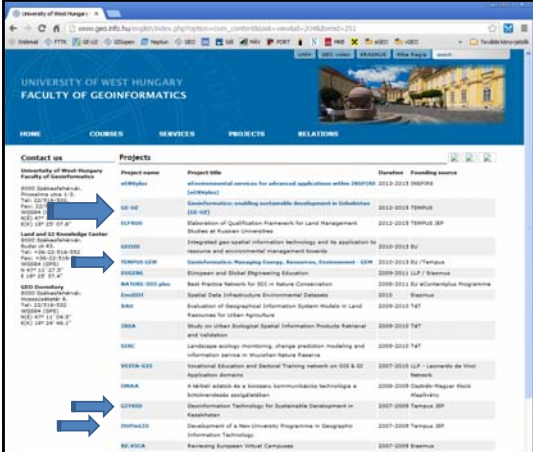


TEMPUS GE-UZ project

Geoinformatics: enabling sustainable development in Uzbekistan

530808-TEMPUS-1-2012-1-HU-TEMPUS-JPCR Tempus IV

Bela Markus
project coordinator
University of West Hungary, Faculty of Geoinformatics



GEO

Contact on	Project name	Project title	Duration	Funding source
GEOPOL	GEOPOL	Administrative services for advanced applications within ENDFRM (Africa)	2012-2013	TEMPUS
GEOPOL	GEOPOL	Geoinformatics: enabling sustainable development in Uzbekistan (Africa)	2012-2013	TEMPUS
GEOPOL	GEOPOL	Revision of Qualification Framework for Land Management Studies at Russian Universities	2012-2013	TEMPUS JPCR
GEOPOL	GEOPOL	Integrated geo-spatial information technology and its application to tourism and environmental management issues	2010-2013	Bu
GEOPOL	GEOPOL	Geoinformatics: Managing Energy, Resources, Environment - KEM	2010-2013	Bu / Tempus
GEOPOL	GEOPOL	European and Global Engineering Education	2009-2013	EU / Erasmus
GEOPOL	GEOPOL	Best Practice Network for DEC in Nature Conservation	2009-2011	Bu / eLearning Programme
GEOPOL	GEOPOL	Spatial Data Infrastructure Environmental Datasets	2010	Erasmus
GEOPOL	GEOPOL	Evaluation of Geographical Information System Products in Land Resources for Urban Agriculture	2009-2010	TAF
GEOPOL	GEOPOL	Study on Urban Biological Spatial Information Products: Rational and Utilization	2009-2010	TAF
GEOPOL	GEOPOL	Land-use ecology monitoring, change prediction modeling and information services in Mountain Nature Reserve	2009-2010	TAF
GEOPOL	GEOPOL	Technical Education and Vocational Training network on GIS & GIS Application domains	2007-2008	EU / Leonardo da Vinci Network
GEOPOL	GEOPOL	A virtual network de a business communication technology a business-to-business communication	2009-2010	Erasmus / Magyarok
GEOPOL	GEOPOL	Geoinformation Technology for Sustainable Development in Kazakhstan	2007-2008	TEMPUS JPCR
GEOPOL	GEOPOL	Development of a New University Programme in Geographical Information Technology	2007-2008	TEMPUS JPCR
GEOPOL	GEOPOL	Enriching European Virtual Campus	2007-2008	Erasmus

Aims


To ensure that UZ partner universities have the capacity to offer a Master programme in Geoinformatics that meet Bologna process and international academic quality.



