

D3.3

*Assessment of educational/training  
program implementation with updates  
by IFF*

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alliance



## DOCUMENT CONTROL SHEET

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| <b>Project no.</b>                                    | 692426  | <b>Acronym</b> | ALLIANCE  |
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| <b>Deliverable no.</b>                                | 3.3   | <b>Title</b>   | Assessment of educational/training program implementation with updates by IFF |
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**ALLIANCE Beneficiaries**

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

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**LIST OF ABBREVIATIONS**

| <b>Abbreviation</b> | <b>Description</b>  |
|---------------------|---|
| D                   | Deliverable   |
| EU                  | European Union  |
| Fraunhofer          | Fraunhofer Institute for Factory Operation and Automation |
| GA                  | Grant Agreement   |
| ICT                 | Information and Communications Technology                 |
| M                   | Month   |
| MSc                 | Master of Science   |
| P                   | Paper   |
| PhD                 | Doctor of Philosophy                                      |
| PO                  | Project Officer   |
| STSE                | Short-Term Staff Exchange                                 |
| TTI                 | Transport and Telecommunication Institute                 |
| UTH                 | University of Thessaly                                    |
| WP                  | Work Package  |

## **ABSTRACT**

The present deliverable constitutes the assessment of the training program held in Magdeburg, Germany by the German ALLIANCE partner, Fraunhofer Institute for Factory Operation and Automation (IFF).

The assessment of the training program was conducted through an online questionnaire addressed to its participants. Based on responders' feedback, a statistical analysis has been performed for the quantitative data, while for the qualitative, a summary with the most interesting findings is given.

# 1 Introduction

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## 1.1 Contents of the deliverable

This document is the fifth deliverable of WP3 and its objective is to define and implement a knowledge-sharing strategy. The strategy clearly defines the activities and plans for activities execution, which aims at maximizing 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 D3.3 constitutes the assessment of the training program organized by the German ALLIANCE partner, Fraunhofer Institute for Factory Operation and Automation (IFF), the “10<sup>th</sup> International Doctoral Students Workshop on Logistics” in cooperation with the Otto von Guericke University Magdeburg, the “Workshop on Modeling and Simulation in Manufacturing, Logistics, Transportation and Traffic” and Collaboration Meetings within the scope of the project.

For the assessment of the training program, an online-questionnaire survey was conducted, and the feedback of 11 students that participated in the program, was received. Based on this feedback, a statistical analysis was performed for the quantitative data, while for the qualitative data, an overview of the most interesting findings is also provided.

## 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 Training program setting up and implementation

The training program organized by IFF is part of WP3, which focuses on the organization of activities to share knowledge and increase research excellence of all partners and other related stakeholders. The aim of the training program was to present best practice in the organisation of doctoral student workshops, to transfer scientific knowledge, to give insight in collaborative research work progress, to establish a communication channel between the participating students, to train presentation skills and get guidance for collaborative research work and PhD theses of TTI students. In total 11 students participated in the program, 8 from Latvia and 3 from Germany. Furthermore, 3 professors and 1 associated professor from Latvia participated in the PhD workshop to enhance their knowledge in logistics and PhD supervision.

The training program, entitled “10<sup>th</sup> International Doctoral Students Workshop on Logistics” and “Workshop on Modeling and Simulation in Manufacturing, Logistics, Transportation and Traffic” was held on June 20-21, 2017 in Magdeburg, Germany and lasted two days. Both workshops were realized at the premises of the Institute of Automation and Communication (ifak) in Magdeburg.

Supervisors and staff members that participated in the organisation of the the workshop and provided feedback and guidance to the students were: Prof. Klaus Richter, Dipl.-Vw. Kay Matzner, Dr.-Ing. Fabian Behrendt, and M.A. Evelyn Fischer from Fraunhofer IFF, Dr.-Ing. Tobias Reggelin and Dr.-Ing. Sebastian Trojahn from OVGU, Prof. Eftihia Nathanail, Dr. Lambros Mitropoulos, Dr. Giannis Adamos and Ioannis Karakikes from UTH. The list of presentations being held from students and staff members of ALLIANCE project during both workshops is shown in Table 1, while the analytical programme is presented in Annex A.

**Table 1:** Overview of presentations

| No | Presentation title  | Collaborative Research or PhD thesis, Institutions   | Supervisors, Institutions                                 |
|----|---|--|---|
| 1  | Questions of the Transport Infrastructure Development Financing in Latvia: Problems and Solutions | M.Sc. Oksana Skorobogatova (TTI)   | Prof. Irina Kuzmina-Merlino (TTI)                         |
| 2  | Research of Ground Vehicles Movement Control on the Aerodrome Using Simulation                    | M.Sc. Iyad Alomar (TTI), M.Sc. Wladimir Hofmann (IFF)  | Prof. Jurij Tolujew (TTI), Dr.-Ing. Tobias Reggelin (IFF) |
| 3  | Accessibility on Long-Distance Terminals: Case Study Riga Coach International Terminal            | M.Sc. Evelina Budilovich (TTI), M.Sc. Maria Tsami (UTH), Vissarion Magginas (UTH)              | Dr. Giannis Adamos (UTH), Prof. Irina Yatskiv (TTI)       |
| 4  | Establishing Initial Operating Range for Cooperative UAV Collision Avoidance System               | M.Sc. Dmitrijs Lancovs (TTI)   | Prof. Irina Yatskiv (TTI)                                 |
| 5  | Environmental Impact Assessment Based on Microscopic Traffic Flow Simulation                      | Dr.sc.ing. Mihails Savrasovs (TTI), Dr. sc.ing. Irina Pticina (TTI), Prof. Irina Yatskiv (TTI) |   |

