



HEARTFAID

**D46 – Report on Dissemination
Activities and Exploitation
Activities Plan**

**Submission date: 15/06/09
Due date of document: 30/04/09**



HEARTFAID

A KNOWLEDGE BASED PLATFORM OF SERVICES FOR SUPPORTING MEDICAL-CLINICAL MANAGEMENT OF THE HEART FAILURE WITHIN THE ELDERLY POPULATION

Project summary	
Project acronym:	HEARTFAID
Project identifier:	IST – 2004 – 027107
Duration of the Project:	01/02/2006 – 30/04/2009
Project Co-ordinator:	UNICAL University of Calabria (Italy)
Thematic Priority:	Information Society Technology
Instrument:	Specific Targeted Research or Innovation Project

Consortium
<ul style="list-style-type: none">➤ UNICAL- Università della Calabria (Italy)➤ UNICZ- Università degli studi Magna Graecia di Catanzaro (Italy)➤ UNIMIB- Università degli studi di Milano Bicocca (Italy)➤ JUMC- Jagiellonian University Medical College (Poland)➤ VMWS- Virtual Medical World Solutions Ltd (United Kingdom)➤ FORTHNET S. A.- Hellenic Telecommunications and Telematic Applications Company S. A. (Greece)➤ SYNAP- Synapsis s.r.l. (Italy)➤ CNR- Consiglio Nazionale delle Ricerche (Italy)➤ FORTH-Foundation for Research and Technology Hellas (Greece)➤ RBI- Rudjer Boskovic Institute (Croatia)➤ AUXOL- Istituto Auxologico Italiano (Italy)



D46 – Report on Dissemination Activities and Exploitation Activities Plan

Document summary	
Document title:	Report on Dissemination Activities and Exploitation Activities Plan
Document classification:	Deliverable D46
Dissemination level:	PU
Submission date:	15 June 2009
Due date:	30 April 2009
Authors:	Domenico Conforti – UNICAL Debora Minardi – UNICAL
Work package:	WP8 – Dissemination
Report version:	1.1

Short description
This document contains an overview of the dissemination activities carried out by the Heartfaid consortium during the third year of the project. In particular, a detailed description of the specific dissemination activities performed by each partner is given. A set of exploitation activities aiming at promoting the tools methodologies and general results of the project is presented.

Change record		
Version number	Changes	Release date
1.0	First draft of the document	30/04/09
1.1	Further contributions and final version	15/06/09



Table of contents

Executive Summary	4
1 Introduction	5
2 Consortium Dissemination Activities in the Third Reporting Period.....	6
2.1 Dissemination to the General Public.....	6
2.2 Horizontal Activities	7
3 Individual Dissemination Activities	8
3.1 Dissemination Activities of UNICAL.....	8
3.2 Dissemination Activities of UNICZ.....	9
3.3 Dissemination Activities of UNIMIB	10
3.4 Dissemination Activities of JUMC	10
3.5 Dissemination Activities of VMWS	11
3.6 Dissemination Activities of FORTHNET	12
3.7 Dissemination Activities of SYNAPSIS	12
3.8 Dissemination Activities of CNR	13
3.9 Dissemination Activities of FORTH.....	14
3.10 Dissemination Activities of RBI.....	16
3.11 Dissemination Activities of AUXOL.....	17
4 Plans for Exploitation.....	19



Executive Summary

In this deliverable we detail the most relevant issues related to the activities carried out during the third reporting period, concerning the dissemination of the knowledge “extracted” from the overall activities of HEARTFAID project.

The deliverable provides a general overview of the horizontal dissemination activities and dissemination to the general public. Moreover, the specific dissemination activities carried out by each partners are presented

The contents of the document are organized as follows. After the introduction, in which the dissemination guidelines (reported in the deliverable D6) have been briefly described, the section 2 presents the general dissemination activities carried out by the whole consortium.

The section 3 regards the specific dissemination activities carried out by each partner in form of table, by which it is possible to summarize, in a “synoptic” way, all the specific types of dissemination activities performed.

The section 4 presents an exploitation activities plan aimed at promoting the tools, methodologies and general results of HEARTFAID project.



