# EUROPEAN UNION HORIZON 2020 RESEARCH & INNOVATION PROGRAMME



# Report about Special Session in European Level Transport Conference – ETC Dublin 2018





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Abbreviation	Description
CERTH	Centre for Research and Technology Hellas
D	Deliverable
DLR	German Aerospace Center
ETC	European Transport Conference
EU	European Union
FEHRL	Forum of European National Highway Research Laboratories
Fraunhofer IFF	Fraunhofer Institute for Factory Operation and Automation IFF
GTiT	Global Trends Impacting Transport
HIT	Hellenic Institute of Transport
MaaS	Mobility as a Service
PO	Project Officer
R&I	Return on Invest
SAP	Scientific excellence and innovation assurance panel
STSE	Short-Term Staff Exchange
TEN-T	Trans-European Transport Networks
ТТІ	Transport and Telecommunication Institute
UCD	University of College Dublin
UTH	University of Thessaly
WP	Work Package
YRPF	Young Researchers' and Practitioners' Forum

### LIST OF ABBREVIATIONS

#### ABSTRACT

The present deliverable constitutes the report about the special session "Education and Training – New challenges towards the Future Transport", which was organized in the frame of 46<sup>th</sup> European Transport Conference on the 11th of October 2018 in Dublin, Ireland. The special session aimed on giving information about projects and providing public with progress and findings of the projects ALLIANCE and SKILLFULL with strong emphasis on development of linkage among education, research and industry.

The main statements of the presentations, which were being shown from members of the projects ALLIANCE and SKILLFULL are presented in the current deliverable. Also, the main outcomes of the subsequent round table discussion have been summarized and stated for the development of further collaboration activities. Representatives of the Department of Finance and Development Planning of Ministry of Transport (Latvia), the Riga International Bus and Coach Terminal (Latvia), Riga Municipality (Latvia), the Hellenic Institute of Transport (Greece), the University of College Dublin (Ireland), the Transport and Telecommunication Institute, the University of Thessaly (Greece) and the Fraunhofer Institute of Factory Operation and Automation IFF (Germany), actively participated in the Round Table. Finally, the special session was evaluated by two SAP members of the ALLIANCE project.

# **1** Introduction

## 1.1 Contents of the deliverable

The current document is a deliverable in the framework of WP3. The objective of WP3 is to define and implement a knowledge-sharing strategy. The strategy clearly defines the activities and plans for activities execution, which can maximize the transfer of knowledge between partners of the project. Knowledge-sharing strategy targets on the following groups of users: researchers and academic staff of TTI; master and PhD students. Deliverable D3.11 constitutes the report about the special session "Education and Training – New challenges towards the Future Transport", which was organized in the frame of the 46<sup>th</sup> European Transport Conference on the 11th of October 2018 in Dublin, Ireland. The special session took place in the second day of the three-days conference in a time slot of two hours from 16:15 till 18:15. The scope of the session was to inform the public on an international stage about the projects ALLIANCE and SKILLFULL and to share progress and findings of both projects. The emphasis was put on identifying synergies between the projects in the development of linkage among education, research and industry in the domain of transportation.

The special session was organised by the project coordinator of ALLIANCE project, the Transport and Telecommunication Institute (TTI), and coordinated by representatives of both projects – ALLIANCE and SKILLFULL. The special session consisted of two parts: 1) presentations about ALLIANCE and SKILLFULL projects, and 2) a subsequent round table for discussions between researchers and stakeholders invited by the project's consortia. In total, five presentations, three from ALLIANCE project and two from SKILLFULL project, were given by members of the projects:

- 1) ALLIANCE Project: Partnerships for innovation, skills and jobs and how to engage the profitable international cooperation (*Prof. Irina Yatskiv (Jackiva), TTI*)
- 2) ALLIANCE Project: New educational program on intermodal connections (Dr. Giannis Adamos, UTH)
- 3) ALLIANCE Project: Assessing knowledge of stakeholders on sustainable interchanges' design and operation (Dr. Mihails Savrasovs, TTI)
- 4) SKILLFUL Project: Skills and competences development of future transportation professionals at all levels (Mrs. Matina Loukea, CERTH/HIT)
- 5) *SKILLFUL Project:* Training needs and skills gaps across the transportation sector. (*Ms. Grace Moloney, UCD*).

During the Round Table the following four key questions were being discussed:

- How to facilitate stakeholder collaboration and the development of strong linkage among education, research and industry?
- How we can focus education, research and innovation activity on social and economic development?
- Balanced combination to the triplex of research/education, industry and policy makers, acknowledging the key role of society. How to increase related R&I impact and exploitation?
- How to identify the skills and competences needed by the Transport workforce of the future?

The deliverable also contents a concluding evaluation of the special session, conducted by two ALLIANCE SAP members, Inta Rozensteine and Dr. Sc. Ing. Vaira Gromule.

## **1.2 ALLIANCE Project overview**

ALLIANCE aims at developing advanced research and higher education institution in the field of smart interconnecting sustainable transport networks in Latvia, by linking the Transport and Telecommunication Institute – TTI with two internationally recognized research entities – University of Thessaly – UTH, Greece and Fraunhofer Institute for Factory Operation and Automation – Fraunhofer, Germany. Close collaboration of TTI with UTH and Fraunhofer will enable the achievement of the goals through the following activities:

- Organization of young researchers' seminars.
- Organization of workshops.
- Organization of summer schools for trainers and young researchers.
- Development of educational programme for graduate and post-graduate students.
- Development of training programme for trainers and practitioners.
- Provision of grants for participation as authors of peer reviewed publications in conferences.
- Facilitation of Short-Term Staff Exchanges (STSE's) with the aim of international collaboration, mainly publications.
- Establishment of a guidance strategy for preparing scientific publications.
- Creation of an educational forum as on-line tool for distance learning and knowledge sharing.

The overall methodology of the project is built around the analysis of the needs of Latvia and the surrounding region of the Baltic sea (Lithuania, Estonia, Poland) on knowledge gain about intermodal transportation networks and the development of the tools to attain this knowledge, providing at the same time excellence and innovation capacity. The analysis to be conducted during the first stages of the project, steps on the overarching relations among policy makers, industry and education/research.

Structured around three main pillars, organizational/governance, operational/services and service quality/customer satisfaction, ALLIANCE will deliver a coherent educational/training program, addressed to enhancing the knowledge of current and future researchers and professionals offering their services in Latvia and the wider region.

The expected impacts on the overall research and innovation potential of TTI and Latvian research community will be of high importance and TTI will benefit from ALLIANCE by:

- Improving its knowledge in methodologies for preparing, writing and publishing scientific papers.
- Strengthening its research capacity.
- Establishing international research teams in specific areas of interest.
- Generating new innovative ideas for future research work through the project's activities.
- Setting up the fundamentals for the young generation of researchers.
- Being integrated in a number of existing international transportation research networks.
- Being incorporated in the European research system of transport and logistics.

In addition, the cooperation of TTI with UTH and Fraunhofer will induce benefits into several domains of everyday life at regional, national and international scope. New bases will be established concerning knowledge transfer procedures, education and interdepartmental collaboration amongst research institutes. The innovative organizational framework, which will be

structured for this purpose during the project, is expected to constitute a best practice application with tangible and well estimated progress results, which will be disseminated and communicated through social events to the research community and to the respective business sector as well.

Lastly, an important benefit will be the configuration of an integrated framework pertaining to the knowledge transfer techniques and the generic upgrading of the educational system with use of networking, staff exchange, webinars and other knowledge transfer methods and techniques based on a well-structured and well-tried schedule.