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Objectives

- **Develop a successful MSc in Geoinformatics**
- **Ensure qualified staff for course delivery**
- **Build a sustainable educational network**
- **Support UZ in sustainable development**



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Develop a successful MSc in Geoinformatics

WP 2. Curriculum development (DEV)

- 2.1 As-is survey, needs analysis
- 2.2 Bologna conform curriculum
- 2.3 Accredited and licensed courses

WP 3. Development of learning materials (DEV)

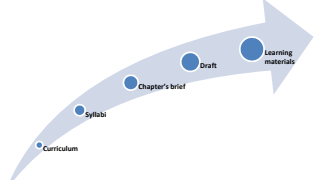
- 3.1 Guidelines
- 3.2 Course syllabi in English
- 3.3 8 modules in Uzbek
- 3.4 Review
- 3.5 Final draft
- 3.6 Feedback from the pilot course
- 3.7 8 core modules in Uzbek and Russian


WP 5. Development of learning environment (DEV)

- 5.1 Learning Management System (LMS)
- 5.2 Installation and operation of 4 computer labs
- 5.3 Use of photogrammetric workstation, laserscanner

WP 7. Quality Management (QPLN)

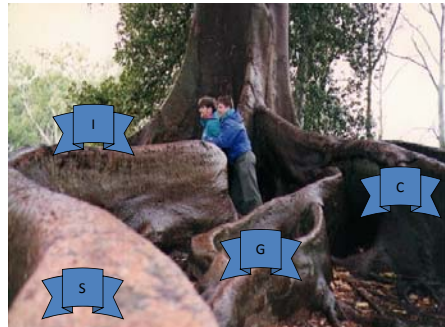

- 7.1 Quality Manual assuring project quality
- 7.2 Guidelines for Quality Assurance of learning material development
- 7.3 Guidelines for Quality Assurance of course delivery
- 7.4 External Evaluation Report (EER)





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Geoinformatics

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GE-UZ Core modules

- Introduction to Geoinformation Systems and Science
- Spatial Data Models
- Data Acquisition and Data Integration
- Geodatabases and Distributed Architectures
- Cartography and Geovisualization
- Spatial Analysis
- Remote Sensing and Photogrammetry
- Project Management and Organisation
- Cadastre and Land Information Systems



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Ensure qualified staff for course delivery

- WP 4. Train-the-teachers (DEV)**
- 4.1 32 trained teachers prepared for course development (5 days)
 - 4.2 16 trained teachers in data acquisition and GeoDBMS (4 weeks)
 - 4.3 16 trained teachers in data analysis (4 weeks)
 - 4.4 16 trained staff members in educational quality assurance (5 days)
- WP 8. Pilot course Implementation**
- 8.1 Business plan (BP)
 - 8.2 Potential students informed
 - 8.3 Motivated students admitted into the MSc course
 - 8.4 16 trained teachers prepared for use of new technologies (2 weeks)
 - 8.5 24 students give feedback on the course materials and course delivery



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Build a sustainable educational network

- WP 6. Educational network development (DEV)**
- 6.1 National network based on cooperation agreements
 - 6.2 International network based on academic agreements
- WP 9. Dissemination and awareness (DISS)**
- 9.1 Brochures, posters, presentations and other PR materials
 - 9.2 Project website
 - 9.3 GE-UZ visibility in social and professional media
 - 9.4 4 newsletters (annual)
 - 9.5 80 participants from CA countries will be informed on the project results



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Support UZ in sustainable development

- Spatially enabled society
 - Spatial enablement, that is, the ability to add location to almost all existing information, unlocks the wealth of existing knowledge about social, economic and environmental matters, play a vital role in understanding and addressing the many challenges that we face in an increasingly complex and interconnected world.
 - The main issue societies have to focus on is probably less about spatial data, but much more about managing all information spatially. This is a new paradigm that still has to be explored, deliberated and understood in the context of a spatially enabled society.

