EUROPEAN UNION HORIZON 2020 RESEARCH & INNOVATION PROGRAMME

D4.3

Electronic material upload on eplatform





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LIST OF ABBREVIATIONS

Abbreviation	Description
D	Deliverable
DMS	Document Management System
Fraunhofer IFF	Fraunhofer Institute for Factory Operation and Automation IFF
GNU	General Public License
LMS	Learning Management System
LTI	Learning Tools Interoperability
SCORM	Sharable Content Object Reference Model
STIP	Sustainable Transport Interchanges Program
STSE	Short-Term Staff Exchanges
ТТІ	Transport and Telecommunication Institute
UTH	University of Thessaly
WP	Work Package

ABSTRACT

The present deliverable reports the upload of the electronic materials on ALLIANCE e-platform. The deliverable presents the generic workflow for the development of e-courses for ALLIANCE e-platform and gives an overall overview of the uploaded materials.

1 Introduction

1.1 Contents of the deliverable

The present deliverable reports the upload of the electronic materials on ALLIANCE e-platform. The deliverable presents the generic workflow for the courses' development for ALLIANCE e-platform and gives an overall overview of the uploaded materials. The main objective of the e-platform as stated in D4.1 is to provide public access to the "Sustainable Transport Interchanges Program (STIP)" course material developed in the framework of WP2 and digitized in frame of WP4. The e-platform technically is based on the learning management system (LMS) Moodle. The digitized content of the courses is technically developed with the help of Moodle standard tools. Thus, iSpring software was used for producing sharable content object reference model (SCORM) packages, which allow integrating the presentation and narration in a user-friendly environment.

The outcome of deliverable D4.3 is materials produced by ALLIANCE consortium and uploaded into ALLIANCE e-platform, which is publicly available in the domain: <u>http://e-alliance.tsi.lv/</u>. The platform is accessed by a direct link or as a section in official webpage of the ALLIANCE project (<u>http://alliance-project.eu/</u>). The e-platform will be supported by TTI at least 5 years after the end of the project.

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. The 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 an educational programme for graduate and post-graduate students.
- Development of a 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 an online 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 policymakers, 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 into 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 Generic workflow for materials preparation and e-Courses development

The current section of this deliverable provides an overview of the generic forkflow adopted by ALLIANCE consortium to produce electronic material for the development of the e-Courses.

2.1 Courses for e-platform

The courses for e-platform and the respective ALLIANCE partners' responsibility are presented in Table 1. The Table shows the responsible ALLIANCE partner that prepares the materials for e-Courses, while TTI has a responsibility to e-Courses development based on provided materials. The examples of the developed e-Courses with reference to Table 1 could be found in Annexes A-N.

	Core	Passenger transport	Freight transport	Responsibility
C0. Research methodology and teamwork setup	x			ТТІ
Governance				
C1. The European policy on intermodal transportation	x			UTH
C2. Building business models for intermodal transport interchanges	x			Fraunhofer IFF
C4. Operation and management of intermodal transport systems		x	х	UTH
Smart solutions				
C6. Intelligent services for passenger transportation		x		Fraunhofer IFF
C8. Design of passenger transport interchanges		х		UTH
C9. Design of freight transport interchanges			х	UTH
C10. Smart equipment for freight transshipment			x	Fraunhofer IFF
Decision making				
C11. Decision making methodologies	x			UTH
C12a. Data collection methods: surveys		x	х	UTH

Table 1: ALLIANCE digitalized courses

	Core	Passenger transport	Freight transport	Responsibility
C12b. Data collection methods: historical and observed data		x	х	Fraunhofer IFF

2.2 Generic workflow description

Figure 1 demonstrates the generic workflow adopted by ALLIANCE consortium to provide the ecourses.



Figure 1. Generic workflow description

As it can be seen in Figure 1, the proposed workflow is simple and clear, but at the same time contains specific quality assurance steps. Moreover, additional materials, instructions and templates were provided to the responsible ALLIANCE partners for the material preparation. Below, additional details per workflow step are provided:

• Step 1: Course preparation for digitalisation. The main task of this step is to adopt earlier developed STIP materials in frame of WP2 and approbated in frame of WP3 for digitalisation. Adaptation in this case means the simplification of the course content and the split of the materials into themes. More details and instructions regarding this process are provided in D4.2. The most important outcome of this step is a metafile of the e-course, which defines general information about the course. The template for metafile was developed and provided to all responsible partners. The template can be seen in Annex O.

