



PROGRAMME

of the 17th International Conference

**“RELIABILITY and STATISTICS in
TRANSPORTATION and COMMUNICATION”
*(RelStat-2017)***

18–21 October 2017

Riga, Latvia

Transport and Telecommunication Institute

Lomonosova 1, 9-floor building

<http://RelStat.tsi.lv>

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“Reliability and Statistics in Transportation and Communication” (RelStat-2017)

18–21 October 2017. Riga, Latvia
Transport and Telecommunication Institute
Lomonosova 1, 9-floor building

Date	Time	Hall #1 (Aud. 130)	Hall #2 (Aud. 230)	Hall #3 (Aud. 223)
18.10.2017	9.00-17.30	Project ALLIANCE. WORKSHOP		
	18.00-20.00	Registration		
	18.30	Welcome Party (Hall #1)		
19.10.2017	9.15 –14.00	Registration		
	10.00 –12.30	Opening and Plenary Sessions		
	12.30–13.30	Lunch		
	13:30 – 15:30	Parallel Sessions		
		Session Transport for Smart City	Session Innovative Economics	Session Statistics and Modelling in Transport Applications
	15:30 – 16:00	Coffee Break		
	16:00 – 18:00	Parallel Sessions		
Session Sustainable Aviation and Maritime Transport		Session Reliability, Safety and Risk Management	Tutors Seminar Project ALLIANCE	
19:00	Dinner (Restaurant “LIDO”)			
20.10.2017	10:00 – 12:30	Parallel Sessions		
		Young Researchers Seminar Project ALLIANCE	Session Intelligent Transport Systems and Telematics	Session Smart Solutions and Decision Making for Supply Chain Management
	12:30 – 13:30	Lunch		
	13:30 – 15:30	Parallel Sessions		
		Young Researchers Seminar Project ALLIANCE	Session Identification, classification, implementation and cryptography problems of various complex systems	Workshop Project EduRail
	15:30 – 16:00	Coffee Break		
	16:00 – 17:30	Parallel Sessions		
Session Education and Training in Engineering		Session Innovative Economics		
17:30 – 18:00	Closing Session			
21.10.2017	09:00 – 15:00	Social Programme		

WEDNESDAY, OCTOBER 18

9.00 – 17.00	Project ALLIANCE. WORKSHOP
18:00–20:00	Registration (Hall#1 – Aud. 130)
18:30	Welcome Party (Hall#1 – Aud. 130)

THURSDAY, OCTOBER 19

09:15–14:00	<i>Registration and Welcome Coffee (Hall#1 – Aud. 130)</i>
10:00–10:15	<i>Opening Session (Hall#1 – Aud. 130). Moderator: TTI Vice-Rector, Prof. Irina Yatskiv (Latvia)</i> <ul style="list-style-type: none">• <i>TTI Acting Rector, Juris Kanels (Latvia)</i>
10:15–12:30	<i>Plenary Session (Hall#1 – Aud. 130). Moderator: TTI Vice-Rector, Prof. Irina Yatskiv (Latvia)</i> <ul style="list-style-type: none">• <i>Prof. Nicos Komninos (Greece)</i> <i>Smart Specialisation Strategies: an Online Platform for Strategy Design and Assessment</i>• <i>Prof. Eftihia Nathanail (Greece)</i> <i>A Multistakeholder Multicriteria Decision Support Platform for Assessing Urban Freight Transport Measures</i>• <i>Prof. Guido Gentile (Italy)</i> <i>Simulation of Congestion in Public Transport Networks</i>
12:30–13:30	<i>Lunch</i>
13:30–15:30	<i>Parallel Sessions</i>
15:30–16:00	<i>Coffee Break</i>
16:00–18:00	<i>Parallel Sessions</i>
19:00	<i>Dinner (Restaurant “LIDO”)</i>

FRIDAY, OCTOBER 20

10:00–12:30	<i>Parallel Sessions</i>
12:30–13:30	<i>Lunch</i>
13:30–15:30	<i>Parallel Sessions</i>
15:30–16:00	<i>Coffee Break</i>
16:00–17:30	<i>Parallel Sessions</i>
17:30–18:00	<i>Closing Session</i>

SATURDAY, OCTOBER 21

09:00–15:00	<i>Social Programme</i>
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THURSDAY, OCTOBER 19

