





# Work packages 4

# System of UA & GE University SmaLog teachers' skills upgrading







# Summary

- 1. International Network for Distance Learning **completed**
- 2. Distance Learning Courses in Advanced SmaLog in progress
- 3. UA & GE project academic staff formation completed
- 4. Training of 24 UA & GE teachers in EU Universities completed
- 5. Annual Training Seminars on SmaLog issues in progress
- 6. Feedback and Improvement of the Developed System skills upgrading <u>01.06.2020- 29.08.2020</u>







# **1. International Network for Distance Learning**







## Distance Learning

Description of the activity carried out and	Partners' share of responsibilities	
Developing a platform for distance learning A page of a remote course based on the Moodle platform has been created. Course administrators added. The course settings are done.	A course "Smart transport and Logistics for cities" teachers' skills upgrading" has been added to the distance learning site of the responsible university (National Transport University) <u>http://do.ntu.edu.ua</u>	NTU
Course structure development The structure of the Distance Learning course was developed in accordance with the master's program of the SmaLog project.	Added 6 sections to the distance course: Passenger, Freight, Traffic, and Smart, Test and Useful resources. The latter is divided into: Passenger_presentations, Freight_presentations, Traffic_presentations, Smart_presentations, Equipment_presentations, The system of education in European universities and Research at universities.	NTU
Placement of learning materials Learning materials (presentations of European partner universities) have been added to the distance learning site.	23 presentations added	NTU







# Центр заочного та дистанційного навчання НТУ

A Home 🚯 Dashboard	🛗 Events	My Courses	Manage courses	
Courses > Miscellaneo	JUS		"Smart transport and	
Miscellaneous		Course categories:	# Home ▲ Dischoord ☆ Evenis ♣ My Courses ▲ This course	
Miscellaneous			Announcements	Your progress 🕲
🔊 "Smart transport at	nd Logistics fo	Search Courses	Passenger	
Co-Unded by the Essence - Programme of the Europein Union	Iu Logistica io	The course was created as p Logistics for Cities <b>«SmaLog</b> »	ert of the pro	
		Course goal - upgrading tead	chers' skills in 👩 LESSON 1 - Road Safety Assessment	
		Add a new course	Freight      [5550N 3_ Rousing (and scheduling) models	
			Smart	
			LESSON 1_Intensive applications of ICT  TEST	

# http://do.ntu.edu.ua







# 2. Distance Learning Courses in Advanced SmaLog







## **Distance Learning Courses in Advanced**

Description of the activity carried out and specified indicators of achievement	Partners' share of responsibilities	
Filling the course with lessons for teachers The responsible leader (NTU) coordinates the development and determining the themes of the lessons. After that, all participants in the responsible subgroups provide material for the placement of lessons in the distance course Goal – is the development of 3 lessons for each section: Passenger, Freight, Traffic, and Smart. Total 12 lessons	Two lessons for each section: Freight, Traffic, and Smart and one lesson for Passenger, were developed.	Tor Vergata Sapienza HWU Silesian University NUUE LPNU ZTU NTU GTU BSMA







# Need - **12 lessons** (3 lessons in each area)







# Developed

Area	Working group	How many lessons developed		How many lessons still need to be developed
1 Freight	<b>P3 (NUUE)</b> + P4, P8	2 lessons	1 - approved 2 - on approval	1
2 Passenger	<b>P4 (LPNU)</b> + P7; P5	3 lessons	1 - approved 2 - on approval	-
3 Traffic	<b>P6 (NTU)</b> + P5; P8	3 lessons	1 - approved 2, 3 - on approval	-
4 Smart	<b>P3 (NUUE)</b> +P6; P7	2 lessons	1 - approved 2 - on approval	1







Area	Title of the lesson	At what stage	Lesson developer
Freight	Routing (and scheduling) models	Approved	NUUE
	E-commerce	On approval	NUUE
	Freight transportation simulation	Being developed till the end of June 2019	NUUE
Passenger	Human and Environmental Impacts, Safety and Sustainability	Approved	LPNU
	Evaluating Efficiency of Cities Transport Systems	On approval	LPNU
	Modeling and managing city passenger transport systems	On approval	LPNU
Traffic	Road Safety Assessment	Approved	NTU
	Intersection of streets and roads on one level	On approval	STU
	Traffic Flow Simulation	On approval	NTU
Smart	Intensive applications of ICT (Maria Olkhova)	On approval	NUUE
	Demand evaluation in residential zones (Andrii Galkin)	On approval	NUUE
	The geomatics technologies related to positioning and navigation (GPS, MMS) (Oleksii Prasolenko)	Being developed till the end of May 2019	NUUE