- Step 2: Course materials preparation. The main tool used for material preparation is iSpring software¹, which allows to create SCORM² packages (Sharable Content Object Reference Model). Additional materials regarding the use of the iSpring software were provided to the partners in form of YouTube official videos. At the same time a pre-structured Excel file was provided to partners to develop the self-assessment tests. The file allows generating the tests in Moodle compatible format, so self-assessment test can be easily imported into the e-platform. Additional instructions and recommendations about the preparation of the materials are highlighted in D4.2.
- Step 3: Course materials delivery. Considering the size of the produced materials, all course materials after they were finished they were submitted to ALLIANCE project DMS as zip file. After the successful submission, TTI staff received a notification. The internal structure of the zip file for submission is presented below in Figure 2. The notification about upload was provided using e-mail.





• Step 4: Course material technical validation. Before implementation of the e-Course based on submitted materials, an internal technical validation was performed according to the presented workflow. The technical validation mainly concerned the evaluation of the quality of the narration, the review of self-assessment and final-assessment tests, and the checking that all provided materials work appropriately. Validation was

¹ <u>https://www.ispringsolutions.com</u>

² <u>https://scorm.com/scorm-explained/</u>

performed by TTI experts. After the successful validation, the materials were ready for the e-Course implementation, and in case of any issues the responsible partner was notified accordingly. Technical validation is an important step in workflow as it allows to avoid the situation that materials with some technical problems are uploaded to e-Course.

- Step 5: e-Course development and testing. After the course material technical validation, the materials were ready to be used for the e-Course development. The development in this step means preparation of all materials for uploading to e-platform of ALLIANCE project:
 - Provided theme presentations are converted to pdf format in form of handouts and are used in course as handouts file (could be printed and used for notes), as in the example demonstrated in Figure 3.



Figure 3. Example of handouts

 Provided theme presentation, iSpring files are used to convert presentations into SCORM packages, which are uploaded directly into e-platform. An example can be seen in Figure 4.



Figure 4. Example of SCORM package generated by iSpring

 Provided self-assessment and final assessment data files were converted into Moodle compatible format in case any data was provided in Excel file. Examples can be seen in Figures 5-7.



Next

Figure 5. Example of self-assessment tests (single answer)





QUIZ NAVIGATION			
		Started on	Friday, 21 December 2018, 11:07 AM
1 2 3 4 5 6 7 8 9 10		State	Finished
Show one page at a time		Completed on	Friday, 21 December 2018, 11:12 AM
Finish review		Time taken	5 mins 6 secs
1 man rovew		Marks	i 18.00/30.00
Start a new preview		Grade	6.00 out of 10.00 (60%)
		Question 1 Ple	ase state whether the following statements are true or false
		Partially correct	- Identify a recearch problem Quantifative recearch attempts to describe the transfer and explain the relationships of the variables
ADMINISTRATION	- <	Mark 1.00 out of	
Quiz administration		4.00	
Edit settings		♥ Flag guestion	p. specify the purpose. Quantitative research is general and broad and seeks to understand the participants experiences.
Group overrides		A Edit question	Pollect data Qualitative research collects information from a small number of individuals or sites
User overrides		Se cui question Ste	
🕸 Edit quiz		5 to	
Q Preview		516	p. Analyze and interpret data. Quantitative research analyzes the text, the description of the memory and states the larger meaning of infutings.
Results			
Locally assigned roles			
Permissions		Question 2 Nat	me the three basic parts of a travel survey. For each part name one of its characteristics:
Check permissions		Partially correct	Kar V
Filters		Mark 3.00 out of	
Logs		6.00	
Backup		V Flag question	I.I. Geinei – aye
Restore		***	
Question bank		to Eait question 2.	
Course administration			2.1. Trip purpose departure time and arrival time
Switch role to		3 [fatar 🗙
Site administration		0.(
Search			3.1. Possession of private car

Figure 7. Example of the report about final assessment

Course general data was used to fill-in the e-Course in e-platform manually.
 The result of file uploading, and manual data insertion is an e-Course, and an example is demonstrated in Figure 3. During the e-Course development the following approved structure of e-Course was used:

- General information about the course
 - o Course title
 - Course id
 - Course aim and scope
 - o Course learning outcomes
 - Recommended information sources

- Collaboration forum
- \circ News forum
- Sections per each theme
 - \circ Title of the theme
 - Learning outcomes of the specific theme
 - Theme SCORM³ package: narrated presentation
 - o Theme handouts
 - o Specific references to additional materials regarding topic
 - o Self-assessment tests
- Final-assessment
- Feedback about course
- Certificate

The above-presented structure is common for all digitalised courses, but deviations are possible depending on the specific course and the responsible tutor.

