

D5.6

Dissemination Material 2



alliance



DOCUMENT CONTROL SHEET

Project no.	692426	Acronym	ALLIANCE
Project Title	Enhancing excellence and innovation capacity in sustainable transport interchanges		
Work Package	5	Title	Dissemination
Deliverable no.	5.6	Title	Dissemination material 2
Date of preparation of this version	30-Dec-2016		
Status (F: Final, D: Draft, RD: Revised Draft)	F		
Issue Date	31-Dec-2016		
Dissemination Level	Public		
Future reference	ALLIANCE Deliverable D5.6, 2016. Dissemination material 2.		
Author(s)	Eftihia Nathanail, Giannis Adamos, Ioannis Karakikes & Lambros Mitropoulos		
Co-author(s)	-		
Responsible Organisation	UTH		
WP Leader	UTH		
Internal Reviewer(s)	Irina Yatskiv (Jackiva), TTI Kay Matzner, Fraunhofer		
Project Officer	Agnes Hegyvarine Nagy		

ALLIANCE Beneficiaries

TRANSPORT AND TELECOMMUNICATION INSTITUTE – TTI	Latvia
PANEPISTIMIO THESSALIAS – UTH	Greece
FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV – Fraunhofer	Germany

TABLE OF CONTENTS

1	INTRODUCTION	6
1.1	Contents of the deliverable	6
1.2	Project overview	6
2	DISSEMINATION MATERIAL.....	8
2.1	Roll-on banner	8
2.2	Press releases	9
2.3	Fact sheets.....	10
2.4	Newsletters.....	11
3	IMPACT MONITORING SYSTEM.....	13
3.1	Website	13
3.2	Press releases	14
3.3	ALLIANCE events and participation in Conferences.....	17
3.4	ALLIANCE promotion and extroversion	20
4	SYNOPSIS.....	25
5	ANNEXES.....	26

LIST OF TABLES

Table 1:	Overview of the participation of ALLIANCE consortium at RelStat'16	19
-----------------	--	----

LIST OF FIGURES

Figure 1:	Roll-on banner	8
Figure 2:	4 th Press release.....	9
Figure 3:	5 th Press release.....	10
Figure 4:	2 nd ALLIANCE fact sheet (cover page).....	11
Figure 5:	1 st ALLIANCE newsletter (cover page).....	12

Figure 6: Overview of the website visits, users and page views	13
Figure 7: Analytics of the visitors' countries	14
Figure 8: 4 th press release (Latvian version)	15
Figure 9: UTH-TTLog's website presentation of the 5 th press release (Greek version).....	16
Figure 10: 4 th press release (German version).....	17
Figure 11: Train-the-Trainers Seminar.....	18
Figure 12: Young Researchers' Seminar	18
Figure 13: Proceedings of RelStat'16	19
Figure 14: TTI's student interview with reference to ALLIANCE.....	20
Figure 15: ALLIANCE's coordinator interview with reference to ALLIANCE	21
Figure 16: Article about ALLIANCE in the Newsletter of the European Office of Cyprus	22
Figure 17: ECTRI Assembly in the premises of TTI	23
Figure 18: ALLIANCE at CORDIS portal.....	24
Figure 19: ALLIANCE at TRIP portal	25

LIST OF ABBREVIATIONS

Abbreviation	Description
CSUM	Conference on Sustainable Urban Mobility
D	Deliverable
EU	European Union
Fraunhofer	Fraunhofer Institute for Factory Operation and Automation
GA	Grant Agreement
PO	Project Officer
STSE	Short-Term Staff Exchange
TTLog	Traffic, Transportation and Logistics Laboratory
TTI	Transport and Telecommunication Institute
UTH	University of Thessaly
WP	Work Package

ABSTRACT

The present deliverable provides an outline of the second part of the dissemination material that has been produced for the ALLIANCE project, addressing material that has been designed during the last six months of the project's lifecycle, and including: two press releases, the 2nd ALLIANCE fact sheet, the 1st ALLIANCE newsletter and a roll-on banner. In addition, the project's events and activities for the same period are presented.

1 Introduction

1.1 Contents of the deliverable

This document is the fourth deliverable of WP5 that has been prepared, along with deliverable D5.1 entitled “1st Dissemination and exploitation plan”, deliverable D5.4 “Website” and deliverable D5.6 “Dissemination material 1”. The overall aim of WP5 is to promote the project to the wider audience, including international, European and national forums, and feed them with the latest news, forthcoming activities and events, etc. UTH, acting as the dissemination manager of ALLIANCE, is responsible to produce the appropriate material for these purposes, and to coordinate further promotion synergies.

Deliverable D5.6 includes the second part of the dissemination material designed and developed for ALLIANCE. New material for this period includes the 2nd fact sheet, the 1st newsletter, a roll-on banner and two press releases. The monitoring of the impact of the project is also documented in this deliverable, through key statistics for the website (visits, users, page views), and the presentation of project's events and extroversion activities.

A synopsis is presented in the last part of the deliverable, and three annexes follow with the dissemination material.

1.2 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.

2 Dissemination material

The material that has been produced during the second semester of the project is presented in the following paragraphs.

2.1 Roll-on banner

A roll-on banner has been designed (Figure 1), in order to be used at the project's events, i.e. summer schools, train-the-trainers' seminars, young researchers' seminars, etc. (Annex A).



Figure 1: Roll-on banner

2.2 Press releases

Press releases (Figure 2 and Figure 3) are among the main dissemination materials of ALLIANCE, communicating at specific milestones the achieved progress of the project and providing information about forthcoming events and activities. During the last semester, two press releases have been issued, the first one promoting the organization of the young researchers' and train-the-trainers' seminars in Riga in October, 2016, and the second one including the retrospection of the specific events of the project. The press releases were also translated in the three national languages of partners (Latvian, Greek and German). Indicatively, the Latvian versions may be found in the following link: <http://www.tsi.lv/lv/content/enhancing-excellence-and-innovation-capacity-sustainable-transport-interchanges-alliance>.

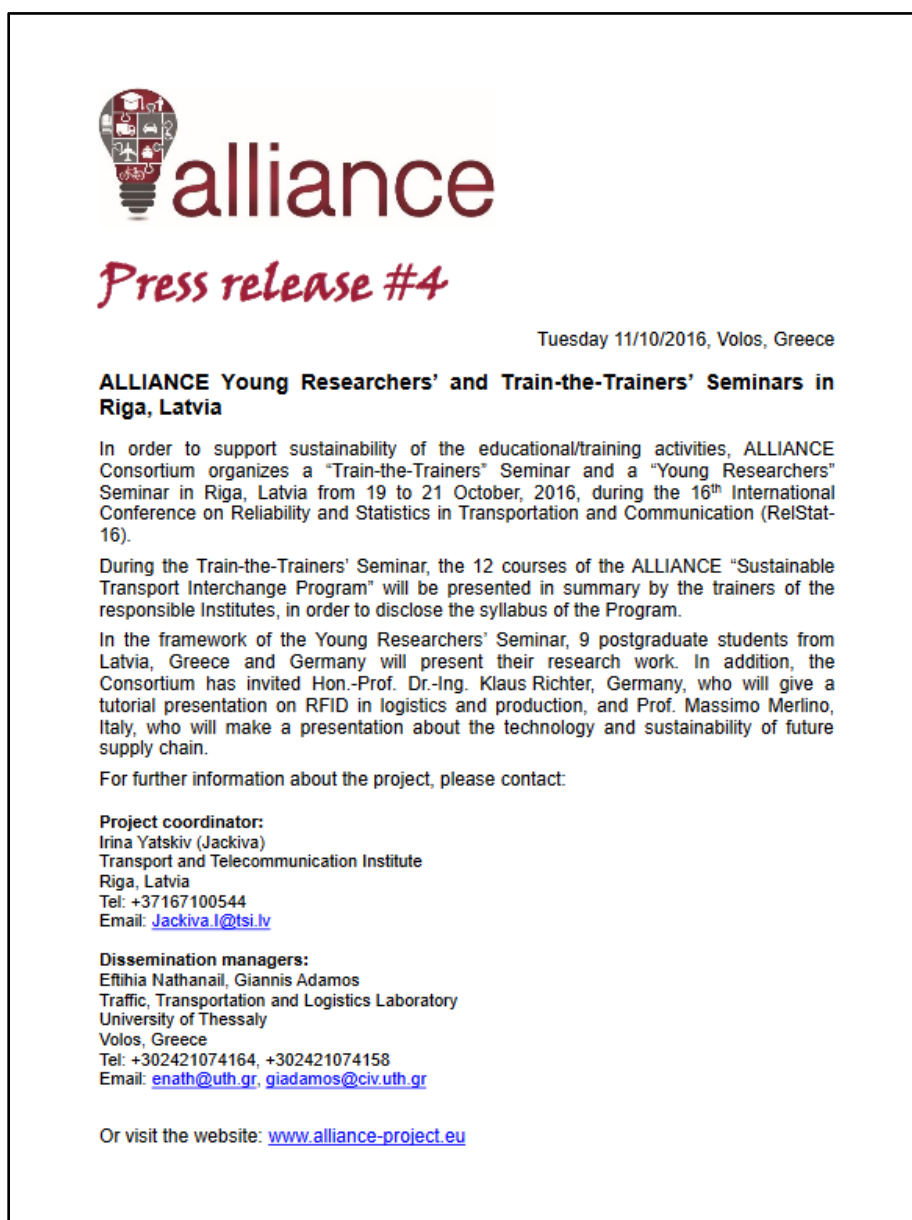



Figure 2: 4th Press release



alliance

Press release #5

Tuesday 01/11/2016, Volos, Greece

ALLIANCE Train-the-Trainers' & Young Researchers' Seminars in Riga, Latvia

In order to support sustainability of the educational/training activities, ALLIANCE Consortium organized a "Train-the-Trainers" Seminar and a "Young Researchers" Seminar in Riga, Latvia from 19 to 21 October, 2016, during the 16th International Conference on Reliability and Statistics in Transportation and Communication (RelStat-16).

During the "Train-the-Trainers" Seminar, the 12 courses of the ALLIANCE "Sustainable Transport Interchange Program" were presented in summary by the responsible Institutes, in order to disclose the syllabus of the Program. Seminar attendees provided feedback for amending the courses and discussed with presenters potential challenges that might be faced during the Summer School 2017 in Latvia.