# Plans

1. Finalize the development of lessons – till the end of summer.

 To teach the staff, at least, all teachers are involved in the preparation of SmaLog masters – <u>autumn 2019 – spring 2020</u>







# 3. UA & GE project academic staff formation







# UA&GE project academic staff formation

Description of the activity carried out and s of achievement	Partners' share of responsibilities	
UA and GE partners defined the criteria for selecting teachers (target group). Target group includes representatives with	Criteria were defined Call for teachers were launched P3: http://k-tsl.com/smalog-project/	Tor Vergata NUUE LPNU
high level of English language skills and professional background, including the academic performance of the candidate, relevant experience of teaching, willingness and appropriate attitude to teaching students according to rating assessment system at each universities.	P4 <u>http://lp.edu.ua/en/news/2018/selection-</u> <u>participants-internship-international-project-</u> <u>smalog-erasmus-ka2</u> P5 <u>https://ird.ztu.edu.ua/2018/09/call-for-the-training-</u> <u>of-teaching-staff-in-eu-universities-within-smalog-</u> <u>project/</u> P6: <u>http://www.ntu.edu.ua/en/selection-participants-</u> internship/	ZTU NTU GTU BSMA
The target group for probation at EU universities is 24 teachers from all local universities	P7 <u>http://gtu.ge/Stmm/en/News/?ELEMENT_ID=1133</u> <u>2</u> P8 <u>http://bsma.edu.ge/main/page/1412/index.html</u>	







### Selection procedure

#### The Call

	Dear Applicant.	
	we are grateful for your interest to the	
	SmaLog project.	
This	Call for the INTERNSHIP according t	o the
Work package	4.4. "Training UA&GE teachers in EU	universities"
	SmaLog project	
	ting Application for the internship accor EU universities" SmaLog project	rding to the Work package 4.4.
The selection is provided for sel	lecting 4 participants for the internship.	
Internship period - 15 days		
The place of the internship is Eu	aropean universities, namely:	
10 N 1 1	D	NT 1 0 01 1

European University	Dates of travel (from-to)	Number of participants
Sapienza University of Rome	12.11.18 - 23.11.18	2
Hochschule Wismar. University of Applied Sciences Technology, Business and Design	29.10.18 - 09.11.18	2

#### **1-Target Group**

Universities' academic staff from the Georgian and Ukrainian universities/academy of SmaLog project.

#### 2 - Eligibility Criteria

- For participating to the selection the following requirement are asked:
- To be academic staff from the Georgian and Ukrainian universities/academy partners of SmaLog
- To have a work agreement with the institution to which the application is submitted; the work agreement must end not later than two years after the end of SmaLog or a declaration from the institution that it is available to continue collaboration for not later than two years after the end of SmaLog
- To be involved in SmaLog programme as professor or lecture
- To have experience in the topic of modules of SmaLog
- To held a Master degree or equivalent academic title
- To have adequate knowledge of English

Teachers with fewer opportunities, from less advantaged socio-economic backgrounds, who going abroad for the first time and less experience rather than more experienced staff members will have priority

#### Teachers with fewer opportunities are:

- ✓ economically disadvantage groups, which belong to the Low-income families in accordance with Ukrainian legislation;
- ✓ persons with disability I and II groups in accordance with Ukrainian legislation and etc.;
- 1 persons who suffered from the Chernobyl disaster;
- participants in hostilities;
- ✓ citizens belonging to preferential population groups in accordance with Ukrainian legislation.

Complete application: You are requested to submit your application according to the rules of this Guideline. Each applicant, participating in the selection, declares to accept the rules and constraints defined by the Guidelines provided by EACEA. Please be aware that without providing all mandatory documents your application will be considered ineligible.