Design of freight tran	isport i	nterchanges		
Home IN Courses IN Sustainable Transport Int	erchange Program	n (STIP) 🕨 eC9		Furn editing on
ACTIVITIES Conficates 4 Feedback 5 Dorums 2 Quizzes 5 SCORM packages		Design of freight transport interchanges course title: Design of pregist transport interchanges course to: = co	LOGGED IN USER MIHAILS Savrasovs Commy, Lawa Commy, Lawa Commy, Lawa	
(last 5 minutes) None	- 4	Course author:	SEARCH FORUMS	
COURSE COMPLETION STATUS Completion is not enabled for this course		Prof. Efilinia Nathanail Troffic, Transportation and Logistics Laboratory, University of Thessaly, Greece	Advanced search (2)	
ADMINISTRATION ▼ Course administration P [*] Turn editing on © Edit settings	- 1	Course author bio Course aim and scope Course lasming outcomes Course lasming outcomes Recommended Internations sources Recommended Stores form Course form Course form Course form Course Cou	LATEST NEWS Add a new topic (No news has been posted yet)	
Uets Uets Filters Reports Grades Grades			UPCOMING EVENTS There are no upcoming events Go to calendar New event	- 3
쇼 Backup 쇼 Restore 쇼 Import @ Publish ② Reset ▶ Question bank		Theme 1: Introduction This theme will focus on the components of an intermodal freight terminal and will analyse the parameters that have to be astimuted and assesses. A note to provide the input data for designing the terminal.	MESSAGES No messages waiting Messages	
Switch role to Site administration Search		Terms 1 Handouts Self-assessments: Theme 1	RECENT ACTIVITY Activity since Wednesday, 26 December 2 Full report of recent activity No recent activity	018, 5:33 PM
		Theme 2. European legal framework - guidelines ¹ will present the Europan relation framework designing and inconcerting height transport hiershanges and will reveal the relationess of transportation planning with regional and usan development procedures.		
		 Theme 2: European legal framework - guidelines Theme 2 Handous Theme 2 References Self-assessments: Theme 2 		
		Theme 3. Background This theys will seas on the background and on relevant information about the current state of practice of		
		neemoon regul territal isolates afond surpe.		

Figure 8. Example of e-Course with uploaded materials

³ <u>https://scorm.com/scorm-explained/</u>

• Step 6: Cross-validation. Cross validation is the last step of the workflow. The main goal of this step was validate the developed e-Course by the developer of the materials and to ensure technical mistakes during e-Course development. The access to the e-Course is granted to the assigned person from ALLIANCE partners side. In case of some problems the issue is reported to e-Course developer.

3 Description of tools used to develop e-Courses

This section describes in brief the software tools used during the e-Courses development in frame of ALLIANCE project.

3.1 Moodle environment

The developed e-platform is organised as a website, based on the Moodle⁴ environment (https://moodle.org). Moodle is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalised learning environments. With over 10 years of development guided by social constructionist pedagogy, Moodle delivers a powerful set of learner-centric tools and collaborative learning environments that empower both teaching and learning. Moodle is provided freely as Open Source software, under the GNU General Public License. Anyone can adapt, extend or modify Moodle for both commercial and non-commercial projects without any licensing fees and benefit from the costefficiencies, flexibility and other advantages of using Moodle. Moodle provides the most flexible tool-set to support both blended learning and 100% online courses. Moodle has a complete range of built-in features, including external collaborative tools such as forums, wikis, chats and blogs. Because it is open-source, Moodle can be customised in any way and tailored to individual needs. Its modular setup and interoperable design allow developers to create plugins and integrate external applications to achieve specific functionalities. Moodle is web-based and can be accessed from anywhere in the world. With a default mobile-compatible interface and cross-browser compatibility, content on the Moodle platform is easily accessible and consistent across different web browsers and devices. Moodle has achieved and is compliant with the following international standards: An Open Source Initiative; IMS LTI™; SCORM-ADL; Open Badges.

3.2 iSpring software

iSpring⁵ is a well-known software in the market of tools, which supports online courses development. iSpring has different suites and therefore different functionality, but the most important functionality of the iSpring is ability to create SCORM packages, based on Power Point presentations. This allows to create from standard Power Point presentation, the online environment, which user-friendly and device-friendly. By user-friendly we do understand here the simple and clear way to follow the presentation, by the device-friendly we do understand ability to show the content on all types of devices starting from PC ending by mobile phones. iSpring can integrate in SCORM package: presentation, narration, video, online quizzes, etc. This makes iSpring useful for development online courses. In the same time iSpring has a number of opportunities related to the security issues, like protection from copying the SCORM packages or unrestricted downloading the materials. The deep integration with mentioned above Moodle

⁴ <u>https://moodle.com/about/</u>

⁵ <u>https://www.ispringsolutions.com</u>

platform throw SCORM packages, allows to use iSpring materials in the same way as Moodle standard features.

