Equipped institutions with ICT to support BAEKTEL

DEV 2.4

BAEKTEL

Blending academic and entrepreneurial knowledge
in technology enhanced learning

*Blending Academic and Entrepreneurial Knowledge
in Technology enhanced learning – BAEKTEL*

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BAEKTEL

Project full title:

**Blending Academic and Entrepreneurial Knowledge
in Technology Enhanced Learning**

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Equipped institutions with ICT to support *BAEKTEL*

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PU	Public	**X**
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Author (s) – in alphabetical order		
Name	**Organisation**	**e-mail**
Aleksandar Borković	University of Banja Luka	aleksandar.borkovic@baektel.eu
Ivan Obradović	University of Belgrade	ivan.obradovic@baektel.eu

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1 Introduction

The procurement of equipment was planned in such a way to enable WB partner universities to set up their nodes within the BAEKTEL network, as well as in proportion to the size and scope of OER content to be developed by each of them. The plan was to acquire the necessary hardware and software resources for every institution involved. Specific instructions were given to institutions on securing the necessary requirements for the ICT resources as well as recommendations how to plan, organize and acquire the necessary facilities.

The timeframe in which the purchase of equipment was realized was considerably extended (from December 2014 to June 2016), due to problems related to the strict application of the „rule of origin", which were in some cases further complicated by lengthy institutional procedures. Hence, the acquired equipment slightly differs from the one in project proposal as some partner universities amended their needs during the process in order to fulfil requirements of both the rule of origin and the project activities.

Institution	Date of purchase	Comment
Mediterranean University	29.12.2014.	
University of Kragujevac	3.2.2015.	
University of Niš	19.2.2015.	
University of Belgrade	17.9.2015.	First public procurement failed due to improper documentation on rule of origin.
University of Banja Luka	8.12.2015.	First public procurement failed since there was no valid offer.
University of Tuzla	20.6.2016.	First public procurement failed since there was no valid certificate for all equipment.

2 List of equipment

In this section, detailed lists of purchased equipment are given, followed with short descriptions and pictures.

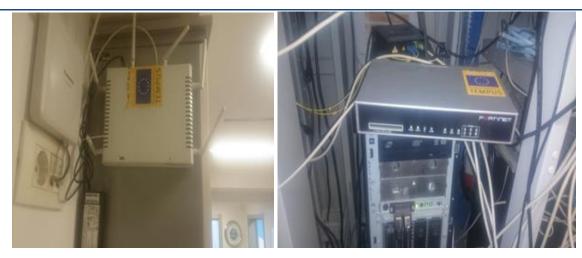### 2.1 Mediterranean University

Date of contract for purchase: 29.12.2014.

The purchase of equipment is realized according to tender procedure, having on mind all national and Tempus regulations regarding this issue. Equipment is installed at Faculty of Information technology University Mediterranean. It is used for creation, storage and use of OER materials. In addition to that all equipment is also used by professors and students of University Mediterranean for lectures, classes, IT communication and infrastructure support etc.

Title	Manufacturer and model	Quantity	Type of the equipment
Computer	HP Notebook 350 G1	1	Equipment for teacher education faculties
Computer	HP Notebook 450 G1	1	Equipment for teacher education faculties
Computer	HP EliteBook 850 G1	1	IT equipment - notebook computer
CD Players	LG CM 1530	3	Equipment for teacher education faculties
Printer	MFP Lexmark MX410de	1	Office equipment (fax, telephone, white board)
Software	Adobe Captivate 8	1	Software
Computer	HP 490 PD MT 500	20	Lab equipment in engineering
Projector	IN Fokus IN 114a	3	Equipment for teacher education faculties
FORTIGATE 80C	FORTIGATE 80C FG-80C-BDL	1	IT equipment – other
Wireless Router	AT-FS716L-50	1	Lab equipment in engineering

Picture 1. Equipment installed at Mediterranean University

2.2 University of Kragujevac

Date of contract for purchase: 3.2.2015.

The equipment is installed/used at the Faculty of Technical Science, Faculty of Science (Institute of Mathematics and Informatics) and Rectorate (University IT Centre). It is used for: provisioning servers and application for classes, video recording and editing, creation of courses and tutorials, presentations, and other OER content, as well as for collaboration, communication and infrastructure support.

