOVIĆ	University of Novi Sad, Faculty of Technical Sciences, Serbia
Nebojša BOJOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Branislav BOŠKOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Ranko BOŽIČKOVIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Mirjana BUGARINOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Slavko ĐURIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Tihomir ĐURIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Hamed FAZLOLLAHTABAR	University of Science and Technology Babol, Department of Industrial Engineering, Iran
Miloš IVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Dragoslav JANOŠEVIĆ	University of Niš, Faculty of Mechanical Engineering, Serbia
Dragan JOVANOVIĆ	University of Novi Sad, Faculty of Technical Sciences, Serbia
Predrag JOVANOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Jadranka JOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Pavle KECMAN	Allianz, The Netherlands
Nikola KRSTANOSKI	University of St. Kliment Ohridski, Faculty of Technical Sciences Bitola, Macedonia
Krsto LIPOVAC	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Bojan MARIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Dejan MARKOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Goran MARKOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Peter MARTON	University of Žilina, Faculty of Management Science and Informatics, Slovakia
Sanjin MILINKOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Miloš MILOŠEVIĆ	University of Niš, Faculty of Mechanical Engineering, Serbia
Milan MILOTIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Petar MIROSAVLJEVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia

Dušan MLADENOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Snežana MLADENOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Markos PAPAGEORGIOU	Technical University of Crete, School of Production Engineering and Management, Greece
Norbert PAVLOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Dragan PERAKOVIĆ	University of Zagreb, Faculty of Transport and Traffic Sciences, Croatia
Dalibor PEŠIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Goran PETROVIĆ	University of Niš, Faculty of Mechanical Engineering, Serbia
Aleksandar RIKALOVIĆ	University of Novi Sad, Faculty of Technical Sciences, Serbia
Andreas SCHÖBEL	Vienna University of Technology, Institute of Transportation, Austria
Marko SLAVULJ	University of Zagreb, Faculty of Transport and Traffic Sciences, Croatia
Siniša SREMAC	University of Novi Sad, Faculty of Technical Sciences, Serbia
Dušan STAMENKOVIĆ	University of Niš, Faculty of Mechanical Engineering, Serbia
Aleksandar STEVANOVIĆ	University of Pittsburgh, Civil and Environmental Engineering, SAD
Gordan STOJIĆ	University of Novi Sad, Faculty of Technical Sciences, Serbia
Marko SUBOTIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Marko ŠEVROVIĆ	University of Zagreb, Faculty of Transport and Traffic Sciences, Croatia
Snežana TADIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Ilija TANACKOV	University of Novi Sad, Faculty of Technical Sciences, Serbia
Slaven TICA	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Marko VASILJEVIĆ	University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina
Slavko VESKOVIĆ	University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia
Milan VUJANIĆ	Adriatic University Bar, Faculty of Traffic, Communications and Logistics Budva, Montenegro
Jianhong WU	Beijing Jiaotong University, School of Economics and Management, China
George YANNIS	National Technical University of Athens, Greece
Milan ZLATKOVIĆ	University of Wyoming, Department of Civil and Architectural Engineering, SAD

ORGANIZING COMMITTEE

Bojan MARIĆ, chair
Vladimir MALČIĆ, co-chair
Ratko ĐURIČIĆ
Marko VASILJEVIĆ
Aleksandar STJEPANOVIĆ
Tanja PETROVIĆ
Radenka BJELOŠEVIĆ
Mirko STOJIĆ
Dunja RADOVIĆ
Željko VIDOVIĆ

CONFERENCE PROGRAM – 29th November 2019

Hotel Park, Kneza Lazara 2,
Doboj

09.00-10.00 Registration of participants

10.00-10.30 **Opening ceremony** – *Conference hall 1*

10.30-11.00 **COFFEE BREAK**

11.00-14.00 **PLENARY SECTION** - *Conference hall 1*

- DIGITAL INFRASTRUCTURE FOR THE IMPLEMENTATION OF OPEN SCIENCE AT THE UNIVERSITY
Zoran Ćurguz, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina*
- THE FINANCIAL AND ECONOMIC ASSESSMENT OF HIGH SPEED RAIL INVESTMENTS IN CHINA: 10 YEARS' REVIEW
Jianhong Wu, *Professor in Transport Economics, Beijing Jiaotong University, China*

COFFEE BREAK

- DEVELOPMENT OF TRANSPORT INFRASTRUCTURE IN THE REPUBLIC OF SRPSKA
Nataša Kostić, *Assistant Minister for Road Transport at Ministry of Transport and Communications of the Republic of Srpska, Bosnia and Herzegovina*
- TOWARD EFFICIENT AND RELIABLE RAILWAY CONNECTIONS IN THE CENTRAL AND SOUTHEASTERN EUROPE
Peter Márton, *University of Žilina, Faculty of Management Science and Informatics, Slovakia*
- THE POSITION AND ROLE OF TRANSPORT AND TRAFFIC ENGINEERS IN THE PROCESS OF PLANNING AND DESIGN RAILWAY LINES
Miloš S. Ivić, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*