Daniel Steudler and Abbas Rajabifard, 2012, <http://www.fig.net/pub/fig/pub/pub58/figpub58.pdf>



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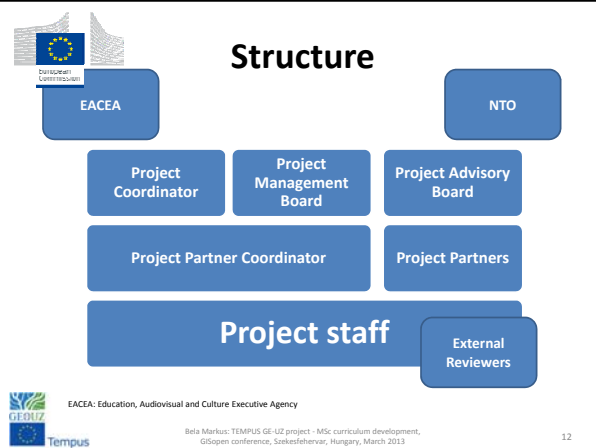
Support UZ in sustainable development



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Structure



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Project partners

Coordinator

P1 University of West Hungary (UWH), Sopron, HU

Uzbekistan

P2 National University of Uzbekistan named after Mirzo Ulug'bek (NUU), Tashkent, UZ

P3 Karakalpak State University (KSU) Nukus, UZ

P4 Tashkent Architecture Building Institute (TABI) Tashkent, UZ

P5 Tashkent Institute of Irrigation and Melioration (TIIM) Tashkent, UZ

P6 Ministry of Higher and Secondary Specialized Education (MHSSE) Tashkent, UZ

P7 National Center of Geodesy and Cartography (NCGC) Tashkent, UZ

P8 State Unitary Enterprise "Geoinformkadastr" (Geoinformkadastr) Tashkent, UZ

EU

P9 Paris-Lodron Universität Salzburg (PLUS) Salzburg, AT

P10 Royal Institute of Technology (KTH) Stockholm, SE

P11 University of Greenwich (UoG) London, UK



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UWH Staff



Prof. Béla Márkus
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mb@geo.info.hu

The project management is responsible for

- maintaining communication,
- controlling project plans,
- supervising financial transactions,
- reporting to partners and to the Commission,
- ensuring the timely submission of deliverables.

Ongoing communication and coordination is supported by using an intranet environment.



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Outcomes

1. Project management (PM)
 - 1.1 Well managed communication and reporting
 - 1.2 Sustainable use of project resources
 - 1.3 Good work environment
2. Curriculum development (CD)
 - 2.1 In learning materials
 - 2.2 Tempus conforming curriculum
 - 2.3 Detailed and detailed content
3. Development of learning materials (DM)
 - 3.1 Outcomes
 - 3.2 Content outline in English
 - 3.3 e-modules in class
 - 3.4 e-modules
 - 3.5 Feedback from the pilot course
 - 3.6 e-modules in Uzbek and Russian
4. Train-the-teachers (TT)
 - 4.1 20 teachers prepared for course development
 - 4.2 20 teachers in their own countries and abroad
 - 4.3 20 trained teachers in their subjects
 - 4.4 20 trained teachers in their subjects
5. Development of learning management system (LMS)
 - 5.1 Development of learning management system
 - 5.2 Development of learning management system
 - 5.3 Use of development system, website, hardware
6. Educational network development (EN)
 - 6.1 National network based on agreements
 - 6.2 International network based on agreements
7. Quality Management (QM)
 - 7.1 Quality Manual setting project quality
 - 7.2 Sustainable Quality Manual of learning material development
 - 7.3 Sustainable Quality Manual of course delivery
 - 7.4 Sustainable Quality Manual of course delivery
8. Pilot course implementation (PI)
 - 8.1 Pilot course (PI)
 - 8.2 Pilot course in Uzbek
 - 8.3 Pilot course in Russian
 - 8.4 In Uzbek course prepared for use of new technologies
 - 8.5 In Russian course prepared for use of new technologies
9. Dissemination and awareness (DA)
 - 9.1 Project results
 - 9.2 In Uzbek course in social and professional media
 - 9.3 In Russian course in social and professional media
 - 9.4 In Russian course in social and professional media
 - 9.5 40 participants from 10 countries will be informed on the project results

