Healthcare Interoperability Testing and Conformance Harmonisation

WP5 (Dissemination)

D5.4: Liaison Report

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ABSTRACT
This document describes all HITCH liaison activities performed during project lifetime.

KEYWORDS
Liasion, interoperability, dissemination, report.

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1 INTRODUCTION

The dissemination activities are concentrated in Work Package 5 (Dissemination). This report summarizes all activities regarding liaisons with other projects.

The HITCH project is not the only project aiming to enhance interoperability in eHealth. There are many others, some of them funded by the European Commission, that deal with different aspects of this field. In the HITCH project proposal and at project start, the most relevant liaison partners have been identified and are listed below in Table 1 with a short description:

Project	Description
European Liaisons	
Calliope	Calliope is a network of collaborating organisations mandated with the planning and implementation of eHealth. CALLIOPE has been initiated by 28 founding members comprising 17 organisations representing national governments and eHealth competence centres and 11 EU-level stakeholder organisations of health professionals, patients, health insurers and industry.
EHR-Q^{TN}	EHR-QTN is a Thematic Network project that intends to better prepare the health community across Europe for systematic and comparable quality assurance and certification of e-Health products, more specifically of the Electronic Healthcare Record systems (EHRs).
epSOS	The collaboration between a number of Member States in the epSOS large scale pilot project seeks to develop cross-border interoperability of summaries of electronic health records and ePrescriptions.
HPRO Card	The main objectives of the developed HPRO card are to facilitate the free movement of health professionals in Europe while protecting patients from the small number of professionals that could be subject to severe disciplinary sanctions.
SmartPHS	Smart Personal Health is a European initiative to promote awareness about issues and challenges related to personal health systems interoperability, from technical to organisational and legal aspects.
International Liaisons	
CCHIT	The Certification Commission for Health Information Technology (CCHIT) is authorized by the US Health Department as an Authorized Testing and Certification Body for EHR functionality, interoperability and security.
NIST	Besides other activities, the role of NIST is to advance healthcare information enterprise integration through standards and testing, consult US government on updating the Federal Health IT Strategic Plan, on health IT implementation and to provide pilot testing of standards and implementation specifications, as requested.
Continua	Continua Health Alliance is a non-profit, open industry organization of healthcare and technology companies joining together in collaboration to improve the quality of personal healthcare.

Table 1: Liaison Projects

In the following chapters, it is described by which means HITCH co-operated with these projects and how it was assured that relevant information from the projects was utilized in HITCH and vice versa where applicable. Additionally, for each of the European research projects, a one page synopsis (including URL, description, goals, approach, etc) has been developed and is included in Annex A.

2 EUROPEAN LIAISONS

This section lists the Liaisons to other European projects.

2.1 Calliope

Calliope was a EU-funded Thematic Network aiming at providing value to decision makers for national eHealth implementations. HITCH was in contact with Ms. Zoi Kolitsi, the project coordinator and Ms. Tanja Niederländer from the dissemination team, in order to get information about the (to that time) upcoming eHealth interoperability roadmap and discuss possible relations. Before this background it could be seen that the Calliope roadmap (released in December 2010) contains some direct thematic links that makes it easy connecting it to the HITCH roadmap that is scheduled for release about half a year after the Calliope document.

The Calliope roadmap[i] takes a global view and gives high level recommendations in the area of eHealth Interoperability. Thus, it does not cover technical details with respect to testing which is the focus of HITCH. Nevertheless, in particular the Calliope roadmap recommends to

> "*Consider legislative frameworks for innovation that recognise standardisation - including certification and accreditation - as one of the major facilitators of innovation in eHealth and encourage maximal use of standards;* […]"

And, further:

> *"Certification of quality of eHealth systems and services, against commonly accepted standards may provide the needed tools for such mutual recognition and acceptance."*

This is greatly complemented by HITCH' work package 4 that described the state of the art in the area of certification and quality labelling, and further presents a roadmap how to shape the future in that area.