4 Results and statistics

This section demonstrates some results and statistics of e-platform development and the electronic material uploading. Figure 9 demonstrates the list of e-Courses implemented during ALLIANCE project, which is in-line with the list of courses in Table 1 of this deliverable. The Annex A-N of current deliverable has examples of each e-Course mentioned in the list below.

	Co	ourse categories:		
	Sustainable Transport Interchange Pro	ogram (STIP)	•	
	Search courses:		Go	
				 Collapse all
- Core courses				
The European policy on intermodal transp	ortation			
Building business models for intermodal tr	ansport interchanges			
Decision making methodologies				
 Passenger transport bloc 	k courses			
Design of passenger transport interchange	s			
Operation and management of intermodal	transport systems: passenger interchang	ges		
Intelligent services for passenger transport	ation			
Data collection methods: Historical and ob	served data (Public transport)			
Data collection methods: Travel Surveys				
Freight transport block control	ourses			
Design of freight transport interchanges				
Operation and management of intermodal	transport systems: freight interchanges			
Smart equipment for freight transshipment				
Data collection methods: Historical and ob	served data (Freight transport)			
Data collection methods: Freight Transport	ation Surveys			
Research methodology and the second secon	and teamwork setup			

Figure 9. List of implemented e-Courses

The Table 2 demonstrates some statistics about the developed e-Courses and the materials used for e-Course development.

Course	Materials file size, Mb	Course narration length, min	Number of themes	Total number of slides	
C0. Research methodology and teamwork setup	279	45	6	50	
	Govern	ance			
C1. The European policy on intermodal transportation	179	26	4	41	
C2. Building business models for intermodal transport interchanges	253	36	4	53	
C4. Operation and management of intermodal transport systems: public transport	190	27	4	38	
C4. Operation and management of intermodal transport systems: freight transport	179	26	4	43	
Subtotal:	801	115	16	175	
Smart solutions					
C6. Intelligent services for passenger transportation	313	45	4	38	
C8. Design of passenger transport interchanges	238	42	4	48	
C9. Design of freight transport interchanges	223	31	5	58	
C10. Smart equipment for freight transshipment	119	43	4	47	
Subtotal:	893	161	17	191	
Decision making					
C11. Decision making methodologies	319	47	6	74	
C12a. Data collection methods: freight transport	151	22	4	32	
C12a. Data collection	154	22	4	32	

Course	Materials file size, Mb	Course narration length, min	Number of themes	Total number of slides
methods: public transport				
C12b. Data collection methods: historical and observed data: freight transport	151	40	3	47
C12b. Data collection methods: historical and observed data: public transport	76	30	2	19
Subtotal:	851	161	19	204
Total:	2824	482	58	620

Table 2 shows statistics about the developed materials for the e-Courses implementation. As it can be seen, the total size of the developed materials is around 2.8 Gigabytes. Significant part of this size is audio narration of the slides. The total amount of narration is around 8 hours. In total e-Courses cover 58 themes and are supported by more than 600 slides. Figure 10 and Figure 11 represent the narration length and number of themes by the field of the course (excluding C0).



36% 31% 33% 33% Overnance Smart solutions Decision making

Figure 10. Distribution of narration length by course field



As it is observed in Figure 10 and Figure 11, the e-Courses of STIP are well balanced across the three thematic areas (Governance, Smart solutions, Decision making) by the total length of the

provided narration and the total number of themes. To note, the same distribution as for number of themes (Figure 11) is also observed for the total number of slides.

Figure 12 shows the volume of provided materials per e-Course, with coloring based on course thematic area. It is indicated that, the volume of materials deviates a lot, while the length of narration does not have such significant deviation as demonstrated in Figure 13.



Figure 12. Volume of provided materials per course, Mb (green-C0; blue – Governance courses; orange – Smart solutions courses; grey – Decision making)



Figure 13. Narration length per course, min (green-C0; blue – Governance courses; orange – Smart solutions courses; grey – Decision making)

To wrap-up, ALLIANCE consortium believes, that the digitalized STIP program (c-Courses) is well balanced by the three thematic areas (Governance, Smart solutions, Decisions making), and at the same time particularities of each course are appropriately considered. The developed e-Courses could be treated as a core of the STIP programme, which could be adopted, extended or modified by any institution, apart from ALLIANCE partners. Moreover, the e-Courses are dynamic, meaning, that each e-Course has a feedback form, which can be used to upgrade the e-Courses continuously.