Time	Hall #1 (Aud. 130)	Hall #2 (Aud. 230)	Hall #3 (Aud. 223)
13:30–15:30	<p align="center">Session. Transport for smart city</p> <p align="center">Moderators: <i>Prof. Guido Gentile</i> <i>Prof. Igor Kabashkin</i></p>	<p align="center">Session. Innovative Economics</p> <p align="center">Moderators: <i>Prof. Irina Kuzmina-Merlino</i> <i>As.Prof. Yulia Stukalina</i></p>	<p align="center">Session. Statistics and Modelling in Transport Applications</p> <p align="center">Moderators: <i>Prof. Valery Lukinskiy</i> <i>As.Prof. Pavlyuk Dmitry</i></p>
	<p>From Travel Time and Cost Savings to Value of Mobility <i>Tatiana Kováčiková, Giuseppe Lugano, Ghadir Pourhasem (Slovakia)</i></p> <p>Methodology for Assessment of Electronic Payment Systems in Transport Using AHP Method <i>Ivana Olivková (Czech Republic)</i></p> <p>Modelling the Location of Charging Infrastructure for Electric Vehicles in Urban Areas <i>Larisa Grackova, Irina Oleinikova, Gaidis Klavs (Latvia)</i></p> <p>The System of the School Routes' Development and Their Safety Assessment <i>Irina Makarova, Ksenia Shubenkova, Vadim Mavrin, Aleksey Boyko (Russia)</i></p> <p>The Impact of Selected Road Freight Transport Management Measures for the Society and Environment <i>Tatjana Vasiljeva, Mihael Minx (Latvia, France)</i></p> <p>Contribution to the Improvement the Operation of an Urban Railway Line. Case Study: Constantine Tramway <i>Kahlouche Abdelaziz, Chaib Rachid (Algeria)</i></p> <p>Assessment of Road Safety Morale: Survey Analysis for Hungary <i>David Baranyai, Adam Torok (Hungary)</i></p>	<p>Industry 4.0 – For Sustainable Development of Lean Manufacturing Companies in the Shipbuilding Sector <i>Anatoli Beifert, Laima Gerlitz, Gunnar Prause (Germany, Estonia)</i></p> <p>Quantitative Analysis of the Competitive Environment in the Electronic Communications Sector <i>Lucia Madleňáková, Mária Matúšková, Radovan Madleňák, Paweł Drożdziel (Slovakia, Poland)</i></p> <p>The Issues of Increasing the Effectiveness of Teaching Comparative Economy <i>Jurijs Baltgailis (Latvia)</i></p> <p>Socially Responsible Investing and Public Pension Fund Performance in Latvia <i>Irina Kuzmina-Merlino, Svetlana Saksonova (Latvia)</i></p> <p>The New Trends in Usage of E-Commerce Tools for Communication with Target Groups in SME Sector in Baltic Region <i>Ina Gudele (Latvia)</i></p> <p>The Influence of Visual Smog on Driver Distraction During Night <i>Radovan Madleňák, Dominika Hoštáková, Martin Hudák, Anna Rudawska (Slovakia, Poland)</i></p> <p>Adjustment of Banking Activity According to Basel III Requirements: Experience and Problems of Eastern Europe Countries <i>Natalia Konovalova, Nina Trubnikova</i></p>	<p>Spatiotemporal Big Data Challenges and Solutions for Traffic Flow Analysis <i>Dmitry Pavlyuk (Latvia)</i></p> <p>Controlling the cycles of the traffic lights in the long run <i>Alexander Novikov, Andrei Katunin, Ivan Novikov, Anastasia Shevtsova (Russia)</i></p> <p>Synchronisation of Timetables for Public Bus Lines Using Genetic Algorithms and Computer Simulations <i>Vitalii Naumov (Poland)</i></p> <p>Study on Riga Public Transport Service Reliability Based on Traffic Flow Modelling <i>Irina Yatskiv, Irina Pticina, Kateryna Romanovska (Latvia)</i></p> <p>Markov-Modulated Linear Regression: Tasks and Challenges in Transport Modelling <i>Nadezda Spiridovska (Latvia)</i></p> <p>An Empirical Analysis of Time Headways on Two-Lane Roads with Mixed Traffic <i>Rupali Roy, Pritam Saha (India)</i></p> <p>The Prediction Model of Express Letter-Mails Sent by Domestic Postal Services <i>Matej Pechota, Mária Matúšková (Slovakia)</i></p> <p>Modelling Kinetics of Dynamic Crack Propagation in a Gas Mains Pipe as Cyclic Random Process <i>Iaroslav Lytvynenko, Pavlo Maruschak, Olegas Prentkovskis, Andriy Sorochak (Ukraine, Lithuania)</i></p>
15:30–16:00	Coffee Break		