Title	Manufacturer and model	Quantity	Type of the equipment
Server	Server IBM x3500 M4	2	IT equipment – server
Laptop	ACER VN7-791G-70K4"	1	IT equipment - notebook computer
Digital Camera	NIKON Coolpix S6700	1	Audio, Video and Communication equipment - photo equipment
Wireless Router	Asus RT-AC68U	1	IT equipment – other
Network Storage	Qnap TS-212P	3	IT equipment – other
Tablet	Samsung T805 Galaxy Tab S	5	IT equipment - tablet computer
UPS	Power Walker VI 1000 RT LCD	2	IT equipment – other
USB Flash	Trancend TS32GJF760	3	IT equipment – other
Memory Card	Kingston MicroSDXC 64GB	3	IT equipment – other
Hi-Fi System	Samsung BD H5500	1	Audio, Video and Communication equipment – other
Projector	Optoma HD141x	2	Audio, Video and Communication equipment – projector and TV
Multifunctional Device	HP M276nw	3	IT equipment – printers, scanners, multifunctional devices
Printer	HP LJ Pro 400 Color M451nw	3	IT equipment – printers, scanners, multifunctional devices
Robot	Lego Mindstorms	3	Interdisciplinary lab equipment
Scanner	Epson V37	1	IT equipment – printers, scanners, multifunctional devices
Laptop	Lenovo 850-70	4	IT equipment - notebook computer

Desktop	i5 JAPI I5	8	IT equipment - desktop computer
Monitor	23" HP Pavilon 23xi IPS	8	IT equipment – other
External HDD	Transcend TS2TSI25H3P	2	IT equipment – other
Stabilized power supply	Aim-Tti EX2020R	1	Lab equipment in physics
Laptop	ACER VN7-791G-70K4	1	IT equipment - notebook computer
Video Camera	CANON LEGRIA HF R66 HD	1	Audio, Video and Communication equipment - photo equipment
Digital Camera	NIKON Coolpix S6700	1	Audio, Video and Communication equipment - photo equipment
Wireless Router	Asus RT AC68U	1	IT equipment – other
USB Flash	Trancend TS32GJF760	1	IT equipment – other
Hi-Fi System	Samsung BD H5500	1	Audio, Video and Communication equipment – other
Speakers	Pionieer S-ESR2TB	1	Audio, Video and Communication equipment – other
UPS	3000VA	1	IT equipment – other
NAS Server	Qnap TS-451-4G	1	IT equipment – other
HDD	3TB WD Caviar red 30EFRX	3	IT equipment – other
Wireless Router	Asus RT-AC68U	2	IT equipment – other

Picture 2. Equipment installed at University of Kragujevac

2.3 University of Niš

Date of contract for purchase: 19.2.2015.

Most of the fixed installation equipment is located at the main University building and the portable equipment is used for OER materials creation, preparation and publishing.

Title	Manufacturer and model	Quantity	Type of the equipment
Projector	InFocus IN5554L + Lens-079	1	Audio, Video and Communication equipment – projector and TV
Projector	Optoma w307ust	1	Audio, Video and Communication equipment – projector and TV
Computer	Lenovo IdeaTab A7-30	18	IT equipment - tablet computer
Computer	Lenovo T440S	3	IT equipment - notebook computer
Camera	Sony HXR-MC2000	1	Audio, Video and Communication equipment - photo equipment
Wireless microphone system	Electro-Voice R300L	1	Audio, Video and Communication equipment – other
Scanner	3D scanner Cubify Sense	1	IT equipment – printers, scanners, multifunctional devices
Scanner	Mustek Scaner A3 600S	1	IT equipment – printers, scanners, multifunctional devices
Pen table	Wacom Intous medium pro PTH-651-ENES	1	IT equipment – other
Computer	All in one Lenovo ThinkCentre M93Z	11	IT equipment - desktop computer
Server	Eurotherm sistem - server monitoring sistem, Network monitoring system Ripe Atlas Anchor	1	IT equipment – server
Rack	Wall mount rack cabinet Conteg RUN-06-60/40	1	IT equipment – other

Picture 3. Equipment installed at University of Niš

2.4 University of Belgrade

Date of contract for purchase: 17.9.2015.