## 1.3 SKILLFULL Project overview

SKILLFUL is a H2020 funded project (skillfulproject.eu) and its Consortium consists of 21 partners, all with great experience and expertise in transportation issues for all modes. The coordinator of SKILLFUL is FEHRL (www.fehrl.org), and CERTH/HIT acts as its Technical Manager (www.hit.certh.gr). SKILLFUL vision is to identify the skills and competences needed by the transport workforce of the future (2020, 2030 and 2050 respectively) and define the training methods and tools to meet. More particularly, SKILLFUL aim is threefold:

i. to critically review the existing, emerging and future knowledge and skills requirements of workers at all levels in the transportation sector, with emphasis on competences required by important game changers and paradigm shifters (such as electrification and greening of transport, automation, MaaS, etc.);

ii. to structure the key specifications and components of the curricula and training courses that will be needed to meet these competence requirements optimally, with emphasis on multidisciplinary education and training programmes;

iii. to identify and propose new business roles in the education and training chain, in particular those of "knowledge aggregator", "training certifier" and "training promoter", in order to achieve European wide competence development and take-up in a sustainable way.

## **1.4 About the European Transport Conference 2018**

The European Transport Conference (ETC) is an annual conference of the Association for European Transport that presents the opportunity to interact with a range of speakers across the transport industry. The range of topics, the multi-seminar approach and the networking environment makes ETC unique among transport conferences, making it the established premier event of its type.

The conference attracts transport practitioners and researchers from all over Europe where they can find in-depth presentations on policy issues, best practice and research findings across the broad spectrum of transport. The range of topics and the multi-seminar approach makes ETC unique among transport conferences and it is well established as the premier event of its type. The conference programme covers supranational issues, national and local policy and the implementation of projects at a local level.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> <u>https://aetransport.org/en-gb/etc</u>. [Access: 05.11.2018]

The 46<sup>th</sup> European Transport Conference was held from 10-12 October 2018 in Dublin Castle, Dublin Ireland and covered the following topics:

- Global Trends Impacting Transport (GTiT)
- New Mobility patterns, Digitisation and Mobility as a Service
- Automated Driving and Connected Vehicles/Infrastructure
- Mobility for Liveable Cities, including Urban Mobility, air quality, health and active travel
- TEN-T extension to the Balkans and the further east, the new silk road
- Air Transport and Travel
- The Wider Economic Benefits of Transport Investment
- Decision making under uncertainty the perils of ignorance and a means of effective response
- Young Researchers' and Practitioners' Forum (YRPF)

In summary over 250 papers were presented in 10 parallel sessions per day. Around 450 delegates were represented with attendees from over 30 countries worldwide.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> <u>https://aetransport.org/en-gb/etc/this-year-at-etc</u>. [access: 05.11.2018].

# 2 Progress and findings of ALLIANCE and SKILLFULL on Education and Training in Future Transport

**The first presentation** was given by Prof. Irina Yatskiv (Jackiva), TTI on the topic: "Partnerships for innovation, skills and jobs and how to engage the profitable international cooperation".

**Prof. Irina Yatskiv, ALLIANCE project coordinator,** opened the session with welcoming words and introduced ALLIANCE, emphasizing the partnership role in stimulating and strengthening the scientific and technological capacity of research institutions and in raising the profile of the research staff. The project ALLIANCE has provided great benefits for graduate and post-graduate students and staff of the partnering institutions – organized exchange visits, training courses, summer schools, supported collaboration in research. Summer schools organized in Riga, Latvia have been open also for representatives from business and government institutions and participants from partners countries and Baltic Sea region.

PhD students of TTI come from various parties in transport sector – industry, education & research and policy makers. The project ALLIANCE has helped to link all parties and share experiences with each other. It also has helped to establish international research teams in different areas of interest within the project scope.

Prof. Yatskiv stressed the importance of higher institution to be open to business. One of the challenges for sustainability is strengthening of the relationship between higher education and industry. The project ALLIANCE has helped to establish good and sustainable platform of educational courses for graduate program and vocational training in the field of intermodal transport networks, has promoted research through publications and participation in the number of transport conferences in the EU and has encouraged collaboration between industry, education & research and policy makers.

**The second presentation** was given by Dr. Giannis Adamos, UTH on the topic: "New educational program on intermodal connections".

**Dr. Giannis Adamos, ALLIANCE project WP5 leader,** introduced the methodology of creating new educational program for TTI relevant to the scope of the project ALLIANCE. At first, educational programs related to inter-modal transport networks in well-reputed higher education institutions of the European Union were analysed (aim, objective, courses, learning outcomes). Similarly, available transport programs were identified in the Baltic States and Poland. Gap analysis was performed according to the three thematic areas of ALLIANCE – governance and policy development, smart solutions and decision-making. Looking at planned development of Latvian transport networks and interchanges, future knowledge and skills requirements were defined. This process allowed to develop new training courses that would cover the gaps identified.

**The third presentation** was given by Dr. Mihails Savrasovs, TTI on the topic: "Assessing knowledge of stakeholders on sustainable interchanges' design and operation".

**Dr. Mihails Savrasovs, ALLIANCE project WP3 leader,** presented results of the study where outcomes of the current education programs were assessed and also the new training program "Sustainable Transport Interchange Program" (STIP) prepared within ALLIANCE project was evaluated. A survey was conducted containing questions about the level of today's knowledge obtained, importance of this knowledge, and its relevance to the skills required for further career pursuance. The new educational program STIP was validated, respondents from all parties (policy makers, industry, education & research) approved the program to be on the right track. The results of the survey also showed that vocational training and on-job training is already used by significant number of respondents.

**The fourth presentation** was given by Mrs. Matina Loukea, HIT on the topic: "Assessing knowledge of stakeholders on sustainable interchanges' design and operation".

**Mrs. Matina Loukea**, HIT, Greece introduced the SKILLFULL project, implemented between October 2016 – September 2019. The aim of the project is to identify skills and competences required in the transport sector in the future (short term 2020, medium term 2030 and long term 2050). The activities involved identification of driving forces (changes in technologies – electrification, autonomous driving etc. and in business models); identification of new jobs that will be mainly affected by new developing trends; identification of training courses to meet future needs. The gaps in training and educational programs were discovered for specific transport sectors. For example, better training in new technologies is required in rail sector, cyber security - in air sector, knowledge in information technologies - in inter-modal systems, engineers in "green" technologies – in maritime sector.

**The fifth presentation** was given by Ms. Grace Moloney, UCD on the topic: "Training needs and skills gaps across the transportation sector".

**Ms. Grace Moloney**, UCD, Ireland, showed the main findings in training needs and skill gaps across the transportation sector. She informed about the educational and vocational trainings they developed and pointed out that the blended learning approach turned out to be the most suitable. On this point there is a linkage to ALLIANCE digitalization of the developed training material that could be compared and extended on the basis of SKILLFULL empirical work. Another result of the workshops they conducted is that all sectors (maritime, intermodal, etc.) do more focus on soft skills than on hard skills in future competence to be developed. Also there are some jobs facing major changings as "transportation planners" for example. The recommendation was to differentiate their profiles into i. a. "urban freight planners", acting more interdisciplinary on the linkage between city planning, logistics and transportation. Furthermore, there are some new jobs expected to emerge, like mobility and mass obligators, designers of autonomous vehicles, automation and robotics experts, etc.