Time	Hall #1 (Aud. 130)	Hall #2 (Aud. 230)	Hall #4 (Aud. 117)
16:00– 18:00	<p align="center">Session. Sustainable Aviation and Maritime Transport</p> <p align="center"><i>Moderators:</i> <i>Prof. Ramūnas Palšaitis</i> <i>Prof. Gunnar Prause</i></p>	<p align="center">Session. Reliability, Safety and Risk Management</p> <p align="center"><i>Moderators:</i> <i>Prof. Igor Kabashkin</i> <i>Prof. Vladimir Labendik</i></p>	<p align="center">Tutors Seminar</p> <p align="center"><i>Moderators:</i> <i>Prof. Eftihia G. Nathanail</i> <i>As.Prof. Mihails Savrasovs</i></p>
	<p>Risk Assessment of Emission Abatement Technologies for Clean Shipping <i>Sina Atari, Gunnar Prause (Estonia)</i></p> <p>Strategic Energy Partnership li Shipping <i>Eunice Omolola Olaniyi, Patrick Gerber, Gunnar Prause (Estonia)</i></p> <p>Smart and Sustainable Cross-Sectoral Stakeholder Integration into Macro-Regional LNG Value Chain <i>Laima Gerlitz, Robert Philipp, Anatoli Beifert (Germany, Estonia)</i></p> <p>Time Series Analysis and Prediction Statistical Models for the Duration of the Ship Handling at an Oil Terminal <i>Julia Rudnitckaia, Tomáš Hruška (Czech Republic)</i></p> <p>Evalustion of the Risk Management Issues in the Seaports of Latvia And Lithuania <i>Darius Bazaras, Ramūnas Palšaitis (Lithuania)</i></p> <p>Risks Associated with the Use of High-Strenght Titanium Alloys in Transportation Systems <i>Mykola Chausov, Pavlo Maruschak, Olegas Prentkovskis, Myroslav Karpets (Ukraine, Lithuania)</i></p>	<p>Estimation and Evaluation of Risk in the Railway Infrastructure <i>Piotr Smoczyński, Adam Kadziński (Poland)</i></p> <p>Advanced Structural Health Monitoring and Diagnostics of Transport, Industrial and Energy Facilities <i>Aleksey Mironov, Deniss Mironovs, Igor Kabashkin (Latvia)</i></p> <p>Risk Management of Innovative Projects: New Aspects <i>Alina Konovalova (Russia)</i></p> <p>Shared Risks at Interface Between Railway Undertakings and Infrastructure Managers <i>Piotr Smoczyński, Adrian Gill (Poland)</i></p> <p>Bypass Turbojet Operating Performance Simulation Based on Similarity Principles <i>Vladimir Labendik, Sergey Yunusov, Alexander Kolbasov (Latvia, Russia)</i></p> <p>Advanced Vibration Diagnostics for Perspectives of Helicopter Technical Maintenance <i>Aleksey Mironov, Pavel Doronkin, Alexander Priklonsky (Latvia)</i></p>	<p align="center">Project ALLIANCE</p>
19:00	Dinner (LIDO)		