1 Introduction

The HEARTFAID consortium has carried out dissemination activities which have been developed and upgraded along the entire duration of the project. These activities concern the wide diffusion and distribution of knowledge and information related to the project and to the establishment of a close cooperation with potential end-users, the scientific community and professional organizations. The consortium tried to balance the need of a capillary diffusion of the information that was better done using individual efforts by all the partners with the provision of a uniform image of the consortium itself.

According to the early plan for using and disseminating knowledge (deliverable D6), the dissemination activities have been mainly organized on the basis of the following items:

- The members of the HEARTFAID consortium have raised awareness of their own project but have also actively participated in activities that have raised the profile of the HEARTFAID initiative in general. The partners have collaborated and cooperated amongst each other, and also have participated in some “clustering” activities, e.g. workshops or joint review meetings.
- A project website has been created and it has been maintained during the project period and beyond it in order to inform the public worldwide about the aims and the main results of the HEARTFAID project. Public deliverables are making available on the web site.
- Dissemination activities beyond the consortium: publications, conferences, workshops and web-based activities aiming at disseminating the knowledge and technology produced.
- The project is promoting both the coordinated publication in research journals as well as in sector oriented magazines.
- Each partner has operated its own dissemination activity as well using its web site and its dissemination channels mainly on a geographical base.
- As it is already established in the Project Handbook, if the Work Package Leaders Group has agreed a Project Deliverable to be available to the public, any partner may publish information included in such Project Deliverable without any notifications to the other partners and without any other partners’ consent.



2 Consortium Dissemination Activities in the Third Reporting Period

2.1 Dissemination to the General Public

Raising public participation and awareness is a strategic activity of the whole project, which is involving all the partners. In order to create a wider project awareness impact, the main objectives of raising public participation and awareness are the effective involvement of all relevant intermediaries, actors and stakeholders, with particular attention to European regional governmental bodies, health care professional associations, patient associations and Higher Education institutions.

With the contribution of all the partners, an inner circle of User Interest Groups made of healthcare organizations and institutions from the 5 countries of the consortium has been established. In the different countries, a larger circle of a User Interest Group has been also established, to publicise by seminars in each country the project to a wider audience of healthcare institutions. The involvement and interaction with end-users health care organizations will encourage further experimentation and clinical validation of the developed systems, services and tools.

Strong interactions have been established also with the interested intermediary organisations (European regional governmental bodies, healthcare professional associations and patient associations), by holding, in cooperation, seminars, workshops and press conferences. Particular attention has been devoted to the interaction with European higher education institutions (i.e. Universities and Colleges), with the end to disseminate the innovative results of HEARTFAID to young student at several grade levels (bachelor, master and PhD).

Especially at the launch of the project, but also during its run, particular attention has been paid to the issue of press releases, in order to give wide public resonance to the overall project's activities.

Finally, a public available website has been created for disseminating project results, publications and public deliverables. The website is the major dissemination mean at the current point towards the general public. The website presents the objectives of HEARTFAID, a brief summary of the project, the work packages organization and a comprehensive contact details list of all partners involved in the project.



2.2 Horizontal Activities

This section identifies and present the horizontal activities of the HEARTFAID project. This includes joint work with other projects as well as further co-operations and exchange activities. Moreover, the participation to concertation and clustering activities organized by EU Commission has been taken into account.

From the beginning of the project, it became obvious that there are many projects and initiatives with which a co-operation should in principle be possible. HEARTFAID is generally open to all these co-operation activities. However, mainly because of resource issues, each co-operation opportunity has been evaluated carefully, considering resource requirements, mutual benefits and synergies, and time lines of the different activities.

The HEARTFAID partners have agreed on a process within the consortium to handle these co-operation activities. The key points are:

- A free exchange of overview information with any other activity that shows interest in HEARTFAID (or, with activities to which HEARTFAID partners would like to set-up a contact).
- In case that there was mutual interest and certain activities or potential working areas are defined, the consortium has agreed on whether HEARTFAID engaged in this co-operation.
- The definition of co-operation details, including topic areas and formal steps that might be required, has been defined on a case-by-case basis.

