TOR VERGATA
UNIVERSITY OF ROME

SMA LOG

Co-funded by the Erasmus+ Programme of the European Union

KA2 - Cooperation for innovation and the exchange of good practices

Capacity Building in Higher Education

Joint project

Master in Smart Transport and Logistics for Cities / SmaLog

SMALOG project:

an overview and the main achievements

Final conference, Kharkiv

Antonio Comi, University of Rome Tor Vergata (coordinator)

Consortium

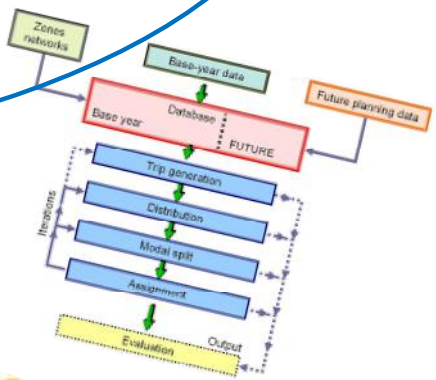
Wismar (Germany)
P11 – Hochschule Wismar
Gliwice (Poland)
P9 – Politechnika
Kharkiv (Ukraine)
P12 – OOO «System Service»
Zhytomyr (Ukraine)
P5 – Zhytomyr State Technological University
Kharkiv (Ukraine)
P3 – OM Beketov National University of Urban Economy
Kyiv (Ukraine)
P6 – National Transport University
Lviv (Ukraine)
P4 – Lviv Polytechnic National University
Rome
P2 – Sapienza University of Rome
Odessa (Ukraine)
P10 – Institute of Market Problems and Economical and Ecological Res
Batumi (Georgia)
P8 – LEPL Teaching University
Rome
P1 – applicant: University of Rome Tor Vergata
Batumi (Georgia)
P13 – Batumi Autotransport Ltd
Tbilisi (Georgia)
P7 – Georgian Technical University
Application Organization
Partner Organization
Programme Organization
Associated Partner Organization

Why SmaLog?

City sustainability issues

Education *backwardness*

Resesarch lacks



SMALOG

Co-funded by the Erasmus+ Programme of the European Union

All started in Rome about 4 years ago…

- Official start: October 2017
- Some concerns
- A lot of *Interest*, *Curiosity* & *Enthusiasm*
- …

Rome Kick-off Meeting
5-7 Dec 2017

The «*logical framework*»

Then…

to strengthen the role of telematics in transport services for improving city sustainability and liveability

- SmaLog Masters
- Train the Trainer
- SmaLog Laboratories
- Newsletters, events, workshops & seminars (dissemination)
- Setting up Smart Transport & Logistics networks (exploitation)

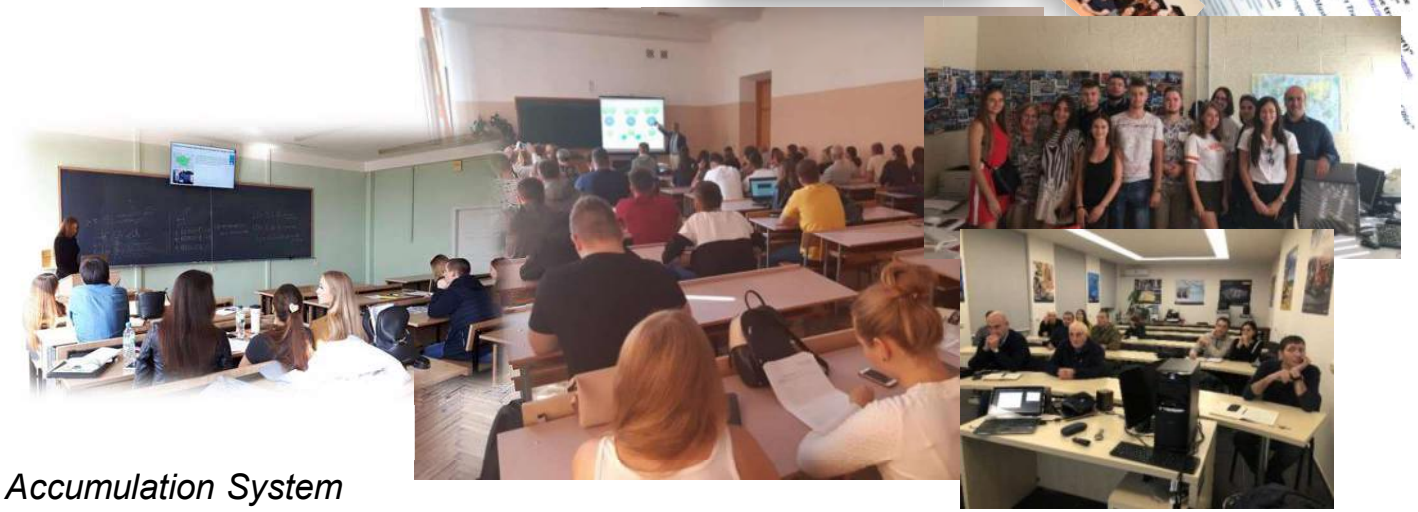
IF…

SmaLog Masters

What:

- Establish new master curricula (120/90 ECTS) for engineering and economics faculties on Smart Transport and Logistics for Cities
- Based on Bologna process standards

(full part of educational offers at each PC HEIs)

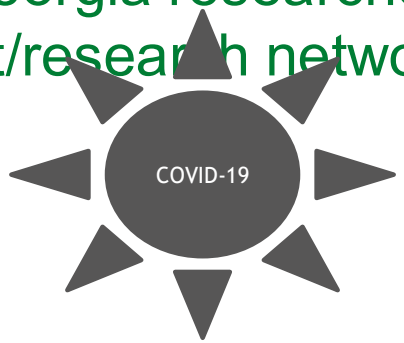


ECTS: European Credit Transfer and Accumulation System

How we get there

Hard preparatory work:

- No existing Masters in Smart Transport and Logistics for Cities in 2014
- Masters' curricula needed a formal approval by the Ukrainian and Georgian Authorities
- Teaching material not fully available
- No fully aware of the opportunities offered by new tools and methods for transport systems analysis and simulation
- Ukrainian and Georgia researchers were mainly out of the main worldwide expert/research networks



Pandemic

Achievements (1)

- 4 editions, enrolment: 2018, 2019, 2020, 2021
- 69 graduated students (2018-2020) in the 2 first Master editions
- 20 master theses under the supervision of EU and PC experts and from the industry sector
- More then 80% of the 1st generation graduated students employed by transport companies
- **Acknowledgements:** Approval of the [illegible]inistry of Education;

Achievements (2)

- 66 students studied at EU universities
- One full semester for learning and training activities

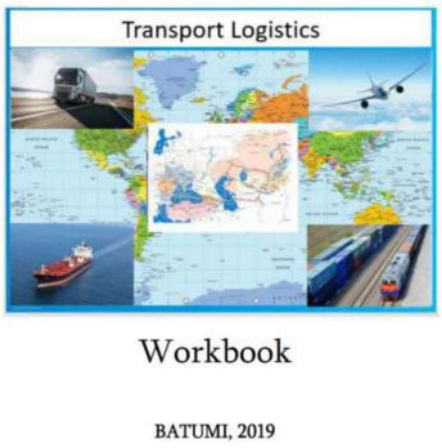
	2018-2020
University of Rome Tor Vergata (Italy)	32
"Sapienza" University of Rome- CTL (Italy)	14
Silesian University of Technology (Poland)	9
Hochschule Wismar (Germany)	11