## **3 Outcomes of the Round Table Discussion**

After the input presentations of both projects, a round table was conducted with project members and representatives from business and education. Inspired by five focus questions (see table below) the Round Table participants formulated the following statements:

**Ms. Inta Rozensteine**, a member of Scientific excellence and innovation assurance panel (SAP) of ALLIANCE project, also representing the Ministry of Transport of Latvia reminded that it is important to understand the current issues in transport sector, foresee the needs in the future and understand what knowledge will be necessary to meet the future demand. The future transport system shall be seen as an effective mobility provider for both cargo and passengers. And it is not just about suitable infrastructure and environmentally-friendly vehicles, but also about intermodality - providing the convenient, fast, accessible and affordable transport system. Increasing passenger and freight flows, new destinations and transport routes require intermodal interchanges with modern infrastructure, smart information systems and good service. Ms Rozensteine concluded that ALLIANCE project fits very well into overall transport development trends enhancing the knowledge and experience of transport students and practitioners in the area of intermodal interchanges.

**Dr. Vaira Gromule**, the second ALLIANCE SAP member, emphasized spatial availability as one of the challenges for transport system development in urban environment. She acknowledged ALLIANCE summer school participants who did practical studies useful for business. Dr. Gromule also as a chairwoman of the board of Riga international coach terminal agreed that changes in business models in transport sector are also expected in the future. She reviewed the four main priorities for transport research under Horizon 2020 and highlighted how ALLIANCE project helps to form globally competitive Latvian science, technology and innovation industry that could support the needs for development of the national economy and society.

**Mr. Tom Assmann**, research assistant of the Fraunhofer IFF, Magdeburg, stated that the task of applied research mainly is to solve the problems the industry faces. Therefore, the industry problems firstly have to be transformed into scientific problems. In his experience, students are generally good in applying methodologies, but not good enough in understanding the problems of industry in their system environment. Asking the right questions is necessary and also to look for the right solutions instead of the newest technology available. For example, autonomous vehicles consume the same amount of energy as conventional vehicles and are not solving the problem of traffic, if we completely change our traffic system towards autonomous vehicle implementation, as a study of DLR recently discovered. As soon as we have collected more possible solutions to solve our problems, we have to convince municipalities not immediately to plan, but firstly to start with doing more experiments, surveys, evaluating tests, distinguishing between harder and softer solutions, etc. and then to begin with the planning step. Too long planning processes, unsure which side effects they may produce, prevent good transport design.

The main issues discussed and conclusions are listed in the following paragraphs.

Questions for Discussion	Main Outcomes		
How to facilitate stakeholder collaboration and the development of strong linkage among education, research and industry?	<ul> <li>Education and research institutions could provide a virtual platform with the latest developments, trends, hot topics, ideas for transport sector development. Often industry and policy makers can define the</li> </ul>		

 Table 1: Main discussion outcomes

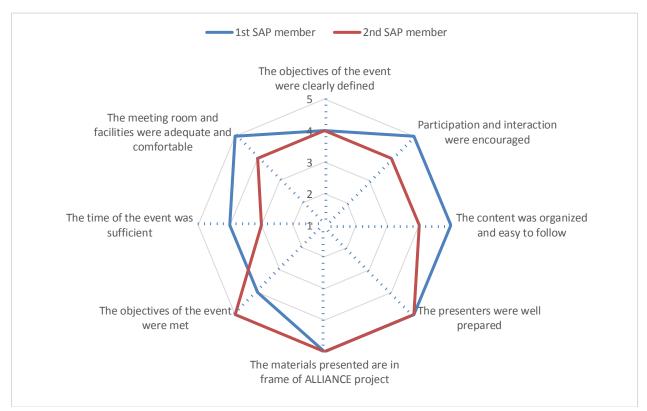
	problem but don't know how to solve it. Researchers can provide solutions (ALLIANCE institutions).
How can we focus education, research and innovation activity on social and economic development?	<ul> <li>Another challenge for education and research sector is how to help industry and policy makers to define the vision of transport system or particular transport sector. Lifelong learning helps policy makers in their daily work bringing new ideas and up-to-date knowledge. There is a need for lifelong learning from low professionals to high skill professionals (SKILLFULL institutions).</li> <li>It is important to teach students and researchers to understand industry problems and needs correctly and then provide the right solutions. On the other hand, it is important that industry supports research financially, otherwise it is a hindering factor for development and economic growth of a country (ALLIANCE institutions).</li> </ul>
Balanced combination to the triplex of research/education, industry and policy makers, acknowledging the key role of society. How to increase related R&I impact and exploitation?	<ul> <li>Vouchers for industry to order research projects is only an artificial push, Industry generally does not know what exactly to order. A virtual platform could feed the industry with problem relevant information and knowledge and also provide new ideas. That could also change the ways of business (ALLIANCE institutions).</li> <li>Spatial availability is a big shortage in Riga, so interchanges need to get transformed into mobility hubs → real changes in business models and management (SAP member).</li> <li>Policy makers need to support national innovation (ALLIANCE institutions)</li> <li>For transportation planners it is important to remember that interchange points need to be constructed where they are necessary but not where it is easier to build them. Transport system has to be flexible to adopt to mobility needs (SAP member).</li> </ul>
How to identify the skills and competences needed by the Transport workforce of the future?	<ul> <li>On the basis of identified driving forces and the subsequent derivation of competences needed, which are getting more and more interdisciplinary (SKILLFULL institutions).</li> </ul>

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## 4 Evaluation of the Special Session

Subsequent to the special session an evaluation through two ALLIANCE SAP members, Inta Rozensteine and Dr. Vaira Gromule, was conducted.

Figure 1 depicts the results of SAP members' feedback regarding the level of agreement with statements listed in questionnaire. The numbers have the following meaning: 5 "strongly agree", 4 "agree", 3 "neutral", 2 "disagree", 1 "strongly disagree". The analysis of this feedback shows the positive evaluation of the event by the SAP members. The SAP members were also welcomed to provide their opinion about the special session in free form. As a result, SAP members assessed the event as very successful and pointed out the opportunity to get acquainted with the SKILLFULL project, which largely complemented with the ALLIANCE project. They suggested that it would be highly desirable to continue this kind of project on the basis of the conclusions drawn and especially asked for receiving the protocol of the meeting with the main conclusions and proposals highlighted. The results of the evaluation are presented in Annex C.





# **5** Synopsis

Some of the projects' findings could add direct value to other projects of the participants. For example, Tom Assmann considered the proposal of SKILLFULL project to establish urban freight planners in cities in his research project "cargo bike depot" by implementing the idea in his planning guide for planning transshipment points for cargo bikes. Also, the presentations and discussions had been quite fruitful for setting the focus in the development of ALLIANCE e-learning courses in sense of the industry needs and skills gaps to be filled.

