



# Urban Resilience and Adaptation for India and Mongolia

curricula, capacity, ICT and stakeholder collaboration to support green & blue infrastructure and nature-based solutions

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



619050-EPP-1-2020-1-DE-EPPKA2-CBHE-JP



## Minutes of Online-Training on Information and Communications Technology (ICT)

<b>Title:</b>	Urban Resilience and Adaptation for India and Mongolia: curricula, capacity, ICT and stakeholder collaboration to support green & blue infrastructure and nature-based solutions – URGENT
<b>Number:</b>	619050-EPP-1-2020-1-DE-EPPKA2-CBHE-JP
<b>Coordinator:</b>	Center for Multimedia in Higher Education (ZMML), University of Bremen
<b>Partners:</b>	UniHB, UNICT, EMU, MLU, MNU, KHU, MULS, UPRI, NGP, JNU, NU, PU, SKUAST-K, NIUA, GIFT

**A four-day training was held on June 30th – July via the online platform Zoom.**

The interactive training aimed at introducing key aspects of “Information and Communications Technology” to the participants and had been delivered by the European partners of both the MARE and the URGENT project. The training contained the theoretical input by lecturers, practical group exercises for the participants and additional information and input from experts from the field of ICT. As part of the training, participants had been introduced to the topic of ICTs, their growing importance in society and academia as well as received detailed and in-depth knowledge on important and popular ICT methodologies (e.g., Geo- Information Systems, Lecture Recordings, Web-based Learning Platforms, etc.).

Specific objectives of the training were to strengthen capacities of participants and fellow project members, to enhance cooperation between partners and to provide specific scientific knowledge and examples on describing, using, and understanding ICTs. A particular focus lied on the rise of ICTs during the ongoing global pandemic and the lessons learned during this period.

### Objectives of the training:

- a. To learn about the fundamentals of ICT
- b. Theoretical Input and Practical Exercises
- c. To gain knowledge on ICT Teaching and Learning Tools
- d. Good practice – Guest lecturers and practical examples
- e. Advantages and Disadvantages of ICT methods
- f. Interaction between Participants with open-mindedness
- g. To enhance co-operation and strengthen capacities
- h. To use training results for Next Steps in both MARE and URGENT



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## Speakers:



*Arjan de Groot, Researcher, Institute for Geosciences and Geography, Dept. Sustainable Landscape Development, Martin-Luther-Universität Halle-Wittenberg.*



*Veljo Kabin, E-learning and Moodle support educational technologist, University of Life Sciences, Estonia*



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*Volha Kaskevich, environmentalist, Chief specialist of Environmental Protection and Landscape Management, Institute of Agricultural and Environmental Sciences, University of Life Sciences, Estonia*



*Yildiray Ogurol, Director of centre for multimedia education at University of Bremen*



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**Daniele La Rosa**, Professor (Associate) University of Catania, Department of Civil Engineering and Architecture



**Kalev Sepp**, Professor, Chair of Environmental Protection and Landscape Management  
Institute of Agricultural and Environmental Sciences, University of Life Sciences, Estonia



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**Simon Bell**, landscape architect, Professor at Estonian University of Life Sciences and Associate Director, OPENspace, Edinburgh College of Art



**Massimo Zotti**, Head of Government & Security SBU, Planetek Italia, specializes in GIS and Remote Sensing at Geography Department of the University of Nantes (France).



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*Michael Schwenk, Media Services, IT Professional at University of Bremen*

**On Day 1**, the preparation of participants provided by facilitators Arjan de Groot and Veljo Kabin: reviewing study materials on ICT and preparation for GIS Exercise, downloading and installing of QGIS.

**Day 2** was dedicated to the topic of **Introduction to ICT and Marketplace on ICT Methods in groups** with presentations on the **Plenary Session and Q&A Panel**.