5 Annexes

Annex A: Screenshot of the course "The European policy on intermodal transportation"

Annex B: Screenshot of the course "Building business models for intermodal transport interchanges"

Annex C: Screenshot of the course "Operation and management of intermodal transport systems: freight interchanges"

Annex D: Screenshot of the course "Operation and management of intermodal transport systems: passenger interchanges"

Annex E: Screenshot of the course "Intelligent services for passenger transportation"

Annex F: Screenshot of the course "Design of passenger transport interchanges"

Annex G: Screenshot of the course "Design of freight transport interchanges"

Annex H: Screenshot of the course "Smart equipment for freight transshipment"

Annex I: Screenshot of the course "Decision making methodologies"

Annex J: Screenshot of the course "Data collection methods: Freight Transportation Surveys"

Annex K: Screenshot of the course "Data collection methods: Travel Surveys"

Annex L: Screenshot of the course "Data collection methods: Historical and observed data (Freight transport)"

Annex M: Screenshot of the course "Data collection methods: Historical and observed data (Public transport)"

Annex N: Screenshot of the course "Research methodology and teamwork setup"

Annex O: Template of e-Course metadata file

5.1 Annex A: Screenshot of the course "The European policy on intermodal transportation"

The European policy on intermodal transportation			
Home ► Courses ► Sustainable Transport In	rchange Program (STIP) ▶ eC1		
ACTIVITIES Certificates Feedback Forums Quizzes Resources SCORM packages	The European policy on intermodal transportation Course title: The European policy on intermodal transportation Course ID: # eCt		
ONLINE USERS (last 5 minutes) None			
COURSE COMPLETION STATUS Completion is not enabled for this course	Course author: Dr. Giannis Adamos Traffic, Transportation and Logistics Laboratory, University of Thessaly, Greece		
ADMINISTRATION Course administration Turn editing on Edit settings Users Tilters Reports Grades Grades Badees	Course author bio Course aim and scope Course learning outcomes Recommended information sources News forum Questions, Comments, Discussion		
Carge	Theme 1: Background Institute introduces some basic principles of the European policy and indicative statistical data. Image: Theme 1: Background Image: Theme 1: Handouts Image: Theme 1. Specific references for the theme Image: Self-assessment: Theme 1		
	Theme 2. Trends in intermodality In theme will help students to understand some basic terminology and it will introduce current and future trends in passenger and freight transportation. Image: Theme 2: Trends in intermodality Image: Theme 2: Trends in intermodality Image: Theme 2: Specific references for the theme Image: Self-assessment: Theme 2 Theme 3. EU legal and institutional framework This theme explains how transport has become one of the main concerns of the European policy.		

5.2 Annex B: Screenshot of the course "Building business models for intermodal transport interchanges"

Building business models for intermodal transport interchanges			
Home 🕨 Courses 🕨 Sustainable Transport Inte	rchange Prograr	m (STIP) ⊳ #eC2	
ACTIVITIES Certificates Feedback Cuizzes Resources SCORM packages		Building business models for intermodal transport interchanges Course title: Building business models for intermodal transport interchanges Course ID: # eC2	
ONLINE U SERS (last 5 minutes) None		Course author:	
COURSE COMPLETION STATUS Completion is not enabled for this course	- 2	Otto von Guericke University Magdeburg (OvGU) Faculty of Mechanical Engineering Institute of Logistics and Material Handling Systems (ILM)	
ADMINISTRATION Course administration Turn editing on Course administration Course Users Titlers Reports Grades Course States Distribution Badoes		 Course author bio Course aim and scope Course learning outcomes Recommended information sources Recommended information sources News forum Questions, Comments, Discussion 	
Backup Backup Restore Import Publish Reset Question bank Switch role to		Theme 1: Business Models Introducing business models. Theme 1: Business Models Theme 1 Handouts Theme 1. Specific references for the theme	
Search		M Self-assessment: Theme 1 Theme 2. Intermodal Transport	
		Acquire basic knowledge of intermodal transport. Theme 2: Intermodal Transport Theme 2 Handouts Theme 2. Specific references for the theme Self-assessment: Theme 2	
		Theme 3. Interchange Zones Acquire basic knowledge of intermodal transport interchange zones.	
		Theme 3: Interchange Zones	