## Annexes

Annex A: Programme of ETC 2018 Annex B: Agenda of ETC 2018 Special Session and Photos Annex C: SAP Evaluation Forms Annex A: Programme of ETC 2018

		Thursday		
	Session 4 09:00 – 10:30	Session 5 11:15 – 12:45	Session 6 14:00 – 15:30	Session 7 16:15 – 18:15
	TEN-T Network Development	The Belt and Road Initiative	TEN-T extension to South-East	BREXIT
	Sponsored by the Global Trends	Sponsored by the Global Trends	Europe	Sponsored by the Global Trends
	impacting Transport and Freight	impacting Transport and Freight	Sponsored by the Global Trends	impacting Transport Programme
	and Logistics Programme Committees	and Logistics Programme Committees	impacting Transport Programme Committee	Committee Session Chain Tim Cont. Athing
	Session Chair: Jan Kiel, Panteia,	Session Chair: Peter Endemann,	Session Chair: Peter Endemann,	Session Chair: Tim Gent, Atkins, UK
	NL	Regional verband	Regional verband	UK
		FrankfurtRheinMain, DE	FrankfurtRheinMain, DE	Perspectives on Brexit and its
	Traffic safety impact of the TEN-T			implications for the rail sector of
	network, with special regard to	China Belt and Road initiative:	The Balkan section of the	the Island of Ireland and Great
	potential accident reductions in	measuring the impact of	Orient/East-MedCorridor:	Britain. Are there lessons from
	the West Balkans	improving transportation	problems and potentials	recent history?
	C Kelen, Arup, UK	connectivity on international	M Niedermaier, A Peric, B Scholl,	A Smyth, University of
	The freight transport accessibility	trade	ETHZ, CH	Hertfordshire, UK
	through Europe: the multi-criteria	HLu, CRohr, AKnack, MHafner,	Tauern-Pyhrn/Schober axis as	Levels of movement between
European	evaluation of intermodal	RAND Europe, UK	part of the TEN-T core network –	Ireland and the UK post Brexit.
Infrastructure	(rail/road) freight transport	The New Silk Road bonanza: how	gateway to Southeast Europe and	What are the official
Development	corridors M Janić, Delft University of	will proposed infrastructure	beyond	pronouncements and how reliable are those assessments? a
	Technology, NL	capacities and prognosed demand between East Asia and Europe	H-P Kienzler, A Labinsky, S Westphal, T Gutberlet, Prognos	review of the official evidence
	reemology, NL	align in the future?	AG, DE; H Adelsberger,	and robustness of the tools used
		A Labinsky, H-P Kienzler, Prognos	InfraConceptA; N Sedlacek, HERRY	to inform assessment of future
		AG, DE	Consult, AT	conditions
		The "Belt and Road Initiative":	TEN-TExtension to the Western	A Smyth, University of
		impacts on TEN-T and on the	Balkans - perspectives and	Hertfordshire, UK
		European transport system	opportunities for Croatia	
		D Dunmore, S Ellis, A Preti, C	K Ležaić, Ministry of Maritime	
		Routaboul, Steer (formerly Steer	Affairs, Transport and	
		Davies Gleave), UK	Infrastructure of the Republic of Croatia, HR	
	Room: Hibernia Centre Conference Room	Room: Hibernia Centre Conference Room	Room: Hibernia Centre Conference Room	Room: Hibernia Centre Conference Room
	Welcome and introductions	Debate		
DECISION MAKING	Session Chair: Alison Irvine.	Where we are now: To what extent		
UNDER UNCERTAINTY	Transport Scotland, UK	and how is uncertainty being		
– THE PERILS OF		currently addressed in decision		
IGNORANCE AND A	Multi-dimensional future	making?		
MEANS OF EFFECTIVE	scenarios to help policy makers	The perils of ignorance: What is the		
RESPONSE	embrace uncertainty in the fields	nature and extent of risks that we		
Seminar organised by	of land use and transport	face if uncertainty is not handled		
Transport Scotland;	D Hamers, D Snellen, J Tennekes, A	appropriately in decision making?		
University of the West of England (UWE	van Hoorn, K Nabielek, L van den Broek, PBL Netherlands	Where we need to be: What can be done to improve decision making		
Bristol); the Chartered	Environmental Assessment	under uncertainty?		
Institution of Highways	Agency, NL			
& Transportation; PBL	Embracing uncertainty and	Summing up by the Session Chair		
Netherlands	shaping transport for Scotland's			
Environmental	future			
Assessment Agency;	S Cragg, M Neil, Transport			
Dutch Ministers of	Sectland, C. Lyona Matt			
Dutch Ministry of	Scotland; G Lyons, Mott			
Infrastructure and	MacDonald Professor of Future			
Infrastructure and Water/Rijkswaterstaat;	MacDonald Professor of Future Mobility and University of the			
Infrastructure and Water/Rijkswaterstaat; and UK Department for	MacDonald Professor of Future Mobility and University of the West of England, UK			
Infrastructure and Water/Rijkswaterstaat;	MacDonald Professor of Future Mobility and University of the West of England, UK Overview of post-break debate			
Infrastructure and Water/Rijkswaterstaat; and UK Department for	MacDonald Professor of Future Mobility and University of the West of England, UK	Room: E207-E208		
Infrastructure and Water/Rijkswaterstaat; and UK Department for	MacDonald Professor of Future Mobility and University of the West of England, UK Overview of post-break debate	Cable Cars Q&A		
Infrastructure and Water/Rijkswaterstaat; and UK Department for	MacDonald Professor of Future Mobility and University of the West of England, UK Overview of post-break debate	Cable Cars Q&A 1245 hours in		
Infrastructure and Water/Rijkswaterstaat; and UK Department for	MacDonald Professor of Future Mobility and University of the West of England, UK Overview of post-break debate	Cable Cars Q&A		

Local Public Transport	Technical visit to LUAS light rail system	Public Transport as a NetworkSponsored by the Local PublicTransport Programme CommitteeSession Chair: Andras Munkacsy,Institute for Transport Sciences,HUCycling as access and egress modeof public transport: what are thefactors affecting thecombination?TS Leferink, JFP van Mil, JAAnnema, N van Oort, DelftUniversity of Technology,Witteveen+Bos, AT Osborne,Goudappel Coffeng, NLBus network planning in mediumto large Irish townsE Rhys Thomas, Jacobs; PMcGartoll, National TransportAuthority, IEReimagining and redesigning thepublic bus network for the DublinareaD Costantino, J Walker, JarrettWalker + Associates; HCreegan, CO'Donovan, National TransportAuthority, IE	Up in the Sky - cable cars Sponsored by the Local Public Transport Programme Committee Session Chair: Gisela Graefin von Schlieffen, RMV, DE Medellín's aerial cable-cars: Reducing urban marginalisation through transport connectivity J D Davila, University College London, UK IJbaan Amsterdam B Dekker, Foundation IJbaan Amsterdam, NL Are cable cars a viable form of urban mass transit? L Manzi, F Carippo, Steer (formerly Steer Davies Gleave), UK	Making the network work - the importance of interchange Sponsored by the Local Public Transport Programme Committee Session Chair: Andras Munkacsy, Institute for Transport Sciences, HU Why interchange is important J Hawthorne, Independent Consultant, UK Quality of service in urban transport interchanges: understanding the gaps between users' and operators' expectations E Budilovich, I Yatskiv, E Nathanail, G Adamos, M Tsami, V Magginas, University of Thessaly, GR VisWalk modelling of bus interchange on Dublin Quays P Leone-Ganado, Jacobs, IE Establishing modern rail connection to Budapest Airport - searching for realistic solutions C Orosz, T Toth, Budapest University of Technology and Economics, HU
Rail Policy and Planning	Promoting Rail Travel: understanding the drivers Sponsored by the Rail Policy and Planning Programme Committee Session Chair: Edward O'Loughlin, WSP, UKUnderstanding the drivers of travel behaviour: a long-term look at the future of demand for rail M Dillon, A Moreno Pelayo, Arup; S King, Future Thinking; S Cassidy, Rail Safety and Standards Board, UKUK Bringing romance back to the rails – starting with a map M van Hagen, J van der Made, E Ten Elsen, Netherlands Railways; R Woods, Robinworldwide, NL Explaining the development of use of public transport in the Netherlands from 2005-2016 H van der Loop, P Bakker, F Savelberg, KiM Netherlands Institute for Transport Policy Analysis; M Kouwenhoven, E Helder, Significance, NLRoom: Crown Jewels Room	Room: Guard RoomStation Quality EvaluationSponsored by the Rail Policy andPlanning Programme CommitteeSession Chair: Elaine Seagriff,Jacobs, UKObjective and subjectivepredictors of perceivedcleanliness on train stationsM C Vos, M van Hagen,Netherlands Railways, NLThe valuation and demandimpacts of improvements torailway stationsR Maldonado, M Wardman,SYSTRA; P Wheat, A Stead, JShires, ITS, University of Leeds; TMagee, Passenger DemandForecasting Council; N G Harris,The Railway Consultancy Ltd., UK	Room: Guard RoomRail: finance, funding andeconomicbenefitsSponsored by the Rail Policy andPlanning Programme CommitteeSession Chair: Neil Fleming,Department for Transport, UKCheaper, simpler rolling stockfinancing: the benefits of theLuxembourg Rail ProtocolHRosen, Rail Working Group; PHope, A Pechevy, Oxera, UKNew station developments:challenges and benefits ofTransport Oriented Development:how about innovative fundingmechanisms and internationalcomparisons?G Tenekeci, G Smith, Jacobs,UK	Room: Guard RoomRail Disruption: managing stressSponsored by the Rail Policy andPlanning Programme CommitteeSession Chair: Charles Harmer,Crossrail, UKHow does unplanned disruptionaffect train operator revenue?M Shepherd, R Lauer, OxeraConsulting LLP, UKMeasuring stress during traintripsM van Hagen, M Vos, NetherlandsRailways, NL