Furthermore, during the "Young Researchers" Seminar 9 presentations were given by young researchers from Germany, Greece and Latvia. The topics of the presentations covered transport modeling, logistics and evaluation of transport systems. Following the Young Researchers' Seminar, a roundtable was organized with attendees representing TTI, UTH and Fraunhofer to discuss potential scientific collaborations between the organizations.

The Consortium had invited Prof. Dr.-Ing. Klaus Richter, Germany, who gave a tutorial presentation with title "RFID in Logistics and Production – Applications, Research and Visions for Smart Logistics Zones", and Prof. Massimo Merlino, Italy, who gave a presentation about the technology and sustainability of future supply chain.

For further information about the project, please contact:

Project coordinator:
Irina Yatskiv (Jackiva)
Transport and Telecommunication Institute
Riga, Latvia
Tel: +37167100544
Email: Jackiva.I@tsi.lv

Dissemination managers:
Efthia Nathanail, Giannis Adamos
Traffic, Transportation and Logistics Laboratory
University of Thessaly
Volos, Greece
Tel: +302421074164, +302421074158
Email: enath@uth.gr, giadamos@civ.uth.gr

Or visit the website: www.alliance-project.eu

Figure 3: 5th Press release

2.3 Fact sheets

The second ALLIANCE fact sheet (Figure 4), entitled "Defining educational requirements and areas in transportation for Latvia and the region", has been prepared. The scope of the 2nd fact sheet is to present the main findings of a coherent gap analysis, which resulted in the identification of educational requirements and areas in transportation for Latvia and the region. The visitors of the project's website are able to download it. The 2nd fact sheet is included in Annex B.

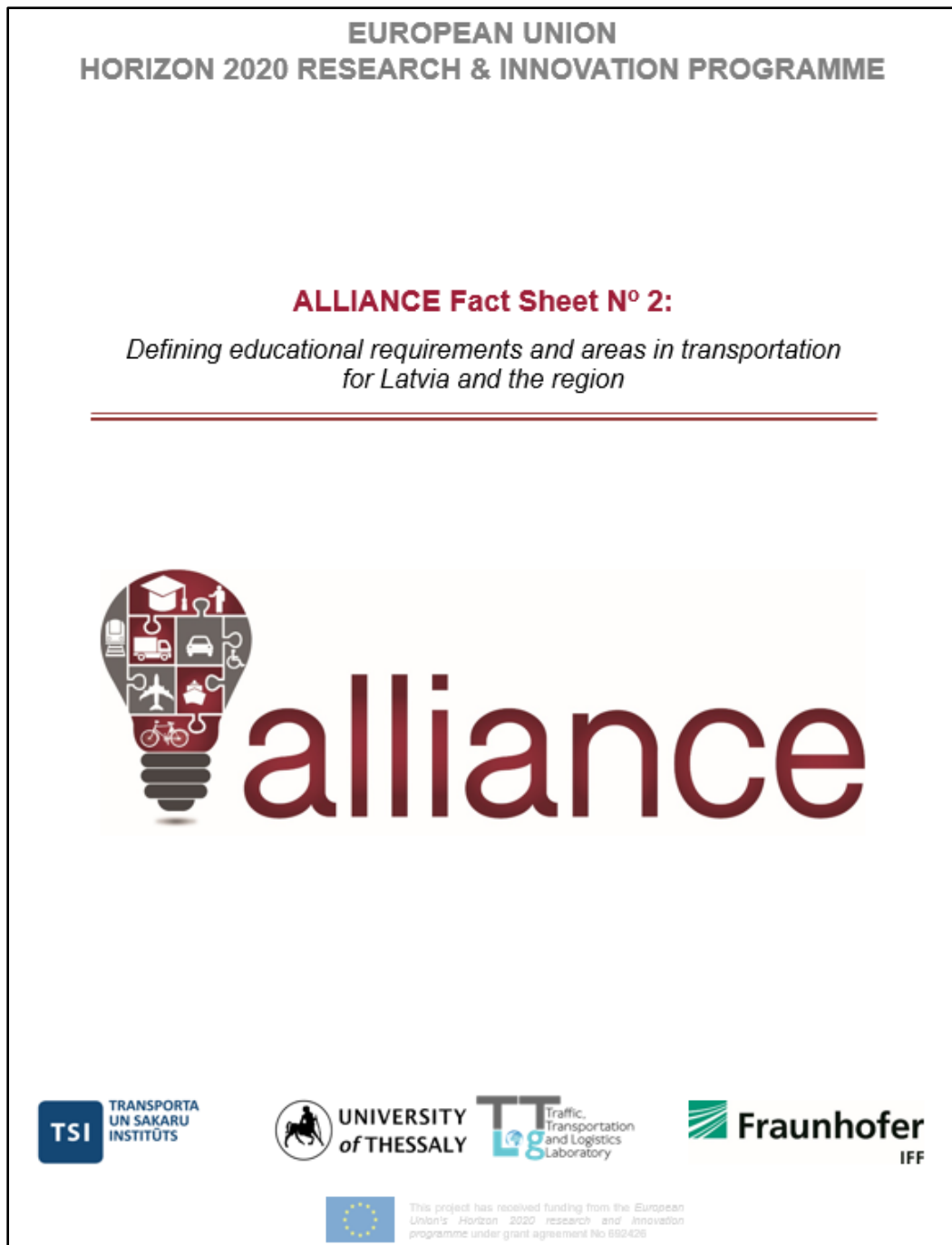


Figure 4: 2nd ALLIANCE fact sheet (cover page)

2.4 Newsletters

The 1st ALLIANCE newsletter has been produced (Figure 5). It will be available for downloading from the website, and will be sent by email to the project's contact database. The newsletter is included in Annex C.



Figure 5: 1st ALLIANCE newsletter (cover page)

3 Impact monitoring system

3.1 Website

Key statistics presenting the use of the project's website for the period 10/03/2016 – 12/12/2016 are as follows (Figure 6):

- Visits (sessions): 1,575
- Users (unique IPs): 864
- Page views: 5,802

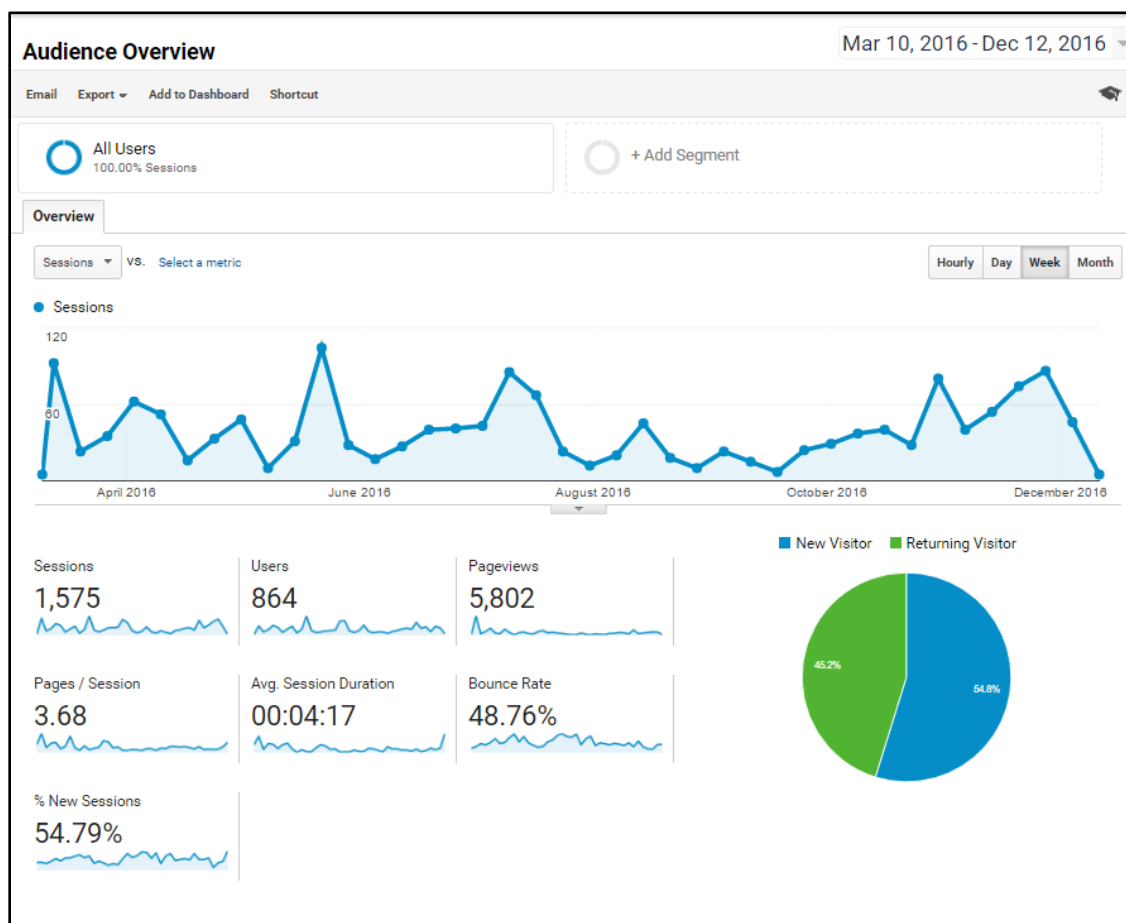


Figure 6: Overview of the website visits, users and page views

In addition, in Figure 7, for the same time period, the location (country) of the visitors is presented.