Arjan de Groot	University of Halle-Wittenberg, Germany	The first day was dedicated to the topic of Introduction to ICT and Marketplace on ICT Methods in groups with presentations on the Plenary Session and Q&A Panel. Arjan de Groot, Volha Kaskevich, Veljo Kabin made introduction to the topic "What is ICT? Why is it important nowadays? What is the role of ICT during the pandemic? How to use ICT correctly/efficiently? Tie into MARE and URGENT, why ICT is important for those projects? Brief showcase different ICT methods and approaches".
Veljo Kabin	University of Life Sciences, Estonia	
Volha Kaskevich	University of Life Sciences, Estonia	



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		<p>The marketplace was held in group work on the topics, divided by project countries (India, Malaysia, Mongolia, Vietnam)</p> <ul style="list-style-type: none"> <li>• E-Learning Platforms (InTeGrate, Ilias, Moodle)</li> <li>• Online Communication Tools (Zoom, BBB, Google Meet)</li> <li>• Presentation Tools (Prezi, Google Slides)</li> <li>• GIS</li> <li>• Blended Learning</li> <li>• Online Teaching Tools</li> </ul>
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## ICT in Education







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Browser tabs: E-Mail - Arjan, URGENT/MARE, GIS (India 2) - G, Blended Learning, Online Com: X, E-Learning Plat, Online Teachin, AFK Arena, OnePieceTC, AvA sugest pe, Canvas LMS for

Address bar: https://jamboard.google.com/d/1JEK-UGuPEnbArvUL7WeAhSZuNiaSpC9SNNvtCnoq9M/viewer?rf=1

## Online Communication Tools (Malaysia 1)

### ONLINE COMMUNICATION TOOLS COMPARISON

MEETINGS/VIDEO CONFERENCING PLATFORMS	ADVANTAGES	DISADVANTAGES	REMARKS
WEBEX	• BREAKOUT ROOM/SESSION	• HIGH POWER CONSUMPTION	LESS PREFERENCE BY MALAYSIAN
TEAMS	• RECORDING	• DEVICE COMPATIBILITY	
GOOGLE MEET	• OPERATING SYSTEM COMPATIBILITY	• LIMITED MEETING LENGTH/DURATION WITHOUT LICENCE	
ZOOM	• INTERACTIVE WHITEBOARDING	• LICENCE PRICE FOR FULL FEATURES	
GO TO MEETING	• FREE FOR STUDENT/PUBLIC	• INTERNET CONNECTION	
SKYPE	WELL ESTABLISHED	• LIMITED NUMBER OF PARTICIPANT	
FACEBOOK LIVE	WIDE REACH OF AUDIENCE	COMMUNICATION THROUGH CHAT	

### USES

- > Forestry
- > Environmental Planning
- > Urban Ecosystem
- > Ecosystem Services
- > Solid Waste Management
- > Natural Resource Management
- > Health management
- > Waste management
- > Demographic Data management.
- > Development planning
- > Urban infrastructure planning and management
- > Transport Planning
- > Climate Studies
- > Disaster Management
- > Defense and Strategic planning

**GIS is Being Applied Around the World**  
Across Many Disciplines, Professions, and Organizations

Source: ESRI

Becoming an Instrument of Evolution

Purpose - Database management, Data Analysis, Representation, Change Detection





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Screenshot of a Google Jamboard titled "Online Communication Tools (Malaysia 1)". The main content is a table titled "ONLINE COMMUNICATION TOOLS COMPARISON".

MEETINGS/VIDEO CONFERENCING PLATFORMS	ADVANTAGES	DISADVANTAGES	REMARKS
WEBEX	<ul style="list-style-type: none"> <li>BREAKOUT ROOM/SESSION</li> <li>RECORDING</li> </ul>	<ul style="list-style-type: none"> <li>HIGH POWER CONSUMPTION</li> <li>DEVICE COMPATIBILITY</li> </ul>	
TEAMS	<ul style="list-style-type: none"> <li>OPERATING SYSTEM COMPATIBILITY</li> </ul>	<ul style="list-style-type: none"> <li>LIMITED MEETING LENGTH/DURATION WITHOUT LICENCE</li> </ul>	
GOOGLE MEET	<ul style="list-style-type: none"> <li>INTERACTIVE</li> </ul>	<ul style="list-style-type: none"> <li>LICENCE PRICE FOR FULL FEATURES</li> </ul>	
ZOOM	<ul style="list-style-type: none"> <li>WHITEBOARDING</li> </ul>	<ul style="list-style-type: none"> <li>INTERNET CONNECTION</li> </ul>	
GO TO MEETING	<ul style="list-style-type: none"> <li>FREE FOR STUDENT/PUBLIC</li> </ul>	<ul style="list-style-type: none"> <li>LIMITED NUMBER OF PARTICIPANT</li> </ul>	LESS PREFERENCE BY MALYSIAN
SKYPE	WELL ESTABLISHED		
FACEBOOK LIVE	WIDE REACH OF AUDIENCE	COMMUNICATION THROUGH CHAT	