Also the other HITCH roadmap topics, namely Quality Management and tools are touched as "Open Issues" by the Calliope Roadmap:

> *"The use of open collaborative tools to jointly develop terminologies as well as the development of tools needed to deploy them; common approaches to testing, evaluation, quality assurance, maintenance of semantic resources are typical areas for joint efforts."*

Overall, the HITCH roadmap perfectly builds on top of Calliope and fills in some of the gaps that Calliope identified on a higher level.

2.2 EC Mandate 403

M403 eHealth addresses the need to develop the necessary support for the adoption and implementation of eHealth standards in Europe. The goal is to assess the requirements or relevant use cases, establish a process for the harmonization of eHealth standards to support the adoption of profiles (detailed standards implementation guidance), develop test tools,

[i] Calliope Network: EU eHealth Interoperability Roadmap, December 2010. http://www.calliope-network.eu/Consultation/tabid/439/Default.aspx

and provide the sharing of best practices to accelerate the adoption of standards-based interoperability in eHealth projects across Europe.

Phase 1 of the project is already completed and provides the work programme for phase 2 of the mandate. Thus, the actual standardisation and profiling work is actually planned for phase 2. However, the mandate project team is currently not active since phase 2 has not been started yet.

Mr. Charles Parisot from the HITCH team was directly involved into the work of Mandate 403's phase 1. Thus, all corresponding results have been integrated into the HITCH discussion where applicable. There are indeed a few contact points between both projects, mainly because quality labelling and certification as well as related test tools heavily rely on fixed standards and standard profiles.

2.3 EHR-Q^{TN}

EHR-Q^{TN} is the Thematic Network on Quality Labelling and Certification of EHR Systems and aims at preparing the health community across Europe for systematic and comparable quality assurance and certification of e-Health products, more specifically of the Electronic Healthcare Record systems[ii].

Of course, EHR-Q^{TN} and HITCH share a common topic, namely certification of eHealth products. However, EHR-Q^{TN} aims at promoting EHR (Electronic Health Record) certification in general within the European Union, while HITCH takes a broad approach considering all eHealth systems and developing different certification and quality labelling scenarios. Additionally, HITCH tries to combine the functional testing that is favoured (so far) by EuroRec with the more interoperability-based testing mechanisms from IHE Europe.

EHR-Q^{TN} includes several partners from EuroRec (through their ProRec centres) that are also working in the HITCH project. Also, Mr. Morten Bruun-Rasmussen MEDIQ A/S in EHR-Q^{TN} is working in HITCH as a representative from MedCom. Thus, HITCH is well informed about the progress made in EHR-Q^{TN} and information about experiences and discussion flow between both projects.

2.4 epSOS

The epSOS large scale pilot project is a collaboration between a number of EU Member States and industry, seeking to develop cross-border interoperability of summaries of electronic health records and ePrescriptions.

The software solutions developed by the different teams implement standard profiles that are mostly built on top of IHE Integration Profiles. The software undergoes heavy interoperability testing on so called Projectathons events. One of these testing events took place at the same venue as the European Connectathon 2011 where also the HITCH workshop on the future of Interoperability Testing took place. epSOS members were invited over epSOS mailing list to join the workshop. Further, HITCH advertised the workshop at the previous epSOS Projectathon in Bratislava (Slovakia) with a large poster (see photo).

[ii] EHR-Q^{TN} Homepage at EuroRec: http://www.eurorec.org/RD/index.cfm

Several members from the HITCH team are also active within the epSOS project; IHE Europe (Ms. Karima Bourquard) is present as a beneficiary in both projects and Mr. Eric Poiseau from INRIA is also active for IHE in epSOS. Mr. Charles Parisot (in HITCH for IHE Europe) joins the epSOS team as a representative from GE Healthcare.

2.5 HPRO Card

The project determined the status and possible future of a Health Professional Card in the different European Union's member states. The main objectives of the card will be to facilitate the free movement of health professionals in Europe while protecting patients from the small number of professionals that could be subject to severe disciplinary sanctions. In the future, the card could have other possible applications such as validation of continuing education and access to medical records.