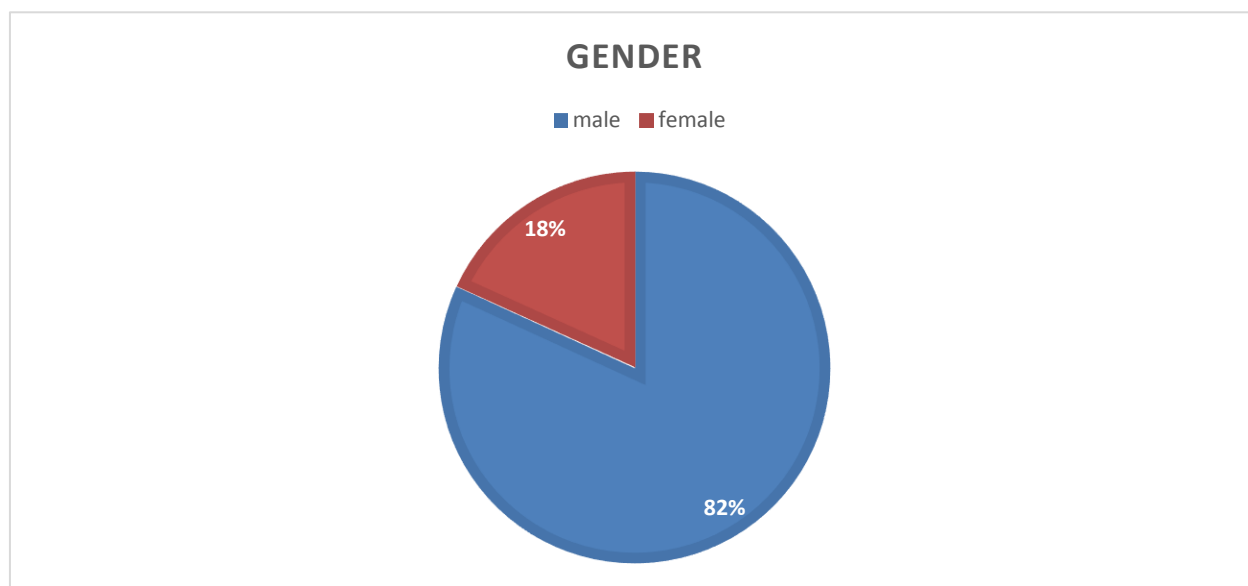
### 3 Training program assessment

#### 3.1 Survey design and participants

For the assessment of the training program, an online-questionnaire survey was conducted, addressing the first day of the program (June 20, 2017). The questionnaire (Annex B) allowed information collection about the profile characteristics of the students (e.g. gender, educational level, home institution), the recording of the students' level of agreement under several statements, and included also other questions regarding their motivation to join the specific training program, their expertise, etc. The core part of the questionnaire was answered by completing free-text fields, while for questions addressing the level of agreement, a five level Likert scale was used, ranging from "strongly agree" to "strongly disagree".

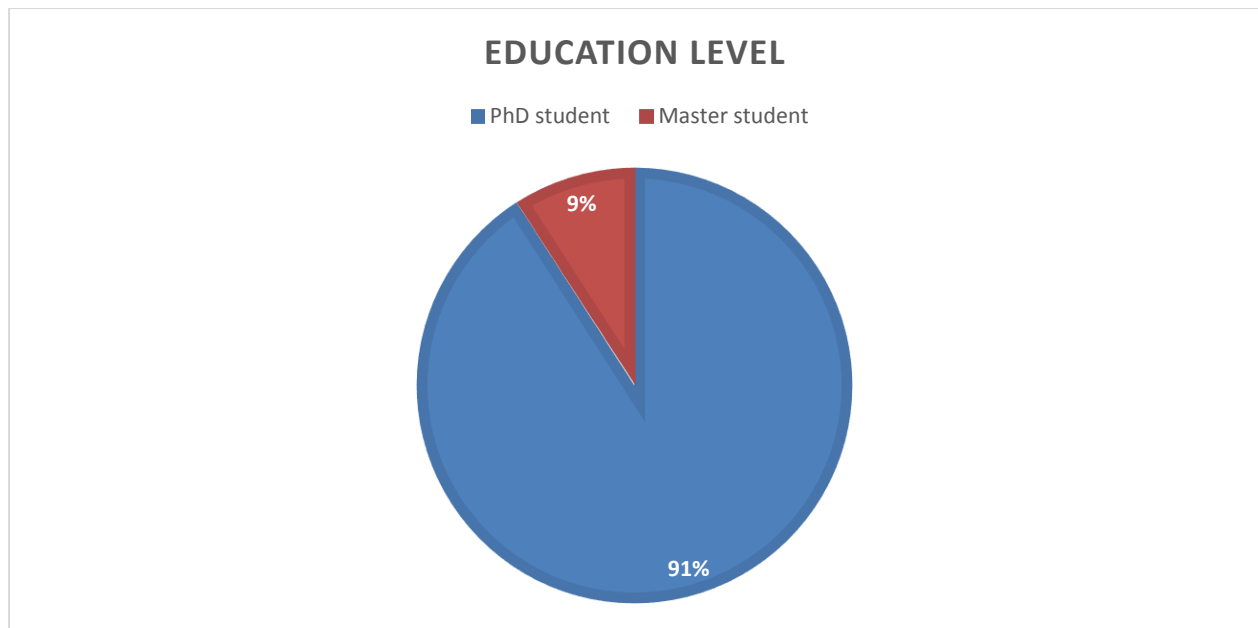
Achieving a response rate of 100%, all of the students replied to the survey from 21/06/2017 to 22/06/2017. Based on the feedback received from these students, a statistical analysis was performed for the quantitative data (section 3.2), while for the qualitative data, the most interesting findings are discussed in Chapter 4.

Regarding the participants' gender, 82% are male and the rest 18% are female, showing an unbalanced share (Figure 1).