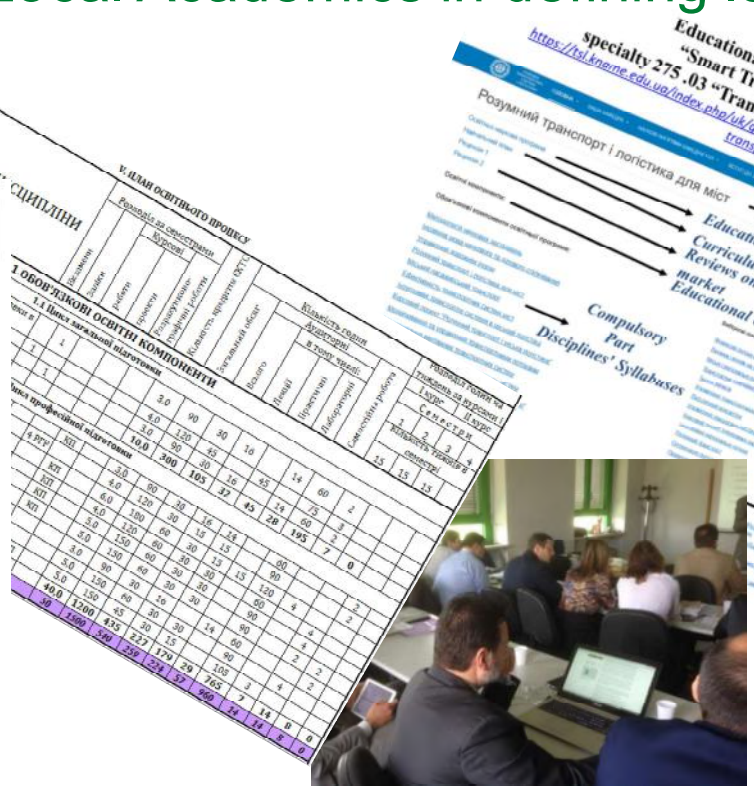
Students visiting the Amazon Distribution Center (FCO1) in Rome

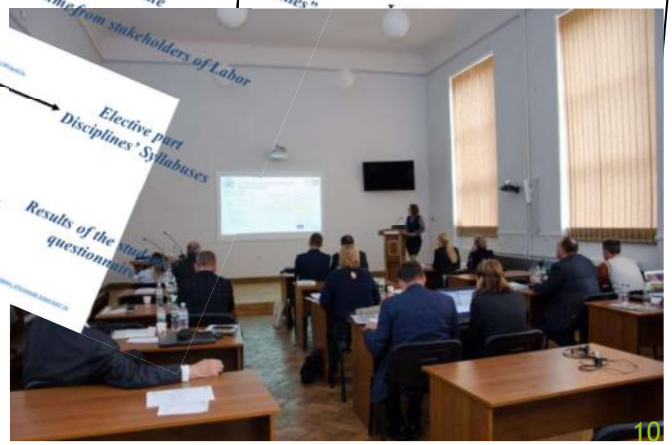
Train the Trainer

What:

- Supporting Local Academics in planning/organizing the Masters
- Knowledge transfer of smart transport and logistics good practices in EU
- Supporting Local Academics in defining learning materials







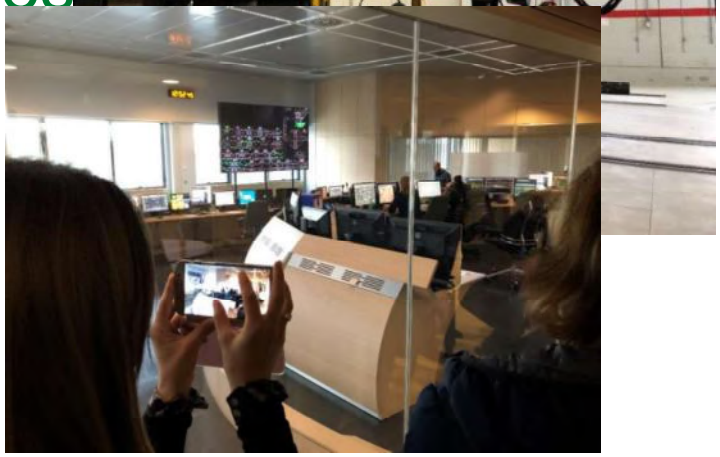
How we get there

- A selected group of Academics will spend approximately one month and half in each EU University involved in the project and will be supported in preparing the materials for the Master classes.
- Technical visits to institutional bodies involved in smart transport and logistics for cities
- A selected group of EU visited PC HEIs for more than 1 week for teaching and training activities.
- Distance Learning Courses in Advanced SmaLog

Achievements (1)

- 51 PC academics visited EU Universities

	2018-2021
University of Rome Tor Vergata (Italy)	13
"Sapienza" University of Rome- CTL (Italy)	11
Silesian University of Technology (Poland)	17
Hochschule Wismar (Germany)	10



Academics visiting the full automated metro line C in Rome

Achievements (2)

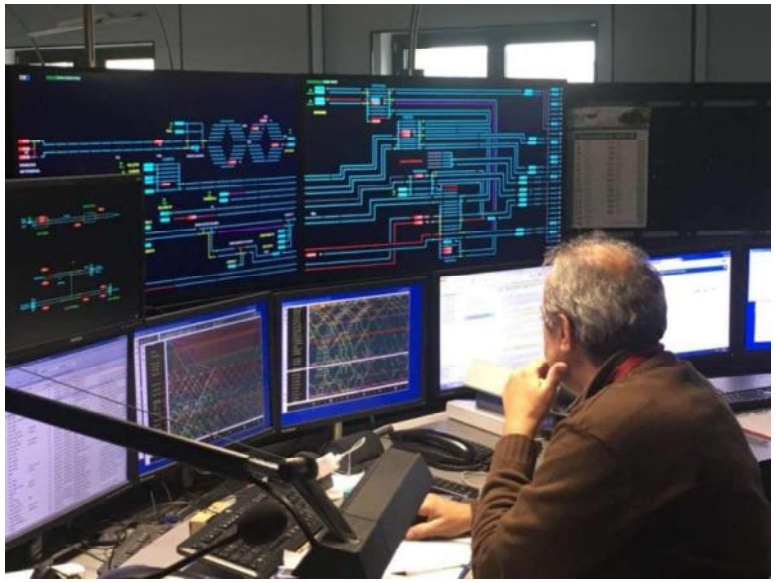
- EU academics visited PC Universities (16 visits)

	2018-2021
O. M. Beketov National University of Urban Economy in Kharkiv (Ukraine)	2
National Transport University, Kiev (Ukraine)	4
Lviv Polytechnic National University, Lvivi (Ukraine)	2
Zhytomyr Polytechnic State University, Zhythomyr (Ukraine)	4
Batumi State Maritime Academy, Batumi (Georgia)	1
Georgian Technical University, Tbilisi (Georgia)	3