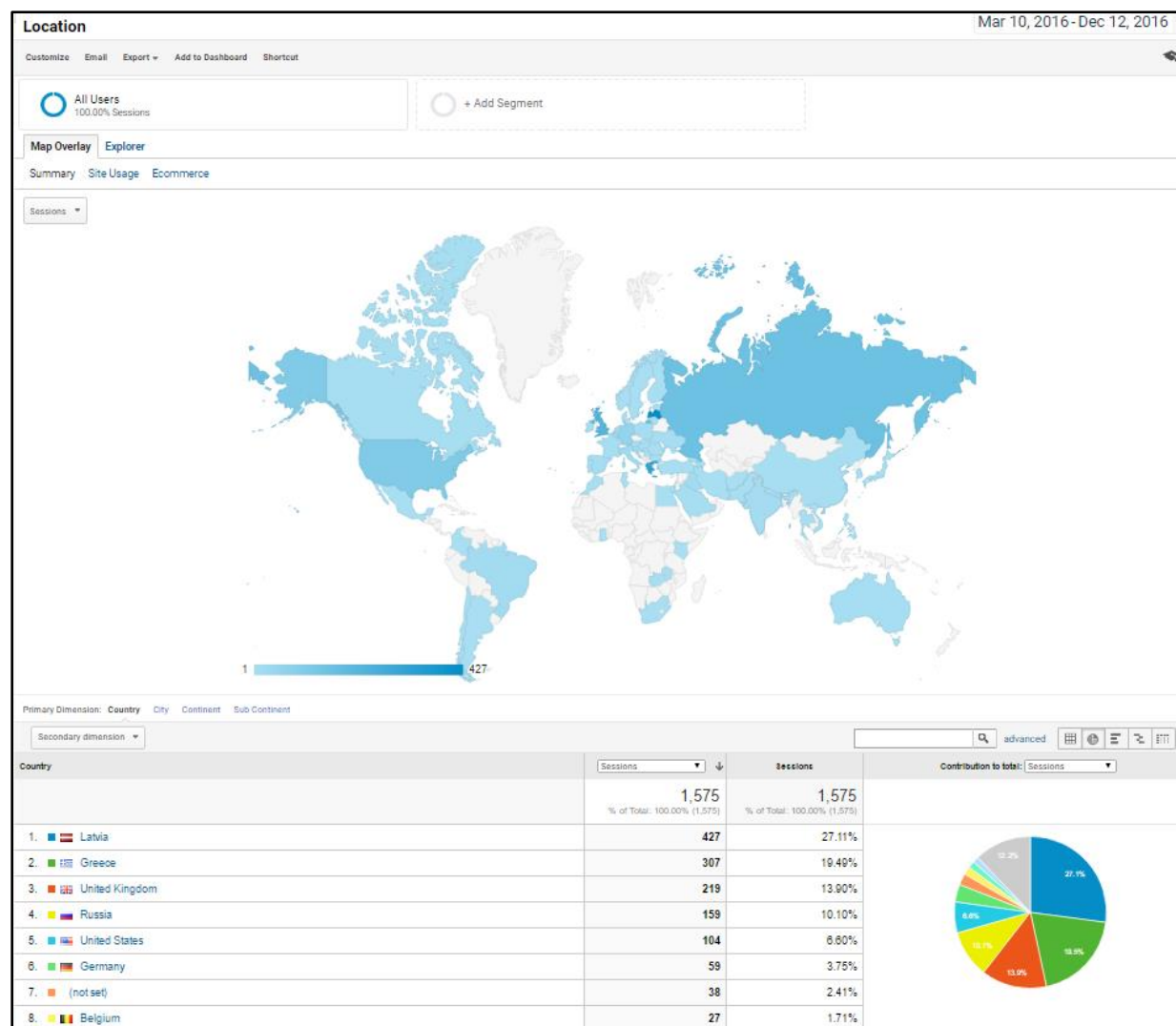


Figure 7: Analytics of the visitors' countries

3.2 Press releases

Regarding the distribution of the two press releases, these have been distributed through the official websites of the partners and selected posts are presented in Figures 8-10.



Preses relīze #4

2016. gada 11.oktobrī, Volos, Grieķijā

ALLIANCE Young Researchers' un "Train-the-Trainers" semināri Rīgā, Latvijā

Lai atbalstītu ilgtspējīgās izglītības/apmācību aktivitātes, no 2016. gada 19. līdz 21. oktobrim, Rīgā, Latvijā, 16. starptautiskās konferences Reliability and Statistics in Transportation and Communication (RelStat-16) laikā, ALLIANCE konsorcijs organizēs "Train-The-Trainers" un "Young Researchers" seminārus.

"Train-The-Trainers" semināra laikā, treneri no atbildīgajiem institūtiem prezentēs 12 ALLIANCE „Ilgtspējīgās Transporta mezglu programmas” kursus, lai atklātu mācību programmas plānus.

"Young Researchers" semināra ietvaros deviņi pēc doktorantūras studenti no Latvijas, Grieķijas un Vācijas prezentēs savus zinātniskos darbus. Turklāt, konsorcijs ir uzaicinājis A.god. Prof. Dr.- Ing. Klaus Richter, no Vācijas, kurš sniegs RFID mācību prezentāciju loģistikā un ražošanā un Prof.Massimo Merlino no Itālijas, kurš sniegs prezentāciju par nākotnes piegādes ķēdes tehnoloģiju un ilgtspēju.

Lai saņemtu sīkāku informāciju par projektu, lūdzu, sazināties:

Projekta koordinatore:

Prof. Irina Jackiva
A/S „Transporta un Sakaru Institūts”
Rīga, Latvija
Tālr.: +37167100544
E-pasts: Jackiva.I@tsi.lv

Informācijas izplatīšanas vadītāji:

Eftihia Nathanail, Giannis Adamos
Satiksmes, Transportēšanas un Loģistikas laboratorija
Tesalī Universitāte
Volos, Grieķija
Tālr.: +302421074164, +302421074158
E-pasts: enath@uth.gr, giadamos@civ.uth.gr

Vai apmeklējiet projekta ALLIANCE mājas lapu: www.alliance-project.eu

Figure 8: 4th press release (Latvian version)

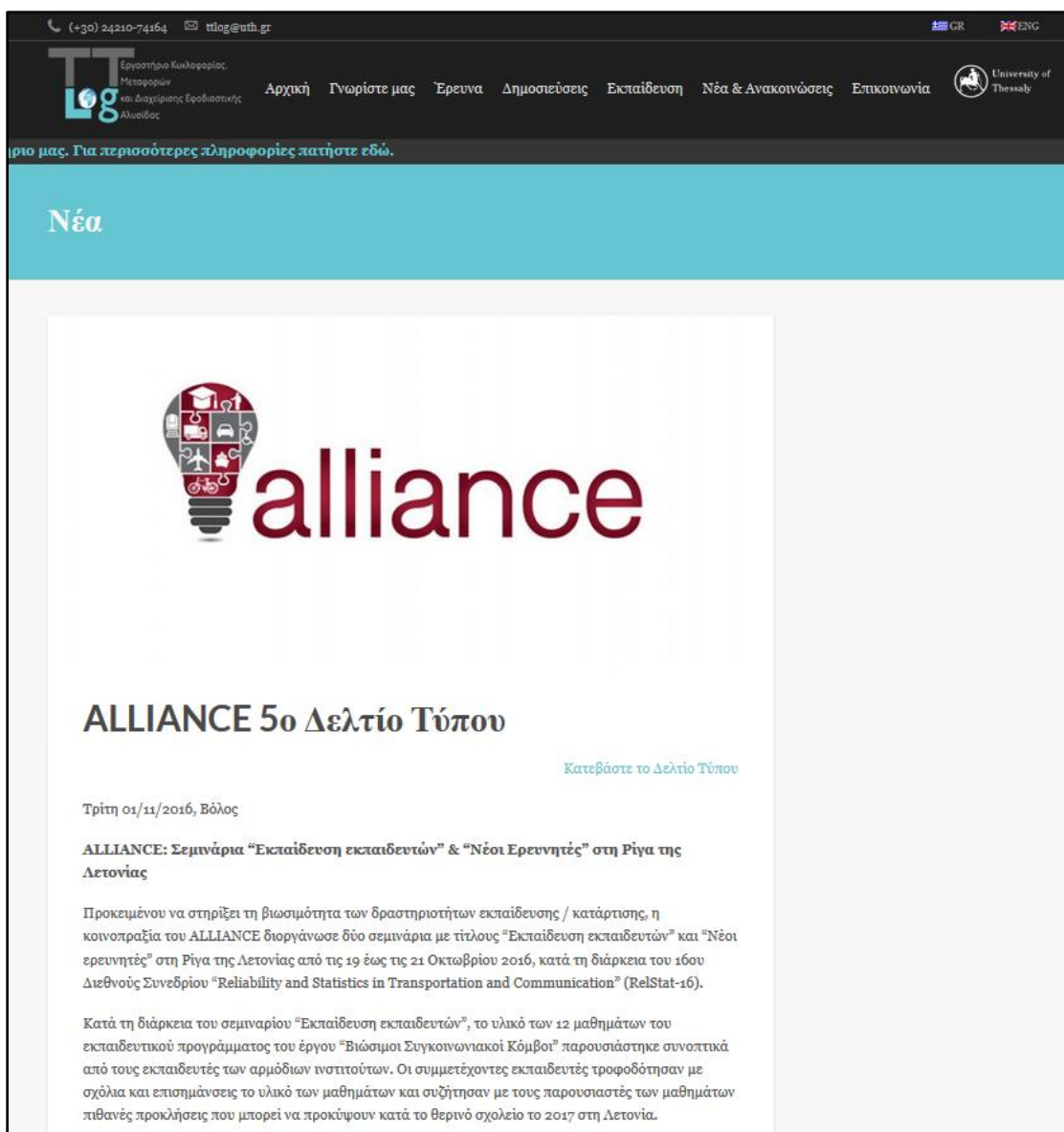


Figure 9: UTH-TTLog’s website presentation of the 5th press release (Greek version)



Figure 10: 4th press release (German version)

3.3 ALLIANCE events and participation in Conferences

In order to support sustainability of the educational/training activities, ALLIANCE Consortium organized a “Train-the-Trainers” Seminar and a “Young Researchers” Seminar in Riga, Latvia from 19 to 21 October, 2016, during the 16th International Conference on Reliability and Statistics in Transportation and Communication (RelStat’16).

During the “Train-the-Trainers” Seminar, the 12 courses of the ALLIANCE “Sustainable Transport Interchange Program” were presented in summary by the responsible Institutes, in order to disclose the syllabus of the Program (Figure 11).