During the last reporting period, a quite relevant horizontal activity was an agreement that has been established with the FP7 project “HEARTCYCLE” (www.heartcycle.eu) for sharing the Heart Failure Ontology developed by Heartfaid consortium within the activities of WP4.

“In particular, the **Heartfaid ontology** encapsulates a detailed taxonomic overview of the HF domain including relevant relations among concepts (i.e. descriptive knowledge about the domain), description of actions, typically in the form of suggestions for patients and medical personnel (i.e. procedural knowledge), resulting in a descriptive and procedural knowledge base for HF.”, and furthermore, “We are looking forward for a fruitful cooperation with **Heartfaid**.” (from HeartCycle Publishable Deliverable 4.B, page 86).



3 Individual Dissemination Activities

3.1 Dissemination Activities of UNICAL

The HEARTFAID's research activities of the partner UNICAL have been mainly faced by the Department of Electronics, Informatics and Systems (DEIS) within the Research Laboratory on DECISION ENGINEERING FOR HEALTH CARE DELIVERY (*de_Health Lab*).

The *de_Health Lab* is currently working on developing models, methods and techniques for the support of decision making in health care. This activity is doing in collaboration with several health care institutions. In particular, the overall activity covers two broad research items: the development of Knowledge based Decision Support Systems for medical diagnosis, prognosis and therapy; the development of quantitative models and methods for the Health Care Management.

The specific dissemination activities, which have been carried out by UNICAL, were the following:

- As HEARTFAID coordinator, interaction and collaboration with other EU projects.
- Participation to concertation and clustering meeting and IST events.
- Dissemination of HEARTFAID results and methodologies within the world wide scientific community of Operations Research and Management Science.
- Publication of HEARTFAID methodological results on international journals of Operations Research and Management Science.
- Transferring of HEARTFAID methodological results to undergraduate, graduate and PhD courses.
- Transferring of HEARTFAID results to the health care operators involved in the relevant medical domain.
- Development and maintenance of the Project Web Site.

UNICAL Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
14-17 July 2008 Las Vegas,	<i>the 2008 International Conference on Semantic Web and Web</i>	<i>Oral Presentation</i>	<i>Computer Scientists</i>	<i>International</i>	<i>CNR, UNICAL, VMWS</i>



Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>USA</i>	<i>Services</i>				
<i>15 July 2009-06-08 Pisa (IT)</i>	<i>PHS 2020 Consultation Workshop</i>	<i>Consultation Meeting</i>	<i>Computer Scientists, Medical Doctors</i>	<i>International</i>	<i>UNICAL, CNR</i>
<i>14-17 Sept. 2008 Bologn, Italy</i>	<i>35th annual Computers in Cardiology Conference</i>	<i>International Conference</i>	<i>100 International medical & technical audience</i>	<i>International</i>	<i>CNR, UNICAL, UNICZ, UNIMIB, JUMC, AUXOL, FORTH, RBI</i>
<i>14-17 Sept 2008 Bologna Italy</i>	<i>35th annual Computers in Cardiology Conference</i>	<i>International Conference</i>	<i>100 International medical & technical audience</i>	<i>International</i>	<i>CNR, UNICAL, UNICZ</i>
<i>25-27 November 2008 Lyon (FR)</i>	<i>ICT 2008</i>	<i>International Conference</i>	<i>General purpose</i>	<i>International</i>	<i>UNICAL</i>

3.2 Dissemination Activities of UNICZ

UNICZ has carried out its own internal dissemination activities, by increasing the awareness of Heartfaid activities and current results within its own institution. UNICZ has consolidated the interactions with the following health care professional associations with the aim to keep informed about the Heartfaid activities: ANMCO (Italian Association of Hospital Cardiologists), SIC (Italian Society of Cardiology), SIMI (Italian Society of Internal Medicine). Other Societies are involved, so as the Italian Society of General Practitioners (SIMG).