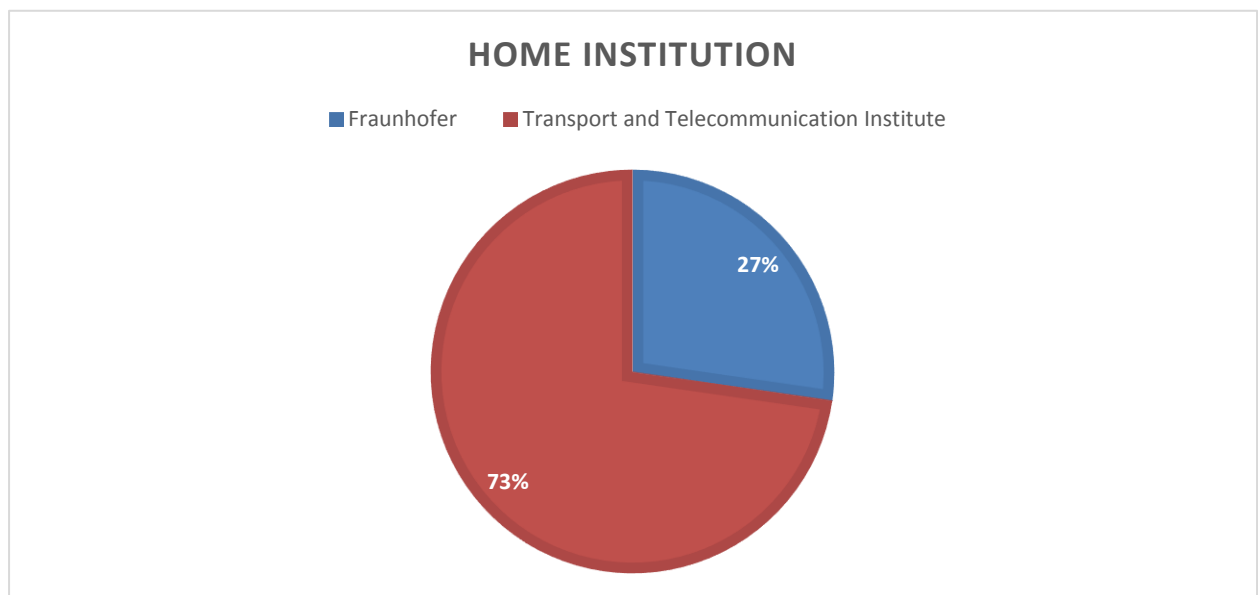
**Figure 1:** Gender distribution

Focusing on the educational level of the participants, 9% of them are master students and 91% are PhD students (Figure 2).



**Figure 2:** Respondents' education level

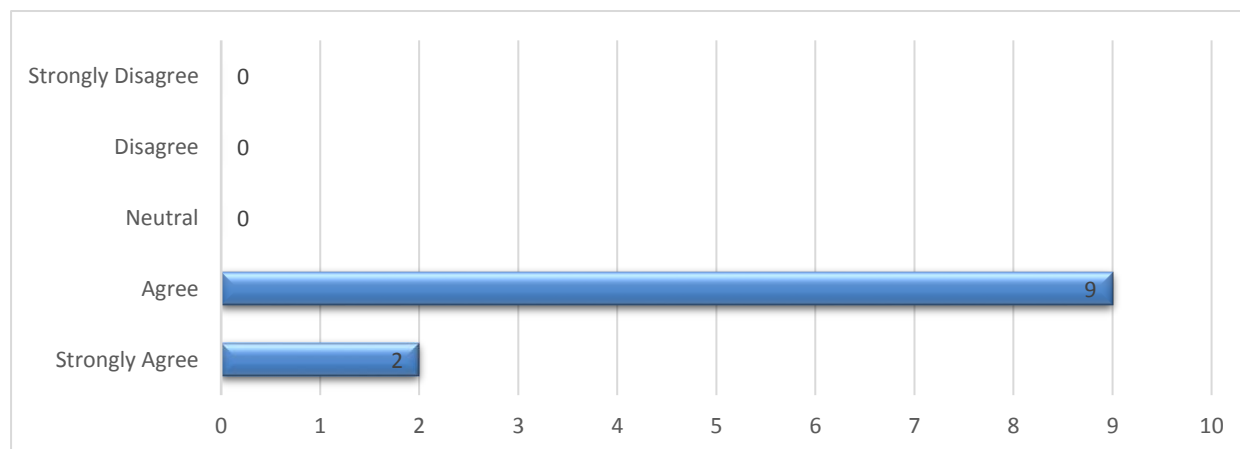
Lastly, the home institution for 27% of the respondents is the Fraunhofer IFF and for the remaining 73%, the home institution is the Transport and Telecommunication Institute (Figure 3).



**Figure 3:** Respondents' home institution

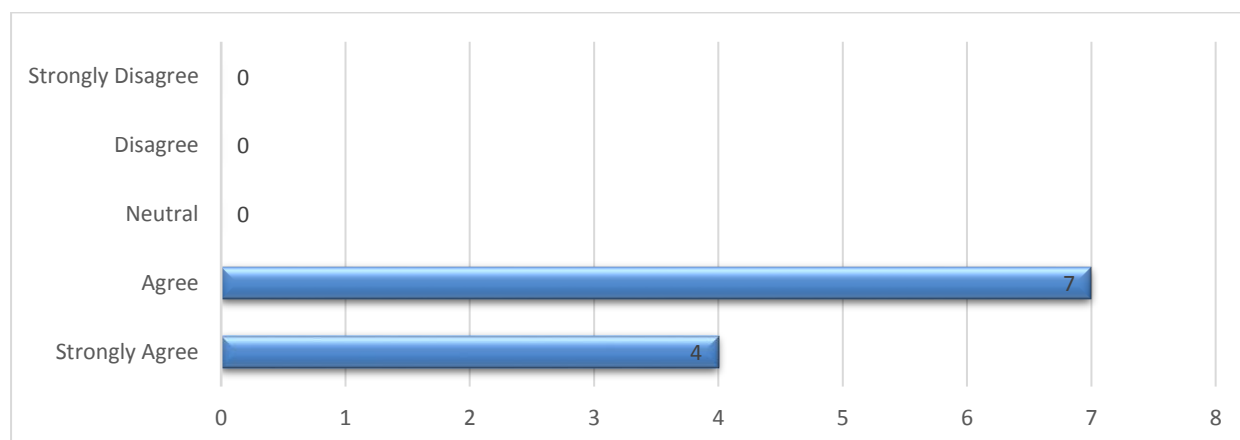
## 3.2 Results

In this section, the results of the assessment for specific variables addressing the level of agreement of participants on several statements, are presented. The first statement regarded the objectives of the training program, and it was observed that 81.8% of the participants agree that the objectives of the training program were clearly defined and 18.2% strongly agree with this statement. (Figure 4).