#### Excerpt from the minute

EXCERPT FROM THE MINUTE Ne Of session of Department in(city)	
PRESENT:	
HEARD: Full Professor, Head of Transport systems and traffic safety Department Polishe	huk
Volodmyr reported the information about Call for the internship according to the W	
package 4.4. "Training UA&GE teachers in EU universities". It will be held according	
the work plan of the project «Master in Smart Transport and Logistics for Citi	
(585832-EPP-1-2017-1-IT-EPPKA2-CBHE-JP).	
REPORTED:	
Professor, Head of Transport Systems and Road Safety Department Volody	nvr
Polishchuk presented the candidates for participation in the internship according to	the
Work package 4.4. "Training UA&GE teachers in EU universities", who applied	for
participation in accordance with the conditions and criteria presented in the requested (	Call
for the intenship according to the Work package 4.4. "Training UA&GE teachers in	EU
universities"	
Name/surname Position European University Dates of travel (from-	to)

In accordance with the terms of the Call for the intenship according to the Work package 4.4. "Training UA&GE teachers in EU universities", a vote was taken on each proposed candidate.

Voting results:

Name/surname	Position	Voting results

#### Selection results

Regulations on the selection of candidates for participation on the internship according to the Work package 4.4. "Training UA&GE teachers in EU universities" within the project «Master in Smart Transport and Logistics for Cities» (585832-EPP-1-2017-1-IT-EPPKA2-CBHE-JP).

The evaluation Application Form from

National Transport University

According to the call for the internship according to the Work package 4.4. "Training UA&GE teachers in EU universities" applications were received. The evaluation Committee designed by the International Office Coordinator, Vice-Rector for Academic Work of National Transport University (the official decree of this designation could be included as annex to this document) is composed by the following people:

- Oleksandr Hryshchuk, International Office Coordinator, Vice-Rector for Academic Work of National Transport University;

- Viktor Danchuk, Dean of the faculty of transport and information technologies;
- Volodymyr Polishchuk, Head of the Department of Transport Systems and Road Safet v.

The president of the Committee is Oleksandr Hryshchuk, the Secretary is Oksana Koliada.

According to the criteria defined in the Call are recalled below

S

#### Selection criteria for the

Selection criteria for ACADEMIC/ADMINISTRATIVE STAFF		
<ol> <li>Curriculum Vitae</li> </ol>		
2. Motivation letter		
<ol> <li>Recommendation letter(s)</li> </ol>		
Total score -		

election	criteria	for the	
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Selection criteria for ACADEMIC/ADMINISTRATIVE STAFF			
<ol> <li>Curriculum Vitae</li> </ol>			
2. Motivation letter			
<ol><li>Recommendation letter(s)</li></ol>			
Total score -			

	Selection criteria for the	
Selection crit	eria for ACADEMIC/ADMINISTRATIVE STAFF	
Curriculum Vitae		1
Motivation letter		1
Recommendation letter(s)		1 1







# **Required documents**

- 1 Passport copy mandatory document.
- 2 Curriculum Vitae mandatory document.
- 3 Recommendation Letter (Expert from the minute of University) mandatory document.
- 4 Motivation Letter mandatory document.
- 5 Proof of staff employment (Decree) mandatory document.







# The main criteria defined for staff selection

#### 1-Target Group

Universities' academic staff from the Georgian and Ukrainian universities/academy of SmaLog project.

#### 2 - Eligibility Criteria

For participating to the selection the following requirement are asked:

•To be academic staff from the Georgian and Ukrainian universities/academy partners of SmaLog

•To have a work agreement with the institution to which the application is submitted; the work agreement must end not later than two years after the end of SmaLog or a declaration from the institution that it is available to continue collaboration for not later than two years after the end of SmaLog

•To be involved in SmaLog programme as professor or lecture

•To have experience in the topic of modules of SmaLog

•To held a Master degree or equivalent academic title

•To have adequate knowledge of English







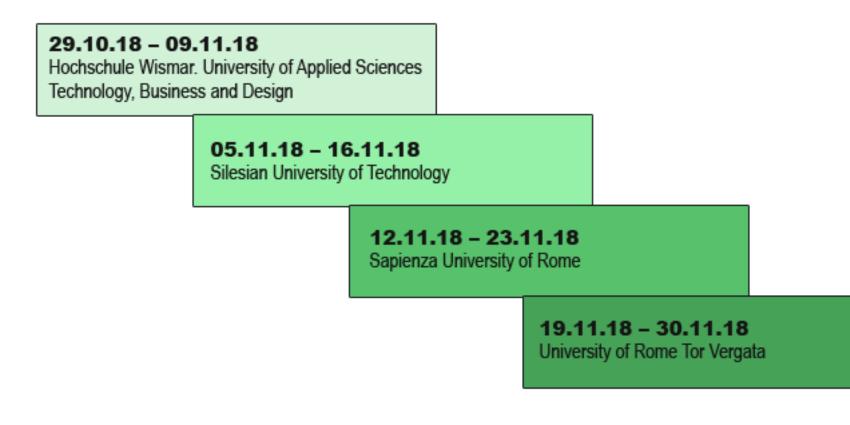
# 4. Training of 24 UA & GE teachers in EU Universities