FRIDAY, OCTOBER 20

Time	Hall #1 (Aud. 130)	Hall #2 (Aud. 230)	Hall #3 (Aud. 223)
10:00–12:30	<p align="center">ALLIANCE Project Session: Sustainable Transport Interchange</p> <p align="center">Moderators: <i>Prof. Eftihia G. Nathanail Prof. Irina Yatskiv</i></p>	<p align="center">Session. Intelligent Transport Systems and Telematics</p> <p align="center">Moderators: <i>As. Prof. Jacek Mazurkiewicz Prof. Alexander Grakovski</i></p>	<p align="center">Session. Smart Solutions and Decision Making for Supply Chain Management</p> <p align="center">Moderators: <i>Ac.Prof. Genady Gromov Prof. Darius Bazaras</i></p>
	<p>Assessing the Design and Operation of Riga’s International Coach Terminal <i>Maria Tsami, Evelina Budilovich, Vissarion Magginas, Giannis Adamos, Irina Yatskiv (Greece, Latvia)</i></p> <p>Mechanisms for Investment in the Transport Infrastructure Development in Latvia <i>Irina Kuzmina-Merlino, Fabian Behrendt, Oksana Skorobogatova, Niels Schmidtke (Latvia, Germany)</i></p> <p>Big Data in Transport - Data Sources and Data Sets Used in Literature <i>Maria Karatsoli, Eftihia Nathanail (Greece)</i></p> <p>Evaluating Smart Urban Freight Solutions Using Microsimulation <i>Ioannis Karakikes, Lambros Mitropoulos, Mihails Savrasovs (Greece, Latvia)</i></p> <p>Wide-Scale Transport Network Microscopic Simulation Using Dynamic Assignment Approach <i>Mihails Savrasovs, Irina Pticina, Valery Zemlynikin (Latvia)</i></p> <p>Experimental study on distributed road tracking system for road traffic registration <i>Alexander Dudko, Irina Yatskiv, Yasushi Kiyoki (Japan, Latvia)</i></p>	<p>The Main Challenges of Winter Road Services to Be Solved Within the Framework of Intelligent Transportation System <i>Boriss Jelisejevs (Latvia)</i></p> <p>Effective Wireless Communications for V2G Applications and Objects in Motion <i>Aleks. Krivchenkov, Alex. Krainyukov, Rodion Saltanovs (Latvia)</i></p> <p>Weigh-in-Motion by Fibre-Optic Sensors: Problem of Measurement Errors Compensation for Longitudinal Oscillations of a Truck <i>Alexander Grakovski, Alexey Pilipovecs (Latvia)</i></p> <p>Model of Wireless Data Network in GPSS Language <i>Aleksandr Krivchenkov (Latvia)</i></p> <p>Introducing Fixed-Wing Aircraft Into Cooperative UAV Collision Avoidance System <i>Dmitrijs Lancovs (Latvia)</i></p> <p>The Analysis of the System That Includes Two Ferromagnetic Spheres in Outer Magnetic Field <i>Yury A.Krasnitsky (Latvia)</i></p>	<p>Models of Inventory Management in Multi-Level Distribution Systems <i>Lukinskiy Valery, Lukinskiy Vladislav (Russia)</i></p> <p>Factors Influencing Local Food Sales Through Green Public Procurement in Rezekne Municipality <i>Anda Zvaigzne, Inita Krivašonoka, Inta Kotāne (Latvia)</i></p> <p>Multi Criteria Decision Making in Life Cycle Management of Modular Ships with Test System <i>Igor Kabashkin, Andrejs Zvaigzne (Latvia)</i></p> <p>The Analytic Hierarchy Process (AHP): Prospects for Application in Supply Chain Management <i>Lukinskiy Valery, Lukinskiy Vladislav (Russia)</i></p> <p>The Importance of Mapping Regional Disparities and Regional Development: Case Study of the ICT Sector in the Slovak Republic <i>Emilia Madudova (Slovakia)</i></p> <p>Intellectualization of the Spare Parts Supplier Selection by the Analysis of Multi-Criterial Solutions <i>Irina Makarova, Ksenia Shubenkova, Polina Buyvol, Eduard Mukhametdinov (Russia)</i></p> <p>The Development of Models of Supply Chain Management in Retailing <i>Odintsova Tatyana, Kocherjagina Nataliya, Ryzhova Olga (Russia)</i></p>
12:30–13:30 Lunch			