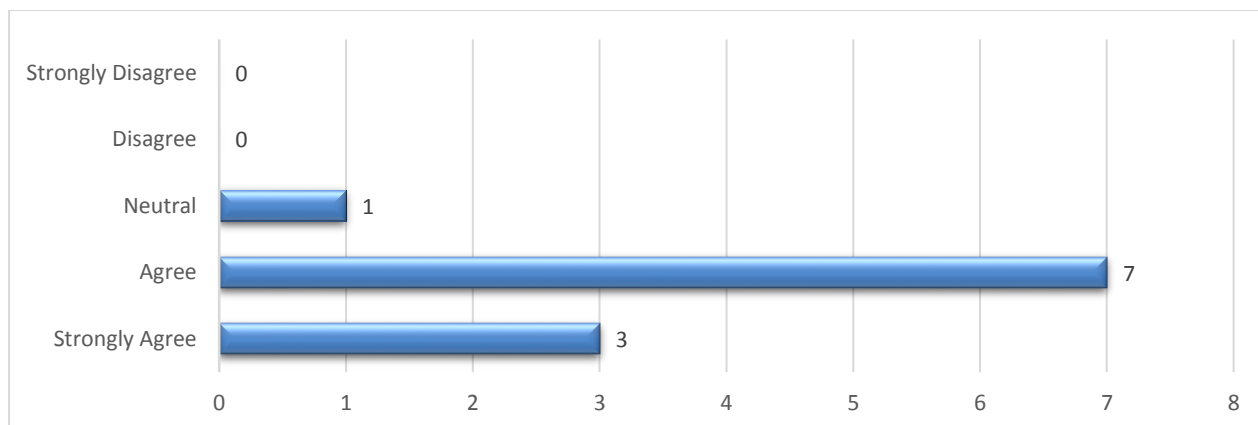
**Figure 4:** Level of agreement to the statement “Objectives of the training program were clearly defined”

In addition, 36.4% of the respondents strongly agree that participation and interaction were encouraged during the program and 63.6% of them agree with the specific statement. (Figure 5).



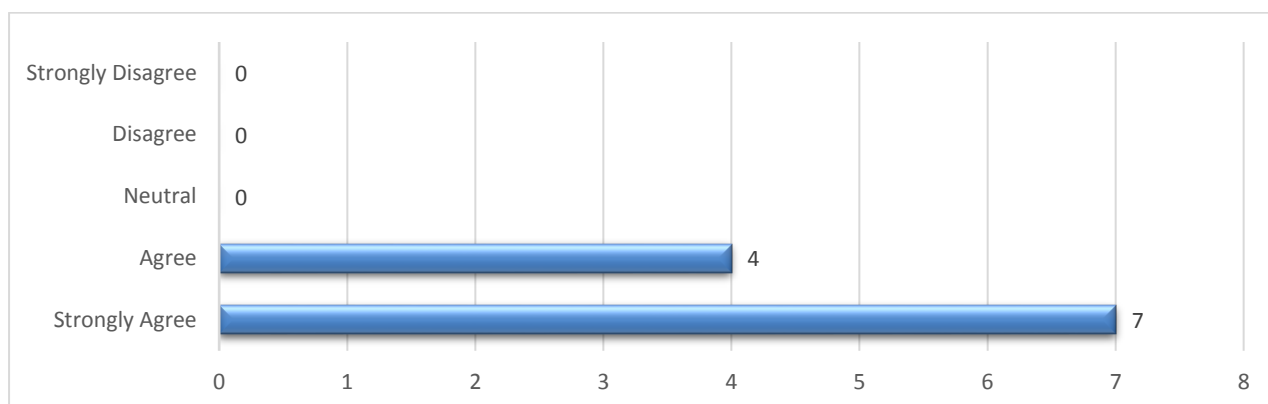
**Figure 5:** Level of agreement to the statement “Participation and interaction were encouraged”

The majority of the respondents – 90.9% – claimed that they agree or strongly agree with the statement that the topics covered in the training program are relevant to them, while the remaining 9.1% – believes that the topics covered, were neither relevant, nor irrelevant to them (Figure 6).



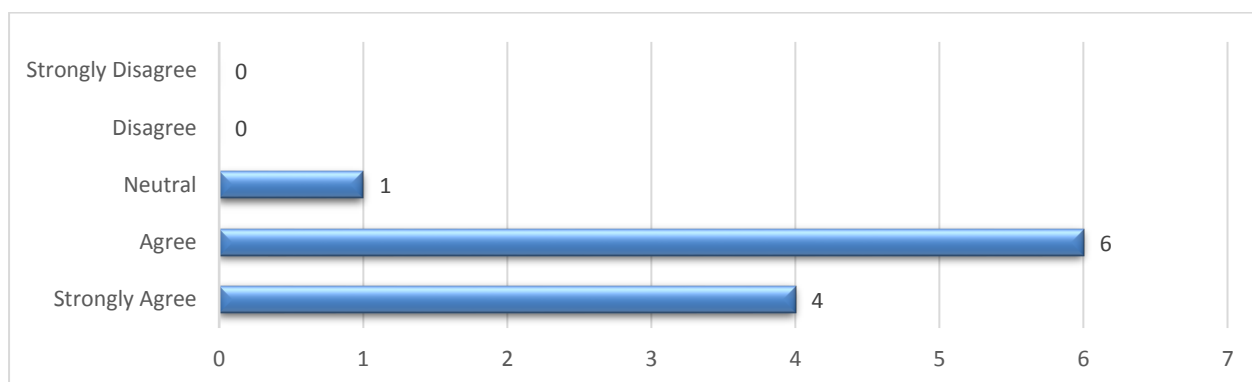
**Figure 6:** Level of agreement to the statement “The topics covered were relevant to me”

The high majority of the participants – 63.6% – strongly agrees that the content of the training program was easy to follow and 36.4% of the respondents agree with this statement (Figure 7).