	Cofee and Dotton Streets	Nacalta Mathada		Unit on Design and Transl
	Safer and Better Streets Sponsored by the Planning for	<u>Novelty</u> <u>Methods</u> Sponsored by the Planning for	<u>Planning for Sustainable</u> Transport	<u>Urban Design and Travel</u> Behaviour
	Sustainable Land Use and	Sustainable Land Use and	Sponsored by the Planning for	Sponsored by the Planning for
	Transport Programme Committee	Transport Programme Committee	Sustainable Land Use and	Sustainable Land Use and
	Session Chair: Gian Paolo	Session Chair: James Odeck,		
			Transport Programme Committee	Transport Programme Committee
	Ansaloni, Department for	Vegvesen, NO	and the Young Researchers' and Practitioners' Forum	Session Chair: Doina Olaru,
	Transport, UK		Practitioners Forum	University of Western Australia,
	Unber street designs a needle first	Transforming liveable cities: the	Coording Chains Wing Kannan	AU
	Urban street design: a people first	role of Virtual Reality in reshaping	Session Chair: Wim Korver,	
	approach	cycling	Goudappel Coffeng, NL	Travel time perception of cyclists
	A Archer, M MacAree, Systra, IE	S Bialkova, D Ettema, M Dijst,	Discusion a superior ship to superstation	as policy instrument
	Towards a safer cycling	Utrecht University, NL	Planning sustainable transport by	M-J Olde Kalter, L Groenendijk,
Planning for	infrastructure: a qualitative study	Impact of Smarter Travel Areas investment in Ireland	constructing transport markets more socially	Goudappel Coffeng; M van Hagen,
Sustainable Land Use	on risks and hazards of cycling community	E Brick, AECOM; A O' Grady,	D Halden, Derek Halden	Nederlandse Spoorwegen, NL Exploring the influences of
and Transport	M Zallio, N O' Reilly, B Caulfield,	Department of Transport, Tourism	Consultancy, UK	neighbourhood type and
	Trinity College Dublin, IE	and Sport, IE	•	attitudes on non-work travel
	Thinty College Dublin, IE	and Sport, IE	Status of SUMP in European member states – Integration of	
				behaviour patterns: insights from Ireland
			SUMP into national or regional	
			programmes T Durlin, CEREMA, FR; A Plevnik, M	S Convery, B Williams, University College Dublin, IE
			Balant, UIRS, SL	College Dublin, IE
			Local impacts of commuting	
			opportunities: a Swedish case	
			study on small geographical areas	
			E Johansson, Lund University, SE	
			E Johansson, Lund Oniversity, SE	
	Room: Castle Hall, Level 1	Room: Castle Hall, Level 1	Room: Castle Hall, Level 1	Room: Castle Hall, Level 1
	Workshop	Accessibility	Workshop	Sharing
	Sponsored by the Young	Sponsored by the Young	Sponsored by the Young	Sponsored by the Young
	Researchers' and Practitioners'	Researchers' and Practitioners'	Researchers' and Practitioners'	Researchers' and Practitioners'
	Forum	Forum	Forum	Forum and the Global Issues
	Alberto Martin Gonzalez-Zaera,	Session Chair: Doina Olaru,	Ines Kawgan-Kagan, DLR, DE	impacting Transport Programme
	Carolina Macedo, Jacobs, UK	University of Western Australia,	Scientific Writing	Committee
	You be the Mayor	AU		Session Chair: Jo Baker, Mott
			Supposed to write your (first)	MacDonald, UK
	Have you ever dreamed of the	How to assess accessibility?	scientific paper and not really an	
	prosperous city that would result,	subjective accounts, objective	idea where to start?	Cooperative sharing mobility
	if only you were in charge of	measurements or both?	Transportation needs planning –	concepts
	making the decisions? Yeah – us	JRyan, Lund University and K2 The	so does scientific writing!	L Mosshammer, AustriaTech, AT
	too.	Swedish Knowledge Centre for		Assessing ridesharing's potential
		Public Transport, SE; R H M	This workshop helps you to	to reduce congestion during
	Welcome to a city like many	Pereirac, TSU, University of	discover your hidden writing skills	commute
	others, where roads are congested	Oxford, UK and Ipea Institute for	by offering strategic management	S Shirazi, E Ryeng, NTNU, NO
	and there is insufficient public	Applied Economic Research, BR	of the process from composing a	The distributional impacts of car
Young Researchers'	transport to meet demand. Your	Cycling during pregnancy and	stunning abstract over efficiently	sharing
and Practitioners'	challenge is to deliver the	with a baby	structuring the manuscript to	M Shepherd, D Jevons, Oxera, UK
Forum	transport infrastructure and policy	A Gering, Verkehr mit Köpfchen,	formatting issues. In addition, you	
	that will deliver economic benefits	DE	will learn about peer-review	
	- all within budget, of course!	Moving transit forward: how	processes and get tips and tricks to	
		major transit infrastructure	improve your writing.	
	This workshop will give you the	progresses from conception to		
	opportunity to work alongside	construction in London and		
	delegates from across Europe to	Toronto		
	learn from and discuss the	P Andison, Arup, UK		
	experiences of diverse cities. It will			
	challenge you to look at transport			
	from different users' perspectives.			
	It is an engaging exercise with lots			
	of discussion and (hopefully)			
	consensus-building. Don't miss this			
	opportunity to be Europe's most			
	transport-savvy Mayor.			
	Room: Balcony Room	Room: Balcony Room	Room: Balcony Room	Room: Balcony Room
	Room. Datcony Room	Koom. Datony Koom	Room. Datony Room	Room. Datony Room