COMMERCIAL PRESENTATIONS

Company X-Express, *Banja Luka, Bosnia and Herzegovina*

Presentation: Journal 'PUT I SAOBRAĆAJ' - Journal of Road and Traffic Engineering, *Serbia*

14.00-14.30 **BREAK (BUFFET COFFEE BREAK)**

SESSIONS – parallel sections

14.30-15.50 URBAN AND ROAD TRANSPORT AND TRAFFIC - *Conference hall 1*

14.30-14.40 ISO 39001 –ROAD TRAFFIC SAFETY MANAGEMENT SYSTEM APPROACH
Boris Antić, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*

14.40-14.50 IMPORTANCE AND POSSIBILITIES OF MONITORING SAFETY PERFORMANCE INDICATORS AT THE LOCAL LEVEL, THE CASE STUDY CITY OF BELGRADE

Krsto Lipovac, Jelica Davidović, Milena Simić, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*

Slaviša Gajić, *Secretariat for Public Transport, Belgrade, Serbia*

14.50-15.00	<p>IMPORTANCE OF MEASURING POPULATION EXPOSURE IN ROAD TRAFFIC</p> <p>Dalibor Pešić, Bojana Todosijević, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
15.00-15.10	<p>CLASSIFICATION OF 'SCHOOL ZONES' AND RISK MAPPING IN FUNCTION OF SPATIAL NETWORK CRITERIA - CASE STUDY OF THE CITY OF BELGRADE</p> <p>Sreten Jevremović, Ana Trpković, Branimir Stanić, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
15.10-15.20	<p>IMPLEMENTING THE IRAP SRS METHODOLOGICAL APPROACH FOR DETERMINATION OF INFLUENCE OF CRITICAL HUMAN, VEHICLE AND ROAD FACTORS ON THE PROBABILITY OF FATAL ROAD TRAFFIC ACCIDENT OCCURRENCE IN THE REPUBLIC OF CROATIA</p> <p>Bojan Jovanović, Marko Ševrović, Ivica Krajnović, <i>University of Zagreb, Faculty of Transport and Traffic Sciences, Croatia</i></p>
15.20-15.30	<p>SAFE AND COMFORTABLE RIDE OF PASSANGERS IN PUBLIC TRANSPORT</p> <p>Stanislav Tokař, Aleš Vémola, Roman Mikulec, <i>Institute of Forensic Engineering BUT, Czechia</i></p>
15.30-15.40	<p>SPECIFICITY OF DETERMINING THE CURRENT SITUATION OF THE DANGEROUS SITUATION IN ANALYSIS OF TRAFFIC ACCIDENTS IN WHICH PEDESTRIANS ARE INVOLVING</p> <p>Osman Lindov, Adnan Omerhodžić, <i>Univesity of Sarajevo, Faculty of Transport and Communications, Sarajevo, Bosnia and Herzegovina</i></p>
15.40-15.50	<p>TRANSPORT DEMAND EVOLUTION IN CROATIA - FACTORS OF CHANGE, SCENARIOS AND CHALLENGES</p> <p>Drago Pupavac, <i>Polytechnic of Rijeka, Croatia</i> Robert Maršanić, <i>'Rijeka promet', Croatia</i> Ljudevit Krpan, <i>Primorsko-goranska county, Croatia</i></p>
15.50-17.10	RAILWAY TRANSPORT AND TRAFFIC - Conference hall 1
15.50-16.00	<p>RAILWAY INFRASTRUCTURE LIFECYCLE MANAGEMENT – A CASE STUDY</p> <p>Hirut Grossberger, Frank Michelberger, <i>Carl Ritter von Ghega Institute for Integrated Mobility Research, Austria</i></p>
16.00-16.10	<p>COMPARATIVE ANALYSIS OF RAILWAY FREIGHT OPERATOR'S EFFICIENCY</p> <p>Predrag Jovanović, Norbert Pavlović, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
16.10-16.20	<p>TRAIN PATH ALLOCATION PROBLEM: BETWEEN DEVOTION FOR OPEN MARKET AND PRACTICE ON RAILWAYS</p> <p>Nikola Stojadinović, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
16.20-16.30	<p>LABOR DEVELOPMENT AND COMPETENCE CHANGES IN SERBIAN RAILWAYS DURING THE TRANSFORMATION PROCESS</p> <p>Vasko Ananiev Vassilev, <i>Transport University Todor Kableshkov, Bulgaria</i></p>