Academics visiting the NTU, Kiev, Ukraine

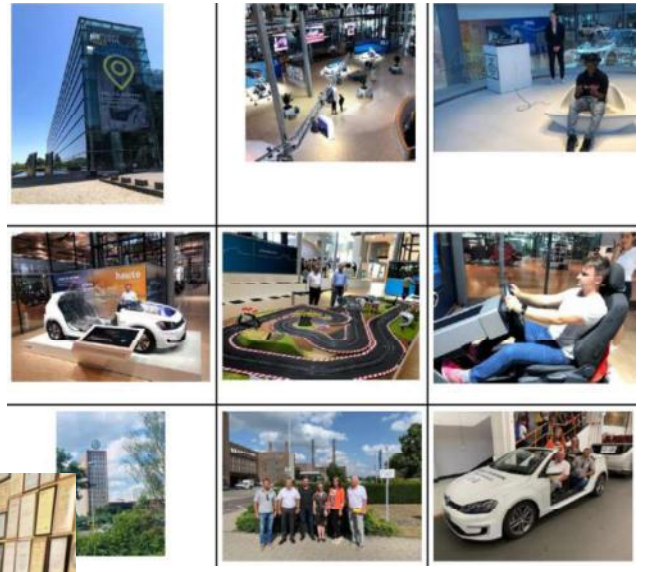
Achievements (3)

- Technical visits



Rome, national railways control room

Wismar



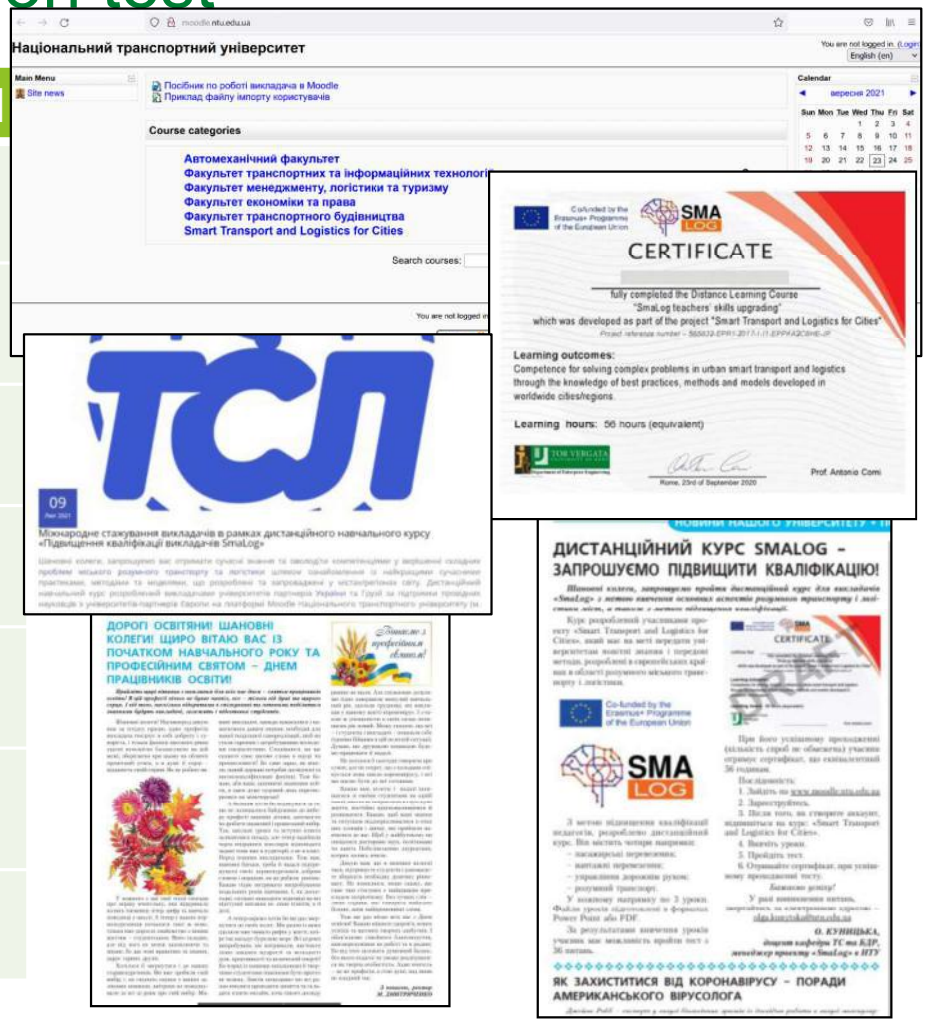
Rome, metro C headquarter

Katowice

Achievements (4)

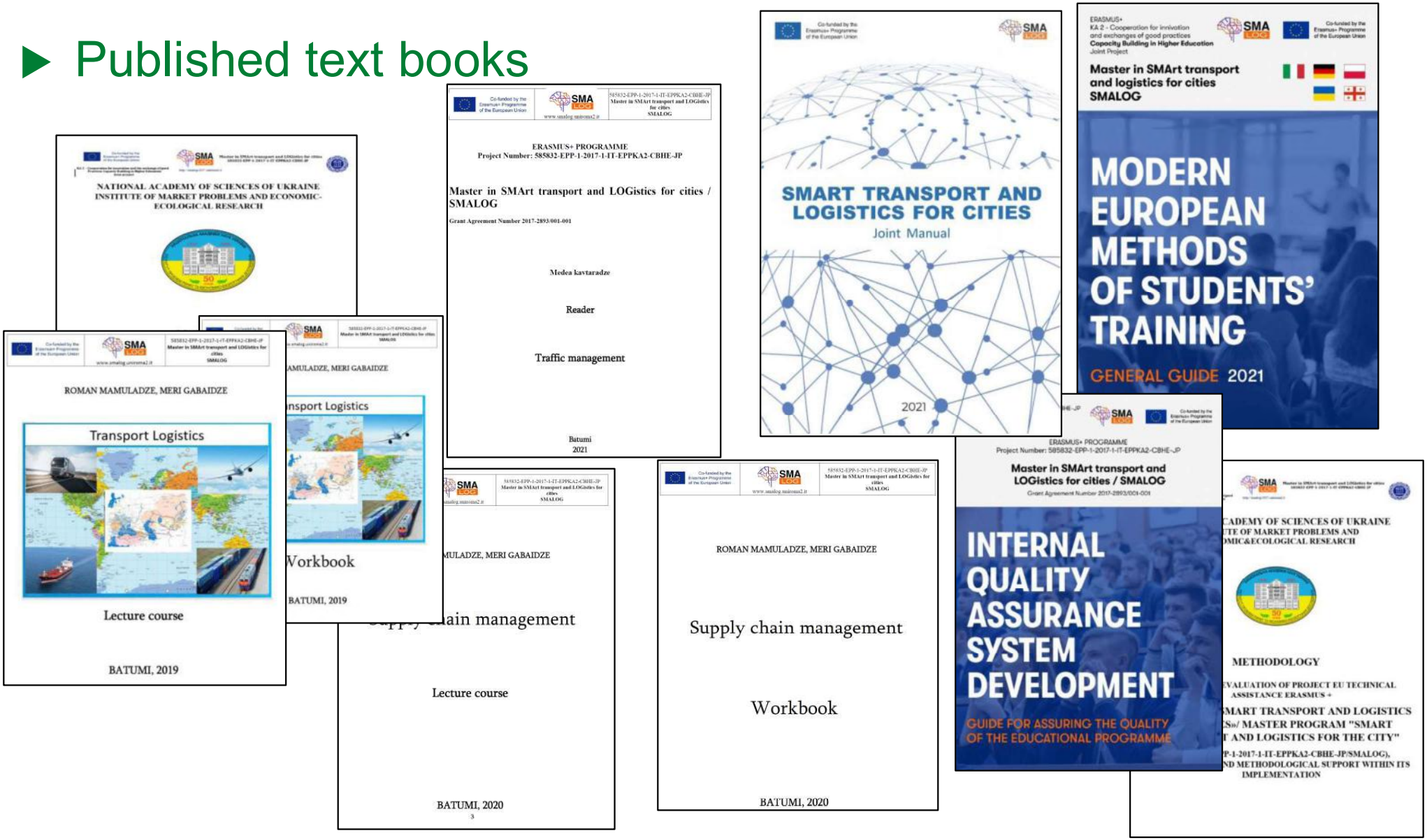
- 73 staff members from PC HEIs partecipated to advanced courses and passed the evaluation test