		Γ		Γ
	Innovating with mobile phone	Mobile Data	International Traffic	
	data to understand travel in	Sponsored by the Data	Sponsored by the Data	
	London – insights, methods and	Programme Committee	Programme Committee	
	findings	Session Chair: Philip Clarke,	Session Chair: Gav Jackman,	
	Sponsored by the Data	Jacobs, UK	Aimsun, UK	
	Programme Committee			
	Session Chair: Derek Halden, DHC	The traffic agent	TN-ITS GO; Ireland's steps	
	Consultants, UK	V F Rørholt, Oslo Kommune, NO	towards a harmonised European	
		Real time short term prediction of	service for fresh and accurate	
	Estimating demand from mobile	traffic states using mobile phone	road-network map data	
	network data in London: insights	data	P Lewis, T McCarthy, Maynooth	
	P Hanson, R Tolouei, AECOM; S	R Prince, P Perret, CitiLogik	University; J McCarthy, M Malone,	
	Rutherford, T Beech, Jacobs; C	Limited, UK	Department of Transport, Tourism	
Data	Wroe, Telefonica; D Marin,	To what extent can we utilise	and Sport, IE	
	Movement Strategies; A Davies,	mobile phone data?	A model of a traffic control	
	Transport for London; H	DBlazy, BCuillier, CDerome,	system in Dublin	
	Neffendorf, Katalysis, UK	RATP; K Mokrani, D Renaud, S	J Marecek, T Tchrakan, IBM	
	Estimating demand from mobile	Fock, S.Bourgeois, ORANGE;	Research; BO'Brien, APO'Connor,	
	network data in London: purpose	V Leblond, EdgeMind, FR	Dublin City Council, IE	
	P Hanson, R Tolouei, AECOM; S			
	Rutherford, T Beech, Jacobs; C			
	Wroe, Telefonica; D Marin,			
	Movement Strategies; A Davies,			
	Transport for London; H			
	Neffendorf, Katalysis, UK			
	Room: La Touche Room	Room: La Touche Room	Room: La Touche Room	
	TEN-T Network Development	The Belt and Road Initiative		Truck Automation
	Sponsored by the Global Trends	Sponsored by the Global Trends		Sponsored by the Freight and
	impacting Transport and Freight	impacting Transport and Freight		Logistics Programme Committee
	and Logistics Programme	and Logistics Programme		Session Chair: Morag White, WSP,
	Committees	Committees		UK
	Session Chair: Jan Kiel, Panteia,	Session Chair: Peter Endemann,		
	NL	Regionalverband		A smart data integration
		FrankfurtRheinMain, DE		framework: seeking the benefits
	Traffic safety impact of the TEN-T			for the end users (trucking
	network, with special regard to	China Belt and Road initiative:		companies)
	potential accident reductions in	measuring the impact of		V Carlan, T Huybrechts, P
Freight and Logistics	the West Balkans	improving transportation		Hellinckx, T Vanelslander,
	C Kelen, Arup, UK	connectivity on international		University of Antwerp, BE
	The freight transport accessibility	trade		Opening up new ways from
	through Europe: the multi-criteria	HLu, CRohr, AKnack, MHafner,		energy-efficient semi-automated
	evaluation of intermodal	RAND Europe, UK		truck convoys
	(rail/road) freight transport	The New Silk Road bonanza: how		W Aigner, HiTec, AT; U Plank-
	corridors	will proposed infrastructure		Wiedenbeck, Bauhaus-University
	M Janić, Delft University of	capacities and prognosed demand		Weimar, DE
	Technology, NL	between East Asia and Europe		
		align in the future?		
		A Labinsky, H-P Kienzler, Prognos		Room: Hibernia Centre

	Room: Hibernia Centre Conference Room <u>Wider Impacts</u> Sponsored by the Transport	The "Belt and Road Initiative": impacts on TEN-T and on the European transport system D Dunmore, S Ellis, A Preti, C Routaboul, Steer (formerly Steer Davies Gleave), UK Room: HiberniaCentre Conference Room <u>Wider Impacts – methods</u> Sponsored by the Transport	<u>Wider Impacts/Rail</u> Sponsored by the Transport	<u>Evaluation</u> Sponsored by the Transport
Transport Economics, Finance and Appraisal	Economics, Finance and Appraisal Programme Committee Session Chair: Lorraine D'Arcy, Dublin Institute of Technology, IE How to implement wider economic benefits in transport appraisals? an account of the Norwegian experience E Tveter, Møreforskning Molde AS; J Odeck, Norwegian University of Science and Technology, NO Capturing the wider economic impacts of transport investment – a case study approach J Nava, C Worsdall, Department for Transport, UK	Economics, Finance and Appraisal Programme Committee Session Chair: John Siraut, Jacobs, UK Understanding the real economy impacts of transport and planning strategies L Atter, C Dosad, C Smith, KPMG; D Simmonds, L Lees, David Simmonds Consultancy Ltd., UK Do modelling limitations affect potential transformative transport schemes? G Smith, G Tenekeci, Jacobs, UK Framing the influence area of infrastructure investments, a soft approach F Gundersen, J Aarhaug, W Hanssen, Institute of Transport Economics (TOI), NO	Sponsored by the Transport Economics, Finance and Appraisal Programme Committee and the Young Researchers' and Practitioners' Forum Session Chair: John Siraut, Jacobs, UK Wider economic impacts along the Aberdeen to Inverness rail corridor S Patel, T M Lundie, TO'Leary, Sweco, IE On track towards economic growth and improved regional development? – a study of the impacts of railroad investments J Holmgren, A Merkel, Molde University College, NO The economic impact of urban rail transit network systems A M Gonzalez-Zaera. Jacobs, UK	Economics, Finance and Appraisal Programme Committee Session Chair: David Simmonds, David Simmonds Consultancy, UK Ex post evaluation of major transport infrastructure projects G de Jong, Significance and ITS Leeds, NL and UK; S Vignetti, C Pancotti, CSILCentre for Industrial Studies, IT Exploring announcement effects: an econometric analysis of the pre-opening impacts of Crossrail L Miles, J Jedrasiak, Arup, UK The accuracy of traffic forecasts for fixed link projects: an empirical study of Norwegian bridges and tunnels M Welde, Norwegian University of Science and Technology; E Tveter, Møreforsking Molde AS / Molde University College; J Odeck, Norwegian University of Science and Technology and Norwegian Public Roads Administration, NO
Mobility as a Service	Room: President's RoomWinning over the sceptics -delivering MaaS on a nationalscaleSummary: Delivery and upscale ofMaaS at a regional or nationallevel will require cooperation andcollaboration from multipledifferent stakeholders, from publictransport operators and localauthorities to transport agenciesand technology suppliers.However, despite the potentialbenefits of MaaS being welldocumented, there remains asignificant degree of scepticismamong those who could helpdeliver it. This interactive sessionwill facilitate an open and honestdiscussion that will explore whythis is still the case and what theMaaS community could be doingto address outstanding concerns.Panel participants to include:Ally McInroy, MaaS ScotlandStuart Turnbull, JacobsDouglas Gilmour, TomTom	Room: President's RoomMobility as a ServiceSponsored by the IntelligentMobility – management andoperations ProgrammeCommitteeSession Chair: Henk Taale, RoadTraffic and Traffic Management,RWS, NLAutonomous emergencymanoeuvring & movementmonitoring for road transportsecurity - TransSecN Padmaprabhu,Telecommunications Software andSystems Group (TSSG), IEMotion Hub, the implementationof an integrated end-to-endjourney plannerK Bevis, University of Hertfordshireand EValu8 Transport InnovationsLimited; S Copsey, University ofHertfordshire; R Fenner, eCar ClubLimited., UK	Room: Presidents' RoomMobility as a ServiceSponsored by the Global Issuesimpacting Transport ProgrammeCommitteeSession Chair: Samya Ghosh,AECOM, UKMaaS requirements for Irishmobility issuesO O'Halloran, P O'Keeffe, JCunningham, Ove Arup andPartners Ltd., IEChanges on transport servicesapproaches within the self-drivevehicle developmentA Aliaga, DCaubel, Cerema, FRConjoint analysis of combinedmobility packagesB Maas, TU Dresden, DE	Room: President's RoomMobilityChoiceSponsored by the Global Issuesimpacting Transport ProgrammeCommitteeSession Chair: Mark Wardman,Systra, UKMobility for liveable cities:in vestigating the determinants ofcommuters' choicesP Lanzini, A Stocchetti, Ca'FoscariUniversity (Venice), ITNew trends in passenger choice inmultimodal door-to-travelsI Laplace, N Lenoir, Civil AviationUniversity, University of Toulouse,FRAre the millenials less car-oriented? literature review andempirical findingsR Grimal, CEREMA, FR

