



SEVENTH FRAMEWORK PROGRAMME

FP7-ICT-2007-1

THEME ICT-2007.5.2

Advanced ICT for Risk Assessment and Patient Safety

Grant agreement for: **Large-scale integrating project (IP)**

Annex I - "Description of Work"

Project acronym: **DebugIT**

Project full title: **Detecting and Eliminating Bacteria Using
Information Technology**

Grant agreement no.: *217139*

Date of preparation of Annex I (latest version): 26 November 2007

Date of approval of Annex I by Commission: *28/11/2007*

1.2 Project Summary

In half a century of antibiotic use, new challenges have emerged: fast emergence of resistances among pathogens, misuse and overuse of antibiotics. Antimicrobial resistance results in escalating healthcare costs, increased morbidity and mortality and the (re-)emergence of potentially untreatable pathogens. For infectious diseases DebugIT will (1) detect patient safety related patterns and trends, (2) acquire knowledge and (3) use this for better quality healthcare.

The DebugIT project will use clinical and operational information from Clinical Information Systems (CIS) across EU through the 'view' of a virtualized, fully integrated Clinical Data Repository, featuring transparent access to the original CIS together with data aggregations in a local store. Highly advanced new text, image and structured data mining on individual patients as well as on populations will render valuable informational and temporal patterns of patient harm. This will be fed into a Medical Knowledge Repository and mixed with domain knowledge coming from external sources (guidelines and scientific evidence). After validating, this knowledge will be used by a decision support and monitoring tool in the clinical environment to prevent patient safety issues and report on them. Outcomes and benefits, in clinical and socio-economic terms, will be measured. Results will be integrated into CIS of participating European hospitals, industry and their clients, and become available globally through a European or global Disease Control Centre/Public Authority, also as Open Source solution.

Advanced ICT applications and innovations concern the virtualization of the Clinical Data Repository through ontology and terminology binding and mediation, advanced data mining techniques, the use of machine reasoning related to real, point-of-care patient data, as well as consolidation of all these techniques in a comprehensive but open framework. Output will be applicable to other clinical fields.

1.3 List of Beneficiaries

List of Beneficiaries

Beneficiary Number *	Beneficiary name	Beneficiary short name	Country	Date enter project**	Date exit project**
1(coordinator)	Agfa HealthCare N.V.	Agfa	Belgium	1	48
2	Les Hôpitaux universitaires de Genève	HUG	Switzerland	1	48
3	Université De Genève	UNIGE	Switzerland	1	48
4	LINKÖPINGS UNIVERSITET	LIU	Sweden	1	48
5	Empirica Gesellschaft für Kommunikations- und Technologieforschung bmH	EMP	Germany	1	48
6	University College London	UCL	United Kingdom	1	48
7	Institut National de la Santé et de la Recherche Médicale	INSERM	France	1	48
8	Universitätsklinikum Freiburg	UKLFR	Germany	1	48
9	TECHNOLOGIKO EKPEDEFTIKO IDRIMA LAMIAS	TEILAM	Greece	1	48
10	IZIP A.S.	IZIP	Czech republic	1	48
11	Gama/Sofia Ltd.	GAMA	Bulgaria	1	48

Further project participants:

Scientific Advisory Board (SAB) and Clinical Advisory Board (CAB)

Among the proposed members for a Scientific Advisory Board (focused on patient safety and ICT issues, including research and analysis methods) and a Clinical (focused on infectious diseases and antibiotics) Advisory Board, the following global experts have already agreed to participate in case this proposal is successful:

Scientific Advisory Board	
Name	Affiliation
Prof. Dr. David Bates	Harvard Medical School, USA
Prof. Enrico Coiera	University of New South Wales, Australia
Prof. Dr. Daniel Grandt	German Coalition for Patient Safety
Prof. W. Ed Hammond	Duke University, USA
Dr. Rainu Kaushal	Cornell University, USA
Prof. Dr. Martin Schumacher	University of Freiburg Medical School, Germany
Clinical Advisory Board	
Name	Affiliation
Prof. Dr. Didier Pittet	WHO, World Alliance for Patient Safety
Prof. Dr. Johan Giesecke	European Centre for Disease Control (ECDC)
Dr. Isabelle Colombet	European Hospital George Pompidou, France
Prof. Dr. Javier Garau (tbc)	European Society of Clinical Microbiology & Infectious Diseases (ESCMID)
Prof. Dr. Kendall Ho	University of British Columbia, Canada
Dr. Håkan Hanberger	Swedish Programme for Rational Use of Antimicrobial and Surveillance of Resistance (STRAMA)
Dr. Stephan Harbarth	Les Hôpitaux universitaires de Genève, Switzerland
Dr. Vilma Marešová	Clinic for Infectious Diseases, Prague, Czech Republic
Dr. Hans Rutberg	Linköping University Hospital, Sweden
Prof. Dr. Sten Walther	Swedish Intensive Care Registry

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Project Identifier: FP7-ICT-2007.5.2-217139

Instrument: Integrated Project

DebugIT is based on the partnership of 11 partners.

Swedish partner: Dept Biomedical Engineering/Medical Informatics, Linköping University

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