5.3 Annex C: Screenshot of the course "Operation and management of intermodal transport systems: freight interchanges"



5.4 Annex D: Screenshot of the course "Operation and management of intermodal transport systems: passenger interchanges"



5.5 Annex E: Screenshot of the course "Intelligent services for passenger transportation

Intelligent services for passenger transportation			
Home 🕨 Courses 🕨 Sustainable Transport Inte	rchange Program	n (STIP) ⊨ eC8	
ACTIVITIES Certificates Feedback Forums Quizzes Resources SCORM packages		Intelligent services for passenger transportation Course title: Intelligent services for passenger transportation Course ID: # eCS	
ONLINE USERS (last 5 minutes) None	- C	Course author:	
COURSE COMPLETION STATUS Completion is not enabled for this course	- 3	Di -ring, Henrining Strubert Otto von Guericke University Magdeburg (OvGU) Faculty of Mechanical Engineering Institute of Logistics and Material Handling Systems (ILM)	
ADMINISTRATION Course administration Turn editing on Edit settings Users Titlers Reports Grades Crades Cradesock setup	- 4	 Course author bio Course aim and scope Course learning outcomes Recommended information sources News forum Questions, Comments, Discussion 	
 Badges Backup Restore Import Publish Reset Question bank 		Theme 1: Transport Modes Introducing different transport modes. Theme 1: Transport Modes Theme 1 Handouts	
Switch role to Site administration Search		Theme 1. Specific references for the theme Image: Self-assessment: Theme 1	
		Get an overview of information technologies for the passenger transport market. Image: Theme 2: Information Technology Theme 2: Information Technology Theme 2: Handouts Theme 2. Specific references for the theme Self-assessment: Theme 2	
		Theme 3. IT Application Fields	
		Theme 3: IT Application Fields	

5.6 Annex F: Screenshot of the course "Design of passenger transport interchanges

Design of passenger transport interchanges				
Home ► Courses ► Sustainable Transport In	ange Program (STIP) 🕨 eC8			
ACTIVITIES Certificates Feedback Forums Quizzes Resources SCORM packages	Design of passenger transport interchanges Course title: Design of passenger transport interchanges Course ID: # eCB	anges		
ONLINE U SERS (last 5 minutes) None				
COURSE COMPLETION STATUS Completion is not enabled for this course	Course autor. Dr. Giannis Adamos Traffic, Transportation and Logistics Laboratory, University of Thessaly	, Greece		
ADMINISTRATION Course administration Turn editing on Cdit settings Users Tilters Reports Gradebook setup Cradeso	Course author bio Course aim and scope Course learning outcomes Recommended information sources News forum Questions, Comments, Discussion			
Backup Restore Import Publish Reset Question bank	Theme 1: Components of passenger tr This theme introduces the components of passenger transport inter Theme 1: Components of passenger transport interchange	ansport interchanges ^{rchanges.}		
Switch role to Site administration Search	Theme 1 Handouts Theme 1. Specific references for the theme Self-assessment: Theme 1			
	Theme 2. Guidance and recommendation This theme provides to students some guidelines and recommendation Theme 2: Design typologies and requirements Theme 2: Design typologies and requirements Theme 2: Handouts Theme 2. Specific references for the theme Self-assessment: Theme 2	ONS tions of the efficient design of passenger		
	Theme 3. Design typologies and requin This theme introduces a methodology for an interchange typology	rements and the respective design requirements.		

5.7 Annex G: Screenshot of the course "Design of freight transport interchanges"



5.8 Annex H: Screenshot of the course "Smart equipment for freight transshipment"

Smart equipment for freight transshipment			
Home Courses Sustainable Transport Ir	terchange Program	m (STIP) ⊨ eC10	
ACTIVITIES Certificates Feedback Forums Quizzes Resources SCORM packages		Smart equipment for freight transshipment Course title: Smart equipment for freight transshipment Course ID: # eC10	
ONLINE USERS (last 5 minutes) None		Course author:	
COURSE COMPLETION STATUS Completion is not enabled for this course	- 6	DiplWirtInform.Oliver Meier Yves Cohen Otto von Guericke University Magdeburg (OvGU) Faculty of Mechanical Engineering Institute of Locitics and Material Handling Systems (II M)	
ADMINISTRATION Course administration Turn editing on Edit settings Users Tilters Reports Grades Grades Grades Gradesok setup Badges Backun		Course author bio Course aim and scope Course learning outcomes Recommended information sources Recommended information sources Course forum Course forum Course forum Course forum Course forum Course forum	
▲ Restore ▲ Import ♥ Publish ♥ Reset ▶ Question bank		Theme 1: Challenges of transshipment Introducing in the transshipment topic with theoretical basics.	
Switch role to Site administration Search		Theme 1: Challenges of transshipment Theme 1 Handouts Self-assessments: Theme 1	
		Theme 2. Transshipment technologies Transshipment technologies is about the theoretical basics and well-known examples from the industry. Theme 2: Transshipment technologies Theme 2 Handouts Additional information section (optional): Theme 2 Self-assessments: Theme 2	
		Theme 3. Places of transshipment	
		This theme will focus on the places of transshipment with their interacting devices.	