In particular, an oral presentation, about Heartfaid platform prototype and our personnel experience with heart failure patients enrolled for home and hospital care, has been prepared for Calabria and Sicily Italian Society of Internal Medicine Meeting, an important scientific event involving a lot of specialized internal medicine doctors of South Italy. Moreover in the Cardiovascular Disease Unit several meetings with cardiologists and other specialized doctors have been performed involving also specialized nurse personnel for illustrating the Heartfaid platform functionalities. The experience gathered with HEARTFAID has also supported the design of future studies planned on the management of patients with CHF involving also other hospital and cardiovascular operative units.



UNICZ Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
14-17 Sept. 2008 Bologn, Italy	35th annual Computers in Cardiology Conference	International Conference	100 International medical & technical audience	Internatio nal	CNR, UNICAL, UNICZ, UNIMIB, JUMC, AUXOL, FORTH, RBI
14-17 Sept 2008 Bologna Italy	35th annual Computers in Cardiology Conference	International Conference	100 International medical & technical audience	Internatio nal	CNR, UNICAL, UNICZ
October 25-28, 2008 Genova, Italy	The National Congress of the Italian Society of Internal Medicine (SIMI)	Poster presentation	Medical Doctors	Italy	UNICZ, UNICAL

3.3 Dissemination Activities of UNIMIB

Presentation of the Heartfaid project during local seminars and University lectures. Presentations at symposia and workshops within and inside the institution. Preparation of database for future publications.

UNIMIB Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
14-17 Sept. 2008 Bologn, Italy	35th annual Computers in Cardiology Conference	International Conference	100 International medical & technical audience	Internatio nal	CNR, UNICAL, UNICZ, UNIMIB, JUMC, AUXOL, FORTH, RBI

3.4 Dissemination Activities of JUMC

JUMC has continued the previously started HEARTFAID dissemination activities by increasing the awareness of Heartfaid project and its current results within



medical personnel in our institution, and HF patients/their relatives visiting hospital and ambulatory unit. Moreover, we have kept informed about the progress within the project the following professional health care associations with their units in Krakow: Polish Cardiac Society and Polish Society of Hypertension.

The experience which was gained with HEARTFAID project has also supported the design of future studies planned on the management and treatment of patients with chronic heart failure.

The information on HEARTFAID is placed on the web pages of the I Cardiac Department at JUMC (<http://www.kardiologia1.cm-uj.krakow.pl/>) and official JUMC www.cm-uj.krakow.pl websites as dissemination knowledge channel.

JUMC Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>14-17 Sept. 2008 Bologn, Italy</i>	<i>35th annual Computers in Cardiology Conference</i>	<i>International Conference</i>	<i>100 International medical & technical audience</i>	<i>Internatio nal</i>	<i>CNR, UNICAL, UNICZ, UNIMIB, JUMC, AUXOL, FORTH, RBI</i>
<i>13.02.20 09</i>	<i>Meeting of Department's staff and Cracow Division of Polish Hypertension Society Scientific event</i>	<i>Scientific event</i>	<i>Physicians , about 20 persons</i>	<i>Cracow, PL</i>	<i>JUMC</i>

3.5 Dissemination Activities of VMWS

Dissemination activities carried out by VMWS during this reporting period are mainly related to presentations and participations in international conferences.

VMWS Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>14-17 July 2008 Las</i>	<i>the 2008 International Conference on Semantic Web</i>	<i>Oral Presentation</i>	<i>Computer Scientists</i>	<i>Internatio nal</i>	<i>CNR, UNICAL, VMWS</i>



Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>Vegas, USA</i>	<i>and Web Services</i>				
<i>9-11 July 2008 London, UK</i>	<i>The Leading International Event on ICT in Medicine and Care - the annual platform of the International Council on Medical and Care Compunetics</i>	<i>International Conference</i>	<i>Computer Scientists, Medical Doctors</i>	<i>International</i>	<i>VMWS</i>
<i>14-17 July 2008 Las Vegas, Nevada, USA</i>	<i>WORLDCOM P'08 - The 2008 World Congress in Computer Science, Computer Engineering, and Applied Computing</i>	<i>Conference</i>	<i>over 2,000 computer science and Engineering researchers from 82 countries</i>	<i>All the world</i>	<i>VMWS</i>
<i>16-19 October 2008, Fuggi (IT)</i>	<i>World Academy of Biomedical Sciences and Technologies, Best for Health, World WABT Forum, Fuggi, Italy</i>	<i>International Forum</i>	<i>General Purpose</i>	<i>International</i>	<i>VMWS</i>

3.6 Dissemination Activities of FORTHNET

FORTHNET did not carried out, during the third reporting period, any relevant dissemination activity.

