STSM Scientific Report

Action Number: IS0605 - A Telecommunication Economics COST Network (Econ@Tel)

STSM Title: "Digital Television – applications for e-Health/e-Learning"

Beneficiary/Applicant: Dr. Zviad Kirtava, Partners for Health / National Information

Learning Centre, Tbilisi (Georgia)

Host: Dr. Bartolomeo Sapio, Fondazione Ugo Bordoni, Rome, Italy

STSM Dates: 23-30 May, 2011

STSM Place: Fondazione Ugo Bordoni (FUB), Viale del Policlinico 147, 00161, Rome, Italy

Purpose of the visit:

1. Study of possibility of usage of Digital Television (DTV) in following conditions:

- 1.1. For outpatients with chronic disorders (specifically at rehabilitation stage)
- 1.2. For children with limited capabilities to usual learning programs
- 1.3. For elderly lonely people as social support program
- 2. To plan possibility of cooperation engaging Georgian and Italian researchers;
- 3. To elaborate chances of applying for joint RTD application for EU FP and other grant programs.

Description of the work carried out during the visit:

Dr. Kirtava visited FUB during May 23-27 (5 working days). Meetings, presentations and discussions were held with following researchers at the FUB:

- Dr. Filomena Papa,
- Dr. Michele Cornacchia
- Dr. Enrico Nicolo

Discussions regarding DTV possible usage in chronic diseases field were mainly concentrated towards neurologic and mental disorders. Before the STSM Dr. Kirtava had meetings with Tbilisi Institute of Neurology and Neuropsychology (INN, Director – Prof. Sofia Kasradze) and have discussed several neurologic diseases, which might be interesting for possible joint research. Neurodevelopmental disorders (NDD) in children, especially - autistic spectrum disorders and other learning disabilities, as well as adult stroke outpatients at rehabilitation phase have been named. These topics were then discussed by Z.Kirtava during STSM with FUB researchers.

Dr. Kirtava provided brief presentation about PfH work in field of e-Health and m-Health, as well as regarding ongoing infrastructure development for Digital TV in Tbilisi.

Description of the main results obtained and future plans agreed on:

We have agreed that:

- 1. Scenarios for DTV usage in case of stroke patients rehabilitation will be discussed with Tbilisi INN researchers, particularly for two subsets:
 - a. Patients with mental and speech distubrbancies,
 - b. Patients with mental disturbanceies only,
 - c. Patients with speech and motor deficiences.
- 2. DTV usage will be discussed for Assisted Ambient Living type scenarios to be used in Tbilisi. The plans would engage Tbilisi municipality Health and Social Care Department and several NGO working in this field. Plans to adapt dyslexia DTV application for Tbilisi will also be discussed with possible trips of FUB team to Tbilisi (possibly Fall 2011-Spring, 2012)
- 3. DTV usage scenarios and applications were discussed for children with neurodevelopment disorders (NDD) including autistic spectrum disorders and other learning disorders. Detailed plan will be agreed upon discussion with INN personnel.
- 4. Prof. Sapio, Dr. Cornnachia and Dr. Papa will elaborate issue for collaborative project and will also learn about funding opportunities in Italy and EU. Dr. Kirtava will also try to elaborate some grant application chances.
- 5. Following issues have been discussed as well in regard of: usage and usability of DTV, user satisfaction, the capability of services to reach all citizens and the capability to include them in the benefits of the information society.
- As an STSM outcome, it is planned to include the results of the STSM into a
 presentation for COST605 Final MCM (Sept 21-22, 2011, Budapest) and they will
 also be reflected in final reports and possible book publication as a result of COST 605
 Action.
- A subject of future proceedings a joint article regarding DTV usage in eHealth and eLearning.

Dr. Zviad Kirtava, MD, PhD PfH/NILC, Tbilisi, Georgia

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