Video record of Training Day 2 by the link <https://drive.google.com/file/d/19cZRugzKNafgr7DXhWO64UPGDUvGnqjH/view?usp=sharing>

Day 3 was dedicated to the topic ICT Tools and Methods showcases and group/individual exercise.

Alexander Hillmann	University of Halle-Wittenberg, Germany	<ul style="list-style-type: none"> <li>Showcases with specific examples from EU practice</li> <li>Online Teaching Tools (Recording/Giving Lectures)</li> <li>Moodle, E-Learning Platforms</li> <li>Geo-Information Systems (GIS)</li> <li>Group / Individual Exercise</li> </ul> <p>The session required pre-installed software. We</p>
Veljo Kabin	University of Life Sciences, Estonia	
Daniele La Rosa	Laboratorio per la Pianificazione Territoriale e Ambientale (LAPTA) Dipartimento Ingegneria Civile e Architettura Università di Catania	



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		<p>provided open data for urban green infrastructure development, which was visualised by participants.</p> <p>Constructed exercise based on that data with different questions had to be answered and maps to be created. The exercise was made in two tasks, one for beginners and one for advanced users of GIS for implementation.</p> <p>The Plenary Session showed correct results so that everyone knew what the idea of the exercise was and how the tool had to be used. With Feedback / Q&amp;A the session was closed.</p>
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## ICT Tools and Methods:

### Media Infrastructure and Media Production for Online Teaching

University of Bremen, Center for Multimedia in Higher Education (ZMML)

Dipl.Inf. Alexander Hillmann  
Bremen 03.06.2021





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## ZMML Media Service Department

→ We provide:

- Infrastructure for video based lectures
- Production, management and publication of videos
- Live recording & streaming in lecture halls
- Green screen studio productions
- One-Button-Record-Studio
- Production of films, tutorials, screencasts



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# moodle

## World's most popular online LMS

Veljo Kabin, Estonian University of Life Sciences

The European Commission supports the views only of the authors, and





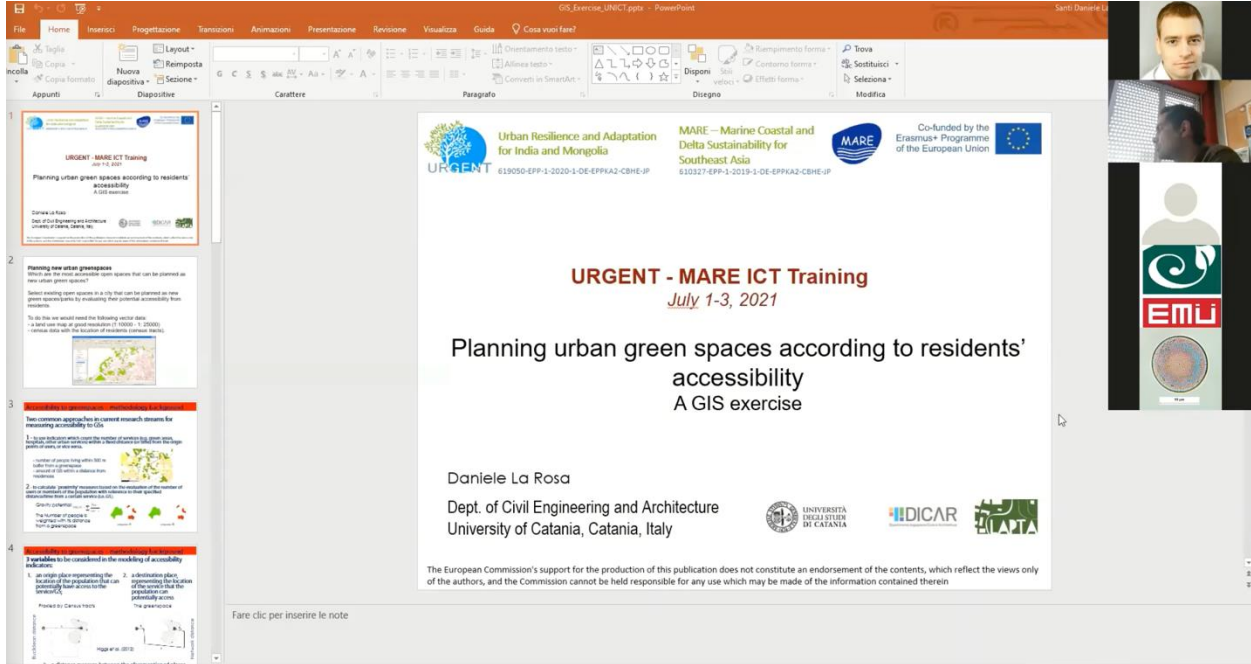
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Video record of Training Day 3 by the link