3.7 Dissemination Activities of SYNAPSIS

SYNAPSIS did not carried out, during the third reporting period, any relevant dissemination activity.



3.8 Dissemination Activities of CNR

CNR has disseminated HEARTFAID activity and achievements by taking advantage of its cooperation with the academic world and in cooperative research and development programs, both national and international.

CNR contributed also to the organization of the PHS2020 Consultation Workshop, held in Pisa in the middle of July.

A special session in cooperation ISTI-CNR and other EU projects like ACGT and ContraCancrum has been organized at ISDA 2009 (Pisa, Italy, November 2009). This special session titled “Intelligent Systems Design and Applications in the Health Domain” aimed to present, analyze and discuss new research trends about the design and application of intelligent advanced systems for medical ontologies, medical knowledge discovery, representation and management, signal and image processing, efficient clinical decision support systems, multilevel modelling of pathologies, therapy simulation and virtualization of the human physiology.

Finally, CNR has taken part to important national and international events promoting the project activities. A summary can be found in the table below.

CNR Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
14 July 2008 Leipzig, Germany	<i>Int. Conf. on Mass-Data Analysis of Images and Signals in Medicine, Biotechnology, Chemistry and Food Industry</i>	<i>Oral presentation</i>	<i>35 international Computer Scientists</i>	<i>International</i>	<i>CNR, FORTH</i>
16-18 July 2008 Leipzig, Germany	<i>8th Industrial Conference on Data Mining ICDM'2008</i>	<i>Oral Presentation</i>	<i>100 International Computer Scientists</i>	<i>International</i>	<i>CNR</i>
14-17 July 2008 Las Vegas, USA	<i>the 2008 International Conference on Semantic Web and Web Services</i>	<i>Oral Presentation</i>	<i>Computer Scientists</i>	<i>International</i>	<i>CNR, UNICAL, VMWS</i>
14-17 Sept. 2008 Bologn, Italy	<i>35th annual Computers in Cardiology Conference</i>	<i>International Conference</i>	<i>100 International medical & technical audience</i>	<i>International</i>	<i>CNR, UNICAL, UNICZ, UNIMIB, JUMC,</i>



Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
					<i>AUXOL, FORTH, RBI</i>
<i>14-17 Sept 2008 Bologna Italy</i>	<i>35th annual Computers in Cardiology Conference</i>	<i>International Conference</i>	<i>100 International medical & technical audience</i>	<i>Internatio nal</i>	<i>CNR, UNICAL, UNICZ</i>
<i>Novemb er 18-20, 2008 NATO- NURC La Spezia, Italy</i>	<i>Geospatial Data in the Operational Decision Making Process</i>	<i>Presentation</i>	<i>30 among Computer Scientists and Engineers from US, Italy, UK</i>	<i>Internatio nal</i>	<i>CNR</i>
<i>16 Decemb er 2008 Genova, Italy</i>	<i>Workshop: Multimodal and Multidimensio nal Content and Media – CNR ICT Department Project</i>	<i>Seminar</i>	<i>80 industrial and academic audience</i>	<i>National</i>	<i>CNR</i>
<i>January 14, 2009 Universi ty of Central Lancashi re, Preston, UK</i>	<i>Engineering and Computational Science for Oncology Network (ECSON) Seminars</i>	<i>Seminar</i>	<i>20 among Computer Scientists and Mathematicians</i>	<i>Internatio nal</i>	<i>CNR</i>
<i>5-8 Februar y 2009 Lisboa, Portugal</i>	<i>Second Workshop on Image Mining. Theory and Applications; within Int. conf. on Computer Vision: Theory and Application</i>	<i>Paper Presentation</i>	<i>About 100 participants</i>	<i>Internatio nal</i>	<i>CNR</i>