	2018-2021
O. M. Beketov National University of Urban Economy in Kharkiv (Ukraine)	17
National Transport University, Kiev (Ukraine)	26
Lviv Polytechnic National University, Lvivi (Ukraine)	8
Zhytomyr Polytechnic State University, Zhythomyr (Ukraine)	6
Batumi State Maritime Academy, Batumi (Georgia)	13
Georgian Technical University, Tbilisi (Georgia)	2
Other	1



Achievements (5)

- Published text books



SmaLog laboratories

What:

- *Laboratories* to support both training and research in smart transport and logistics for cities

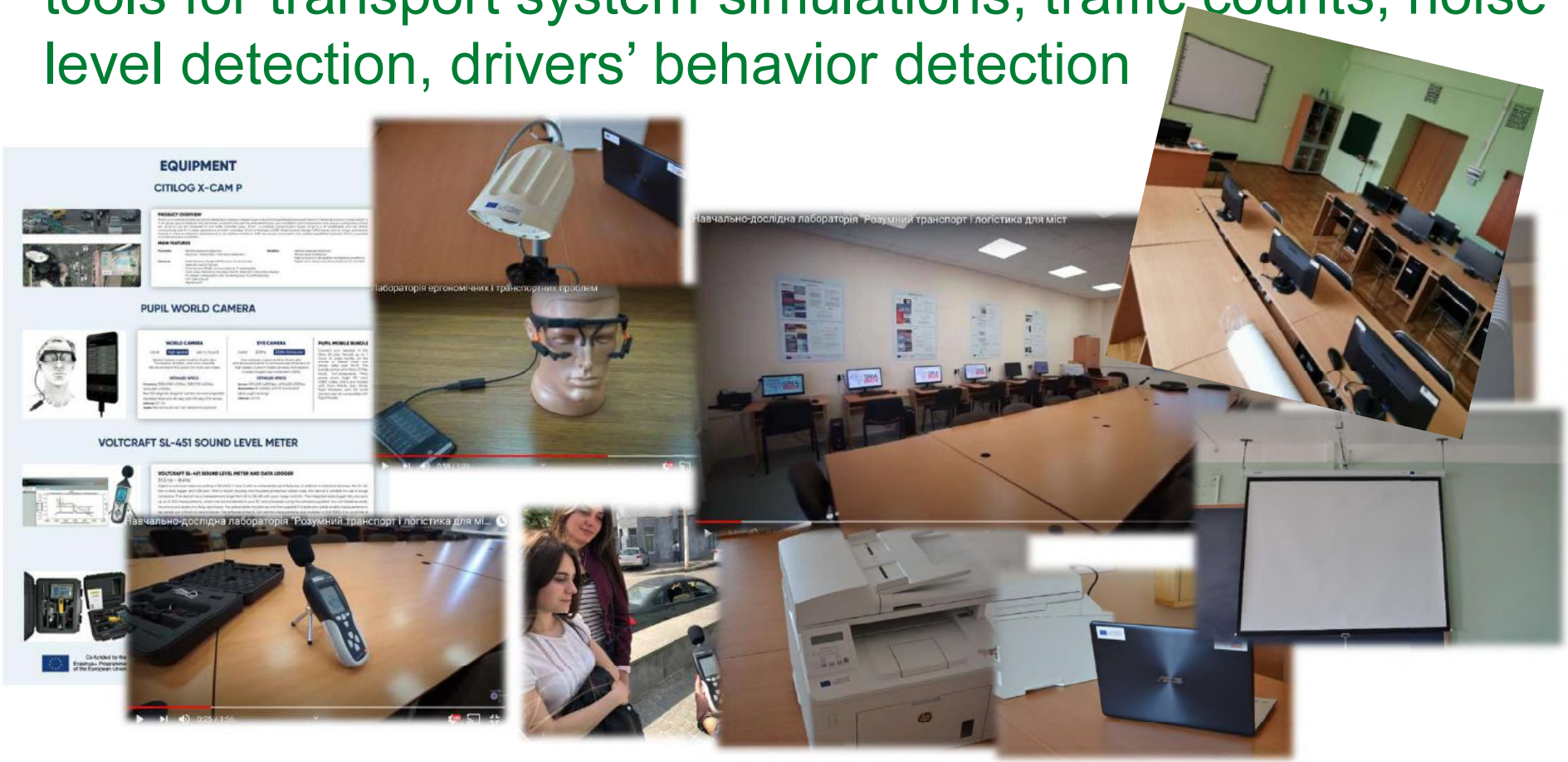
How we get there:

- Investigating local needs and identifying innovation to promote
- Designing laboratories equipment according to real local needs

Co-funded by the Erasmus+ Programme of the European Union

Achievements (1)

- One laboratory for each of the 6 Universities
- *Equipment*: computers included screens, projector, printers, tools for transport system simulations, traffic counts, noise level detection, drivers' behavior detection



Newsletters, events, workshops & seminars

What:

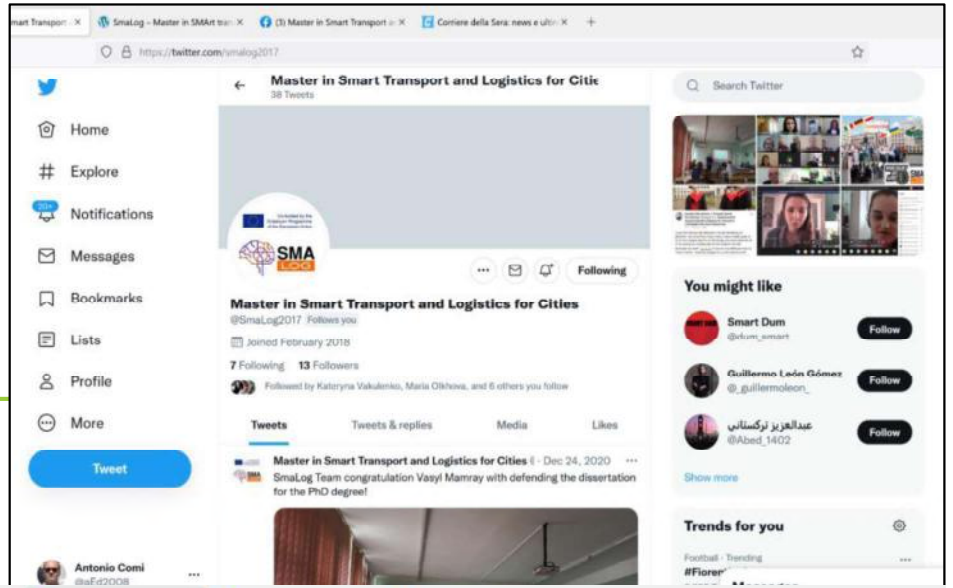
- Dissemination materials
- Dissemination events
- Workshops & seminars
- Meetings with local stakeholders