16.30-16.40	DEVELOPMENT OF COTIF'S UNIFORM RULES FOR THE INTERNATIONAL OPERATION OF RAILWAY VEHICLES Dragan Nešić, Bas Leermakers , <i>Intergovernmental Organisation for International Carriage by Rail – OTIF, Switzerland</i>
16.40-16.50	MARSHALLING YARDS: NOISE REDUCTION BY VARIABLE ROLLING RESISTANCE Adrian Wagner, Frank Michelberger , <i>Carl Ritter von Ghega Institut – St. Pölten University of Applied Sciences, Austria</i> Gernot Heil , <i>Austrian Federal Railway (ÖBB) – Infrastructure AG, Austria</i>
16.50-17.00	TRANSPORT POLICY INSTRUMENTS ON RAILWAY CORRIDORS Miloš Stanojević, Mirjana Bugarinović , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i>
17.00-17.10	APPLICATION OF OPENTRACK AT ZELJEZNICE REPUBLIKE SRPSKE Jelena Kuzmanović, Nikola Malinović , <i>Railway of RS, Doboj, B&H</i> Andreas Schöbel , <i>OpenTrack Railway Technology GmbH, Austria</i> Zorica Milanović , <i>High Railway School of Vocational Studies, Serbia</i>
17.10-17.40	AIR TRANSPORT AND TRAFFIC – Conference hall 1
17.10-17.20	DEVELOPING THE SECOND GENERATION OF SAFETY MANAGEMENT IN THE AVIATION Andrej Lališ, Slobodan Stojić , <i>Czech Technical University in Prague, Czechia</i>
17.20-17.30	GEODETIC REFERENCE SYSTEMS IN AVIATION Sanja Tucikešić, Kornelija Ristić , <i>Faculty for Architecture, Civil Engineering and Geodesy of University of Banja Luka, Bosnia and Herzegovina</i> Ankica Milinković , <i>'Vekom geo', Serbia</i> Tanja Fržović , <i>Republic administration for geodetic and property affairs, Banja Luka, Bosnia and Herzegovina</i>
17.30-17.40	ANALYSIS OF THE AIRPORT COMPLEX ACCESSIBILITY Olgica Pavlović , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i> Tomislav Jovanović, Nenad Kapor , <i>Faculty of Civil Aviation, Serbia</i>
14.30-15.50	TELECOMMUNICATIONS TRANSPORT AND TRAFFIC, POSTAL TRAFFIC and INFORMATICS - Conference hall 2
14.30-14.40	SEMANTIC MODELING URBAN TRANSPORT SERVICES Milorad Banjanin , <i>University of East Sarajevo, Faculty of Philosophy Pale, B&H</i>
14.40-14.50	INTERNET OF VEHICLES: CHALLENGES AND DEVELOPMENT TRENDS Goran Marković, Slobodan Mitrović, Valentina Radojičić , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i>
14.50-15.00	ANALYSIS OF DEVELOPMENT OF THE E-COMMERCE MARKET IN THE REPUBLIC OF SERBIA IN ACCORDANCE WITH THE UNIVERSAL POSTAL UNION PROGRAM Mladenka Blagojević, Momčilo Dobrodolac, Dejan Marković , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i> Đorđe Popović , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i>

15.00-15.10	INTERNET OF THINGS AND SMART CITIES Pavle Gladović , <i>University of Novi Sad, Faculty of Technical Sciences, Serbia</i> Nemanja Deretić , <i>Belgrade business academy for applied studies, Serbia</i>
15.10-15.20	KNOWLEDGE INNOVATION TRENDS IN THE STANDARDIZATION FIELDS 'ROAD VEHICLES ENGINEERING' AND 'RAILWAY ENGINEERING' Vesna Ružičić, Katarina Mitrović , <i>University of Kragujevac, Faculty of Technical Sciences in Čačak, Serbia</i>
15.20-15.30	SPATIAL ACCESSIBILITY ANALYSIS OF HEALTH CARE FACILITIES IN SERBIA Jovan Kovačević, Nikola Stančić, Željko Cvijetinović, Dragan Mihajlović, Nenad Brodić , <i>University of Belgrade, Faculty of Civil Engineering, Serbia</i>
15.30-15.40	GRAPHS IN MODELING LOCAL ROAD NETWORKS: A PRELIMINARY LITERATURE REVIEW Jelena Stojanov, Zeljko Stojanov , <i>University of Novi Sad, Technical faculty 'Mihajlo Pupin', Zrenjanin, Serbia</i> Goran Jauševac , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i> Ilija Hristoski , <i>'St. Kliment Ohridski' University - Bitola, Faculty of Economics, Prilep, Macedonia</i>
15.40-15.50	LOWCOST CONVERSION OF A CLASSIC CAR IN A ELECTRIC VEHICLE Aleksandar Stjepanović, Goran Kuzmić , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i>
15.50-17.40	LOGISTICS - Conference hall 2
15.50-16.00	IMPLEMENTATION OF THE DRY PORT CONCEPT IN THE WEST BALKANS REGION Snežana Tadić, Milovan Kovač, Slobodan Zečević, Mladen Krstić , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i>
16.00-16.10	TRANSPORT QUALITY MANAGEMENT Maria Vodenicharova , <i>UNWE, Department of Logistics and Supply Chains, Bulgaria</i>
16.10-16.20	DIGITAL TRANSFORMATION AS A FACTOR OF EFFICIENT DEVELOPMENT OF LOGISTICS SYSTEMS Abidin Deljanin, Fadila Kiso, Mirza Berković , <i>University of Sarajevo, Faculty of Transport and Communications, Bosnia and Herzegovina</i>
16.20-16.30	FEASIBILITY OF LOGISTICAL MODEL OF COMMUNAL WASTE MANAGEMENT Nikolche D. Talevski , <i>ELEM – REK Bitola, Macedonia</i> Ivo Dukoski , <i>University St. Kliment Ohridski Bitola, Faculty of Technical Sciences, Macedonia</i>
16.30-16.40	LOGISTICS PARAMETERS OF THE NON-PEDESTRIAN PART OF THE CENTRAL CITY ZONE Snežana Tadić, Mladen Krstić, Strahinja Đorić , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i>
16.40-16.50	DETERMINATION OF KEY FACTORS AFFECTING TRANSIENT SEAPORT SELECTION FOR LANDLOCKED COUNTRIES IN AFRICAN CONTINENT Ibrahim Badi , <i>Misurata University, Mechanical Engineering Department, Libya</i> Dragan Pamucar , <i>University of Defence in Belgrade, Department of Logistics, Serbia</i>