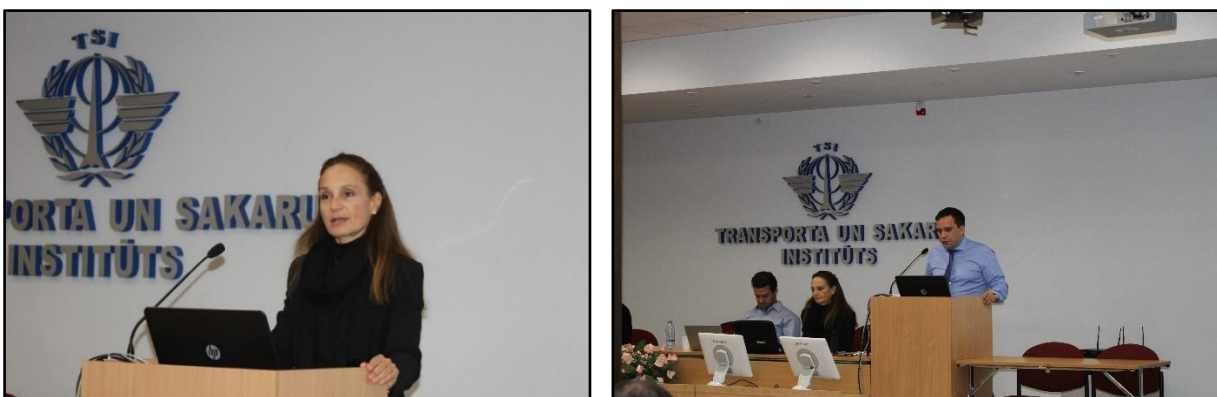


Figure 11: Train-the-Trainers Seminar

In addition, during the “Young Researchers” Seminar nine presentations were given by young researchers from Germany, Greece and Latvia. The topics of the presentations covered transport modeling, logistics and evaluation of transport systems. Following the Young Researchers’ Seminar, a roundtable was organized with attendees representing TTI, UTH and Fraunhofer to discuss potential scientific collaborations between the organizations (Figure 12).



Figure 12: Young Researchers’ Seminar

The full papers of the nine young researchers were issued in the proceedings of RelStat’16 (Figure 13).

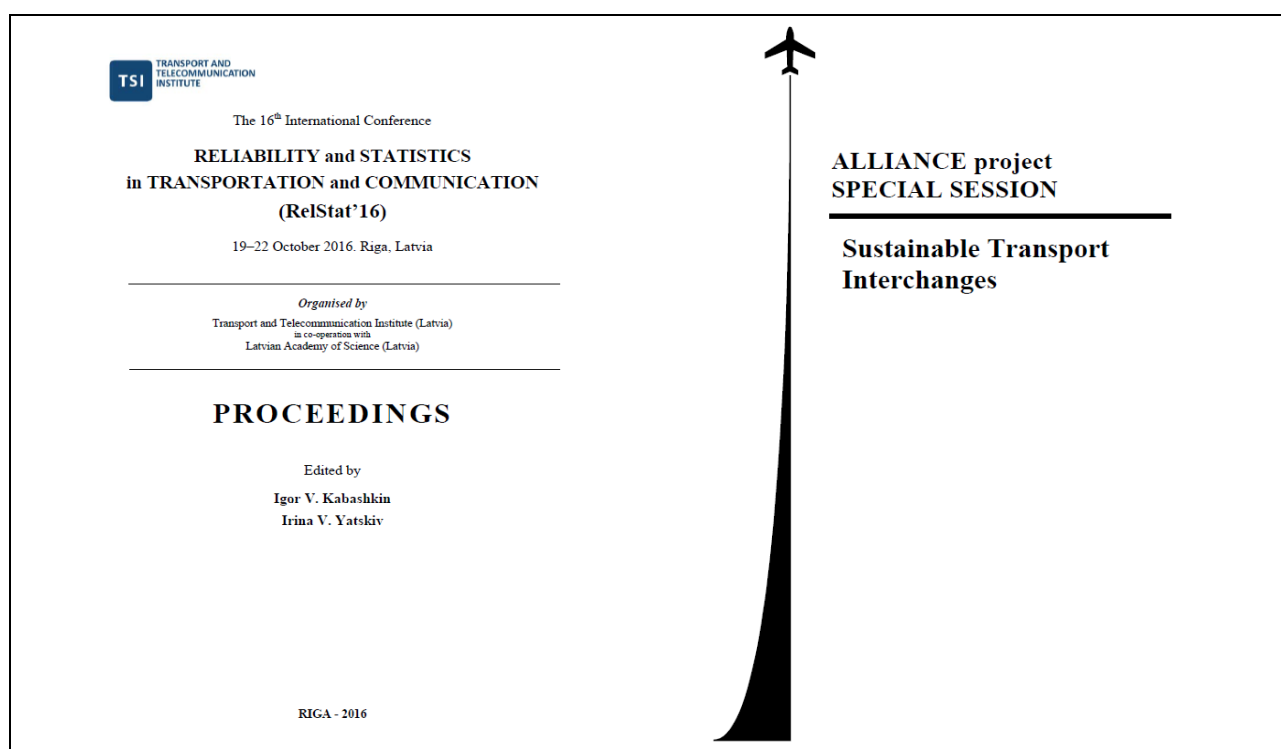


Figure 13: Proceedings of RelStat'16

More than 130 people participated in RelStat'16 from 17 countries, and ALLIANCE was promoted in the wide audience, since a special stand with the project's material was set up in the conference's secretariat area, while the project's poster and leaflet were distributed to all participants, as part of the conference's material. An overview of this activity is presented in Table 1.

Table 1: Overview of the participation of ALLIANCE consortium at RelStat'16

No.	Conference	Involved partners	No. of papers	Date/period	Place	Type of audience	Size of audience	Countries addressed
1	16 th International Conference "Reliability and Statistics in Transportation and Communication"	TTI, UTH, Fraunhofer	9	19 – 21 October, 2016	Riga, Latvia	Research & academics communities, Local & regional authorities, Transport & terminal operators, Transport policy makers & influencers, Enterprises /Businesses, General public	132 participants	17

3.4 ALLIANCE promotion and extroversion

During the second semester of the project's lifecycle, ALLIANCE was promoted through several channels, including an interview of a TTI's student referring to the educational activities of ALLIANCE (Figure 14), an interview of the project's coordinator Prof. Irina Yatskiv (Jackiva) (Figure 15), an article about ALLIANCE included in the monthly newsletter of the European Office of Cyprus (Figure 16), a presentation of ALLIANCE by the coordinator, during the Assembly of Members of the European Conference of Transport Research Institutes (ECTRI) in the premises of TTI (Figure 17), and an interview of Prof. Irina Yatskiv (Jackiva) in the electronic magazine Business Baltia BB.LV (<http://bb.vesti.lv/news/vai-mums-ir-vajadzigs-dialogs-starp-zinatni-un-sabiedribu-vai-kapec-magistrantiem-nepiecie-sama-zinatne?18920>).



TRANSPORT AND TELECOMMUNICATION INSTITUTE LV | RU | EN Search

Search | Student life | Partners | Aviation Center APAC

Master's Courses at TSI – New Ideas and Possibilities!

Master's courses are an important step in the successful career. Each student selects a master's course he or she is willing to take depending on what he or she finds necessary or interesting. Aris Gailītis, student of the master's programme *Transport and Logistics* of Transport and Telecommunication Institute (TSI), tells about the key advantages and possibilities of studying for a master's degree.

– Aris, why did you choose to take a master's course at TSI?

– In fact, I was thinking about taking a master's course for a long time; however, due to different reasons I had to postpone matriculation. In the long run, those were my colleagues who helped me make a firm decision. They told me about the possibility to take a master's course at Transport and Telecommunication Institute. Having considered all the advantages (there turned out to be a good few of them), i.e. the tuition fee, subject choice, time and place of studies, I understood that TSI is the best choice. The Institute's reputation and good references about it were a significant factor for me, too.

– Could you please tell about your speciality in a few words? Has studying the master's course influenced your career?

– I have been holding the office of a container terminal operations manager at Riga Container Terminal for approximately six years. Our company is a port terminal the tasks of which include transfer of containers and general cargoes. In turn, it is my job duty to ensure that there is communication between the terminal and the client, participation in the solution of questions related to the development and tasks of the company.

There is no doubt that studying a master's course has much to offer. I have learned about and thought over the things which I earlier paid no attention to. After the first few lectures, fresh ideas which I want to implement by all means were born. I have also succeeded in bringing some ideas into life almost immediately. I was lucky in terms of my course mates, too; I obtained not only valuable professional experience, but also made new acquaintances.

– You have recently returned from a journey to Greece together with other TSI students. Could you please share your impressions about this journey, about the knowledge and experience you have acquired

– Of course. Since our Institute is the coordinator of the European project **ALLIANCE** (Horizon 2020), the master's degree candidates and doctoral candidates of TSI have very interesting possibilities in terms of scientific mobility. We listened to the lectures on sustainable development of transport systems together with the master's degree candidates of the programme *Transport Engineering* at the University of Thessaly (Greece) and participated in the third international conference on sustainable urban mobility which was held in Greece in the city of Volos. This time I was just a listener; however, I hope to make a report next time.

It is essential that many practical examples were considered at the conference which distinguished it from other conferences in which I had participated before. I hope to apply the obtained knowledge in my master's thesis.

We had four busy days, i.e. participation in the conference, lectures and discussions with the professors and master's degree candidates of the local university. I have acquired invaluable experience during this journey.

In addition, in our delegation there were different specialists with whom discussing many topical issues was not only useful, but also interesting.

Figure 14: TTI's student interview with reference to ALLIANCE

TRANSPORT AND TELECOMMUNICATION INSTITUTE
LV | RU | EN
Search

search | Student life | Partners | Aviation Center APAC
f vk tw in

Do We Need A Dialogue between Science and Society or Why Do Master's Students Need Science?



I have been the director of the master's programme *Transport and Logistics* for several years and I more than ever come to the conclusion that going along with the trends of the contemporary educational marketing we should not speak only about deep professional skills which the students will obtain without advertising the scientific aspects of the programme at all.

At the end of the day, in the field of transport and logistics a contemporary master's student must be able to:

- 'measure' – without measurement there is no management;
- think and manage strategically – how to be attentive to detail and simultaneously foresee the results over time while performing an enormous quantity of tasks and meeting deadlines;
- work independently, think creatively, be communicable;

but the main thing:

- master's students who are studying today need to obtain the knowledge which will be in demand in future, i.e. they must become SUSTAINABLE specialists in the field of transport and logistics.