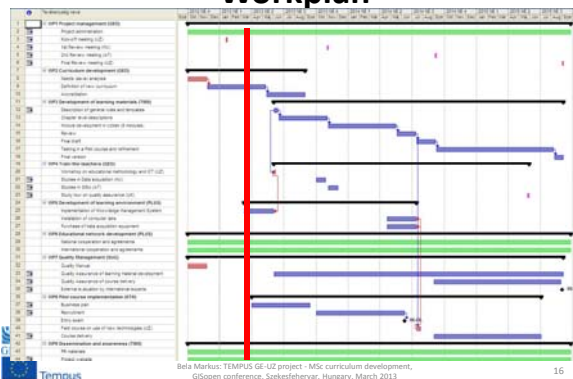


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Sustainable MSc courses
Quality management system
8 textbooks in Uzbek and Russian
Learning Management System
32 trained teachers
4 computer labs
Equipments

Workplan



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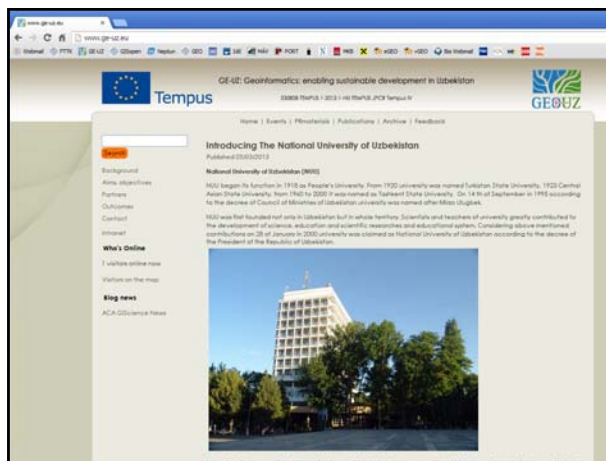
Done

- Needs analysis report
- Quality Manual
- Project website (www.geuz.eu)
- Newsletter
- Poster



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Intranet

The screenshot shows the GEUZ intranet page for the 'WPI, Project management' section. It includes a navigation menu, a search bar, and a list of project milestones and documents. The page is titled 'WPI, Project management' and contains several sub-sections with detailed text and links.

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Workplan 2013

The 2013 workplan calendar shows key events marked on specific dates:

- January:** Kick-off meeting (Jan 15), Learning Management System (Jan 22), Definition of new curriculum (Jan 29).
- February:** Studies in Data Acquisition and Geodatabases (Feb 12).
- March:** Workshop on educational methods and ICT (Mar 18-21), Guidelines (Mar 25).
- April:** Business plan (Apr 15).
- May:** Chapter level description in English (May 15).
- June:** Accreditation (Jun 18-21), Studies in Spatial Analyses (Jun 25).
- December:** Review meeting (Dec 18).

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Next event

Workshop on educational methods and ICT (17-21 June 2013)

1. Learning material development (**Guidelines** from curriculum to textbooks)
2. Learning Management System (**Moodle**) - Social media
3. Teaching / learning environment (**Specification** of computer labs, equipments)
4. Course delivery / sustainability - **Business plan**, Recruitment, Entry requirements
5. **Quality** issues and Bologna tools

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Workplan 2014

The 2014 workplan calendar shows key events marked on specific dates:

- January:** Mid-term report (Jan 15).
- February:** Computer labs and equipments (Feb 12).
- March:** Field course in new technologies (Mar 18-21).
- April:** Module development in Uzbek (Apr 15), Internal review (Apr 22).
- May:** Review meeting (May 15).
- June:** Final draft (Jun 18-21).
- July:** Start of testing learning materials (Jul 15).

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Workplan 2015

The 2015 workplan calendar shows key events marked on specific dates:

- January:** Studies in Quality Assurance (Jan 15), Refinement of course materials (Jan 22).
- February:** Cooperation agreements (Feb 12).
- March:** Final report (Mar 18-21).
- April:** GISCA conference (Apr 15), Review meeting (Apr 22).
- May:** External Quality Review (May 15).

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www.ge-uz.eu

This project has been funded with support from the European Commission.
 This presentation reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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