16.50-17.00	<p>SWOT ANALYSIS OF THE BUSINESS OPERATIONS OF THE COMPANY EURO LIMUN D.O.O. DOBOJ Biljana Mičić, <i>'Trade Trans terminal Doboj', Bosnia and Herzegovina</i> Sladan Davidović, <i>'Euro Limun Doboj', Bosnia and Herzegovina</i></p>
17.00-17.10	<p>MACHINE LEARNING - APPLICATION IN LOGISTICS Sladana Janković, Stefan Zdravković, Snežana Mladenović, Milorad Kilibarda, Ana Uzelac, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
17.10-17.20	<p>EVALUATING EFFICIENCY OF LOGISTICS PERFORMANCE BY USING RADIAL AND NON-RADIAL DEA MODELS Predrag Ralević, <i>Technical College of Applied Sciences Uroševac, Serbia</i> Mladenka Blagojević, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i> Sanja Ilić, <i>'Rico training centre', Serbia</i></p>
17.20-17.30	<p>TECHNICAL TECHNOLOGICAL CHARACTERISTICS OF DELHAIZE STARA PAZOVA DISTRIBUTION CENTER Rade Petrović, Marko Vasiljević, Željko Stjepanović, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p>
17.30-17.40	<p>TRADE TRANS RAILPORT INTERMODAL TERMINAL – LOCATION DETERMINATION MODEL Biljana Mičić, <i>'Trade Trans terminal Doboj', Bosnia and Herzegovina</i></p>
20.00	<p>GALA DINNER</p>
	<p style="text-align: right;">  Restaurant HARIZMA, Cara Dušana, Doboj </p>


CONFERENCE PROGRAM – 30th November 2019

 Faculty of Transport and Traffic
 Engineering Dobož,
 Vojvode Mišića 52, Dobož

SESSIONS – parallel sections

- 09.30-13.20 URBAN AND ROAD TRANSPORT AND TRAFFIC - Amphitheatre 1**
- 09.30-09.40 REACTION BEHAVIOUR OF DRIVERS TO MARKED AND UNMARKED ROAD: GHANA PERSPECTIVE
Jacob Adedayo Adedeji, Thywill Cephas Dzogbewu, *Central University of Technology, Bloemfontein, Republic of South Africa*
Xoliswa E. Feikie, *Department of Civil Engineering and Geomatics, Durban University of Technology, Republic of South Africa*
Mohamed M. H. Mostafa, *Department of Civil Engineering, University of KwaZulu Natal, Durban, Republic of South Africa*
- 09.40-09.50 MODEL FOR THE ASSESSMENT OF LINE OPERATION IN INTERMEDIATE PASSENGER TRANSPORT
Milica Miličić, Pavle Gladović, Tatjana Savković, Ivana Milenković, *University of Novi Sad, Faculty of Technical Sciences, Department of Traffic Engineering, Serbia*
- 09.50-10.00 REVIEW OF THE APPLICABLE METHODS IN ROUTING VEHICLES OF DANGEROUS GOODS
Vladimir Stojković, Siniša Sremac, Ilija Tanackov, Gordan Stojić, *University of Novi Sad, Faculty of Technical Sciences, Serbia*
- 10.00-10.10 THE PROBLEM WITH VEHICLES MOVEMENT THROUGH A ROUNDABOUT
Bojan Marić, Nenad Branković, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*
- 10.10-10.20 IMPACT OF MODERN SYSTEMS ON IMPROVING SAFETY FEATURES OF COMMERCIAL VEHICLES
Dušan Mladenović, Krsto Lipovac, Ivan Ivković, Dragan Sekulić, Đorđe Stanisavljević, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*
- 10.20-10.30 EFFECT OF ACCESS POINTS ON CONDITIONS OF VEHICULAR MOVEMENTS IN TRAFFIC FLOW
Marko Subotić, Dunja Radović, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*
- 10.30-10.40 RESEARCH OF THE EXPECTED QUALITY OF SERVICE IN TAXI TRANSPORT SYSTEM IN CITY OF KIKINDA
Andrea Nađ, Slaven M. Tica, Predrag Živanović, Stanko Bajčetić, Branko Milovanović, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*
- 10.40-10.50 LEGAL FRAMEWORK IN BOSNIA AND HERZEGOVINA IN THE FUNCTION OF SUCSESFULL REALIZATION OF INLAND AND INTERNATIONAL OVERSIZED TRANSPORT OF GOODS
Osman Lindov, *Faculty of Transport and Communications, Univesity of Sarajevo, Bosnia and Herzegovina*
Samir Džaferović, *Ministry of Communications and Transport, Bosnia and Herzegovina*