And, as a result, they should also be aware of:

- how the entire transport industry will fundamentally change within the next 20 years;
- what contemporary technologies and discoveries will lead to the change of all forms of services;
- to what new business-models the solutions based on the data will lead;
- what is IoT, smart supply chain, Big Data, UASs, Industry 4.0, etc;
- and what should be done to ensure that these megatrends do not bring harm but do good for people, make our life really qualitative in all aspects of this complicated concept.

Transport has always been the most advanced and sophisticated branch of economy. Nowadays, transport is the first to fall under the influence of all the IT megatrends. To my mind, this is the industry where parallelism of theory and practice is of prime importance.

Let us take the technology which turned the world upside down, i.e. radio-frequency identification tags (RFID). It is widely accepted that they appeared during World War II when everyone was preoccupied with the problem of enemy aircraft identification. The British were the first to develop the active *Identification, Friend or Foe* system (in 1937, under the guidance of the Scottish physicist A. Watson-Watt). But only now, in the 21st century, we use this technology for business making our delivery chains 'transparent'. And it happened only when they started thinking about the SYSTEM of use of this technology in all fields of economy and started to attract specialists in the respective areas of expertise; it was then that this technology virtually became the catalyst of the development of the megatrend, i.e. the Internet of Things (IoT). It took more than half a century and many applied researches.

Or let's have a look at how many notions and concepts today are formed by adding the word 'smart' to the known terms: smart vehicles, smart equipment, smart infrastructures, smart freight, smart supply chain, smart city, smart solutions, smart social groups, etc. The adjective 'smart' added to a term points at the highest quality of a solution, idea, project, etc. For instance, 'smart' in terms of a city would, first of all, imply that it is 'sustainable' and 'liveable'; whereas, in terms of a delivery chain, 'smart' implies that everything in it is measurable, interacting, and intellectual solutions on its management are based on the analysis and data.

What challenges does the contemporary science prepare for **transport and logistics specialists**? First of all, it is the increasing overall sensorisation which makes all the processes transparent; the new forms of man-machine interface; vigorously developing technologies to improve drone safety and their possibility to solve urban problems; the era of big data (from 3'V just several years ago to 6'V today) and the universal 'web' (the Internet of Things, Industry 4.0, etc), the ever growing **multimodality** in the passenger and **intermodality** in cargo transportation, and **city-hubs** – this is far from being an exhaustive list of the subjects of studies of future master theses in the field of transport and logistics.

Does TSI offer anything new to the students of the TSI master's programme *Transport and Logistics* this year?

Together with its partners in the project **ALLIANCE**, i.e. the University of Thessaly (Greece) and IFF (Germany), TSI develops a new module *Sustainable Transport Interchanges* which will be integrated in the programme, and already starting from 2017 master's students will be able to take it within the framework of the summer school. Professors and experts from Germany, Spain, and Greece will tell about the best European practices in terms of transport terminal design, information services and approaches to decision-making. The students will obtain the possibility to participate in the seminars of PhD students and master's students of the European higher education institutions with their projects and scientific developments, will improve their English as well as find future business partners in Europe.


A tomorrow's professional in the field of *Transport and Logistics* is the one who will be able to make scientific knowledge wisdom as well as apply the knowledge where and when it is really necessary!

Prof., Dr.Sc.Ing., I. Jackiva
Director of the Master's Programme *Transport and Logistics*

Figure 15: ALLIANCE's coordinator interview with reference to ALLIANCE



Figure 16: Article about ALLIANCE in the Newsletter of the European Office of Cyprus



TRANSPORTA

UNSAKARU

INSTITUTS

TRANSPORT AND TELECOMMUNICATION INSTITUTE

LV

RU

EN

Search

About TSI

For applicants

Studies

Research

Student life

Partners

Aviation Center APAC

f

vk

tw

in

APPLY!

Events

December 2016


M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

TSI Newsletter

Your e-mail

Subscribe

For the first time in Latvia, Assembly of Members of the European Conference of Transport Research Institutes (ECTRI) took place at Transport and Telecommunication Institute



On 24-25 November 2016, Transport and Telecommunication Institute (TSI) was held the **ECTRI (European Conference of Transport Research Institutes) Assembly** meeting.

ECTRI is a European research association for sustainable and multimodal mobility. The Association was founded in April 2003, and today its members are 28 transport research institutes and universities from 21 European countries. Together they account for more than 4,000 European scientists in the field of transport.

Transport and Telecommunication Institute (TSI) has been the member of ECTRI since 2006.

ECTRI works in six thematic groups:

- Mobility
- Logistics
- Economics and Policy
- Safety
- Cyber Safety and Risk Analysis
- Transport Flow Management

Within the framework of working groups, joint scientific interests of the represented organisations are determined as well as consortia for the participation in the European projects are formed, etc.

The Association holds its sessions twice a year in one of the ECTRI member states. This year, such session for the first time took place in Riga, at Transport and Telecommunication Institute.

The representatives of research Institutes from more than 20 European countries, i.e. Belgium, Great Britain, Poland, Sweden, Finland, Czech Republic, Germany, Spain, Slovakia, Slovenia, Lithuania, etc. participated in the work of the Assembly.

Among the participants were leaders of French Institute of Science and Technology for Transport, Planning and Networks; National Aeronautics and Space Research Centre (DLR, Germany); Swedish National Road and Transport Research Institute (VTI); VTT Technical Research Centre of Finland Ltd., etc.

The Assembly was opened by the President of ECTRI Prof. Mark Robinson, Great Britain.

Traditionally, the first working day of the Assembly was dedicated to the working questions: summing up of the workshop results, consideration of the draft budget for the next year, admission of new members into the Association. Each of the leaders of the research organisations told about new projects, past and future conferences and other news in their Institutes.

The second day was dedicated to the issues related to transport researches and Latvia's transport branch review.

Inta Rozenšteina, Deputy Director of the Department of Finance and Development Planning of the Ministry of Transport of Latvia, presented a detailed review of the national transport policy.

Prof. Irina Yatskiv (Jackiva), TSI Vice Rector, presented the project **ALLIANCE** which has been coordinated by the Institute since 01 January 2016.

Dr. Mihails Šavrasovs, Head of Scientific Research Department, told about the recent traffic simulation projects which the Institute has been fruitfully dealing with for a long time.

Jurijs Kondratenko, International Project Manager, Economist, Expert of Strategic Planning and Sustainable Development of company "Grupa 93", gave a presentation on *Integration of Rail Baltica Railway Line within the Riga Central Multimodal Public Transportation Hub*.

Dr. Valra Gromule, Chairman of the Board of the Riga International Bus and Coach Terminal, had the presentation on the topic *Passenger Terminal: Safety and Security as Important Aspects for Quality and 'Sustainability' Perspective*.

At the Assembly, the President, Vice President and new members of the Board of ECTRI were also elected. It was the first time when Professor Irina Jackiva, Vice Rector of our Institute, was elected in the Board of this European organisation.

Photo gallery




Figure 17: ECTRI Assembly in the premises of TTI

www.alliance-project.eu

23

Lastly, ALLIANCE is also promoted through the European Commission's portals CORDIS-Community Research and Development Service (Figure 18) and TRIP-Transport Research and Innovation Portal (Figure 19).

The screenshot displays the CORDIS (Community Research and Development Information Service) portal. At the top, there is a navigation bar with links for 'About CORDIS', 'Contact', 'Advanced Search', 'Legal Notice', and a language selector set to 'English (en)'. The main header features the European Commission logo and the CORDIS title. Below this, a breadcrumb trail reads: 'European Commission > CORDIS > Projects & Results Service > Enhancing excellence and innovation capacity in sustainable transport interchanges'.

A search bar and a 'Sign in' link are positioned on the right. A horizontal menu includes 'NEWS & EVENTS', 'PROJECTS & RESULTS' (which is highlighted), 'RESEARCH*EU MAGAZINES', and 'PARTNERS'. Below the menu, there are icons for 'Download' (PDF, RTF, XML), 'Print', 'Booklet', and 'My booklet (0)'.

The main content area is titled 'ALLIANCE' with a 'HORIZON 2020' logo. It lists the 'Project ID: 692426' and the funding source: 'Funded under: [H2020-EU.4.b. - Twinning of research institutions](#)'. The project title is 'Enhancing excellence and innovation capacity in sustainable transport interchanges', with a duration 'From 2016-01-01 to 2018-12-31, ongoing project'.

A 'Project details' section is presented in a table-like format:

Total cost: EUR 996 306,25	Topic(s): H2020-TWINN-2015 - Twinning
EU contribution: EUR 989 331,25	Call for proposal: H2020-TWINN-2015 See other projects for this call
Coordinated in: Latvia	Funding scheme: CSA - Coordination and support action

Below the details, the 'Objective' section states: '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 o...'. A small blue square with a white plus sign is located at the bottom right of the objective text.

Figure 18: ALLIANCE at CORDIS portal

Transport Research & Innovation Portal

Home | Sector | Mode | Policy | Technology | Evaluation

Country Profiles | Programmes | Projects | Publications | Events | Newsroom | About TRIP

Home > Enhancing excellence and innovation capacity in sustainable transport interchanges

Project details

ALLIANCE

Enhancing excellence and innovation capacity in sustainable transport interchanges

Funding: European (Horizon 2020)
Duration: 01/16 - 12/18

Transport Themes: Multimodal transport (key theme). International cooperation & EU Neighbourhood Policy, Awareness, information and user rights, Long-term perspectives, Assessment & decision support methodologies, Environmental impacts

Outline | Funding | Contact

Background & policy context:

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. It will also facilitate stakeholder collaboration and the development of strong linkage among education, research and industry.

Objectives:

ALLIANCE aims at developing advanced research and higher education institution in the field of transport in Latvia by linking the Transport and Telecommunication Institute (TTI) with two internationally recognized research entities – University of Thessaly (UTH) and Fraunhofer Institute for Factory Operation and Automation (IFF).

Full-text search...