The HPRO Card project ended in August 2009, a few months before HITCH started in January 2010. Therefore, there was no active liaison between HITCH and the project; however, the official deliverables available on the HPRO Card web page[iii] and have been investigated and discussed within HITCH.

2.6 Smart Personal Health

Smart Personal Health is a European initiative to promote awareness about issues and challenges related to personal health systems interoperability, from technical to organisational and legal aspects. The personal health devices being in focus of the research project include fever thermometers, pulse oxymeters, weighing machines, etc.

Partners from the Smart Personal Health Project include IHE Europe and ETSI (with Mr. Milan Zoric) which are also active in HITCH. Further, Mr. Charles Parisot from IHE Europe is also connected to Smart Personal Health as a representative of GE Healthcare. Thus, experiences and valuable information could be shared on common topics, i.e. challenges in interoperability of eHealth systems that are the common ground of both projects.

[iii] Deliverables of the HPRO Card project: http://www.hprocard.eu/en/accueil/deliverables.html

3 INTERNATIONAL LIAISONS

3.1 CCHIT / NIST

These two institutions must be seen in the HITCH context with respect to the US certification program for EHR (Electronic Health Record) systems that was initiated through the HITECH (Health Information Technology for Economic and Clinical Health) Act, belonging to the ARRA (American Recovery and Reinvestment Act) from 2009.

According to ARRA, NIST (National Institute of Standards and Technology) has the tasks to

> *"keep or recognize a certification program or programs for the voluntary certification of HIT* […] *such program shall include, as appropriate, testing in accordance with §13201(b) of the HITECH Act."*

More generally, the National Technology Transfer and Advancement Act (NTTAA) directs NIST

> *"to coordinate Federal, State, and local technical standards activities and conformity assessment activities, with private sector technical standards activities and conformity assessment activities, with the goal of eliminating unnecessary duplication and complexity in the development and promulgation of conformity assessment requirements and measures".*

Thus, NIST does not perform any (non-voluntary) EHR certification but this is done by accredited certifiers as CCHIT (Certification Commission for Health Information Technology). The relation between those two and further players, as well as the corresponding experiences with testing and certification in the USA are also highly relevant for the Europe, and therefore, for the HITCH roadmap.

For that reason HITCH invited Ms. Lisa Carnahan from NIST's Standards Coordination Office to the HITCH workshop in Pisa (Italy) in order to give an overview of the situation and experiences in the US. The information provided by Ms. Carnahan in her presentation, as well as the good discussion with the attending HITCH team and the attendees (e.g. from the European Commission) led to a deeper understand of certification schemes, tools and quality management that also had deep impact on the HITCH roadmap.

3.2 Continua

The Continua Health Alliance is a non-profit, open industry organization of healthcare and technology companies joining together in collaboration to improve the quality of personal healthcare[iv]. The Continua Alliance does not offer standards (or standard profiles) freely available for download but requires a membership to access the publications. Products conforming to one or more Continua profiles can be granted a quality label.

A member from the HITCH project, Mr. Charles Parisot (from partner IHE Europe) is also involved into Continua as a representative for GE Healthcare. This helped HITCH to better understand labelling scenarios like used by Continua and account for them in Work Package 4, describing possible certification and labelling scenarios. Also, Work Package 2 (test tools)

[iv] Web page of Continua: http://www.continuaalliance.org/index.html

and Work Package 1 could significantly benefit from the work done by Continua. Therefore, the experiences from Continua influenced the HITCH roadmap within all areas.