10.50-11.00	INFLUENCE OF WEATHER CONDITIONS ON REAL OPERATION VEHICLE ON THE HIGHWAY SECTION '9. JANUARY' Milan Milinković , <i>Enterprise 'Autoputevi Republike Srpske', Banja Luka, Bosnia and Herzegovina</i>
11.00-11.30	COFFEE BREAK
11.30-11.40	STRATEGIES IN FUNCTION OF ROAD SAFETY MANAGEMENT-ANALYSIS OF EXISTING ROAD SAFETY STRATEGY IN THE REGION Miroslav Đerić, Zoran Andrić , <i>Ministry of Communications and Transport, Bosnia and Herzegovina</i>
11.40-11.50	GLOBAL TRENDS IN TRANSPORTATION OF GOODS AND LOAD UNITS Stefan Stanković , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i>
11.50-12.00	ANALYSIS OF TRAFFIC SIGNALIZATION AT LOCATION OF TRIVE AMELICE AND DR MLADEN STOJANOVIC IN BANJA LUKA Radenka Bjelošević , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i> Aleksandar Đukić , <i>Republic Administration for Inspection Activities, Republic of Srpska Inspectorate, Bosnia and Herzegovina</i> Dragan Gatarić , <i>SW Health Center Banja Luka, Bosnia and Herzegovina</i> Branko Aleksić, Milan Sandić , <i>'HKP CONSULTING', Bosnia and Herzegovina</i> Dejana Pajić , <i>'AMD TB', Brod, Bosnia and Herzegovina</i>
12.00-12.10	TRANSPORTATION OF DANGEROUS GOODS CLASS 1 - PROBLEMS AND SOLUTIONS Nenad Smiljanić, Siniša Sremac , <i>University of Novi Sad, Faculty of Technical Sciences, Department of Traffic Engineering, Serbia</i> Tanja Arsić , <i>'ADR ASPEKT', Serbia</i> Jovan Mišić , <i>Collage of Applied Tehnical Sciences Niš, Serbia</i>
12.10-12.20	MODEL OF PEDESTRIAN SPEED ON SIGNALIZED CROSSWALKS Dragana Nenadić, Jovana Božanović, Mirsada Ćorić , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i>
12.20-12.30	EVALUATION OF CONDITIONS IN THE TRAFFIC FLOW ON THE CROSSROAD OF THE MAIN ROAD M4 AND MILUTIN MILANKOVIC BOULEVARD IN BANJA LUKA Radenka Bjelošević , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i> Dragan Gatarić , <i>SW Health Center Banja Luka, Bosnia and Herzegovina</i> Aleksandar Đukić , <i>Republic Administration for Inspection Activities, Republic of Srpska Inspectorate, Bosnia and Herzegovina</i> Milan Sandić , <i>'HKP CONSULTING', Bosnia and Herzegovina</i> Mladen Pajić , <i>'Oil refinery Brod JSC', Bosnia and Herzegovina</i> Stojan Stevanović , <i>Department of Housing and Utilities, Zvornik, Bosnia and Herzegovina</i>
12.30-12.40	STRESS AS A CAUSE OF TRAFFIC ACCIDENTS Tihomir Đurić, Edita Tenić , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i>