Project Search >>

Newsletters

Share

Follow 924

Follow @Transport_EU

Submit Event
 Submit News
 Submit Project

Download TRIP's latest report

Please log in to submit or update content

E-mail or username *

Password *

Figure 19: ALLIANCE at TRIP portal

4 Synopsis

During the 2nd semester of the project, the second part of dissemination material has been developed, including the 2nd fact sheet, the 1st newsletter and the roll-on banner. In addition, the consortium of the project has promoted the ALLIANCE actions through the project webpage (www.alliance-project.eu) and all partners' websites. Two press releases were distributed to a large amount of media, and the first "Train-the-Trainers" and "Young Researchers" seminars were successfully realized in Riga, Latvia during the 16th International Conference on Reliability and Statistics in Transportation and Communication (RelStat'16).

5 Annexes

Annex A: Roll-on banner

Annex B: 2nd Fact sheet

Annex C: 1st Newsletter



alliance

Enhancing excellence and innovation capacity in sustainable transport interchanges

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.

www.alliance-project.eu



Project Coordinator

Irina Yatskiv (Jackiva)
Email: Jackiva.l@tsi.lv

Project Coordinator Assistant

Mihails Savrasovs
Email: savrasovs.m@tsi.lv

Transport and Telecommunication
Institute, Riga, Latvia

Dissemination Managers

Eftihia Nathanail
Email: enath@uth.gr
Giannis Adamos
Email: giadamos@civ.uth.gr

Traffic, Transportation and
Logistics Laboratory, University
of Thessaly, Volos, Greece

Fraunhofer contact person

Kay Matzner
Email:
Kay.Matzner@iff.fraunhofer.de

Fraunhofer Institute for Factory
Operation and Automation,
Magdeburg, Germany

Partners



TRANSPORTA
UNSAKARU
INSTITŪTS



UNIVERSITY
of THESSALY



Traffic,
Transportation
and Logistics
Laboratory



Fraunhofer
IFF



This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 692426



ALLIANCE Fact Sheet N° 2:

*Defining educational requirements and areas in transportation
for Latvia and the region*



alliance

Background and content

Statistics reveal that over 50% of the world population lives in cities, approximately 75% of the European population lives in urban areas, urban mobility accounts for 40% of all CO₂ emissions of road transport and up to 70% of other pollutants from transport, and urban freight vehicles account for 6-18% of total urban travel (European Commission, 2014; European Commission, 2015; Figliozzi, 2010; Grimm et al., 2008).

Even if there are various new technological solutions, still, economic, managerial and regulatory barriers restrict the incorporation of these solutions to the sustainable management and operation of transport systems. To this end, it is crucial that cities and stakeholders identify and apply innovative strategies to improve quality of life of citizens, taking into consideration factors such as economic competitiveness, business needs and emerging traveling and consuming trends.

The understanding of the aforementioned situation requires targeted actions, aiming at organizing an educational and training program, which can inspire the involvement of researchers, practitioners and decision makers, and stimulate scientific excellence and knowledge-sharing in transportation.

The scope of the 2nd ALLIANCE fact sheet is to present the main findings of a coherent gap analysis, which resulted in the identification of educational requirements and areas in transportation for Latvia and the region.

Educational requirements and areas in transportation for Latvia and the region

Conducting a two-level gap analysis, practice related requirements for passenger and freight interchanges (Gap analysis I) were converted into educational gaps and requirements for passenger and freight transport interchanges (Gap analysis II). The requirements per thematic area, i.e. governance, smart solutions and decision-making, were then linked with an educational area. In total, twenty educational areas were defined, based on the Gap analysis II requirements, and the existing research, educational and training programs offered at European institutes. The educational requirements and educational areas per thematic area and topic are presented in Table 1.

Table 1: Educational requirements and areas for Latvia and the region (Source: ALLIANCE, 2016)

Thematic Area	Topic	Gap I	Educational requirement	Educational areas
Governance	Stakeholders	-	Incorporation of organizational and business models in course material.	1. Building business models for passenger transport interchanges
	Policy	Legal framework does not focus on interchanges.	Improvement of course content on transport legal frameworks with reference to EU and partial coverage of interchanges and environmental legislation. Special attention on interchanges and environmental legislation in the courses oriented on EU transport policy issues.	2. Development and implementation of sustainability and transport policies in the EU region
		Not harmonized policy for interchanges.	Improvement of course content on transport legal frameworks with reference to EU, freight transport and environmental legislation	3. Development and implementation of freight transport policies in the EU region
	Ownership	Limited involvement of several authorities.	Incorporation of courses oriented on public private partnerships (PPP) models and mega infrastructure financing schemes in educational and training the program.	4. Public Private Partnerships in transport: Theory and schemes
		Limited business models development.	Incorporation of innovative business models in course material.	5. Building business models for freight transport interchanges
	Sustainable development	Limited incorporation of interchanges in regional and national development plans.	Incorporation in the program of topics with integrated development plans with reference to sustainable development and the environment.	6. Sustainable passenger transportation planning
		Limited incorporation of interchanges in regional and national development plans.	Incorporation in the program topics with integrated development plans with reference to sustainable development and the environment.	7. Sustainable freight transportation planning
	Management	Interchange Management Plan not including all aspects of interchange functionalities and interests.	Development of material on integrated coordination and operation of mega infrastructure facilities with special reference to interchanges and the utilization of	8. Operation and management of urban public transport systems

Thematic Area	Topic	Gap I	Educational requirement	Educational areas
			technological advances.	
		-	Incorporation of innovative business and management models in course material.	9. Operation and management of urban freight transport systems
	Operation	Limited coordination among modes and operators.	Incorporation of transport operations education and training materials that will focus on multimodal systems.	10. Multimodal transport optimization for passenger transport
		-	Development of education material on integrated coordination and operation of mega infrastructure facilities with special reference to interchanges and the utilization of technological advances.	11. Multimodal transport optimization for freight transport
Smart solutions	Information	Limited multimodal information.	Exploration and utilization of technologies to respond to transport information based needs.	12. Information systems for passenger intermodal terminals
	Services	Limited integrating ticketing. Existing services do not offer travelers real-time information across all stages of a multimodal trip Possible conflicts between vehicles and pedestrians. Not sufficient security level.	Development of course that integrates public transport with smart solutions (technology and policy oriented) and potential sustainability impacts. Incorporation in the program topics with interchange and terminal design and planning with reference to their special characteristics and safety issues.	13. Integrated ticketing and time table coordination 14. Design and safety principles of transport terminal infrastructure
	Physical properties	Limited access for all. Insufficient cycling and walking facilities. Environmental concerns vary depending on facilities' age.	Development of education materials on transport planning and design of intermodal terminals for all users to satisfy user needs and fulfill sustainability principles.	15. Passenger terminal design
	New consolidation /distribution and logistics	Individually planned urban consolidation centers. Limited business and transport	Development training materials for case studies of planning urban consolidation centers.	16. Urban freight terminals design

Thematic Area	Topic	Gap I	Educational requirement	Educational areas
	cooperative concepts	operational planning.		
	Information technologies	Limited cooperation between publicly owned and operated Intelligent Transport Systems and enterprise-level software for supply-chain management, trip planning and fleet management.	Study of ITS characteristics and utilization in case studies for the effective supply chain management and trip planning.	17. Information technologies for intermodal freight transport
	Smart transshipment	Limited use of alternative, friendly to environment and energy technologies.	Review of policies related to alternative fuels and propulsion technologies, and estimation of environmental impacts for intermodal terminals.	18. Smart transshipment and alternative transport fuels
Decision-making	Interchange status assessment and users' feedback	Not obligatory. Insufficient information for decision-making: only few surveys, data not reliable; no network assessment at the strategic level, etc. Limited data sharing.	Development of integrated course material that will focus on assessment practices with focus on interchanges and life cycle impacts (society, environment and economy) by including users' satisfaction.	19. Risk assessment analysis, behavioral modeling, social cost benefit analysis and multi-stakeholder multi-criteria assessment
	Decision-support methods	Limited sharing of data.	Incorporation of novel data collection methods and exploitation of big data opportunities in decision-making and analytics of freight transport.	20. Innovative data collection methods to support decision-making

Note: Grey hatched cells are freight based.

Conclusions

Concluding, the first level gap analysis, conducted between the interconnecting networks in the European Union (EU), and Latvia and the region, showed that the latter cover the majority of the thematic areas in terms of practices for both passenger and freight interchanges. Nevertheless, compared to EU practices, Latvia and the region perform poorer, mainly due to limited incorporation of sustainability principles into planning and operation of terminals, and the absence of integrated business and management plans.

The second level gap analysis revealed the lack of a common integrated approach for the development of transport programs and transport courses content, even if there are several transport related programs in Latvia and the region.

References

ALLIANCE, 2016. ALLIANCE Deliverable D2.1, 2016. Good practices on research, educational and training programs on smart solutions for the interconnection of transportation networks.

European Center for Government Transformation, 2015. Boosting innovation in cities to deliver better public services – A view from tomorrow's leaders. College of Europe student case studies, Final report.

European Commission (2014). Living well, within the limits of our planet. 7th EAP — The New General Union Environment Action Programme to 2020.

Figliozi, M.A. (2010). The impacts of congestion on commercial vehicle tour characteristics and costs. *Transportation Research Part E: Logistics and Transportation Review*, 46 (4), 496–506.

Grimm, N.B., Faeth, S.H., Golubiewski, N.E., Redman, C.L., Wu, J., Bai, X., et al. (2008). Global change and the ecology of cities. *Science*, 319(5864), 756–760. <http://dx.doi.org/10.1126/science.1150195>.



alliance

Newsletter

December 2016 Issue 1

Editorial

Dear reader,

ALLIANCE is a three year research project, supported by the EU HORIZON 2020 Programme, aiming at developing advanced research and higher education institution in the field of transport in Latvia, by linking the Transport and Telecommunication Institute with two internationally recognized research entities - University of Thessaly, Greece and Fraunhofer Institute for Factory Operation and Automation, Germany.

We are delighted to present the 1st ALLIANCE newsletter, which is produced in order to inform you and keep you up to date with the project's activities!

This first issue will guide you through the scope, concept and expected impacts of the project, and will update you on the activities of the first year and the latest news on the forthcoming events. You will also read four very interesting interviews with experts in the specific domain of research and practice.