3.9 Dissemination Activities of FORTH

In WP8 FORTH has carried out dissemination activities according to the general plans defined in the deliverable D6. In particular FORTH has carried out its own



internal dissemination activities, by increasing the awareness of HEARTFAID activities and results within its own institution. More specifically, dissemination activities performed by FORTH in this period were:

- Participation to Computers in Cardiology, 2008 (Bologna, Italy) with two oral presentations and one poster:

A) "Morphological Classification of Heartbeats Using Similarity Features and a Two-Phase Decision Tree" (F. Chiarugi, D. Emmanouilidou, I. Tsamardinos, I.G. Tollis), Computers in Cardiology 2008, Bologna, Italy, September 2008.

B) "Measurement of Heart Rate and Respiratory Rate Using a Textile-Based Wearable Device in Heart Failure Patients" (F. Chiarugi, I. Karatzanis, G. Zacharioudakis, P. Meriggi, F. Rizzo, M. Stratakis, S. Louloudakis, C. Biniaris, M. Valentini, M. Di Rienzo, G. Parati), Computers in Cardiology 2008, Bologna, Italy, September 2008.

C) "ECG and Echocardiography Processing for Decision Support in Heart Failure" (F. Chiarugi, S. Colantonio, D. Emmanouilidou, D. Moroni, F. Perticone, O. Salvetti, A. Sciacqua), Computers in Cardiology 2008, Bologna, Italy, September 2008.

- Participation to IHIC 2008 (Hersonissos, Crete, Greece) oral presentation and demo session at FORTH booth:

A) "An Integrated and Interoperable Platform of Services for the Management of Heart Failure" (S. Di Bona, D. Guerri, M. Lettere, R. Fontanelli, F. Chiarugi, A. Marsh, O. Salvetti), IHIC 2008, Hersonissos, Crete, Greece, October 2008.

In the demo session done at FORTH booth, the demo has been performed by many participants at IHIC. Among them Mr. Yun Sik Kwak, Chairman-designate of ISO TC215, Health informatics.

FORTH Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
14 July 2008 Leipzig, Germany	<i>Int. Conf. on Mass-Data Analysis of Images and Signals in Medicine, Biotechnology, Chemistry and Food Industry</i>	<i>Oral presentation</i>	<i>35 international Computer Scientists</i>	<i>International</i>	<i>CNR, FORTH</i>
14-17 Sept. 2008	<i>35th annual Computers in Cardiology</i>	<i>International Conference</i>	<i>100 International medical &</i>	<i>International</i>	<i>CNR, UNICAL, UNICZ,</i>



Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>Bologn, Italy</i>	<i>Conference</i>		<i>technical audience</i>		<i>UNIMIB, JUMC, AUXOL, FORTH, RBI</i>

3.10 Dissemination Activities of RBI

RBI has carried out its own internal dissemination activities, by increasing the awareness of Heartfaid activities and current results within its own institution. Moreover, dissemination activities performed by RBI have been oriented to national and international scientific community. A summary of the activities can be found in the following table.

RBI Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>26.-27. March 2008. Bohinji/ Slovenia</i>	<i>Fifth international workshop on knowledge technologies</i>	<i>invited presentation</i>	<i>35 computer scientists from Slovenia and Croatia</i>	<i>Slovenia/ Croatia</i>	<i>RBI</i>
<i>25.-28. May 2008. Goeteborg Sweden</i>	<i>Conference Medical Informatics in Europe (MIE 2008)</i>	<i>oral presentation at the conference</i>	<i>200 scientists mainly from Europe</i>	<i>Europe</i>	<i>RBI</i>
<i>23.-26. June 2008. Cavtat/ Dubrovnik Croatia</i>	<i>International Conference on Information Technology Interfaces</i>	<i>oral presentation at the conference</i>	<i>150 scientists mainly from Croatia and Slovenia</i>	<i>Croatia and Slovenia</i>	<i>RBI</i>
<i>14.-17. September 2008. Bologna Italy</i>	<i>Conference Computers in Cardiology</i>	<i>Poster presentation</i>	<i>About 200 conference participants</i>	<i>All the World</i>	<i>RBI+dr. Goran Krstacic</i>
<i>17.-19. October 2008. Porec, Croatia</i>	<i>Workshop on Knowledge Discovery Applications</i>	<i>Organization and oral presentation</i>	<i>28 Croatian scientists in the field of artificial intelligence</i>	<i>Croatia</i>	<i>RBI</i>



Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
14-17 Sept. 2008 Bologn, Italy	35th annual Computers in Cardiology Conference	International Conference	100 International medical & technical audience	Internatio nal	CNR, UNICAL, UNICZ, UNIMIB, JUMC, AUXOL, FORTH, RBI
15.-19. Decemb er 2008. Hanoi, Vietnam	Tenth Pacific Rim International Conference on Artificial Intelligence	Oral presentation	computer scientists mainly from Asia, USA, and Australia, 300 participants	Internatio nal	RBI
24. Decemb er 2008. Ho Chi Minh City, Vietnam	Presentation at Faculty of Computer Science of Ho Chi Minh City University of Technology	Invited talk	professors and computer science students, 25 persons	Internatio nal	RBI
5. Februar y 2009. Zagreb, Croatia	Professional meeting at Clinic of Cardiovascula r Diseases, Clinical Medical Centre Rebro	Invited talk	30 medical doctors working in the hospital	Croatia	RBI
2.-4. March 2009. Bohinj, Slovenia	Sixth International Ljubljana- Zagreb Workshop on Knowledge Technologies	Oral presentation	50 scientists in computer science mainly from Slovenia	Slovenia	RBI
3. April 2009. Zagreb, Croatia	RBI seminar	Oral presentation	20 scientists mainly from RBI	Croatia	RBI

3.11 Dissemination Activities of AUXOL

Presentation of the Heartfaid project during local seminars and University lectures. Presentations at symposia and workshops within and inside the institution. Preparation of database for future publications.



AUXOL Overview Table

Dates and Place	Event	Type	Type and Size of Audience	Countries addressed	Partner responsible /involved
<i>14-17 Sept. 2008 Bologn, Italy</i>	<i>35th annual Computers in Cardiology Conference</i>	<i>International Conference</i>	<i>100 International medical & technical audience</i>	<i>Internatio nal</i>	<i>CNR, UNICAL, UNICZ, UNIMIB, JUMC, AUXOL, FORTH, RBI</i>



4 Plans for Exploitation

HEARTFAID is a research and development project aimed at devising, developing and validating an innovative knowledge based platform of services, able to improve early diagnosis and to make more effective the clinical management of heart diseases within elderly population.

In very general terms, the project aims at a broader availability and extension of IST applications and services. In particular, by exploiting the up-to-date scientific achievements on knowledge representation, management, discovery and decision support systems, the main project goal is to develop new systems and services that are able to effectively integrate and process relevant biomedical data and information for improving medical knowledge and processes related to the clinical management of Heart Failure (HF) patients.

Moreover, according to the overall vision of the IST priority in FP6, HEARTFAID project proposal aims to contribute in developing innovative intelligent environments that enable ubiquitous, effective and efficient management of citizens' health conditions and supporting health professionals in coping with major health challenges. In particular, HEARTFAID provides healthcare professionals with access to timely relevant information at the point of need (i.e. different types of health care delivery environments), with a set of functionalities and services for acquiring up-to-date relevant medical knowledge that will provide a reliable support to healthcare professionals in their daily medical and clinical operations, enabling new ways of working as well as improved patient quality.

Under this respect, it is of strong strategic importance for HEARTFAID to devise and effectively implement exploitation strategies, with the aim to emphasize the overall impact of the project's results.

As far as exploitation issues are concerned, since HEARTFAID is a project mostly implementation oriented, theoretical and methodological work are currently being rapidly converted to experimental and practical applications. Furthermore, the knowledge and experiences gained from practical experiments are going to be used by the HEARTFAID partners for defining the next generation of products and services in the relevant domain.

In order to devise and form a clear exploitation strategy, the HEARTFAID Consortium has developed (and is still developing) the following activities.

1. Clearly state the results of the project and identify the exploitable knowledge (see the following Overview Table). What has been reported in the Overview Table concerns the identification and the very preliminary assessment of the expected most promising exploitable "parts" of the project results.