# Internship period









# Studying period of 24 UA&GE teachers in EU Universities

Description of the acti indicators of achieven	Partners' share of responsibilities	
UA&GE teachers from each PC University were participating in training at the base of appropriate EU Universities.	24 UA&GE teachers and 4 persons from each PC University. After 24 UA&GE teachers have studied in EU Universities the learning materials were placed to the International Network for Distance Learning (27 presentations added):	Tor Vergata Sapienza HWU Silesian University NUUE LPNU
	http://do.ntu.edu.ua/mod/folder/view.php?id=23 http://do.ntu.edu.ua/mod/folder/view.php?id=24	ZTU NTU GTU BSMA







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### http://smalog-2017.uniroma2.it/deliverables/

Co-funded b Erasmus+ Progra of the European U Master	amme KA2 - Cooperation for innovation and the exchanges of good practices		JEPP-1-2017-1-IT-EPPKA2-CBHE-JP r in SMArt transport and LOGistics for cities SMALOG
Home Project information ~	Project management and control 👻 News/Events Results 🗸 Contacts 🚃 🚃	ERASMUS+ PROGRAMMI Project Number: 585832-EPP-1-2017-1-IT Master in SMArt transport and L SMALOG	Co-funded by the Ensmuse Programme of the European Union www.smalog.uniroma2.it Status
Blog Stats	Deliverables Report on preliminary planning activities performed within SmaLog project (WP1) Educational Systems in SmaLog countries and Partner Groups (WP1.1) Material from the 1st Annual Training Seminar on SmaLog issues (WP4) Training of UA&GE teachers in EU Universities (WP4.4)	Grant Agreement Number 2017-2893/001-001 System of UA&GE Un SmaLog teachers' skills u Training of UA&GE teachers in	1       Introduction to Work Package 4       6         2       General information about training at European institutions       8         2.1       Participant institutions       8         2.2       Host selection       9
Lagin	CURRICULA DEVELOPMENT SmaLog at NUUE SmaLog at NTU	Description     Version       Date     Version       Programme     Version       University of Applied Sciences Technology, Busine       Silesian University of Technology – SUT (Poland)	3       Academic staff formation in the local (PC) universities
	L	Feb. 2019         V4.1         Olga Kunytskaya           Feb. 2019         V4.2         Antonio Comi           Feb. 2019         V5.0         Olga Kunytskaya           Feb. 2019         V5.0         Olga Kunytskaya           Feb. 2019         V5.1         Olga Kunytskaya           Mar. 2019         V5.2         Страноца         1         из         34	6       Activities agreed after training       21         ANNEX       22         Annex 1       23         Annex 2       24         Annex 3       26         Annex 4       28

Annex 5. Annex 6.







# 5. Annual Training Seminar on SmaLog issues







# Annual Training Seminars

Description of the activit indicators of achievement	Partners' share of responsibilities	
Every year during Project realization	First Annual Training Seminar on SmaLog issues was held.	Tor Vergata Sapienza
Training for target groups of teachers will be carried out at UA&GE	Participants: 4 participants from each local UA&GE Universities	HWU Silesian University
Universities	Lectures:	NUUE LPNU
	10 lectures from European universities	ZTU NTU
	After the first Annual Training Seminars the web platform is updated	GTU BSMA
	( <u>http://do.ntu.edu.ua/mod/folder/view.php?id=2</u> 5) Meteriole of First Appuel Training Seminar	
	Materials of First Annual Training Seminar on SmaLog issues are added (9 presentations)	







# The First Annual Training Seminar on SmaLog issues was held in Batumi / 12-15 September 2018 /

## Goal:

Main goal was training teachers of local universities on those areas that lack information. This knowledge will be used in the master's program.











### •Participants:

4 participants from each local UA&GE Universities

#### •Lectures:

10 lectures from European universities

# Selection criteria for staff

According to the description and application form:

- •Profile matching with the needs of the SmaLog project,
- •English language skills (minimum recommended level B2);
- •Experience in teaching/researching;
- •Professional background and academic performance;
- Willingness and appropriate attitude to teaching students;motivation.