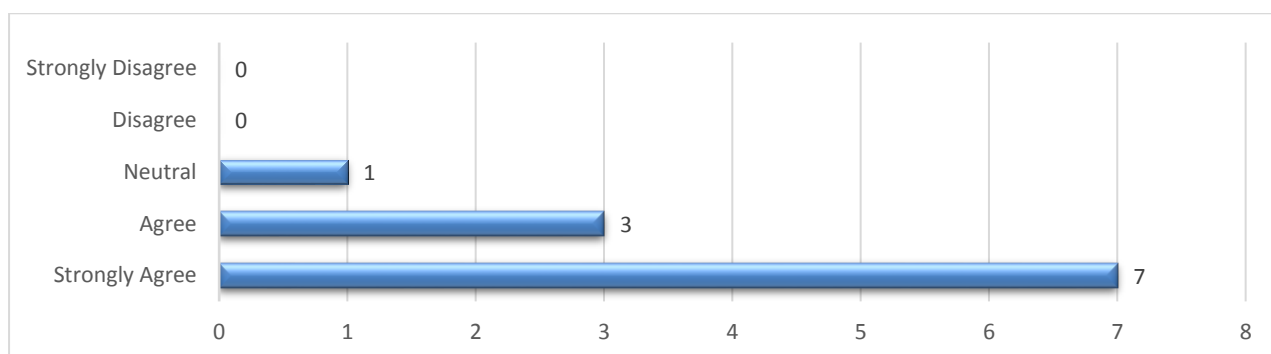
**Figure 7:** Level of agreement to the statement “The topics covered were relevant to me”

The majority of the respondents – 90.9% – claimed that they strongly agree or agree with the statement, that the distributed training material was helpful to them (Figure 8).



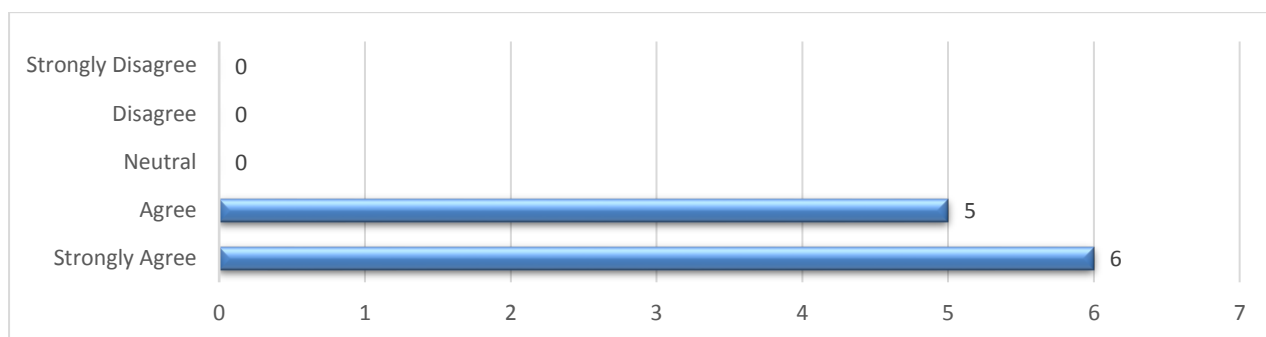
**Figure 8:** Level of agreement to the statement “The materials distributed were helpful”

Most of the respondents claimed that the training experience will be useful in their future work, while only 9.1% of the respondents are neutral towards this statement (Figure 9).



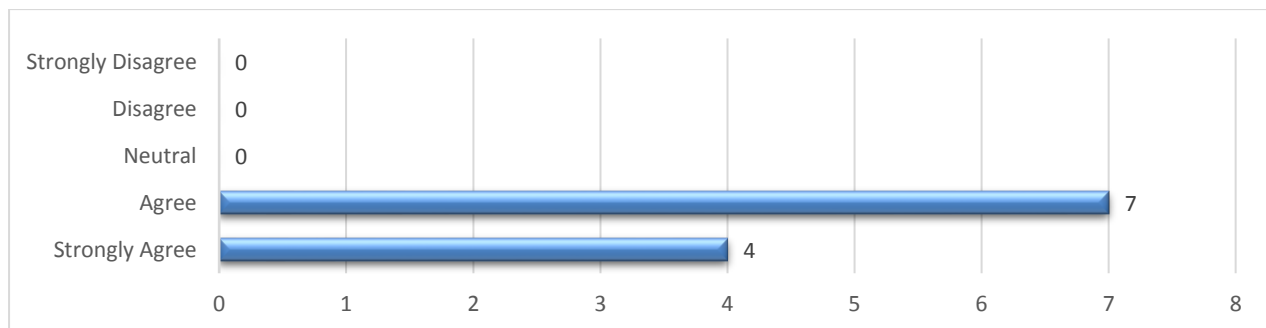
**Figure 9:** Level of agreement to the statement “The training experience will be useful in my work”

All of the respondents strongly agree or agree to the statement that the trainer was well prepared during the workshop (Figure 10).



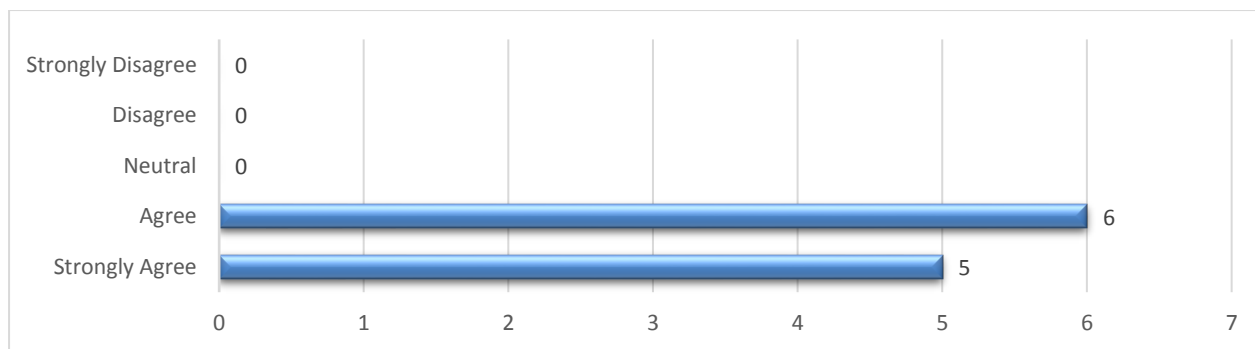
**Figure 10:** Level of agreement to the statement “The trainer was well prepared”

Based on the opinion of the respondents the training objectives related to scientific exchange, presentation and publication practice, best practice in workshop organisation, etc. were totally met. All respondents strongly agree or agree to this statement (Figure 11).