12.40-12.50	IMPLEMENTATION OF THE ZIGBEE PLATFORM AS AN ASSISTANT TO DRIVERS FROM THE SAFETY ASPECTS OF TRAFFIC PARTICIPANTS Miroslav Kostadinović, Nataša Đalić, Amer Sarajlic, Emir Peco , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobo, Bosnia and Herzegovina</i>
12.50-13.00	INFLUENCE OF THE STRUCTURE OF THE TRAFFIC FLOW ON THE PERMEABILITY OF TWO-WAY ROADS ON FALL Goran Bošnjak, Srđan Bogdanović , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobo, Bosnia and Herzegovina</i>
13.00-13.10	ANALYSIS OF THE CONTROL OF LIGHTING DEVICES ON CARS AT TARGETED GROUPS OF VEHICLES ON TECHNICAL INSPECTION Vladan Blagojević, Marko Kovačević , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobo, Bosnia and Herzegovina</i>
13.00-13.20	ANALYSIS OF STATIONARY TRAFFIC AT PARKING 'PALAS' IN BANJA LUKA Branko Aleksić , <i>'HKP CONSULTING', Bosnia and Herzegovina</i> Stojan Stevanović , <i>Department of Housing and Utilities, Zvornik, Bosnia and Herzegovina</i> Dejana Pajić , <i>'AMD TB DOO BROD', Bosnia and Herzegovina</i> Mladen Pajić , <i>'Oil refinery Brod JSC', Bosnia and Herzegovina</i> Zdravko Tutnjević , <i>'AGRAM', Dobo, Bosnia and Herzegovina</i> Marko Kovačević , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobo, Bosnia and Herzegovina</i>

09.30-12.50 RAILWAY TRANSPORT AND TRAFFIC - Amphitheatre 2

09.30-09.40	MEASURING THE EFFICIENCY OF THE RAILWAY UNDERTAKING BY APPLICATION OF FUZZY LOGIC Aleksandar Blagojević, Branislav Gavrilović, Zoran Bundalo , <i>High Railway School of Vocational Studies, Serbia</i> Slavko Vesković , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i> Sanja Simić , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobo, Bosnia and Herzegovina</i>
09.40-09.50	BIR AND TEN-T, COMPETITION OR COOPERATION? Miroslav Prokić, Miloš Stanojević , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i>
09.50-10.00	EU-CHINA RAIL ECONOMIC CORRIDORS AND THEIR ROLE IN TRADE IN GOODS Miroslav Prokić , <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i> Uroš Stanimirović , <i>Ministry of Construction, Transport and Infrastructure, Serbia</i>

- 10.00-10.10 CHARGES FOR TRAIN TOWING – PLACE OF CONFRONTATION OF REGULATION OF RAILWAY AND ENERGY SECTOR
Vladimir Malčić, Ratko Đuričić, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina*
Branislav Bošković, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*
- 10.10-10.20 HOW DOES THE PROBLEM APPROACH IMPROVE THE SOLUTION OF THE MODELING PROBLEM IN TRANSPORT
Rade Cvijanović, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina*
Mirjana Bugarinović, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*
- 10.20-10.30 IMPROVEMENTS IN CONTROL AND TRANSFER OF DATA OF RAILWAY ELECTRIC TRACTION SUBSTATIONS USING ABB RTU560 DEVICE
Goran Stevanović, Nebojša Tomić, Mario Danilović, *Railway of RS, Doboj, Bosnia and Herzegovina*
- 10.30-10.40 INTERACTIVE MOTION TRACKING DIAGRAMS TO HELP ENGINEERS IN DECISION-MAKING WHILE DRIVING
Dušan Vujović, *High Railway School of Vocational Studies, Serbia*
Norbert Pavlović, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*
- 10.40-10.50 MODERNIZATION OF THE SIGNALING AND SAFETY SYSTEM ON DOBOJ - BANJA LUKA RAILWAY SECTION
Borislav Popović, Dragan Žigić, Mario Danilović, *Railway of RS, Doboj, Bosnia and Herzegovina*
- 10.50-11.00 PLANNING AND DESIGN OF NARROW GAUGE RAILWAY FROM STAPARI TO BIOSKA USING ADVANCED SOFTWARE SOLUTIONS
Danijel Savković, Nemanja Lošić, Miloš S. Ivić, Ivan Belošević, Milana Kosijer, *University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia*
-
- 11.00-11.30 *COFFEE BREAK*
-
- 11.30-11.40 APPLICATION OF RAILWAY TRAFFIC COMMUNICATIONS VIA PUBLIC GSM NETWORK
Nebojša Tomić, Dragan Žigić, *Railway of RS, Doboj, Bosnia and Herzegovina*
Jovan Gojić, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina*
- 11.40-11.50 MULTI-CRITERIA FUCOM-MABAC MODEL FOR THE SELECTION OF TANK WAGON FOR TRANSPORT OF THE WHITE OIL DERIVATIVES
Milan Milosavljević, Sandra Kasalica, Goran Tričković, *High Railway School of Vocational Studies, Serbia*
- 11.50-12.00 PARAMETER ESTIMATION OF PAIRS IN LINESIDE RAILWAY CABLE FOR SHDSL APPLICATIONS
Jevtić Sanja, Bursać Marko, *High Railway School of Vocational Studies, Serbia*
Jevtić Dragan, *Affiliation Infrastructure of Serbian Railways, Serbia*
Ilić Ana, *Institute of Transportation, Serbia*