We hope that you find this newsletter informative and enjoyable to read, and we encourage you to visit our website at:

www.alliance-project.eu

Prof. Irina Yatskiv (Jackiva)
Project Coordinator

Prof. Eftihia Nathanail
Dissemination Manager



This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 692426

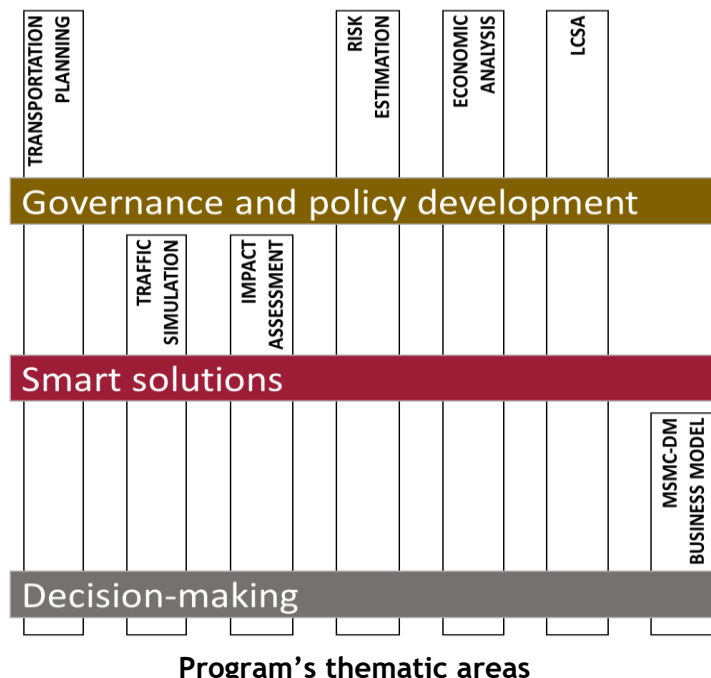
Introducing ALLIANCE

Scope

- Link Transport and Telecommunication Institute (TTI) with University of Thessaly (UTH) and Fraunhofer Institute for Factory Operation and Automation (Fraunhofer)
- Provide knowledge to TTI research staff in the field of smart interconnecting sustainable transport networks
- Facilitate stakeholder collaboration and develop strong linkage among education, research and industry
- Create a doctoral programme in Transport Economics and Management at TTI

Concept

- Needs' analysis of Latvia and the surrounding region of the Baltic sea (Lithuania, Estonia, Poland) on intermodal transportation terminals
- Consideration of the relations among policy makers, industry and education/research
- Development of a coherent educational/training program, structured around 3 pillars:
 - ✓ Organizational/governance
 - ✓ Operational/services
 - ✓ Service quality/customer satisfaction



Expected impacts

- New bases in knowledge transfer procedures, education and interdepartmental collaboration amongst research institutes
- Innovative organizational framework with tangible and well-estimated progress results
- Integrated framework addressing knowledge transfer techniques and the upgrading of the educational system, through networking, staff exchange and webinars



TTI is expected to 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

ALLIANCE events

Training Program “Urban and transportation planning”

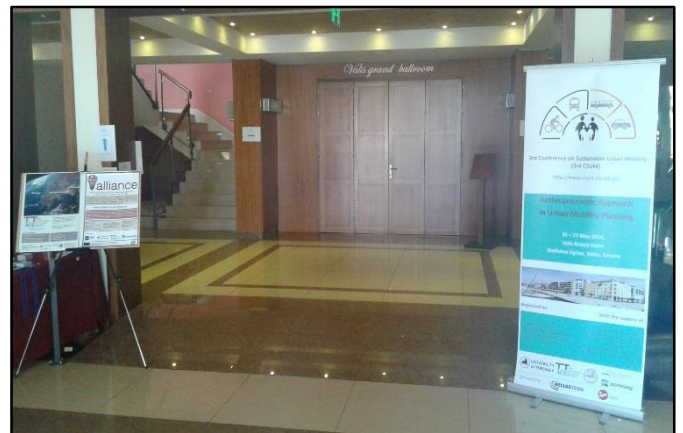
24-27 May 2016 Riga, Latvia



The training program “Urban and transportation planning” was successfully organized by UTH’s Interdepartmental Postgraduate Program “Management, Transportation and Planning” and the 3rd Conference on Sustainable Urban Mobility (3rd CSUM) in Volos, Greece on 24-27 May, 2016. In total, 28 students, 8 from Latvia and 20 from Greece participated.



The training program, being part of ALLIANCE’s dedicated knowledge-sharing activities, lasted 4 days, the first 2 of which were realized at the premises of the School of Engineering of UTH, and concerned a number of selected courses of UTH’s postgraduate program, while two more lectures were given by Fraunhofer experts.



The last two days of the program, students attended selected sessions of the 3rd CSUM:

- Green transportation
- Special Session “City logistics in an era of change”
- Transportation interchanges
- Activity-based transport modeling
- Public transport and demand responsive systems I and II
- Safety and security II
- Accessibility analysis

ALLIANCE events

ALLIANCE organized a “Train-the-Trainers” Seminar and a “Young Researchers” Seminar in Riga, Latvia on 19-21 October, 2016, during the 16th International Conference on Reliability and Statistics in Transportation and Communication (RelStat’16).

Train-the-Trainers Seminar

During the Seminar, the 12 courses of the ALLIANCE’s “Sustainable Transport Interchange Program” were presented in summary by the responsible Institutes, in order to disclose the syllabus of the Program. In addition, attendees provided feedback for amending the courses and discussed with presenters potential challenges that might be faced during the 1st ALLIANCE Summer School in Latvia in July 2017.



Young Researchers’ Seminar

During this Seminar, 9 presentations were given by young researchers from Germany, Greece and Latvia. The topics of the presentations covered: transport modeling, logistics and evaluation of transport systems. Following the Seminar, a roundtable was organized with attendees representing TTI, UTH and Fraunhofer to discuss future scientific collaborations among the Institutes.



Save the date 17-23 July 2017

ALLIANCE organizes the 1st Summer School, entitled “Sustainable Transport Interchange Program - STIP” in Riga, Latvia on 17-23 July, 2017.

An open call for participation will be soon released!

STIP courses

Code	Course	Code	Course
C0	Research methodology and teamwork setup	C7	Information systems for intermodal freight transportation
C1	The European policy on intermodal transportation	C8	Design of passenger transport interchanges
C2	Building business models for intermodal transport interchanges	C9	Design of freight transport interchanges
C3	Sustainable development and transportation planning	C10	Smart technologies for efficient logistics
C4	Operation and management of intermodal transport systems	C11	Decision making methodologies
C5	Optimization of intermodal transport systems	C12a	Data collection methods: Surveys
C6	Intelligent services for passenger transportation	C12b	Data collection methods: Historical and observed data

Preliminary course schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:00	C1 - UTH	C4 - UTH	C8 - UTH	C11 - UTH	C6 - Fraunhofer
10:00-11:00	C2 - Fraunhofer				C7 - Fraunhofer
11:00-12:00	C3 - UTH				C5 -UTH
12:00-13:00					
13:00-14:00					
14:00-15:00	C0	Project time	Project time	Project time	Project time
15:00-16:00	Project time				
16:00-17:00					
17:00-18:00					

Future events and activities

Transportation Research Board 96th Annual Meeting, Washington D.C., USA

Presentation of the paper “Developing an educational program for transportation across regions: The case for intermodal connections for Latvia and the region”, prepared by UTH and TTI.

JANUARY 2017

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE 2017

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

10th International Logistics Doctoral Student Workshop in Magdeburg, Germany, during the 20th IFF Science Days.

ALLIANCE Special Session and Trainers' Seminar in Riga, Latvia, during the 17th International Conference on Reliability and Statistics in Transportation and Communication (RelStat'17).

OCTOBER 2017

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Interview



with Prof. Andrés Monzón
Director of TRANSyT-UPM
Transport Research Centre-
Universidad Politécnica de
Madrid
Madrid, Spain

What are the challenges that are faced for creating an integrated intermodal transport system for passenger or freight transport, depending on your expertise, at EU level?

In the case of **passenger**, the main challenge is to **integrate** all levels of management of the different transport modes. They are normally operated and planned by different operators and transport authorities. Therefore there is a need of a 3 levels of integration:

- **Administrative integration:** one single authority to coordinate the operation of all modes, including public transport, but also taxis, bikes and walking movements.
- **Fare and ticketing integration:** one single transport-card for all services, including other complementary as parking services. For ticketing the best solution is portals to sell tickets for all operators and services. Also this should be the case of the ticket office at stations: one single one selling and providing information about all services whoever is the provider.
- **Information and physical integration:** that means to place stops together, reducing transfer time and penalties. This should include also information protocols. Integrated information of all modes should be integrated in the same platform. Long distance services should provide last mile services in the urban last stage of the trip.

In the case of **freight**, things are much simpler. Usually, decision makers are private companies serving to their own priorities which do not pass through the integration of services with the competitors. In that case, the role of the city authorities could be to provide a common platform to operate and to minimize harmful effects: congestion, accidents, noise, pollution, etc.

In some cases, city authorities could organize concessionaire schemes for last-mile deliveries offered to all long distance haulage companies.

Normally shippers are already multimodal because they look for the best allocation of resources and costs among carriers.

What are the biggest barriers when trying to implement different smart mobility measures in transport terminals? How may these be overcome?

The initial barrier is administrative because competences are quite fragmented. There is a need of transferring competencies to a single body to coordinate all services: public transport, bicycles, taxis, parking, etc.

The same could be said about terminals. They need a terminal coordinator with authority to take both long term strategic and daily decisions to integrate all services. His responsibility should include transport modes, services and facilities, security, space organization and information, and wayfinding protocols.

Situations with a dominant mode should be avoided. For example, rail stations operate as passenger terminals offering access to bus services, parking, bikes, etc. If the rail manager -rail operator or station manager- takes the coordinative responsibility, that does not fulfil his role. It is necessary the coordinator to be somebody independent and above all operators located in the terminal.

At the same time, transport terminals present good opportunities to test MaaS (mobility as a service) schemes.

In the case of freight there is still much to do to have integrated facilities in all cities. There is a lack of integration and cities should develop clear rules for making mandatory use of common spaces and facilities to reduce costs, improve efficiency and reduce externalities.