<https://drive.google.com/file/d/1cCL-bfotS3WDu1rZ9Fom1RcHuiKGJFBH/view?usp=sharing>

Day 4 was dedicated to get inspiration and best practices from guest lectures from Applied ICT.

Kalev Sepp	University of Life Sciences, Estonia	<p>We invited people from the applied field of ICT to showcase their work, method, organisation and tool.</p> <ul style="list-style-type: none"> <li>E-Science was delivered by Kalev Sepp</li> <li>Using ICT tools in 3D modeling during the pandemic, Miro &amp; Adobe Rooms by Simon Bell</li> <li>Developing software for universities on the topic of online education provided by Michael Schwenk</li> </ul> <p>Q&amp;A after each presentation and the “Open Platform” space were provided during the session.</p>
Simon Bell	University of Life Sciences, Estonia	
Michael Schwenk	Heidelberg University, Germany	



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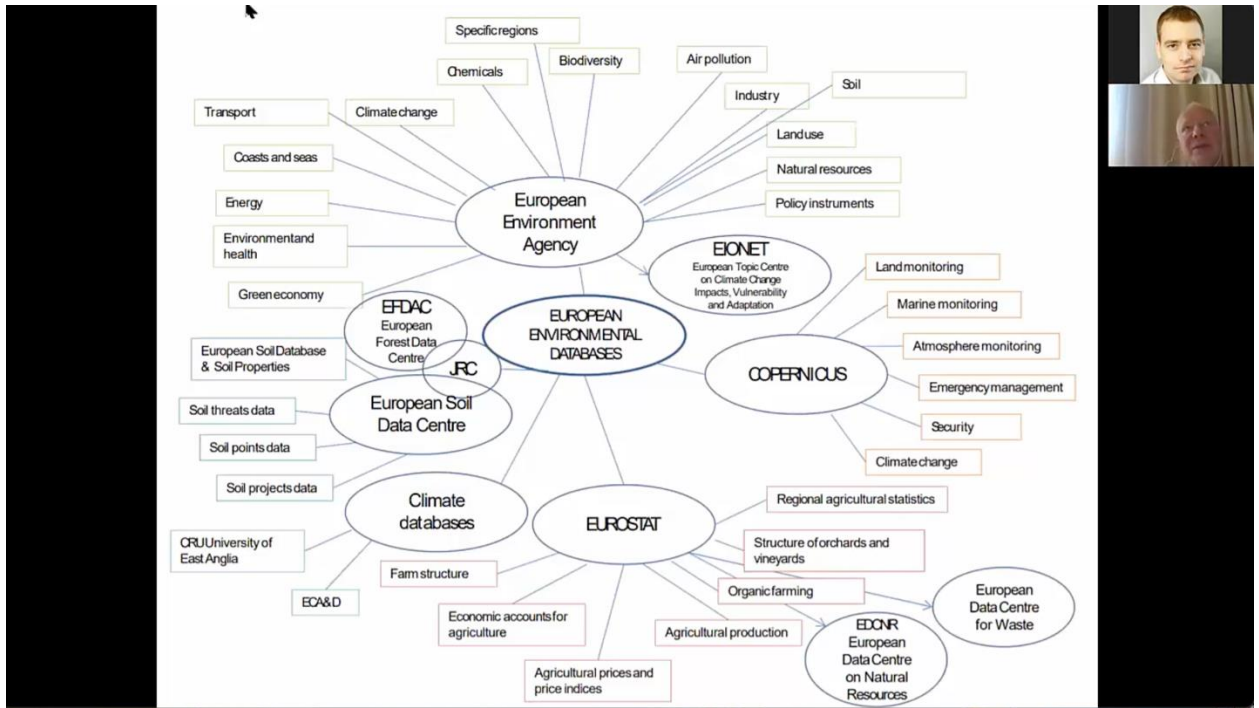