4 ANNEX A: PROJECT SYNOPSIS DOCUMENTS

4.1 Calliope

CALLIOPE: CALL for InterOPErability	
Project Name	CALL for InterOPErability
Acronym	CALLIOPE
Website(s)	http://www.calliope-network.eu/
Start date	2008, June
End date	2010, December
Abstract	CALLIOPE is the EU-funded Thematic Network "CALLIOPE - Creating a European coordination network for eHealth interoperability implementation" CALLIOPE is a network of collaborating organisations mandated with the planning and implementation of eHealth. CALLIOPE has been initiated by 28 founding members comprising 17 organisations representing national governments and eHealth competence centres and 11 EU-level stakeholder organisations of health professionals, patients, health insurers and industry. By the end of 2008, the founding members have set up a network governance and are inviting additional members to join the network. The broader eHealth community is also associated to CALLIOPE through the establishment of the CALLIOPE forum and is invited to contribute to the debate and benefit of the best practice exchange. This collaboration aspires to create the highest possible degree of confidence in the CALLIOPE proposals and hence their potential to be adopted in national and European level eHealth strategies and implementations.
Goals	The main goal of the CALLIOPE Network is to produce value for decision makers for national eHealth implementations. CALLIOPE comprises a dedicated forum where decision makers, implementers, professionals, patients and other stakeholders can share visions, experiences and good practices on how to establish interoperable eHealth services.
Approach	CALLIOPE creates an open forum to support the implementation of interoperable eHealth infrastructures and services across Europe. CALLIOPE builds a unique cross-stakeholder platform aspiring to governing principles and supported by a communication infrastructure and knowledge management tools. CALLIOPE – as part part of its current work plan – will review and advance the EC interoperability recommendation, add value to eHealth standardisation initiatives and propose a European roadmap for eHealth interoperability.
Expected impact	N/A
Addressees	The CALLIOPE project is driven by Member States health administrations. It represents a targeted effort aiming to establish an appropriately governed, composed and structured open forum, with the focal goal to support Member States to implement interoperable eHealth solutions, in close collaboration with the key stakeholders, including users, industry and payers. What is sought in CALLIOPE is consistency

	and this is to be pursued through learning from each other, building consensus on what may be best practices and how to best establish win-win situations for all stakeholders as well as arriving at common specifications for implementing interoperable solutions, in close liaison with the Commission Services and relevant standardisation bodies.
Expected Project results made publicly available (URL? License?)	• D2.1 CALLIOPE Governance and Terms of Operation and • Consensus Building Activities Manual • D2.2 Subscription Services • D4.2 Project/Network Flyer Can be downloaded from: http://www.calliope-network.eu/DownloadArea/Deliverables/tabid/328/Default.aspx
Related projects	Mandate M/403, HITCH, epSOS, Continua Health Alliance, CCHIT, EHRQ Thematic Network, HealthProCard, Calliope, ehrQTN, SmartPersonalHealth
Events	N/A
Important dates	N/A
Project partners	European organisations may become CALLIOPE members, following submission and assessment of a Membership Application form, where they specify - among various other items - the areas of their potential contribution to the CALLIOPE initiatives.
Contact person (Email/Address)	CALLIOPE Project Coordinator Ms. Zoi Kolitsi (kolitsi@vivodinet.gr)