Equipment is installed at Faculty of Mining and Geology. Equipment is used for the production, creation, publication and maintenance of OER content.

First public procurement failed due to improper documentation on rule of origin.

Title	Manufacturer and model	Quantity	Type of the equipment
Server	HP ProLiant DL380p Gen8	2	IT equipment – server
Storage	HP 3PAR StoreServ 7200 Storage	1	IT equipment – other
Switch	DELL Networking N4032F	2	IT equipment – other
Laptop	DELL Precision M4800	4	IT equipment - notebook computer

Picture 4. Equipment installed at University of Belgrade

2.5 University of Banja Luka

Date of contract for purchase: 8.12.2015.

Equipment is installed at Faculty of Architecture, Civil Engineering and Geodesy. It used for: video recording of classes, video editing, creation of video tutorials, IT communication and infrastructure support for developing OER content.

First public procurement failed since there was no valid offer. Original list was modified in order to satisfy rules for purchase of equipment.

Title	Manufacturer and model	Quantity	Type of the equipment
Camcorder	Sony PXW-X200	1	Audio, Video and Communication equipment – valuable/expensive piece
Tripod and Video Head	Manfrotto set, MK055XPRO3-3W Alu 3-S kit 3W Head	1	Audio, Video and Communication equipment – other
Wireless microphone set	Sennheiser EW 112P G3	2	Audio, Video and Communication equipment – other
Cardioid condenser microphone	Sennheiser MK-4	2	Audio, Video and Communication equipment – other
Headset	Bayerdynamic MMX-300	1	Audio, Video and Communication equipment – other
Desktop computer	Infocomputer power i7	1	IT equipment - desktop computer
Desktop computer	Infocomputer design i7	1	IT equipment - desktop computer
Desktop computer	Infocomputer i5	10	IT equipment - desktop computer
Notebook computer	Schenker S405 i7/256GB/8GB	6	IT equipment - notebook computer
Network switch	Lancom GS.2352 + SFP	1	IT equipment – other

Picture 5. Equipment installed at University of Banja Luka

2.6 University of Tuzla

Date of contract for purchase: 20.6.2016.

Equipment is installed at Faculty of Mining, Geology and Civil Engineering (FMGCE) and Faculty of Electrical Engineering (FEE) University of Tuzla. The equipment is used by professors and students of University of Tuzla for the creation, storage and use of OER.
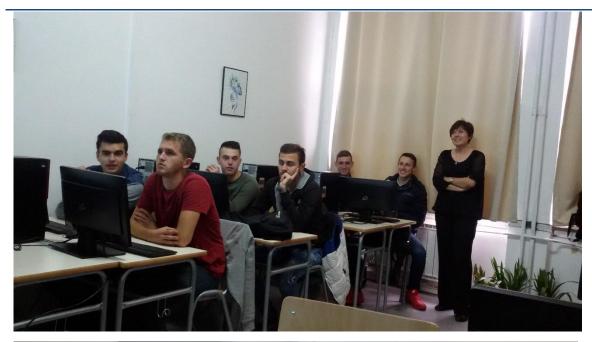
First public procurement failed since there was no valid certificate for all equipment. Original list was modified in order to satisfy rules for purchase of equipment.

Title	Manufacturer and model	Quantity	Type of the equipment
Server	Fujitsu PY TX 2560	1	IT equipment – server (FMGCE)
Server	Fujitsu PY TX 2560	1	IT equipment – server (FEE)
Server	Fujitsu PY RX2540	1	IT equipment – server (FEE)
Notebook	Fujitsu LIFEBOOK A556 i5	3	IT equipment - notebook computer (FMGCE)
Notebook	Fujitsu LIFEBOOK A556 i5	2	IT equipment - notebook computer (FEE)
Personal computer	Fujitsu Celsius W550+monitor E22T-7 Pro	17	IT equipment - desktop computer (FMGCE)

Picture 6. Equipment installed at University of Tuzla

3 Conclusion

Within this WP all institutions were equipped with the necessary hardware, software and communication infrastructure to support implementation and evolvement of BAEKTEL OER platform and development of OER materials. Due to objective problems, purchase of equipment was prolonged, which in turn prolonged the deadlines for realization of some project activities.