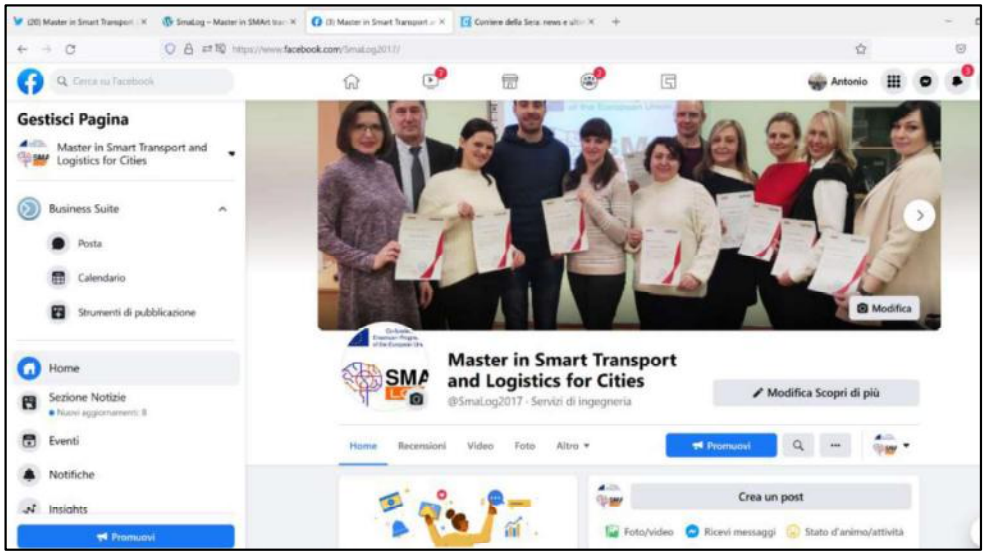
How we get there:

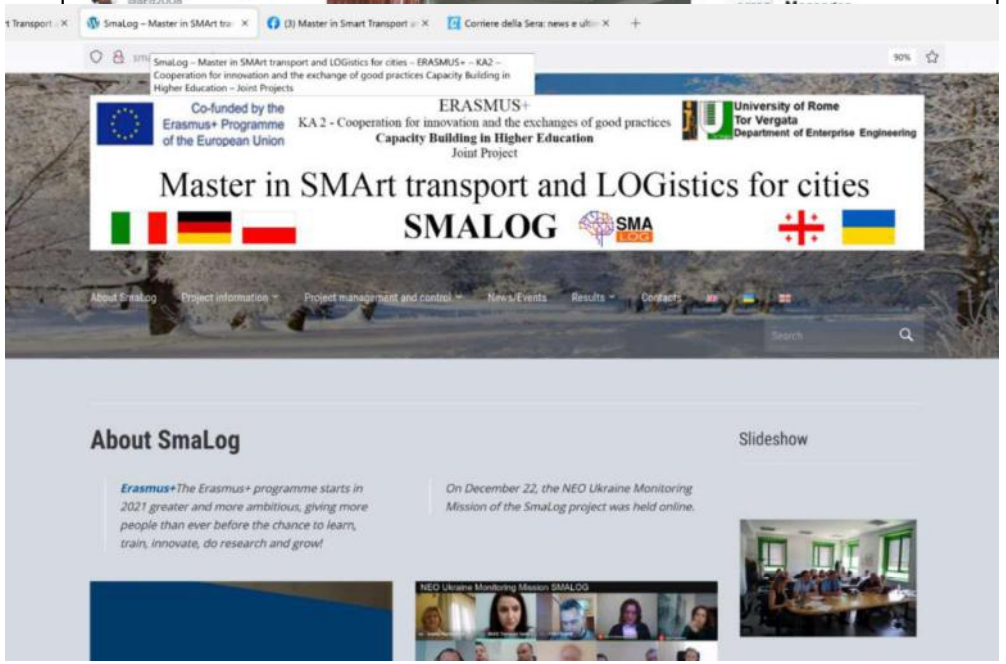
- Assuring to bring knowledge to all potential beneficiaries
- Promoting dissemination events strictly answering to real local needs
- Promoting dissemination involving all potential benficiaries of SmaLog

Achievements (1)

- Project website:
  - http://www.smalog.uniroma2.it
- Facebook page and group:
  - https://www.facebook.com/SmaLog201
- Twitter page
  - https://twitter.com/smalog2017



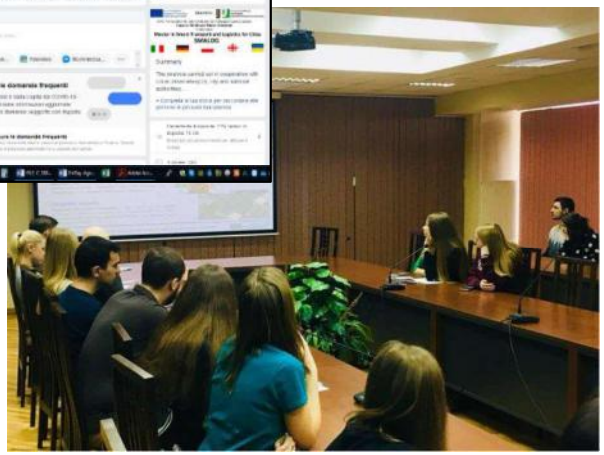




Co-funded by the Erasmus+ Programme of the European Union

Achievements (2)

- SmaLog Master brochure, Erasmus+ Days & Open da



Achievements (3)

- Seminars in local universities

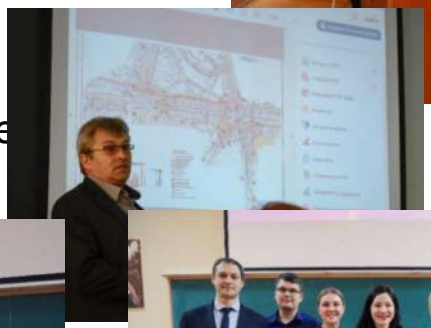
Co-funded by the Erasmus+ Programme of the European Union

Achievements (4)

- NUUE University meets local stakeholders

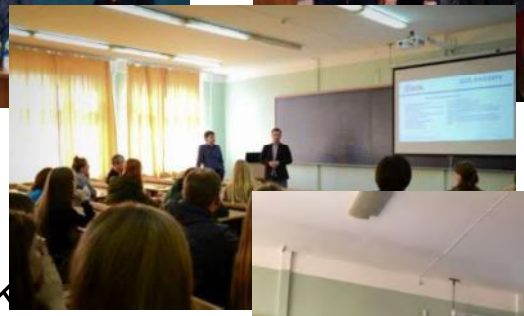
August 2018: Kharkiv Meeting, Department of Infrastructure in Kharkiv, LTD "KOMKON TRAFIC“