Time	Hall #1 (Aud. 130)	Hall #2 (Aud. 230)	Hall #3 (Aud. 223)
13:30–15:30	<p align="center">ALLIANCE Project Session: Sustainable Transport Interchange</p> <p align="center">Moderators: <i>Prof. Eftihia G. Nathanail</i> <i>Prof. Irina Yatskiv</i></p>	<p align="center">Session. Identification, classification, implementation and cryptography problems of various complex systems</p> <p align="center">Moderators: <i>As.Prof. Jacek Mazurkiewicz</i> <i>Prof. Alexander Grakovski</i></p>	<p align="center">Workshop</p>
	<p>Analysis of Riga International Airport Flight Delays <i>Iyad Alomar, Jurijs Tolujevs, Aleksander Medvedevs (Latvia)</i></p> <p>Modelling and Simulation of the Riga International Airport to Reduce Turnaround Times of Curcial Clearance Processes <i>David Weigert, Alina Rettmann, Iyad Alomar, Juri Tolujevs (Germany, Latvia)</i></p> <p>Determination of Parameters for Forming Right Allocation of Items in Picking Area <i>Raitis Apsalons, Genady Gromov (Latvia)</i></p> <p>Smart Solution for 3PL Operators: State-of-the-Art <i>Aleksandrs Avdeikins, Mihails Savrasovs (Latvia)</i></p> <p>Development Prospects of Road Transport in Kazakhstan as Part of the Strategy “NURLY ZHOL” <i>Gani Askarov, Utegali Shedenov, Jurijs Tolujevs (Kazakhstan, Latvia)</i></p>	<p>Automatic Gender and Emotion Recognition System as Impotant Factor for Safety Improvement <i>Jacek Mazurkiewicz (Poland)</i></p> <p>Implementation Efficiency of BLAKE2 Cryptographic Algorithm in Contemporary Popular-Grade FPGA Devices <i>Jaroslav Sugier (Poland)</i></p> <p>Performance Comparison of Observer Design Pattern Implementations in Javascript <i>Artur Zochniak, Tomasz Walkowiak (Poland)</i></p> <p>Multistage Hammerstein–Wiener System Identification with the Help of Binary Excitation <i>Grzegorz Mzyk, Marcin Biegański (Poland)</i></p> <p>Towards CLARIN-PL LTC Digital Research Platform for: Depositing, Processing, Analyzing and Visualizing Language Data <i>Marcin Pol, Tomasz Walkowiak, Maciej Piasecki (Poland)</i></p>	<p align="center">Project EduRail</p>
15:30–16:00	<p align="center">Coffee Break</p>		

Time	Hall #1 (Aud. 130)	Hall #2 (Aud. 230)	Hall #3 (Aud. 223)
16:00– 17:30	<p align="center">Session. Education and Training in Engineering</p> <p align="center">Moderators: <i>Prof. Boriss Misnevs</i> <i>As.Prof. Yulia Stukalina</i></p>	<p align="center">Session. Innovative Economics</p> <p align="center">Moderators: <i>As. Prof. Ishgaley Ishmuhametov</i> <i>Assist. Prof. Ilze Sproge</i></p>	
	<p>Integrating Interactive Teaching Methods into ADR Training Courses System in Estonia <i>Jelizaveta Janno, Ott Koppel (Estonia)</i></p> <p>Career Management in a Technical University as an Essential Factor Influencing its Competitiveness <i>Yulia Stukalina (Latvia)</i></p> <p>Learning Analytics and Software Engineering Competences <i>Boriss Misnevs, Aliaksandr Puptsau (Latvia, Lithuania)</i></p> <p>Ensuring the Academic Workforce Age Balance as a Personnel Management Tool <i>Oksana Pozdnyakova, Anatoly Pozdnyakov (Latvia)</i></p> <p>Mobile Education: Negative Effects of Multitasking <i>Kristīne Užule (Latvia)</i></p> <p>Development of the Training Complex with the Content in the Format of Ontologies <i>Ilya Stepanov, Valeriy Khabarov (Russia)</i></p>	<p>Corporate Governance Disclosures: the Case of Latvian Companies Listed on Baltic Stock Exchange <i>Ieva Kozlovska (Latvia)</i></p> <p>Social Models and Their Instability due to the Properties of Complex Evolutionary System <i>Yelena Popova (Latvia)</i></p> <p>The Role of Productivity in Increasing Latvian Competitiveness <i>Ilze Sproģe, Sandra Jekabsone, Irina Skribane (Latvia)</i></p> <p>Customer Satisfaction with Banking Services and its Estimation <i>Ishgaley Ishmuhametov (Latvia)</i></p> <p>Corporate Income Tax Impact on the Company's Financial Flow <i>Ilze Sproģe, Aina Joppe (Latvia)</i></p> <p>Digital Drivers of the Advertising Market: the Russian Realia <i>Nina Trubnikova, Natalia Konovalova (Russia, Latvia)</i></p>	
	17:30 – 18:00 Closing Session (Hall#1 – Aud.130)		