# Lecture Topics and Lecturers

- <u>Model Applications and Transportation Systems Engineering</u>: Some Areas of Application (e.g. Strategic Planning, Feasibility Studies, Tactical Planning, Operations Management Programs). Transportation Systems: identification of its components. Origin-destination matrices and examples of demand surveys – Prof. Antonio COMI, University of Rome Tor Vergata);
- 2. <u>Elements of transportation system optimization</u> (including basic elements of graph theory) Prof. Norbert GRUENWALD, Hochschule Wismar and Prof. **Manfred AHN**, Hochschule Wismar;
- 3. <u>Shortest path search and routing</u> **Prof. Norbert GRUENWALD,** Hochschule Wismar and Prof. Manfred AHN, Hochschule Wismar;
- 4. <u>Perspectives of goods delivery in East–West connection</u> **Prof. Aleksander SLADKOWSKI**, Silesian University of Technology;
- 5. <u>To the issue of dissemination of knowledge in the field of logistics in modern scientific publications</u> **Prof. Aleksander SLADKOWSKI,** Silesian University of Technology;
- 6. <u>Demand models and elements of discrete choice models.</u> Example of demand modelling system (e.g. purchase demand) **Prof. Antonio COMI**, University of Rome Tor Vergata;
- 7. <u>Urban Goods Flow Modelling</u> **Prof. Agostino NUZZOLO**, **Prof. Antonio COMI**, University of Rome Tor Vergata;
- 8. <u>Transportation supply models</u> (road networks and transit systems line-based) **Prof. Umberto CRISALLI**, University of Rome Tor Vergata;
- Modelling transportation systems: why and how? Elements of modelling transport land use interaction Prof. Agostino NUZZOLO, University of Rome Tor Vergata;
- 10. <u>Elements of models for traffic assignment to transportation networks road networks and transit systems</u> line-based **Prof. Umberto CRISALLI**, University of Rome Tor Vergata.







# The Second Annual Training Seminar on SmaLog issues

Place – Lviv, Ukraine

Time – July, 30





1 1 4 /

# WP 4.5 - Annual Training Seminars on SmaLog (hac) source

<ul> <li>ISSUES (Znd)</li> <li>As agreed, the mobility will be revised in order to provide only one location. Lviv is choosen</li> <li>Number of days could be changed in order to have more participants</li> <li>All partner could be included in the mobility according to project savings from previous activties</li> </ul>					We offer to reduce the number of days - <b>30-31.07 (2 days)</b> Number of participants from local universities - <b>4</b> From Original Application	
Partner	Name of Partner	City of Departure	City of Destination	Expected number of participants	Number of days	Month.Year
P1	UNITOV	Rome	Lviv	2	4	30/07/2019
P2	UNIRM1	Rome	Lviv	2	4	30/07/2019
P3	NUUE	Kharkiv	Lviv	2	4	30/07/2019
P5	ZSTU	Zhytomyr	Lviv	2	4	30/07/2019
P6	NTU	Kyiv	Lviv	2	4	30/07/2019
P7	GTU	Tbilisi	Lviv	2	4	30/07/2019
<b>P8</b>	BSMA	Batumi	Lviv	2	4	30/07/2019
P10	IMPEER	Odessa	Lviv	1	4	30/07/2019
P11	HSW	Wismar	Lviv	2	4	30/07/2019







Prel	liminary	y topics	S

- 1 Elements of Decision Theory
- 2 Estimation of Travel Demand Flows
- 3 Elements of Traffic Flow Theory
- 4 Data-driven methods
- 5 Elements of Traffic Control
- 6 Modelling transit systems (both line-based and run-based) lesson 1
- 7 Modelling transit systems (both line-based and run-based) *lesson 2*
- 8 Transportation Supply Design Models *lesson 1*
- **9** Transportation Supply Design Models *lesson 2*
- 10 Modelling extra urban freight systems
- **11** Methods for the Evaluation and Comparison of Transportation System Projects
- 12 Safety 1
- **13** Safety 2







# Plans

1. Approve lecture topics with European universities (coordinator) – till the middle of July

2. Approve the number of participants from local universities – till the end of May

 Carry out the selection procedure for participants (similar to the selection procedure for participants in Batumi)
 <u>till the middle of July</u>