November 2019: Kharkiv, The Director of the Infrastructure Departme of the Kharkiv City Council gave an open lecture



March 2020: Kharkiv, branch meeting of leading specialists of TDV "ATP 16363“

March 2020: Kharkiv, Meeting with the official representative logistics company “GLOBAL OCEAN LINK”



March 2020: Kharkiv, Lecture by a representative of LTD "KOMK

September 2020: Kharkiv, Meeting with the official representative of PTV Group Ukraine Dmytro Bespa

https://k-tsl.com/

Achievements (5)

- LPNU University meets local stakeholders

October 2018: Meeting and Master Programme publishing & presentation at Lviv Polytechnic National University

June 2018: Meeting at Lviv Polytechnic with stakeholders

March 2019: Smalog at the Ukrainian Scientific and Teoretical Conference

October 2019: Discussion of the mobility plan (Andriy Biliy, Deputy Director of the Department of Housing and Infrastructure of Lviv

April 2020: Meeting at Lviv Polytechnic with stakeholders (Open Days)

Achievements (6)

ZPSU University meets local stakeholders

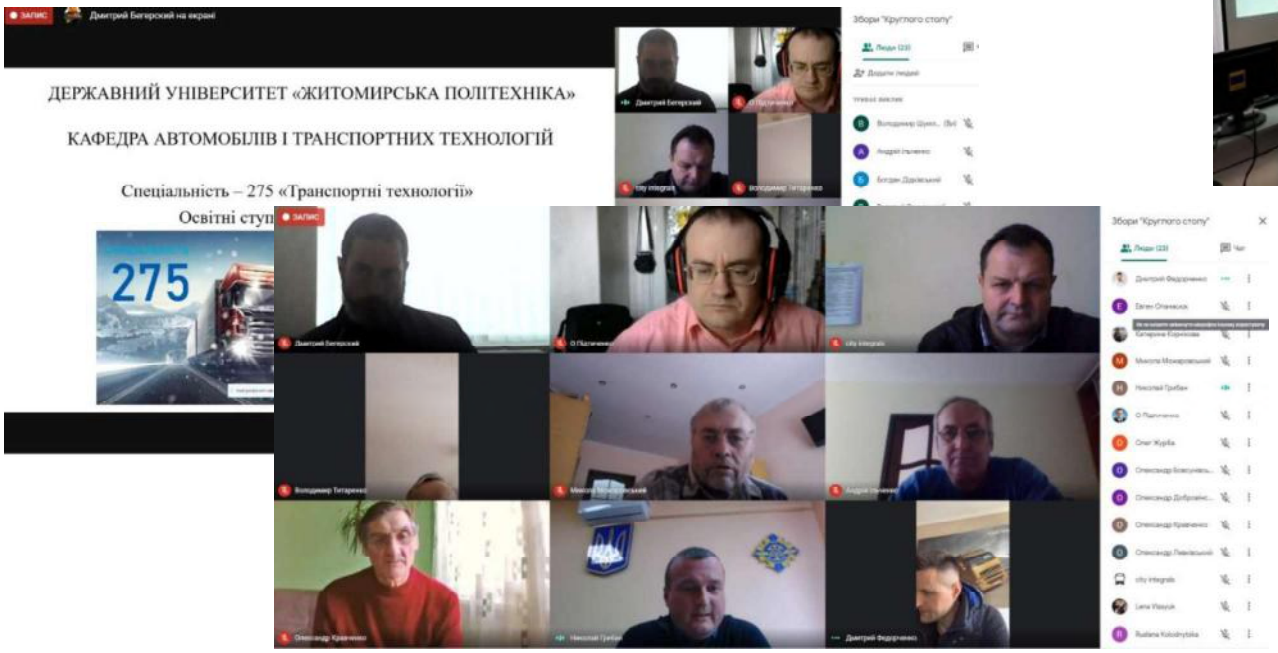
April, 2021: Zhytomyr, Online meeting with stakeholders:

https://news.ztu.edu.ua/2021/04/kruglyj-stil-zi-stejkholderamy-za-spetsialnistyu-275-03-transportni-tehnologiyi-na-avtomobilnomu-transporti/

- Department of Transport and Regional Development in Zhytomyr region;
- PJSC Zhytomyr ATP 11854
- Ukrainian transport safety Department in Zhytomyr region;
- logistics company “Alfakom”
- PE "Sheriff"

April, 2019: Zhytomyr, Forum of employers (stakeholders):

- PJSC "Zhytomyr-Auto”
- PJSC "Zhytomyr Auto International“
- LLC “Veltest”
- PE "Sheriff"
- Zhytomyr regional department of road construction and infrastructure management
- Communal enterprise "Information center”
- Department of the State Service for Transport Safety in Zhytomyr Region



Achievements (7)

▶ NTU University meets local stakeholders

From 2018 to 2021, 9 meetings were held:

- "Institute of the General Plan of Kyiv" (2018,2019,2020)

Transport modeling (PTV Vissim) and the use of its results in the development of the General plan of Kiev

- Department of the patrol police in Kyiv (2019)

Practical activities to ensure road safety in Kiev

- A + S Consult GmBH (2019, 2020)

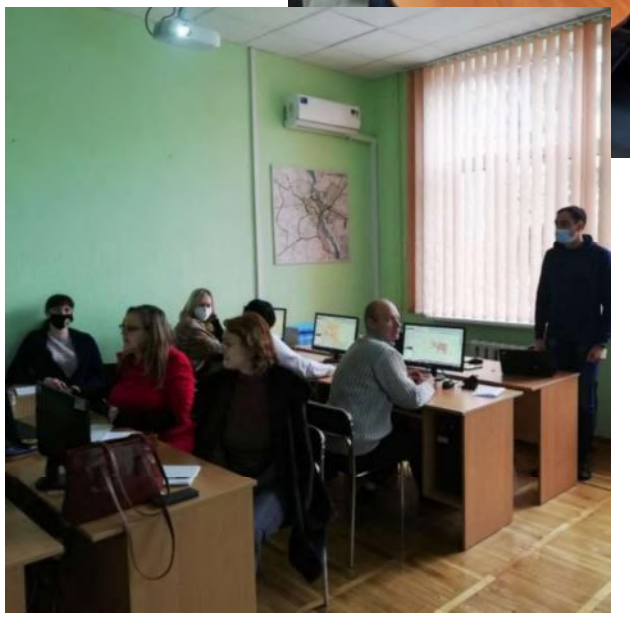
Transport micromodeling algorithms using PTV Vissim software

- "Institute" Kievdormostproekt"(2019,2020,2021)

Implementation of modern technologies for the design of transport infrastructure elements in the cities of Ukraine

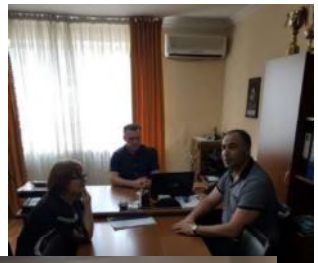
"Institute" Kievdormostproekt"

A + S Consult GmBH



Institute of the General Plan of Kyiv

Achievements (9)