How is ALLIANCE project expected to contribute to smart interconnecting sustainable transport networks in Latvia and the region, and at what level may this be achieved?

The ALLIANCE project could contribute to integrated solutions by motivating transport and city authorities. To facilitate this target it could present good practices in other cities in a benchmarking exercise.

The second goal could be to perform a transferability exercise. It could consist of selecting good practices in some cities and to identify conditions and similarities as to be transferred to cities in Latvia. Normally problems are very similar and therefore solutions too. City planners and municipal officers could learn more from the experiences deployed in brother cities. This twinning exercise could provide better understanding of solutions and enrich links among cities when they are implementing the same type of solutions.

Interview



with Hon. -Prof. Klaus Richter
Institute of Logistics and Material Handling System
Otto von Guericke University Magdeburg
Magdeburg, Germany

What are the challenges that are faced for creating an integrated intermodal transport system for passenger or freight transport, depending on your expertise, at EU level?

Logistics depends on *full* connectivity in communication by means of cellular, satellite and LPWAN (Low Power Wide Area Network) technologies beyond the entire global supply chain with its multitude of independent actors in the logistical value chain down to manufacturers' assembly lines or private consumers in a rural area. Logistics companies' demands on this kind of connectivity, include low capital expenditures for mobile objects, small quantities of data, low energy consumption and longevity, availability of communication even in buildings, and low communication costs (< €1/year) per piece of cargo or shipping equipment. The large number of wireless nodes required makes the business models highly interesting for the telecommunications industry.

What are the biggest barriers when trying to implement different smart mobility measures in transport terminals? How may these be overcome?

In terms of documenting freight movements and security status, severely fragmented information systems and format changes continue to typify the logistics sector whenever risk is transferred.

Internationality: Cargo items and shipping equipment travel internationally and require integrated connectivity beyond regions and borders. Full connectivity also means connectivity on the means of transportation, whether that be an airplane or a ship. Customs agencies and security agencies have to be enabled to access information easily. Regulations must enable non-discriminatory roaming among different network providers.

Flexibility: Communication networks and services have to be dynamically adaptable (network slicing) in keeping with the brevity of contract logistics and also provide services for internal supply chains down to assembly lines in factory buildings in keeping with demands.

Mobility: It is extremely important for logistics to receive as needed the location of mobile objects with which there is communication.

Confidence building: International logistics in telecommunications also means observing international regulations on public security throughout the entire transport chain.

How is ALLIANCE project expected to contribute to smart interconnecting sustainable transport networks in Latvia and the region, and at what level may this be achieved?

The international make-up and expertise of the organizations working in telecommunications give them the opportunity to facilitate the process of implementing "seamless connectivity for logistics" as partners in the ALLIANCE project in which logisticians, research organizations, universities and government agencies are collaborating on the work.

Interview



with Dr. Roberto Palacin
Senior Research Associate
Responsible for Rail Systems Group at NewRail-
Centre for Railway Research
Newcastle University
Newcastle upon Tyne, United Kingdom

What are the challenges that are faced for creating an integrated intermodal transport system for passenger or freight transport, depending on your expertise, at EU level?

While representative bodies of the different transport modes have been actively working towards an integrated European transport system, challenges still remain. Overall, and looking ahead in time, digitalisation and the harmonisation process that is required to achieve it (e.g. data protocols, revenue distribution) is one of the major challenges being faced. This process has ramifications affecting not only the passenger journey (e.g. travel companion), but also the performance of the individual modes as well as the transport system as a whole (e.g. real-time information flow, capacity issues, energy conservation, preventive maintenance). Initiatives such as the European project SETRIS (Strengthening European Transport Research and Innovation Strategies, grant agreement No 653739) are bringing together for the first time all five European Technology platforms (ETPs) representing road, rail, aviation, maritime and freight seeking the identification of synergies to address the realization of a truly integrated European transport system.

What are the biggest barriers when trying to implement different smart mobility measures in transport terminals? How may these be overcome?

The biggest barriers affecting the implementation of smart mobility in transport nodes can be broadly distinguished into two categories i) physical and ii) operational. This is particularly relevant in the urban environment. Physical barriers affecting smart mobility are concerned with the challenges posed by attempting to integrate in a single terminal several mobility options (e.g. metro, bus, tram, taxi) all of which have different requirements. Operational aspects of different modes can become major barriers for the fully implementation of smart mobility plans as these require a level of integration (e.g. timetable) that currently is not common. This is also related to the digitalisation process and its implementation steps (see question 1).

How is ALLIANCE project expected to contribute to smart interconnecting sustainable transport networks in Latvia and the region, and at what level may this be achieved?

A key contribution of the ALLIANCE project could be the identification of the main focus areas to boost the role of Latvia as an integrator of the long distance passenger and particular freight traffic in the Baltic region. Specifically, promoting the region as a focal point for specialised education could be seen as a first essential step towards addressing the key challenges identified above (Q1/Q2) e.g. automation and digitalisation. This would require the development of novel, specialised multidisciplinary research and educational training programmes recognising the systems dimension of smart interconnecting sustainable transport networks.

Interview



with Dr. Paulus Aditjandra
Research Associate
NewRail-Newcastle Centre
for Railway Research
Newcastle University
Newcastle upon Tyne,
United Kingdom

What are the challenges that are faced for creating an integrated intermodal transport system for passenger or freight transport, depending on your expertise, at EU level?

According to the latest report “Transport Advisory Group”, published in 2014 and endorsed by the European Commission - which has included much of the report’s content in its H2020 proposal call - there are three types of integration that are needed. First is the **sustainability** context, embracing social, environmental and economic issues; secondly we must integrate **physical transportation**: modes, traffic, spatial scales, infrastructure and services; and the third type is **sectoral** integration, across business sectors (e.g. energy ICT, materials, manufacturing, retailing, and provision of public services). Since the 2001 EU Transport White Paper, ‘intermodality’ has become the adopted term to describe a transport system that allows at least two different modes to be used, in an integrated manner, in a ‘door-to-door’ transport chain. Intermodality is commonly used alongside interoperability (i.e. standardised and compatible infrastructure technology, facilities, equipment and vehicle dimensions) and interconnectivity (i.e. horizontal coordination and synchronicity between modes) to characterise the integrated transport system. Among the many key challenges identified, I believe that urban nexus problems (congestion, pollution, accidents and inaccessibility); climate change (e.g. GHG, noise); and demographic trends (aging) are the most significant we face, when aiming to achieve these envisaged transport services.

What are the biggest barriers when trying to implement different smart mobility measures in transport terminals? How may these be overcome?

There are several types of transport terminal hub, from the urban down to neighbourhood level - all of which can be associated with a variety of smart mobility measures. When it comes to electric vehicles (EV), the challenge for both passenger and freight is still about the market uptake. The cost of an EV is still more expensive than its equivalent combustion engine powered car, so the customer’s freedom of choice is very much driven by socio-economic characteristics.

For freight, similar problems exist, with even more issues related to the various logistics types needed to deliver the service (e.g. capacity, speed, reliability). To overcome these barriers, it may be appropriate for central government to intervene to accelerate the market uptake, for instance by providing incentives to first time users of EVs, while providing a supply of EV at the hubs and even located among domestic houses. This practice has been evident in many north-west European countries, including UK and Norway.

Smart mobility with regards to active travel (walking, cycling and public transport use) is limited by the built environment characteristics that promote active travel. Generally, people’s travel behaviour is mainly determined by socio-economic status (e.g. job, household characteristics, car ownership) but we have also begun to understand that the way neighbourhood and cities are being built can and does influence the way its residents travel within it. For example, the building of Los Angeles, USA, expected everyone to drive their car everywhere but, if we consider current-day London, with its walking, cycling and public transport friendly built environment, both residents and visitors appreciate the ‘freedom of accessibility’ they have grown to expect. If this approach is applied in hubs, at all levels, there is no doubt that we can turn smart mobility into sustainable mobility.

For freight at the hub level, the challenge is in so-called “last mile” delivery, where goods must arrive on demand and adapt to the changing face of the physical infrastructure of cities and neighbourhoods as hubs - now less accessible by freight vehicles that were designed without the smart mobility concept in mind. New freight vehicle designs, the use of rail freight to connect with last mile delivery EVs, and the adoption of city logistics measures - along with coherent urban freight strategies at organisational up to international level - will all help shape the future sustainable freight system that is well integrated with hubs. This is pretty much in line with the idea of the TEN-T core network, of the transport system promoted by the EU government.

How is ALLIANCE project expected to contribute to smart interconnecting sustainable transport networks in Latvia and the region, and at what level may this be achieved?

The first aim of the ALLIANCE project, with its partnership of academic institutions, will be to contribute to the development of training for transport professionals, who can then contribute to addressing the challenges identified above. The project’s second approach is through research, to identify the gaps in, and find solutions for, local and regional transport problems. I am not personally directly familiar with Latvia and the specific transport problems of that region, but I believe that expertise lies within the ALLIANCE consortium and that it will be able to address that region, as a priority. One thing for sure is that we must ensure the smooth realisation and implementation of the TEN-T Core Network policy, promoted at EU level, in order that it can become the backbone of sustainable, integrated, EU transport systems.

Consortium

TRANSPORT AND TELECOMMUNICATION INSTITUTE (TTI)	Latvia
UNIVERSITY OF THESSALY, TRAFFIC TRANSPORTATION & LOGISTICS LABORATORY (UTH-TTLog)	Greece
FRAUNHOFER INSTITUTE FOR FACTORY OPERATION AND AUTOMATION (IFF)	Germany

Project Coordinator

Prof. Irina Yatskiv (Jackiva)

Email: Jackiva.I@tsi.lv

Project Coordinator Assistant

Dr. Mihails Savrasovs

Email: savrasovs.m@tsi.lv

Transport and Telecommunication Institute Riga, Latvia



Dissemination managers

Prof. Eftihia Nathanail

Email: enath@uth.gr

Dr. Giannis Adamos

Email: giadamos@civ.uth.gr

Traffic, Transportation & Logistics Laboratory, University of Thessaly, Volos, Greece



Fraunhofer contact person

Kay Matzner

Email: Kay.Matzner@iff.fraunhofer.de

Fraunhofer Institute for Factory Operation and Automation, Magdeburg, Germany