5.9 Annex I: Screenshot of the course "Decision making methodologies"

Decision making r	nethodolo	gies
Home 🕨 Sustainable Transport Intercha	nge Program (STIP) 🕨 🤅	sC11
ACTIVITIES		Your progress ③ Course title: Decision making methodologies Course ID: # eC11
ONLINE USERS (last 5 minutes) Mihails Savrasovs		Course author
COURSE COMPLETION STATUS Statue: Not yet started	- 2	Prof. Eftihia Nathanail Traffic, Transportation and Logistics Laboratory, University of Thessaly, Greece
Required criteria	Statua	Course author bio
Activity completion More details View course report	0 of 1	Course learning outcomes Course learning outcomes Recommended information sources News forum Course forum Course of the course o
ADMINISTRATION Course administration Course administration Course completion Users Unenrol me from eC11 Filters Reports Grades Gradebook setup Badges Backup Restore		Theme 1: Background Inis theme will provide a smooth introduction to the relevant terminology and basic information about the need for evaluating a system and decision making methodologies. Image: Theme 1: Background Image: Theme 1: Background Image: Theme 1 Handouts Image: Theme 1 References Image: Self-assessments 1 Self-assessments 1
Import Publish Reset Question bank Switch role to Site administration Se	earch	Theme 2. Benefit cost and social cost benefit analysis This theme will help students to understand the basic decision making methodologies by exploring different characteristics and features of each one. Image: Theme 2: Benefit cost and social cost benefit analysis Image: Theme 2: Benefit cost and social cost benefit analysis Image: Theme 2 Handouts Image: Theme 2 References Image: Self-assessments 2
		Theme 3. Multi-stakeholder multi-criteria analysis This theme will help the student to understand the problem building given alternatives and different stakeholders.

5.10Annex J: Screenshot of the course "Data collection methods: Freight Transportation Surveys"

Data collection methods: Freight Transportation Surveys				
Home ► Courses ► Sustainable Transport In	terchange Program	n (STIP) ▶ eC12a_2017		
ACTIVITIES	- 4	Data collection methods: Freight Transportation Surveys Course title: Data collection methods: Freight Transportation Surveys Course ID: # eC12a_2017		
ONLINE U SERS (last 5 minutes) None	- 4	Course author		
COURSE COMPLETION STATUS Completion is not enabled for this course	- 4	Prof. Eftihia Nathanail Traffic, Transportation and Logistics Laboratory, University of Thessaly, Greece		
ADMINISTRATION Course administration Turn editing on Edit settings Users Filters Reports Gradebook setup Gradebook setup		 Course author bio Course aim and scope Course learning outcomes Recommended information sources News forum Questions, Comments, Discussion 		
 Badges Backup Restore Import Publish Reset Question bank 		Theme 1: Introduction This theme will provide a smooth introduction and understanding of qualitative research and the differences between qualitative and quantitative research. Theme 1: Introduction		
Switch role to Site administration Search]	Theme 1 Handouts Specific references for the Theme 1 Self-assessments 1		
		Theme 2. Sampling & Statistical analysis This theme will focus on the understanding of the role of sampling in data collection. Theme 2: Sampling & Statistical analysis Theme 2 Handouts Specific references for the Theme 2 Self-assessments 2		
		Theme 3. Data collection methods This theme will provide the students with an understanding of qualitative methods in data collection along with the strengths and weaknesses of each method.		

5.11 Annex K: Screenshot of the course "Data collection methods: Travel Surveys"

Data collection methods: Travel Surveys				
Home ► Courses ► Sustainable Transport In	terchange Program	n (STIP) ▶ eC12a_2018		
ACTIVITIES Certificates Feedback Forums Quizzes Resources SCORM packages		Data collection methods: Travel Surveys course title: Data collection methods: Travel Surveys course ID: # eC12a_2018		
ONLINE U SERS (last 5 minutes) None		Course author:		
COURSE COMPLETION STATUS Completion is not enabled for this course	- <	Prof. Eftihia Nathanail Troffic, Transportation and Logistics Laboratory, University of Thessaly, Greece		
ADMINISTRATION Course administration Curse administration Curses Edit settings Users Filters Reports Grades Grades Grades Grades		 Course author bio Course aim and scope Course learning outcomes Recommended information sources News forum Questions, Comments, Discussion 		
 ▶ Badges ▲ Backup ▲ Restore ▲ Import ④ Publish ❑ Reset ▶ Question bank 		Theme 1: Introduction This theme will provide a smooth introduction and understanding of qualitative research and the differences between qualitative and quantitative research. Theme 1: Introduction		
Switch role to Site administration Search)	Theme 1 Handouts Specific references for the Theme 1 Self-assessments 1		
		Theme 2. Setting up a travel survey This theme will help the students to understand how to set up a travel survey from A to Z and analyze survey's results in order to draw useful conclusions. Theme 2: Setting up a travel survey Theme 2: Setting up a travel survey Theme 2: Handouts Setf-assessments 2		
		Theme 3. Sampling & Statistical analysis		
		This theme will focus on the understanding of the role of sampling in data collection.		