- Department of Transport of Batumi meets local stakeholders

May 2018: Ministry of Economy of Adjara

May 2019: meeting with Ministry of Education

April 2020: meeting with Batumi Port

June 2020: Meeting with Employers, Maritime Transport Agency and City administration

March 2021: meeting with Port of Poti administration

June 2021: MoU signing ceremony with Ministry of Environment

Achievements (10)

- **Georgian Technical University meets stakeholders**

May 2018: meeting with Ministry of Education

March 2019: meeting with Ministry of Regional Development

October 2020: meeting with Tbilisi City Hall

December 2020: Meeting with Employers of Land Transport Agency

March 2021: meeting with local transport research organizations

Co-funded by the
Erasmus+ Programme
of the European Union

Setting up SmaLog Networks

What:

- Build an international and national coordinated university research network on smart transport and logistics for cities involving local universities in the wider European network of research centres and universities
- Involvement of PC Universities in international smart transport and logistics for cities research

How we get there

- Involving the participation in high level conferences/workshops on smart transport and logistics for cities
- Submitting research works to high level journals
- Participation in exchanges of teachers/staff
- Starting PhD course accreditation involving foreign professors

Achievements (1)

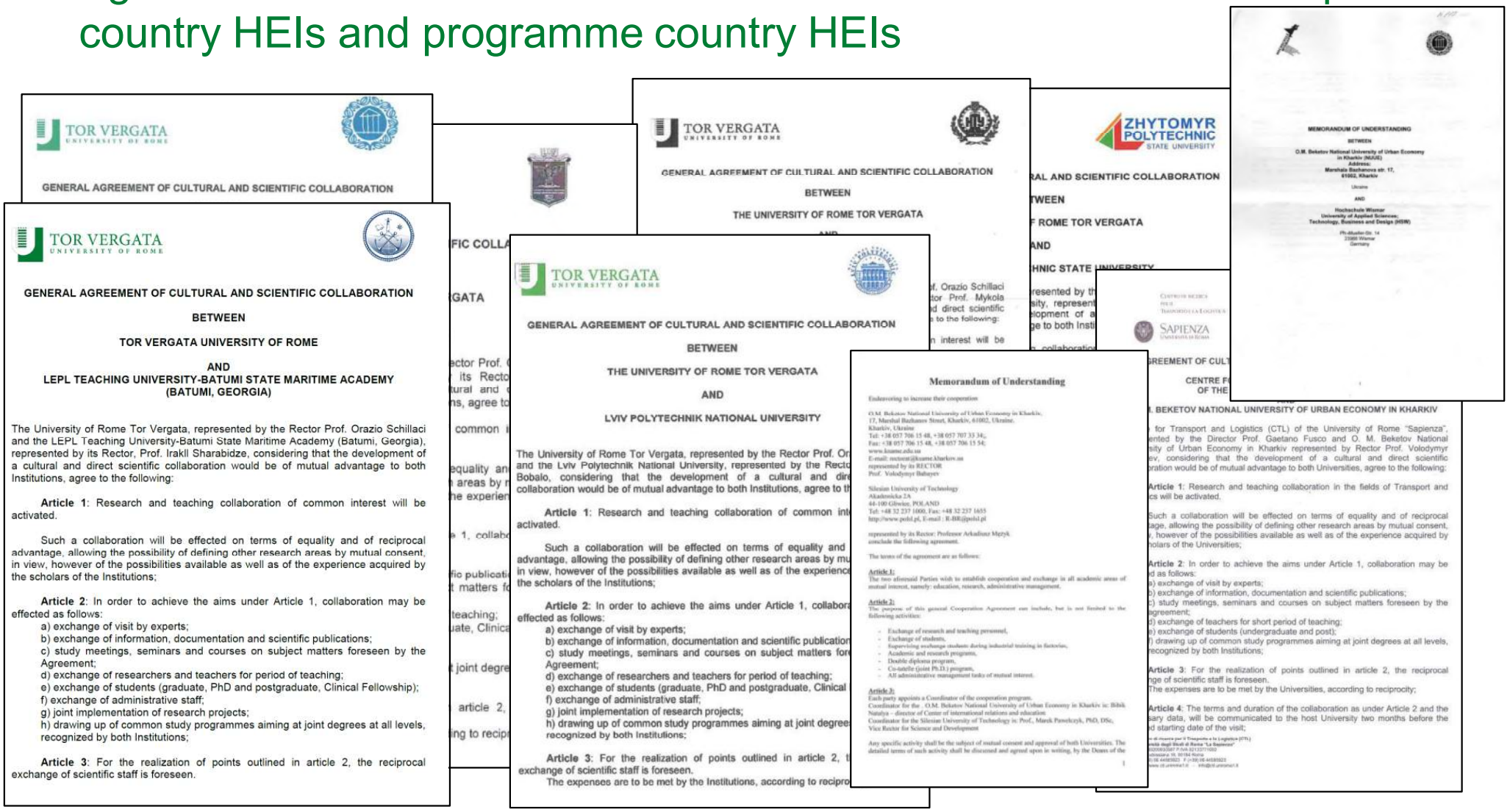
- Participation in high level conference on transportation and advanced educational issues
- Publishing in high impacting journal indexed in Scopus and WoS
- Participation in FullBright Programme

Achievements (2)

- Active involvement in thematic workshops were organised jointly with international (e.g. from Australia, China, Norway) experts on smart transport and logistics for cities

Achievement (3)

- Agreements of cultural and scientific collaboration between each partner country HEIs and programme country HEIs



GENERAL AGREEMENT OF CULTURAL AND SCIENTIFIC COLLABORATION

BETWEEN

TOR VERGATA UNIVERSITY OF ROME

AND

LEPL TEACHING UNIVERSITY-BATUMI STATE MARITIME ACADEMY (BATUMI, GEORGIA)

The University of Rome Tor Vergata, represented by the Rector Prof. Orazio Schillaci and the LEPL Teaching University-Batumi State Maritime Academy (Batumi, Georgia), represented by its Rector, Prof. Irakli Sharabidze, considering that the development of a cultural and direct scientific collaboration would be of mutual advantage to both Institutions, agree to the following:

Article 1: Research and teaching collaboration of common interest will be activated.

Such a collaboration will be effected on terms of equality and of reciprocal advantage, allowing the possibility of defining other research areas by mutual consent, in view, however of the possibilities available as well as of the experience acquired by the scholars of the Institutions;

Article 2: In order to achieve the aims under Article 1, collaboration may be effected as follows:

a) exchange of visit by experts;
b) exchange of information, documentation and scientific publications;
c) study meetings, seminars and courses on subject matters foreseen by the Agreement;
d) exchange of researchers and teachers for period of teaching;
e) exchange of students (graduate, PhD and postgraduate, Clinical Fellowship);
f) exchange of administrative staff;
g) joint implementation of research projects;
h) drawing up of common study programmes aiming at joint degrees at all levels, recognized by both Institutions;

Article 3: For the realization of points outlined in article 2, the reciprocal exchange of scientific staff is foreseen.

GENERAL AGREEMENT OF CULTURAL AND SCIENTIFIC COLLABORATION

BETWEEN

THE UNIVERSITY OF ROME TOR VERGATA

AND

LVIV POLYTECHNIK NATIONAL UNIVERSITY

The University of Rome Tor Vergata, represented by the Rector Prof. Or
and the Lviv Polytechnik National University, represented by the Recto
Bobalo, considering that the development of a cultural and dire
collaboration would be of mutual advantage to both Institutions, agree to t

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activated.