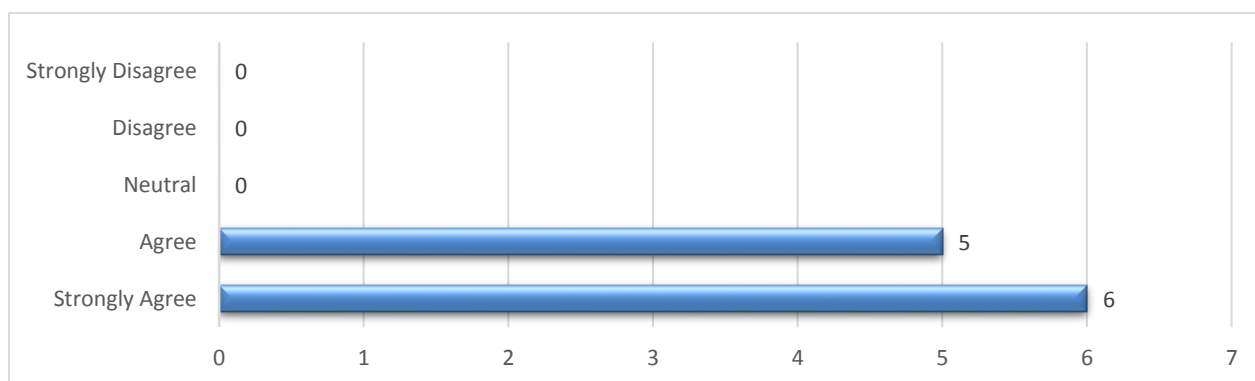
**Figure 11:** Level of agreement to the statement “The training objectives were met”

In overall all respondents strongly agree or agree that the time allotted for the training was sufficient (Figure 12).



**Figure 12:** Level of agreement to the statement “The time allotted for training was sufficient”

Also, all student participants strongly agree or agree that the meeting room and facilities were adequate and comfortable (Figure 13).



**Figure 13:** Level of agreement to the statement “The meeting room and facilities were adequate and comfortable”

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## 4 Synopsis

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A survey addressing the implementation of the training program in Magdeburg, was conducted from June 21, 2017 until June 22, 2017. The sample was composed of eleven students: three Fraunhofer IFF and 8 ITT students. The majority of the respondents was satisfied with the progress of the training program, and claimed their high level of agreement to several variables measuring the program's objectives, topics and content, the trainers' knowledge and preparation, and the organizing facilities.

In addition, students mentioned that their primary motivation to participate in this training program was to collaborate with other PhD students or to find new collaboration possibilities, to present and discuss their scientific work and get advice from international experts. Furthermore, they expected to deepen their knowledge in logistics modeling and simulation as well as familiarize themselves with new concepts used in other countries regarding the logistics area. What they liked mostly about the training program, was the: 1) Opportunity to discuss their presentation and scientific results in discussion groups with experts from different areas of logistics, 2) Access to numerous applications of modeling and simulation, 3) Chance to meet people from other countries, and 4) Opportunity to get in touch with different approaches of logistics that have the potential to be transferable to their own scientific work.

Also, students provided concrete recommendations on how the specific training program can be improved. Among these recommendations, the following could be mentioned: expansion of the discussion session following presentations, leading the workshop under a specific theme for pointing out the trend direction in logistics and lastly improvement of the technical equipment of the speakers.

Concluding, the high majority of students highlighted the benefits of participating in such an interesting, well-organized and comprehensive training program in Magdeburg.



## 5 Annexes

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**Annex A:** Training program's programme

**Annex B:** Questionnaire template

## **Annex A:**

| <b>10<sup>th</sup> International Doctoral Student Workshop on Logistics</b>   |   |
|---|---|
| <p align="center"><b>Enhancing excellence and innovation capacity in sustainable transport interchanges</b></p> <p align="center"><b>ALLIANCE</b></p> <p align="center">(Grant agreement no.: 692426)</p> <p align="center">20 June 2017</p> <p align="center">IFAK, Denkfabrik, Werner-Heisenberg-Straße 1, 39106 Magdeburg<br/>(Large Conference Room, 6<sup>th</sup> floor)</p> <p align="center">Restaurant Daniel's, Werner-Heisenberg-Straße 1, 39106 Magdeburg</p> |   |
| <b>Tuesday, 20 June 2017</b>  |   |
| 08:30 – 09:00   | Welcome coffee and registration   |
| 09:00 – 09:15   | Photo and Welcoming Remarks<br><i>Univ.-Prof. Dr.-Ing. habil. Prof. E. h. Dr. h. c. mult. Michael Schenk<br/>(Managing Director of ILM at OvGU, Director of Fraunhofer IFF)</i>                       |
| <b>Section 1</b>  |   |
| 09:15 – 09:30   | <b>Radical Process Improvements in Material Provision with Industry 4.0 Technologies</b><br><i>M.Eng. Stefan Blöchl, University of Applied Sciences Landshut, Germany</i>                             |
| 09:30 – 10:45   | <b>Supply Chain Optimization for Networking Production Companies</b><br><i>M.Sc. Gábor Nagy, University of Miskolc, Hungary</i>   |
| 09:45 – 10:00   | Discussion and Wrap-Up  |
| <b>Section 2</b>  |   |
| 10:15 – 10:30   | <b>The Choice of Goods Transportation Mode Based on Fuzzy Logic</b><br><i>Ass. Prof. Ph.D. Bilokin Yuliia<br/>National Aerospace University "Kharkiv Aviation Institute", Ukraine</i>                 |
| 10:30 – 10:45   | <b>Questions of the Transport Infrastructure Development Financing in Latvia: Problems and Solutions</b><br><i>M.Sc. Oksana Skorobogatova, Transport and Telecommunication Institute Riga, Latvia</i> |
| 10:45 – 11:00   | <b>Determining Optimal Container Heights for Cargobike Crossdocking Schemes in Urban Area</b><br><i>M.Sc. Tom Assmann, Otto von Guericke University Magdeburg, Germany</i>                            |
| 11:00 – 11:15   | Discussion and Wrap-Up  |
| 11:15 – 11:30   | Coffee break  |
| <b>Section 3</b>  |   |
| 11:30 – 11:45   | <b>Optimization of Inverse Supply with Black Hole Algorithm</b><br><i>M.Sc. Péter Veres, University of Miskolc, Hungary</i>   |
| 11:45 – 12:00   | <b>A Proposal of NoSQL Enabled Logistics Information System Framework</b><br><i>M.Sc. Fares Zaidi, Université Le Havre Normandie, France</i>  |
| 12:00 – 12:15   | <b>Development of Supplier Selection System for Manufacturing Companies</b>   |