Douglas Glimour, 10m10m			
Room: Poddle Room	Room: Poddle Room	Room: Poddle Room	Room: Poddle Room

	New Methods for Modelling Connected and Autonomous Vehicles	Autonomous Vehicles Session Chair: Gav Jackman, Aimsun, UK Sponsored by		Truck Automation Session Chair: Morag White, WSP, UK
	Sponsored by the Transport Models ProgrammeCommittee	the Transport Models Programme Committee		Sponsored by the Transport Models Programme Committee
Autonomous Vehicles	Session Chair: Aurore Remy, Aimsun, FR CAVs and forecasting traffic and revenue for transport concessions L Willumsen, Kineo Analytics, UK Solving stochastic assignment to transportation networks with TVs and AVs G E Cantarella, Università degli Studi di Salerno, DICIV; A Di Febbraro, O Giannattasio, Università degli Studi di Genova, DIME, M Di Gangi, Università degli Studi di Messina, DipIng, IT	Automated vehicles in public transport: deployment scenarios and expectations of users, providers and local authorities K Stark, K Gade, D Heinrichs, German Aerospace Center (DLR), DE Stepwise modelling of the impact of autonomous vehicles on the transport system in Germany for different scenarios L Kröger, C Winkler, T Kuhnimhof, German Aerospace Center (DLR), DE Mobilizing the immobile: the impact of supplying mobility constrained persons with autonomous vehicles F Koller, NSchmiede, V Kolarova, K Stark, German Aerospace Centre		A smart data integration framework: seeking the benefits for the end users (trucking companies) V Carlan, T Huybrechts, P Hellinckx, T Vanelslander, University of Antwerp, BE Opening up new ways from energy-efficient semi-automated truck convoys W Aigner, HiTec, AT; U Plank- Wiedenbeck, Bauhaus-University Weimar, DE
	Room: Printworks Conference	(DLR), DE Room: Printworks Conferene		Room: Printworks Conference
Transport Models	Centre	Centre	Estimation Challenges of Big <u>Models</u> Sponsored by the Transport Models Programme Committee Session Chair: Dusica Krstic- Joksimovic, RWS, NL Developing national transport models: requirements and technical challenges in England, Turkey and Malawi T Gent, D Aspital, M Mahmud, A Allos, Atkins, UK Re-estimation and calibration of the Irish regional model system J Fox, RAND Europe; L Martin, Jacobs, US; B Colleary, National Transport Authority, IE Room: E207-E208	Centre
Transport Models	New Methods for Modelling Connected and Autonomous VehiclesSponsored by the Transport Models ProgrammeCommittee Session Chair: Aurore Remy, Aimsun, FRCAVs and forecasting traffic and revenue for transport concessions L Willumsen, Kineo Analytics, UK Solving stochastic assignment to transportation networks with TVs and AVs G E Cantarella, Università degli Studi di Salerno, DICIV; A Di Febbraro, O Giannattasio, Università degli Studi di Genova, DIME, M Di Gangi, Università degli Studi di Messina, DipIng, ITRoom: Printworks Conference Centre	Modelling Time, Speed and Price Using Analytics Sponsored by the Transport Models and Data Programme Committees Session Chair: Marco Kouwenhoven, Significance, NL Application of Google Maps journey time data in transport planning and modelling: a proof of concept study A Yusuf, S Khorgami, AECOM; C Hale, Leicestershire County Council; B Deng, AECOM, UK Pricing road use by the minute J Marecek, T Tchrakian, R Shorten, J Yuan Yu, IBM Research, IE Room: Courtyard Room	Modelling Transport with Analytics Sponsored by the Transport Models Programme Committee SessionChair: Xiaoyan Xie, ENPC, FR Analysis of the effects of a fare discount scheme for multimodal public transport trips that involve transfers and multiple payments K Miyazaki, National Institute of Technology, Kagawa College; M Ito, The University of Tokyo; K Tanimoto, Tottori University, JP; T Fujiyama, University College London, UK Information provision in urban traffic management J Marecek, T Tchrakian, R Shorten, J Yuan Yu, IBM Research, IE Room: Courtyard Room	Developing More Accurate O-D Matrices from Mobile Phone Data Sponsored by the Transport Models Programme Committee Session Chair: Philip Clarke, Jacobs, UK Trip matrix development: merging data from different sources when relative errors are unknown R Tolouei, S Psarras, AECOM, UK The use of mobile phone data in transport planning in the Netherlands: experiences and vision KFriso, J Henckel, S de Graaf, P van der Mede, DAT.Mobility; J Korf, N Aardoom, B Possel, Goudappel Coffeng; J van der Kooij, Mezuro, NL Room: Courtyard Room
Highway Safety	Safety and RiskSession Chair: Gav Jackman,Aimsun, UKRoad geometry risk assessmentA O'Connor, Trinity College Dublin;S MacGearailt, Roughan &O'Donovan; T Casey, TransportInfrastructure Ireland, IERoad management in IrelandJ McCarthy, Department forTransport, Tourism and Sport; S			

	Flynn, Road Management Office; P Fox, Local Government Management Agency, IE Collision data and road infrastructure management A DeBeer, Transport Infrastructure Ireland; D O'Connor, Transport Infrastructure Ireland; M Dolan, DTTS A/Kildare CoCo, IE		
	Room: Courtyard Room		
ALLIANCE&SKILLFUL Projects			<u>Education and Training – New</u> <u>challenges towards the</u> <u>Future Transport</u>
Partnerships for innovation, skills and jobs and how to engage the profitable international cooperation			Presentations and roundtable discussion
Special Session			

Annex B: Agenda of ETC 2018 Special Session and Photos

# ETC 2018 Session: Education and Training – New challenges towards the Future Transport

This special session in the frame of the ETC aims on giving information about projects and providing public with progress and findings of the projects with strong emphasis on development of linkage among education, research and industry.

#### <u>AGENDA</u>

- 6) (15min) ALLIANCE Project: Partnerships for innovation, skills and jobs and how to engage the profitable international cooperation (Prof. Irina Yatskiv (Jackiva), TTI)
- 7) (20min) New educational program on intermodal connections (Dr. Giannis Adamos, UTH)
- 8) (15min) Assessing knowledge of stakeholders on sustainable interchanges' design and operation (Dr. Mihails Savrasovs, TTI)
- 9) (20min) SKILLFUL Project: Skills and competences development of future transportation professionals at all levels (Mrs. Matina Loukea, CERTH/HIT)
- 10) (20min) SKILLFUL Project: Training needs and skills gaps across the transportation sector. (Ms. Grace Moloney, UCD).