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e) exchange of students (graduate, PhD and postgraduate, Clinical
f) exchange of administrative staff;
g) joint implementation of research projects;
h) drawing up of common study programmes aiming at joint degree
recognized by both Institutions;

Article 3: For the realization of points outlined in article 2, t
exchange of scientific staff is foreseen.
The expenses are to be met by the Institutions, according to recipro

Memorandum of Understanding

Endeavoring to increase their cooperation

O.M. Beketov National University of Urban Economy in Kharkiv,
17, Marshal Bazhanov Street, Kharkiv, 61002, Ukraine.
Kharkiv, Ukraine
Tel: +38 057 706 15 48, +38 057 707 33 34;
Fax: +38 057 706 15 48, +38 057 706 15 54;
www.kname.edu.ua
E-mail: rectorat@kname.kharkov.ua
represented by its RECTOR
Prof. Volodymyr Babayev

Silesian University of Technology
Akademicka 2A
44-100 Gliwice, POLAND
Tel: +48 32 237 1000, Fax: +48 32 237 1655
http://www.polsl.pl, E-mail : R-BR@polsl.pl

represented by its Rector: Professor Arkadiusz Mężyk
conclude the following agreement.

The terms of the agreement are as follows:

Article 1:
The two aforesaid Parties wish to establish cooperation and exchange in all academic areas of mutual interest, namely: education, research, administrative management.

Article 2:
The purpose of this general Cooperation Agreement can include, but is not limited to the following activities:

- Exchange of research and teaching personnel,
- Exchange of students,
- Supervising exchange students during industrial training in factories,
- Academic and research programs,
- Double diploma program,
- Co-tutelle (joint Ph.D.) program,
- All administrative management tasks of mutual interest.

Article 3:
Each party appoints a Coordinator of the cooperation program.
Coordinator for the . O.M. Beketov National University of Urban Economy in Kharkiv is: Bibik Natalya - director of Center of international relations and education
Coordinator for the Silesian University of Technology is: Prof., Marek Panufczyk, PhD, DSc, Vice Rector for Science and Development

Any specific activity shall be the subject of mutual consent and approval of both Universities. The detailed terms of such activity shall be discussed and agreed upon in writing, by the Deans of the

ZHYTOMYR POLYTECHNIC STATE UNIVERSITY

SAPIENZA UNIVERSITÀ DI ROMA

BEKETOV NATIONAL UNIVERSITY OF URBAN ECONOMY IN KHARKIV

for Transport and Logistics (CTL) of the University of Rome "Sapienza", ented by the Director Prof. Gaetano Fusco and O. M. Beketov National sity of Urban Economy in Kharkiv represented by Rector Prof. Volodymyr ev, considering that the development of a cultural and direct scientific ration would be of mutual advantage to both Universities, agree to the following:

Article 1: Research and teaching collaboration in the fields of Transport and cs will be activated.

Such a collaboration will be effected on terms of equality and of reciprocal age, allowing the possibility of defining other research areas by mutual consent, however of the possibilities available as well as of the experience acquired by holars of the Universities;

Article 2: In order to achieve the aims under Article 1, collaboration may be d as follows:
a) exchange of visit by experts;
b) exchange of information, documentation and scientific publications;
c) study meetings, seminars and courses on subject matters foreseen by the agreement;
d) exchange of teachers for short period of teaching;
e) exchange of students (undergraduate and post);
f) drawing up of common study programmes aiming at joint degrees at all levels, recognized by both Institutions;

Article 3: For the realization of points outlined in article 2, the reciprocal nge of scientific staff is foreseen.
The expenses are to be met by the Universities, according to reciprocity;

Article 4: The terms and duration of the collaboration as under Article 2 and the ary data, will be communicated to the host University two months before the d starting date of the visit;

MEMORANDUM OF UNDERSTANDING

BETWEEN

O.M. Beketov National University of Urban Economy in Kharkiv (NUUE)
Address:
Marshala Bazhanova str. 17,
61002, Kharkiv
Ukraine

AND

Hochschule Wismar
University of Applied Sciences;
Technology, Business and Design (HSW)
Ph-Albatten-Str. 14
23966 Wismar
Germany

Are we closer to the target?

to strengthen the role of telematics in transport services for improving city sustainability and liveability

SmaLog Masters	Train the Trainer	SmaLog Laboratories	Newsletters, events, workshops & seminars (dissemination)	Setting up Smart Transport & Logistics networks (exploitation)

Co-funded by the Erasmus+ Programme of the European Union

Questions?

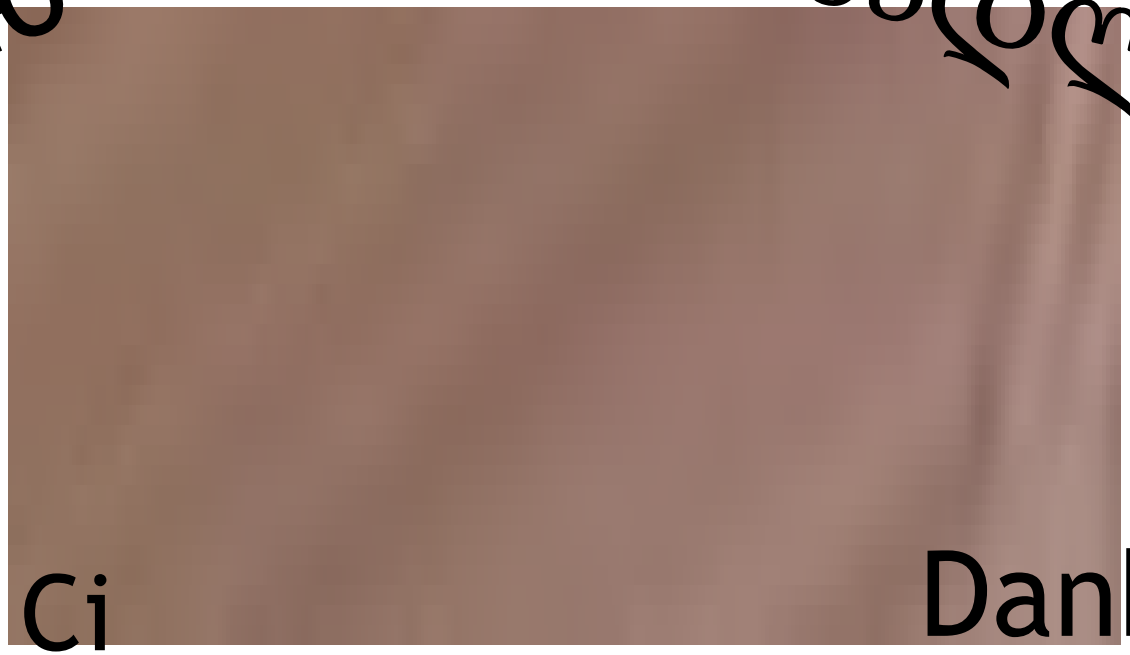
Tribute to our colleague Manfred

- A very big **THANK YOU!**

Дякую

მადლობა

Grazie



Dziękuję Ci

Dankeschön

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