|                  |   |
|------------------|---|
|                  | <i>M.Sc. Gréta Okvat, University of Miskolc, Hungary</i>  |
| 12:15 – 12:30    | Discussion and Wrap-Up  |
| 12:30 – 13:30    | Lunch at Daniel's Restaurant  |
| <b>Section 4</b> |   |
| 13:30 – 13:45    | <b>Modeling of Complex Virtual Validation Processes with Matrix-based Methods</b><br><i>M.Sc. Max Stanglmeier, BMW Group Munich, Germany</i>  |
| 13:45 – 14:00    | <b>Design and Evaluation of Sugarcane Biomass Supply Chains for Energy Cogeneration: Towards a Sustainable Supply Chain Analytics Approach</b><br><i>Dipl.-Ing. Frank Cecilio Piedra Jimenez, Universidad Central "Marta Abreu" de Las Villas, Cuba</i> |
| 14:00 – 14:15    | <b>Development of an Early Warning System in Production and Logistics through the Combination of Artificial Intelligence and Material Flow Simulation</b><br><i>M.Sc. David Weigert, Otto von Guericke University Magdeburg, Germany</i>                |
| 14:15 – 14:30    | Discussion and Wrap-Up  |
| <b>Section 5</b> |   |
| 14:30 – 14:45    | <b>Research of Ground Vehicles Movement Control on the Aerodrome Using Simulation</b><br><i>M.Sc. Iyad Alomar, Transport and Telecommunication Institute Riga, Latvia</i>   |
| 14:45 – 15:00    | <b>The Performativity of Commons in Meta-Organization: The Case of Gateway Corridors</b><br><i>M.Eng. Antoine Kauffmann, Université Le Havre Normandie, France</i>  |
| 15:00 – 15:15    | Discussion and Wrap-Up  |
| 15:15 – 15:30    | Coffee break  |
| <b>Section 6</b> |   |
| 15:30 – 15:45    | <b>Modelling of Urban Transport Processes in the Conduct Repair Work</b><br><i>Ass. Prof. Ph.D. Tetyana Solianyk, National Aerospace University "Kharkiv Aviation Institute", Ukraine</i>   |
| 15:45 – 16:00    | <b>Accessibility on Long-Distance Terminals: Case Study Riga Coach International Terminal</b><br><i>M.Sc. Evelina Budilovica, Transport and Telecommunication Institute Riga, Latvia</i><br><i>M.Sc. Maria Tsami, University of Thessaly, Greece</i>    |
| 16:00 – 16:15    | <b>Establishing Initial Operating Range for Cooperative UAV Collision Avoidance System</b><br><i>M.Sc. Dmitrijs Lancovs, Transport and Telecommunication Institute Riga, Latvia</i>   |
| 16:15 – 16:30    | Discussion and Wrap-Up  |
| 16:30 – 17:00    | Concluding Remarks  |
| 17:00            | Get together at Fraunhofer IFF  |

| <b>Workshop on Modeling and Simulation in Manufacturing,<br/>Logistics, Transportation and Traffic</b>   |  |
|--|--|
| <p style="text-align: center;"> <b>Enhancing excellence and innovation capacity in<br/>sustainable transport interchanges</b><br/> <b>ALLIANCE</b><br/>         (Grant agreement no.: 692426)       </p> <p style="text-align: center;">         21 June 2017<br/>         IFAK, Denkfabrik, Werner-Heisenberg-Straße 1, 39106 Magdeburg<br/>         (Large Conference Room, 6<sup>th</sup> floor)<br/>         Restaurant Daniel's, Werner-Heisenberg-Straße 1, 39106 Magdeburg       </p> |  |
| <b>Wednesday, 21 June 2017</b>   |  |
| 09:00 – 09:30  | Welcome coffee and registration  |
| 09:30 – 09:40  | Welcoming Remarks<br><i>Dr.-Ing. Tobias Reggelin, Otto von Guericke University Magdeburg</i><br><i>Dipl.-Phys. Bastian Sander, Fraunhofer IFF</i>  |
| <b>Section 1: Simulation in Traffic and Transportation</b>   |  |
| Chair: M.Sc. Tom Assmann   |  |
| 09:40 – 10:10  | <b>Environmental Impact Assessment Based on Microscopic Traffic Flow Simulation</b><br><i>Dr.sc.ing. Mihails Savrasovs, Dr.sc.ing. Irina Pticina, Prof. Irina Yatskiv,</i><br><i>Transport and Telecommunication Institute Riga, Latvia</i>  |
| 10:10 – 10:40  | <b>Simulation-Based Assessment Tool for Cargo Bikes in Multimodal Transportation Chains</b><br><i>B.Sc. Wladimir Hofmann, Otto von Guericke University Magdeburg</i><br><i>M.Sc. Tom Assmann, Otto von Guericke University Magdeburg</i><br><i>Parisa Dolati Neghabadi and Van-Dat Cung, Université Grenoble Alpes</i> |
| 10:40 – 11:00  | Coffee break   |
| <b>Section 2: Simulation in Traffic</b>  |  |
| Chair: Dipl.-Phys. Bastian Sander  |  |
| 11:00 – 11:30  | <b>VSIMRTI – Virtual Testing of Connected and Automated Driving</b><br><i>Robert Protzmann, Fraunhofer Institute for Open Communication Systems FOKUS, Berlin</i>  |
| 11:30 – 12:00  | <b>Optimized Routing with NUNAV</b><br><i>Peter Edward Finch, graphmasters GmbH, Hannover</i>  |
| 12:00 – 12:30  | <b>Energy Consumption Simulation and Energy-Optimal Routing for Electric Vehicles</b><br><i>Riccardo Bartolozzi, Eva-Maria Stelter</i><br><i>Fraunhofer Institute for Structural Durability and System Reliability LBF, Darmstadt</i>  |
| 12:30 – 13:30  | Lunch at Fraunhofer IFF, VDTc  |