# Round Table with discussions between researchers and stakeholders invited by projects (30 min).

Focus:

- ✓ How to facilitate stakeholder collaboration and the development of strong linkage among education, research and industry?
- ✓ How we can focus education, research and innovation activity on social and economic development?
- ✓ Balanced combination to the triplex of research/education, industry and policy makers, acknowledging the key role of society. How to increase related R&I impact and exploitation?
- ✓ How to identify the skills and competences needed by the Transport workforce of the future?

#### Round table key participants

- Inta Rozenšteine, Department of Finance and Development Planning of Ministry of Transport, Deputy Director (Latvia)
- **Dr.Sc.Ing. Vaira Gromule,** JSC "Riga International Bus and Coach Terminal", Chairman of the Board (Latvia)
- Evelina Budilovica, Riga municipality (Latvia)
- Mrs. Matina Loukea, Hellenic Institute of Transport, (Greece).
- Grace Moloney, University College Dublin, (Ireland)

Questions from participants.

Round Table Rapporteur: Ms. Kristina Malnaca and M.A. Evelyn Fischer

#### Names of the session coordinator(s)

#### Names of the session coordinator(s) Alliance Project (www.alliance-project.eu)

- Prof. Irina Yatskiv (Jackiva), Transport and Telecommunication Institute, Riga, Latvia, Email: <u>Jackiva.I@tsi.Iv</u>
- Prof. Giannis Adamos, Traffic, Transportation and Logistics Laboratory, University of Thessaly, Volos, Greece, Email: <u>giadamos@civ.uth.gr</u>

#### SKILLFUL Project (skillfulproject.eu)

- Mrs. Matina Loukea, Research Associate at the Hellenic Institute of Transport, Athens, Greece.
  - Email: <u>mloukea@certh.gr</u>
- *Ms. Grace Moloney, PhD candidate at University College Dublin, Ireland.* Email: <u>grace.moloney.2@ucdconnect.ie</u>

ALLIANCE is a H2020 funded project in the frame of TWINN activity (www.allianceproject.eu). The partners of the project are: Transport and Telecommunication Institute, Riga, Latvia (leader); University of Thessaly, Volos, Greece; Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg, Germany. The scope of ALLIANCE is the enabling of stimulating and strengthening the scientific and technological capacity of Latvia and the raising of the profile of the research staff and their institution, by providing knowledge in the field of smart interconnecting sustainable transport networks. This knowledge transfer will build the grounds for a common understanding of the main components affecting sustainable intermodality and support the selection and management of the most optimal and applicable solutions for transport interchanges.

**SKILLFUL** is a H2020 funded project (<u>skillfulproject.eu</u>) and its Consortium consists of 21 Partners, all with great experience and expertise in Transportation issues for all modes. The Coordinator of SKILLFUL is FEHRL (<u>www.fehrl.org</u>), while CERTH/HIT acts as its Technical Manager (<u>www.hit.certh.gr</u>). SKILLFUL vision is to identify the skills and competences needed by the Transport workforce of the future (2020, 2030 and 2050 respectively) and define the training methods and tools to meet. More particularly, SKILLFUL aim is threefold:

- i. to critically review the existing, emerging and future knowledge and skills requirements of workers at all levels in the transportation sector, with emphasis on competences required by important game changers and paradigm shifters (such as electrification and greening of transport, automation, MaaS, etc.);
- ii. to structure the key specifications and components of the curricula and training courses that will be needed to meet these competence requirements optimally, with emphasis on multidisciplinary education and training programmes;
- iii. to identify and propose new business roles in the education and training chain, in particular those of "knowledge aggregator", "training certifier" and "training promoter", in order to achieve European wide competence development and takeup in a sustainable way.



Mrs. Matina Loukea, HIT and Prof. Irina Yatskiv (Jackvia), TTI Foto: Evelyn Fischer, IFF



Mrs. Matina Loukea, HIT, Prof. Irina Yatskiv (Jackvia), TTI and Dr. Giannis Adamos, UTH Foto: Evelyn Fischer, IFF



Prof. Irina Yatskiv (Jackvia), TTI and Mrs. Matina Loukea, HIT Foto: Evelyn Fischer, IFF



Mrs. Matina Loukea, HIT, Prof. Irina Yatskiv (Jackvia), TTI and Ms. Grace Moloney, UCD Foto: Evelyn Fischer, IFF



Mrs. Inta Rozensteine, ALLIANCE SAP member, Department of Finance and Development Planning of Ministry of Transport (Latvia) Foto: Evelyn Fischer, IFF



Mrs. Evelina Budilovica, Riga municipality (Latvia), Foto: Evelyn Fischer, IFF



Mr. Tom Assmann, Fraunhofer IFF Foto: Evelyn Fischer, IFF



Mrs. Inta Rozensteine, Dr. Vaira Gromule - ALLIANCE SAP members, ALLIANCE and SKILLFULL institutions' representatives

### Annex C: SAP Evaluation Forms

## Enhancing Excellence and Innovation Capacity in Sustainable Transport Interchanges ALLIANCE

(Grant agreement no.: 692426)

#### European Transport Conference 2018: ALLIANCE&SKILLFUL Special Session

Dublin Castle, Dublin, Ireland 10-12 October 2018

# European Transport Conference 2018: ALLIANCE&SKILLFUL Special Session Evaluation by SAP member

1. SAP Name, Surname:

XXXXXXXXXXX

2. Please indicate your level of agreement with the statements listed below:

Issue	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The objectives of the event were clearly defined		x			
Participation and interaction were encouraged	x				
The content was organized and easy to follow	x				
The presenters were well prepared	x				

The materials presented are in frame of ALLIANCE project	x			
The objectives of the event were met		x		
The time of the event was sufficient		x		
The meeting room and facilities were adequate and comfortable	x			

#### 3. What did you like most about this event?

The opportunity to get acquainted with the SKILLFUL project, which largely complemented with the ALLIANCE project

#### 4. What aspects of the event could be improved?

The event was successful. It would be important to have a minutes of the meeting, which would highlight the main conclusions and proposals. As far as I know, such a document is being prepared?

#### 5. Any comments

It would be highly desirable to continue this kind of project on the basis of the conclusions drawn

### Enhancing Excellence and Innovation Capacity in Sustainable Transport Interchanges ALLIANCE (Grant agreement no.: 692426)

# European Transport Conference 2018: ALLIANCE&SKILLFUL Special Session

Dublin Castle, Dublin, Ireland 10-12 October 2018

# European Transport Conference 2018: ALLIANCE&SKILLFUL Special Session Evaluation by SAP member

#### 1. SAP Name, Surname:

XXXXXXXXXXX

#### 2. Please indicate your level of agreement with the statements listed below:

Issue	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The objectives of the event were clearly defined		X			
Participation and interaction were encouraged		X			
The content was organized and easy to follow		X			

The presenters were well prepared	X			
The materials presented are in frame of ALLIANCE project	x			
The objectives of the event were met	X			
The time of the event was sufficient			X	
The meeting room and facilities were adequate and comfortable		x		

#### 3. What did you like most about this event?

#### 4. What aspects of the event could be improved?

#### 5. Any comments

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