

TEMPUS PROJECT: 530510-TEMPUS-1-2012-RS-TEMPUS-JPCR

PROJECT TITLE: "Assisting humans with special needs: curriculum for HUman-

TOol interaction Network"

ACRONYM: HUTON

WP NUMBER: WP.1: Development and maintenance of the network and

forming of the core of experts for the delivery of the

curriculum leading to the specialist degree

DELIVERABLE: 1.4. New training Web services development

Due Date: Month 18

Submission date: Month 18

Start date of project: 15/10/2012.

Duration: 36 months

Lead beneficiary for

this deliverable: UB

Responsible Person: Dr Aleksandar Sedmak, UBG

Other persons who participated in preparation

of WP1.1 deliverable:

- 1. Ljubica Konstantinović (CR BEG),
- 2. Lana Maneski (SUNP),
- 3. Aleksandar Veg (UB),
- 4. Nikola Jorgovanović (UNS),
- 5. Bojana Petrovački (CYHCI NS),
- 6. Marko Munih (UL),
- 7. Vittorio Sanguineti (UG),
- 8. Nicolas Pallikarakis (UP)
- 9. Vladimir Simeunović (IMP)

Revision: 1.0

Dissemination Level		
NL	National level	
IL	International level (including the Commission Service)	1



DELIVERABLE 1.4: New training Web services development

This deliverable is the fifth action of the WP1: **Development and maintenance of the network core and structure for support of the new curriculum.**

INTRODUCTION:

The wider objective of the project "Assisting humans with special needs: Curriculum for HUman-TOol interaction Network (HUTON)" is the development of interdisciplinary and multidisciplinary curriculum with the laboratory educational support and THE EDUCATIONAL TRAINING NETWORK for the optimized use of technology that improves the quality of life of humans with special needs.

The specific objectives in the project are:

- Development of the **new interdisciplinary and multidisciplinary accredited curriculum (MECHATRONICS FOR REHABILITATION)** leading to the master degree in the domain of technologies for humans with special needs.
- Setup of the training **network in Republic of Serbia (RS) in the domain of mechatronics, rehabilitation engineering and medicine, and neurorehabilitation** that enables the delivery of the new interdisciplinary and multidisciplinary curriculum.
- Training of staff for providing on-the-job education and use of appropriate technologies which increases **new employment opportunities.**
- Training of staff for providing **better medical services** for humans with special needs.

WORKPACKAGE WP.1:

The project is planned with eight workpackages, where the first four are the development activities.

The workpackage (WP) 1 is dedicated to the development of the network core for support of the new curriculum.

The WP1 goal is construction and delivery of Web based training environment. This includes discussion forums, document sharing, training sessions, chats, presentations and other "e-learning" and "knowledge management" interactive platforms.

The new IT infrastructure was planned with the aim to ensure secure, high-quality and unrestricted network environment. Supporting the implementation of the curriculum network, video and IT equipment had to be configured. In order to ensure and provide the technical prerequisites for the use of new Web based techniques, review of the existing technical and IT capacity is completed. All existing laboratories are visited, analyzed and discussed with project partners and they technical personnel.

The approved project proposal started from the following assumptions and risks:

- 1. Availability of the expertise in the domain of web communication,
- 2. Availability of staff trained for the development and maintenance of the web portal,



- 3. Availability of the resources for the networking,
- 4. Timed funding and purchasing of the hardware/software along the project activities,
- 5. Availability of personal resources.
- 1. Based on needed network requirements new Web training servies have been created:

The fifth phase of the activities:

2. New training Web services development

New Web training servies enables Virtual Learning Environment (VLE) for all project partners, students and university professors.

All services are installed on demonstration center IT infrastructure.

Next options for all team members, professors and future students have been enabled:

- Create multiple activity links to on-line sessions within a course/meeting/demonstration,
- Realtime video, audio and chat networks,
- Control of all active participants by system administrator,
- Recording of network sessions,
- Using documents, presentations, exercises in live or offline sessions.
- New courses implementation,
- Material implementation.

Web training servies are using Moodle platoform for Courses designe and implementation and Big Blue Button platform for realtime video and audio conversation, course demonstration and training activities.

All installed services are access protected under University network and can be used only by using HUTON security codes.

All Huton IT equepment has been setup for using Huton VLE and basic training has been performed.