| <b>Section 3: Mesoscopic Simulation in Manufacturing and Logistics</b>   |  |
|--|--|
| Chair: Dr.-Ing. Tobias Reggelin  |  |
| 13:30 – 13:45  | <b>Introduction to Mesoscopic Simulation Modeling in Manufacturing and Logistics</b><br><i>Dr.-Ing. Tobias Reggelin, Otto von Guericke University Magdeburg</i>  |
| 13:45 – 14:15  | <b>Mesoscopic Discrete Rate Simulation Models for Production Planning: Requirements of Production Planners and First Applications</b><br><i>Christian Schauf, Volkswagen AG, Wolfsburg</i>   |
| 14:15 – 14:45  | <b>Mesoscopic Simulation Models for Logistics Process Planning in Receiving</b><br><i>Toralf Wunder, BMW Group Munich</i><br><i>B.Sc. Sebastian Lang, Otto von Guericke University, Magdeburg</i>  |
| 14:45 – 15:15  | <b>Mesoscopic Discrete Rate and Microscopic Discrete Event Simulation Models for Simulation-Based Optimization of a Hybrid Flow Shop Problem in Electronics Manufacturing</b><br><i>B.Sc. Paul Aurich, Otto von Guericke University, Magdeburg</i><br><i>M.Sc. Abdulrahman Nahhas, Otto von Guericke University, Magdeburg</i><br><i>Marco Krist, Tectron GmbH, Worbis</i> |
| 15:15 – 15:45  | Coffee break   |
| <b>Section 4: Machine Learning and Automated Modeling in Manufacturing and Logistics Modeling for Large Capital Projects</b> |  |
| Chair: Dr.-Ing. Tobias Reggelin and Dipl.-Phys. Bastian Sander   |  |
| 15:45 – 16:15  | <b>Machine Learning in Manufacturing and Logistics: Trends and Prospects</b><br><i>Sergii Kolomiichuk, Fraunhofer IFF</i>  |
| 16:15 – 16:45  | <b>Automatic Data Exchange System among Visualization, Simulation and Construction tools</b><br><i>M.Sc. David Weigert und B.Sc. Paul Aurich</i><br><i>Otto von Guericke University Magdeburg</i><br><i>Klaus Hanisch, tarakos GmbH</i>  |
| 16:45 – 17:15  | <b>Building Information Modeling in Revit: Connectivity and Logistics</b><br><i>M.Sc. Peter Veres, University of Miskolc, Hungary</i>  |
| 17:15 – 19:00  | <b>Modeling of Logistics Processes for Major Investment Projects in Russia</b><br><i>Dr. Vasily Demin, Scientific Center of Logistics MADI</i>   |
| 19:00  | <b>IFForum “Business Meets Research” at VDTC</b><br>Participants from TTI side:<br><i>Prof. Dr.sc.ing. Irina Yatskiv</i><br><i>Dr.sc.ing. Mihails Savrasovs</i><br><i>Prof. Dr.sc.ing. Alexander Grakovsky</i><br><i>Prof. Irina Kuzmina-Merlino</i>   |

| <b>Collaboration Meetings and Twinning Meeting</b>  |   |
|---|---|
| <p style="text-align: center;"><b>Enhancing excellence and innovation capacity in sustainable transport interchanges</b><br/> <b>ALLIANCE</b><br/>         (Grant agreement no.: 692426)</p> <p style="text-align: center;">21 June 2017<br/>         Fraunhofer Institute for Factory Operation and Automation IFF<br/>         Sandtorstraße 22, 39106 Magdeburg, Auditorium 4.050<br/>         Virtual Development and Training Centre, Joseph-von-Fraunhofer-Straße 1, Magdeburg, Germany<br/>         Auditorium 4.145</p> |   |
| <b>Wednesday, 21 June 2017</b>  |   |
| <b>Collaboration Meeting (parallel sessions)</b>  |   |
| 09:00 – 10:30   | <b>Collaboration Meeting with Dr.-Ing. Fabian Behrendt (IFF)</b><br>M.Sc. Niels Schmidtke (IFF)<br>M.Sc. Oksana Skorobogatova (TTI)<br>Prof. Irina Kuzmina-Merlino (TTI)<br>(Auditorium 4.145, Joseph-von-Fraunhofer-Straße 1)  |
| 09:00 – 10:30   | <b>Collaboration Meeting with Dr. Giannis Adamos (UTH)</b><br>M.Sc. Evelina Budilovich (TTI)<br>Prof. Irina Yatskiv (TTI)<br>(Auditorium 4.050, Sandtorstraße 22)   |
| <b>Trinning Meeting, Horizon 2020</b>   |   |
| 10:30 – 12:30   | <b>ALLIANCE project meets UMi-TWINN Project</b><br>Prof. Bela Illés, University of Miskolc, Hungary<br>Prof. Irina Yatskiv, Dr.sc.ing. Mihails Savrasovs, TTI<br>Prof. Etihia Nathanail, UTH<br>Dipl.-Vw. Kay Matzner, M.A. Evelyn Fischer, Fraunhofer IFF<br>Ass. Prof. Dipl.-Ing. Dr. techn. Christian Landschützer, TU Graz<br>M.Sc. Fabian Schenk, Fraunhofer IFF<br>(Auditorium 4.050, Sandtorstraße 22) |
| 12:30 – 13:30   | Lunch at the Canteen of Fraunhofer IFF  |

## **Annex B:**



# 10th International Doctoral Student Workshop on Logistics

Educational/Training programs Participants Questionnaire

\*Required

Name, Surname

Your answer

Gender \*

Choose ▼

Level \*

Choose ▼

Home institution \*

Choose ▼

Please describe your motivation to take part in Educational/Training program: \*

Your answer

Expertise: \*

Your answer

Keywords of your research: \*

Your answer

Please indicate your level of agreement with the statements listed below \*

|   | Strongly Agree        | Agree                 | Neutral               | Disagree              | Strongly Disagree     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| The objectives of the training were clearly defined           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Participation and interaction were encouraged                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The topics covered were relevant to me                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The content was organised and easy to follow                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The materials distributed were helpful                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This training experience will be useful in my work            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The trainer was knowledgeable about the training topics       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The trainer was well prepared                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The training objectives were met                              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The time allotted for training was sufficient                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The meeting room and facilities were adequate and comfortable | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

What did you like most about this training? \*

Your answer

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What aspects of the training could be improved? \*

Your answer

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How do you hope to change your research as result of this training? \*

Your answer

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Any comments

Your answer

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