5.12 Annex L: Screenshot of the course "Data collection methods: Historical and observed data (Freight transport)"



5.13 Annex M: Screenshot of the course "Data collection methods: Historical and observed data (Public transport)"



5.14Annex N: Screenshot of the course "Research methodology and teamwork setup"

Research methodology and teamwork setup			
Home ► Courses ► Sustainable Transport Inte	erchange Program	n (STIP) ⊨ c0	
ACTIVITIES	- 3	Research methodology and teamwork setup Course title: Research methodology and teamwork setup Course ID: # eCO	
ONLINE USERS (last 5 minutes) None			
COURSE COMPLETION STATUS Completion is not enabled for this course		Course author: Prof. Irina Yatskiv (Jackiva)	
ADMINISTRATION Course administration Turn editing on Edit settings Users Fitters Reports Gradebook setup Badges Backup Kestore Import Publish		Transport and Telecommunication Institute, Latvia Course author bio Course aim and scope Course learning outcomes Recommended information sources News forum Course forum Theme 1: Research process: definition, phases, methods	
Reset Question bank Switch role to Site administration		This theme will provide a smooth introduction to the research process, clarify definitions and puts attention to phases and methods of the research. Theme 1: Research process: definition, phases, methods	
Search		 Theme 1 Handouts Theme 1 References Self-assessment: Theme 1 	
		Theme 2. Scientific document types This theme will help students to understand the scientific documents types, their purpose and also clarify generic structure for each type of the document types Theme 2: Scientific document types Theme 2: Scientific document types Theme 2: Handouts Theme 2: References Self-assessment: Theme 2	

5.15 Annex O: Template of e-Course metadata file

e-Metadata

Course title:	{text - Building business models for intermodal transport interchanges}
Course id:	{text #eC2}
Course author photo:	{any graphical format}
Course author	{text - DrIng. Henning Strubelt}
academic title, name,	
surname	
Course author	{text- Otto-von-Guericke-University Magdeburg, Germany}
affiliation:	
Course author CV:	{short text up to 200 words - with information to educational background,
	current working place and position, research field, other ALLIANCE course
	responsibilities}
Course thematic area	{text – Governance, Smart Solutions, Decision Making}
Course classification	{text – Core, Passenger, Freight}
Course key words	{text – Logistics, business models, intermodal interchanges, modal split,
	transport modes}
Course aim and scope	{text - see example below}
Course learning	{bulleted text}
outcomes:	
Recommended	{text in Harvard style}
information sources	
Course duration	{Minutes – 45 to 60 min maximum}

e-Metadata theme n and selfassessments n

(copy paste the table below according to the number of themes you have created for your course)

Theme 1 title	{text}
Theme learning	{short text up to 100 words}
outcomes	
Theme presentation	{as ppt or pptx file in directory – belonging to presentation, e.g. title}
Theme iSpring data	{as files in directory belonging to presentation, e.g. title }
Theme assessment	{text - Location planning}
title	
Theme duration	{Minutes}
Additional information	- files (should be
section (optional):	-links
	-youtube video
	-other
-files	{file name}

	{file title (as it will be presented to user}}
-links	{link}
	{link title (as it will be presented to user}}
-youtube	{link}
videos	{link title (as it will be presented to user}}
Specific	{list using Harvard style}
references for	
the theme	

Theme 2 title	{text}
Theme learning	{short text up to 100 words}
outcomes	
Theme presentation	{as ppt or pptx file in directory – belonging to presentation, e.g. title}
Theme iSpring data	{as files in directory}
Theme assessment	{text – Location planning}
title	
Theme duration	{Minutes}
Additional information	- files (should be
section (optional):	-links
	-youtube video
	-other
-files	{file name}
	{file title (as it will be presented to user}}
-links	{link}
	{link title (as it will be presented to user}}
-youtube	{link}
videos	{link title (as it will be presented to user}}
Specific	{list using Harvard style}
references for	
the theme	