12.00-12.10	<p>MODEL OF E-EDUCATION AND INFORMATION ON THE CASE OF RAILWAY TARIFFS Zoran Pavlović, <i>University of Belgrade, Faculty of Organizational Sciences, Serbia</i> Zoran Bundalo, <i>The school of railway applied studies – Belgrade, Serbia</i></p>
12.10-12.20	<p>IMPROVEMENT OF WORKING TECHNOLOGY IN SODA FACTORY LUKAVAC FOR INCREASING THE PARTICIPATION OF RAILWAY TRANSPORT Selmir Delić, Aldin Glumčević, Hidajet Đulović, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p>
12.20-12.30	<p>MAAS IN EU RESEARCH PROJECTS OF IMPORTANCE FOR THE DEVELOPMENT OF RAILWAY Teodora Milenković, Aleksandar Filipović, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
12.30-12.40	<p>BIG DATA IN EU FUNDS RESEARCH PROJECTS WHICH SUPPORTING RAILWAY DEVELOPMENT Aleksandar Filipović, Teodora Milenković, Branislav Bošković, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
12.40-12.50	<p>STUDENT'S AND YOUNG PEOPLE'S INTEREST IN BEING A TRAIN DRIVER Nemanja Stevanović, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i></p>
12.50-13.00	WATER TRAFFIC - Amphitheatre 2
12.50-13.00	<p>MATHEMATICS IN THE SHIP'S ROLLING MECHANISM OBSERVED AS A SET OF ELECTONIC FILTERS Tatjana Stanivuk, Marina Laušić, Petar Milat, <i>Faculty of Maritime Studies, Croatia</i> Petra Zemunik, <i>Institute of Oceanography and Fisheries, Croatia</i></p>
09.30-11.10	MOTOR VEHICLES – Room 16
09.30-09.40	<p>SAFETY OF USING GAS DEVICES IN VEHICLES Tripo Torović, Željko Tomić, <i>Institute for Occupational Safety, Novi Sad, Serbia</i> Milan Milotić, Borislav Gojković, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p>
09.40-09.50	<p>ANALYSIS OF FACTORS AFFECTING DAMPING PROPERTIES AND ECONOMICITY OF HYDRODYNAMIC TRANSMISSIONS OF MOTOR VEHICLES Vojislav Krstić, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i> Ranko Božičković, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i> Božidar Krstić, <i>University of Kragujevac, Faculty of Engineering, Serbia</i></p>
09.50-10.00	<p>OPTIMIZING THE PREVENTIVE MAINTENANCE OF THE ENGINE COOLING SYSTEM Vojislav Krstić, <i>University of Belgrade, Faculty of Transport and Traffic Engineering, Serbia</i> Ranko Božičković, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i> Božidar Krstić, <i>University of Kragujevac, Faculty of Engineering, Serbia</i></p>

10.00-10.10	<p>EXPLORING THE POSSIBILITY OF REDUCING HARMFUL EXHAUST GASES FROM MOTOR VEHICLES</p> <p>Ana Bonić, Miloš Simić, Borislav Gojković, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p>
10.10-10.20	<p>TESTING TRACTION CHARACTERISTICS OF VEHICLES DRIVEN BY LIQUID PETROLEUM GAS</p> <p>Miroslav Pavlović, Svetko Milutinović, Boško Đukić, Zoran Ristikić, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, B&H</i></p>
10.20-10.30	<p>INTERACTION BETWEEN SUSTAINABLE MOBILITY AND ECONOMIC DEVELOPMENT IN BOSNIA AND HERZEGOVINA</p> <p>Abidin Deljanin, Fadila Kiso, <i>University of Sarajevo, Faculty of traffic and communications, Bosnia and Herzegovina</i></p> <p>Emir Deljanin, <i>IFSTTAR-Nantes, Allée des Ponts et chaussées - CS4, Bouguenais Cedex, France</i></p>
10.30-10.40	<p>TESTING REVITALIZATION OF WASTE TRANSFORMER OIL IN BOSNIA AND HERZEGOVINA</p> <p>Dragiša Đorđić, <i>University of Novi Sad, Faculty of Technical Sciences, Serbia</i></p> <p>Milan Milotić, Slavko Đurić, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p>
10.40-10.50	<p>DIVERSIFICATION OF GAS TRANSPORTATION ROUTES AND SOURCES FOR GAS HUB BALKAN</p> <p>Roumen A. Ivanov, <i>Higher School of Transport 'T. Kableskov', Bulgaria</i></p>
10.50-11.00	<p>REFLEXION OF FIXED COSTS ON BUSINESS RESULT AND RISK OF ACHIEVEMENT OF THE BUSINESS PROFIT OF THE COMPANY</p> <p>Slobodan Subotić, Živko Erceg, Irena Đalić, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p>
11.00-11.10	<p>RESEARCH OF THE REGIONAL CONCENTRATION OF THE TRANSPORT ACTIVITY IN THE REPUBLIC OF SRPSKA</p> <p>Sinisa Božičković, Irena Đalić, Zdravko Božičković, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p> <p>Goran Mitrović, <i>'Drina osiguranje', Bosnia and Herzegovina</i></p> <p>Dragan Anđelić, <i>'Šume Republike Srpske', Bosnia and Herzegovina</i></p>
11.10-11.30	<i>COFFEE BREAK</i>
11.30-13.00	TELECOMMUNICATIONS TRANSPORT AND TRAFFIC, POSTAL TRAFFIC and INFORMATICS - Room 16
11.30-11.40	<p>UNMANNED AIRAL VEHICLE APPLICATIONS IN URBAN ENVIRONMENTS</p> <p>Gordana Jotanović, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, Bosnia and Herzegovina</i></p> <p>Vladimir Brtka, Eleonora Brtka, Vesna Makitan, <i>University of Novi Sad, Technical faculty 'Mihajlo Pupin', Zrenjanin, Serbia</i></p>
11.40-11.50	<p>NETWORKING MODEL OF MECHATRONIC VEHICLE SYSTEMS</p> <p>Miroslav Kostadinović, Nataša Đalić, Amela Jukan, Emir Peco, <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Doboj, B&H</i></p>