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Massimo Zotti	Planetek Italia Tentative title "Open-source satellite imagery for territorial resilience"	Open Access Copernicus Services for Land Monitoring
Open Platform for Participants	Potentially Peer-to-Peer Session	Participants showed their previous work/current projects related to ICT and introduced a part of their project that they are dealing with





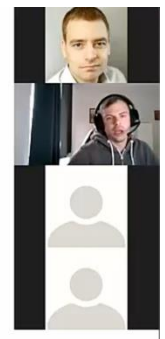
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# Online Education:

**Opencast** *video-capture, -management, and -distribution system*

University of Bremen, Center for Multimedia in Higher Education (ZMML)

M.Sc. Michael Schwenk  
 Bremen 01.07.2021



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Teaching experience with ICT.pdf - Adobe Acrobat Reader DC (32-bit)

File Edit View Sign Window Help

Home Tools Teaching experien... x

1 / 8 72.8%

Teaching experience with ICT

Simon Bell

Organize Pages

Compress PDF

Redact

Convert, edit and e-sign PDF forms & agreements

Free 7-Day Trial



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## Platforms in use

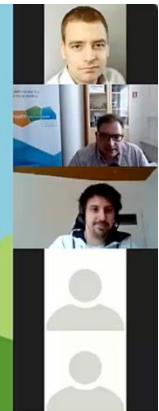
- There are numerous different platforms in use and of which I have experience for different roles and with different functionality for teaching as well as meetings:
- Tools for meetings, lectures, discussions
  - Skype
  - Zoom
  - MS Teams
  - BigBlueButton
  - Blackboard Collaborate
  - GoToMeeting
  - AdobeConnect
  - Zomo (a Chinese pirated version of Zoom)
  - Skyroom (Iranian)



## Earth monitoring from Space



Massimo Zotti, Planetek Italia





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### Main activity areas

- **Continuous monitoring with satellite data** of Earth's surface, infrastructures, forests and agriculture, urban dynamics or marine coastal areas in support of decision-making and operational activities;
- Design and development of **Cloud-based geoprocessing solutions, Spatial Data Infrastructures (SDI) and Enterprise solutions** for geospatial data management and automatic geo-processing;
- Creation of **geo-analytics** in support of **Decision Support Systems**.



**Video record** of Training Day 4 by the link

<https://drive.google.com/file/d/1RJQb2B32EeHWdd9aQBD5b-sCGTvDtdoZ/view?usp=sharing>

All the participants who have attended the whole program and has completed all the tasks got the certificates.





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## Certificate of Training



This acknowledges that

**Dr. Delgerjargal Dugarjav**

has successfully completed the training program "Training on Information and Communications Technology (ICT) in the frame of ERASMUS+ Projects MARE\* & URGENT\*\* and awarded 1 ECTS.

Program duration:  
29.06. – 02.07.2021 (20 hours)



  
Dr. Yildiray Ogurol (Managing Director ZMML)

\* **MARE** - Marine Coastal and Delta Sustainability for Southeast Asia  
[www.mare-project.net](http://www.mare-project.net)



\*\* **URGENT** - Urban Resilience and Adaptation for India and Mongolia: curricula, capacity, ICT and stakeholder collaboration to support green & blue infrastructure and nature-based solutions  
[www.urgent-project.net](http://www.urgent-project.net)



University of Bremen



University of Catania



Estonian University of Life Sciences



Martin-Luther-Universität Halle-Wittenberg