Overview Table

Exploitable Knowledge (description)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable for commercial use	Patents or other IPR protection	Owner & Other Partner(s) involved
Data acquisition and transmission infrastructure from home care environment	1. Ambient Intelligence Systems 2. Nurse@Home	1. Health Care 2. Ambient Assisted Living	2009-2010	Software license agreement	VMWS SYNAP FORTH
e-CRF (electronic-Case Report Form): integrated informative tool for the collection and storing of all the clinical data and information of the Heart Failure patient	Heart Failure Electronic Patient Record	Clinical management of chronic Heart Failure patients	2009-2010	Software license agreement	JUMC
Medical Knowledge Base: integrated tool which implements and codes the descriptive and procedural medical knowledge of the heart failure domain.	Clinical Decision Support Systems	Clinical management of chronic Heart Failure patients	2009-2010	Software license agreement	RBI CNR
Medical Model Base: integrated tool which implements and codes the new medical knowledge of the heart failure domain by tailored application of innovative KDD methods	Clinical Decision Support Systems	Clinical management of chronic Heart Failure patients	2009-2010	Software license agreement	UNICAL RBI CNR FORTH
Signal Analysis methods for the management, processing and features extraction of the ECG signals	Clinical Decision Support Systems	Clinical management of chronic Heart Failure patients	2009-2010	Software license agreement	FORTH
Image Analysis Toolkit for the	Clinical Decision Support Systems	Clinical management	2009-2010	Software license	CNR



Exploitable Knowledge (description)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable for commercial use	Patents or other IPR protection	Owner & Other Partner(s) involved
management, processing and features extraction of the EcoCG images		of chronic Heart Failure patients		agreement	
Knowledge Discovery System for Web-Based Data Extraction and Analysis	Clinical Decision Support Systems	Clinical management of chronic Heart Failure patients	2009-2010	Software license agreement	FORTHNET RBI SYNAP
Methods and technologies for the implementation of instant Alert and Notification system	Clinical Decision Support Systems	Clinical management of chronic Heart Failure patients	2009-2010	Software license agreement	FORTHNET SYNAP

2. Definition of direct and indirect “selling points” out of the produced results.
3. Definition and assessment of the objective of marketing the overall HEARTFAID platform. In particular, identification of the appropriate collaborating marketing schemes for maintaining shared objectives and common interests. Moreover, marketing management (market research, identification of competitors, SWOPT and PEST analysis).
4. As far as the individual partners are concerned, exploitation plans are mainly based on specifically taking into account the “owning of results” and the exploitable parts of these results. In particular:
 - a. Academic and research partners:
 - i. Collaboration with other companies for exploiting the relevant result owned by the individual partner.
 - ii. Foundation of spin-off companies.
 - iii. Academic and research oriented exploitation (e.g., new research topics, PhD dissertations, etc.).
 - b. Industrial partners:
 - i. Use results in advancing existing products or solutions.
 - ii. Creation of new products or solutions.
 - iii. Adaption of results to cover solutions offered in other fields.
 - iv. Use the new knowledge gained by the project as a new base level for further R&D.



- v. Define future company's R&D objectives for participation in new projects.

All the mentioned exploitable results are related to the developed technological components and functionalities of the Heartfaid Platform, about which all the consortium has been involved.

Even though the Industrial Partners (VMWS, FORTHNET and SYNAP) have the responsibility to define the Exploitation Plan, they equally share the roles about the exploitation activities with all the consortium.

More specifically, the industrial partners are developing an exploitation plan, based on the following steps: identification and evaluation of the most promising exploitable "parts" of the project results; identification of the market segments; detailed business plan; detailed identification of the potential markets and the competitive environment; assessment of benefits by end-users; establishment of a commercial agreement among partners on the joint commercialization and exploitation after project end; after project completion, development of the prototypes into industrial products.

At the moment, we foresee that the results might be commercially exploited indirectly by some form of licensing agreement. On the other hand, the scientific and methodological results of the project will be mainly exploited in some other forthcoming national and international projects.