- 11.50-12.00 IMPLEMENTATION OF CONTEMPORARY IOT TECHNOLOGY IN CONTROL AND MANAGEMENT OF ROBOT HANDS DIRECTED ON 3D PRINTER
Aleksandar Stjepanović, Goran Kuzmić, Mirko Stojčić, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*
- 12.00-12.10 ADAPTIVE NEURO-FUZZY MODEL FOR INDOOR WI-FI SIGNAL STRENGTH PREDICTION
Mirko Stojčić, Žarko Jovanović, Siniša Božičković, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*
Milorad K. Banjanin, *University of East Sarajevo, Faculty of Philosophy, Pale, Bosnia and Herzegovina*
- 12.10-12.20 IMPROVING THE PASSIVE SECURITY
Adrian Wagner, Philipp Graf, Frank Michelberger, *Carl Ritter von Ghega Institute for Integrated Mobility Research, Austria*
- 12.20-12.30 FREIGHT SIGNAL PRIORITY OPERATIONS IN CONNECTED VEHICLE ENVIRONMENT
Zorica Cvijovic, Milan Zlatkovic, *University of Wyoming, USA*
- 12.30-12.40 PHASES OF IMPLEMENTATION RFID TECHNOLOGY IN LOGISTIC SYSTEMS
Žarko Jovanović, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*
Dejan Danilović, *UNDP Bosnia and Herzegovina*
- 12.40-12.50 APPLICATION OF SMART SIGNALIZATION IN ORDER TO INCREASE THE SAFETY OF TRAFFIC PARTICIPANTS
Aleksandar Damjanović, Maida Babić, Emira Hodžić, Bojan Cvijanović, Branko Jotanović, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*
- 12.50-13.00 IMPROVING THE QUALITY OF TRAFFIC BY USING THE IOT CONCEPT
Slobodan Nešić, Harisa Mujakić, Milan Gajanović, Milanko Petrović, *University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina*

WORKSHOP - Smart and IoT technologies in transportation and communications

<i>Room 10</i>	PACKING OPTIMIZATION SOLVER Goran Jauševac , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina</i> Emir Ahmetović , <i>Software developpe, Codecentric, Bosnia and Herzegovina</i>
10.00-11.00	
<i>Room 24</i>	KEY ENABLING COMMUNICATION TECHNOLOGIES FOR SUPPORT OF TRAFFIC APPLICATIONS IN SMART CITIES Gordana Jotanović , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina</i> Dalibor Dobrilović , <i>University of Novi Sad, Technical faculty 'Mihajlo Pupin', Zrenjanin, Serbia</i>
10.00-11.00	
<i>Room 13</i>	IMPLEMENTATION OF CONTEMPORARY IOT TECHNOLOGY IN CONTROL AND MANAGEMENT OF ROBOT Aleksandar Stjepanović, Mirko Stojčić , <i>University of East Sarajevo, Faculty of Transport and Traffic Engineering Dobož, Bosnia and Herzegovina</i>
10.00-11.00	
13.30	CONFERENCE CLOSING - Amphitheatre 1

VII INTERNATIONAL SYMPOSIUM NEW HORIZONS
2019 OF TRANSPORT AND COMMUNICATIONS



**ВЛАДА
РЕПУБЛИКЕ СРПСКЕ**



ЖЕЉЕЗНИЦЕ РЕПУБЛИКЕ СРПСКЕ А.Д. ДОБОЈ



ELTA HD