4.2 Continua

Continua Health Alliance	
Project Name	Continua Health Alliance
Acronym	Continua
Website	http://www.continuaalliance.org/index.html
Start date	2006, June 6th
End date	No end date, continuing effort
Abstract	Given the rise of chronic conditions and the rapid aging of the population, the methods of managing health will need to shift from traditional institutional settings to peoples' everyday environments, including the home. To enable this shift, a group of technology, healthcare and fitness companies have formed the Continua Health Alliance, an open industry group that will establish an ecosystem of connected personal health and fitness products and services, making it possible for patients, caregivers and healthcare providers to more proactively address ongoing healthcare needs. Continua does not create new networking standards, but will be based on proven connectivity standards. Proven connectivity standards that will be considered include Bluetooth®, USB, Wi-FiTM, Z-WaveTM and ZigBeeTM, among other established transports
Goals	The Continua mission is to establish an ecosystem of interoperable personal health systems that empower people and organizations to better manage their health and wellness. Increase effectiveness of personal health and fitness management. With interoperable products and services, individuals can maximize the effectiveness of their wellness programs. They can track their progress and share wellness results with a healthcare practitioner or personal coach, who can provide feedback and help them to stay motivated. Better manage chronic conditions. Interoperable health products empower patients to better manage chronic conditions at home, work, or on the move. Improved healthcare data systems enable care teams to make necessary interventions and allow family members to play a greater role in their loved one's care. Together, these tools offer the potential to manage chronic conditions more efficiently and reduce the frequency of physician office visits and hospital stays. Live independently, safe and well. Products that monitor daily activities and inform loved ones and care teams helping individuals to continue their lives independently. By offering a viable alternative to institutional living, the Continua ecosystem can help alleviate some of the burden on social and healthcare systems and improve quality of life for our aging population.
Approach	Developing design guidelines that will enable vendors to build interoperable sensors, home networks, telehealth platforms, and health and wellness services. Establishing a product certification program with a consumer-recognizable logo signifying the promise of interoperability across certified products. Collaborating with government regulatory agencies to provide methods for safe and effective management of diverse vendor solutions.

	Working with leaders in the health care industries to develop new ways to address the costs of providing personal telehealth systems.
Expected results & impacts	In a system well-designed for improving health, people with heart disease or diabetes can transmit their vital signs – blood pressure, heart rate, oxygen saturation, glucose levels, temperature, weight, respiration – seamlessly from home to their health professional, and get real-time feedback on their condition. A busy professional is able to receive a daily electronic check-up on the health status his aging parent who lives alone, suffers from a series of chronic conditions and is on multiple medications. Today, technologies like these that can enable more proactive personal health and are being applied – but not nearly as commonly as needed to radically improve health and quality of life and eliminate unnecessary costs from the healthcare system. To become a central component of the way we manage health, personal health and medical devices must be fully interoperable with each other and with other information sources. Because broad interoperability has yet to be achieved, this is an emerging priority for health systems and for the medical and information technology industries. Creating a rich eco-system of interoperable health and fitness devices will: Empower individuals and patients to better manage their health by providing them with information regarding their fitness and health through personal medical devices and services. Allow loved ones and professional care givers to more accurately monitor and coach chronic disease patients and elderly individuals living independently. Enable medical and fitness device manufacturers to rapidly develop interoperable devices and services using industry developed connectivity standards. Enable health care providers to offer better quality care through personalized health solutions assembled from a rich marketplace of interoperable health care devices and services
Addressees	Healthcare authorities, Healthcare providers, and vendors of medical devices
Related projects	IHE Patient Care Devices
Events & important dates	Please visit the 'News & Media' and "Events" pages at http://www.continuaalliance.org for important dates and events of Continua Health Alliance.
Project partners	See the member list on: http://www.continuaalliance.org/about-the-alliance/member-companies.html
Contact person (Email/Address)	Continua Health Alliance c/o VTM, Inc. 3855 SW 153rd Drive Beaverton, Oregon 97006 USA Phone: +1 503.619.0867 Fax: +1 503.644.6708 Email: Admin@ContinuaAlliance.org

4.3 EHR-Q^{TN}

EHR-Q^{TN}:Thematic Network on Quality Labelling and Certification of EHR Systems	
Project Name	Thematic Network on Quality Labelling and Certification of EHR Systems
Acronym	EHR-Q^{TN}
Website	http://ehrqtn.eurorec.org
Start date	2009, February 1st
End date	2012, January 31st
Abstract	EHR-Q^{TN} is a Thematic Network project that intends to better prepare the health community across Europe for systematic and comparable quality assurance and certification of e-Health products, more specifically of the Electronic Healthcare Record systems (EHRs). The project fits with objective 1.6 of the 2nd Call for Proposals for the CIP-ICT PSP program: "Improving certification of eHealth products", more especially where the work programme refers to the "good practice requirements as elaborated by EuroRec", bringing the work done by the Q-REC consortium a step further towards the acceptance of the principles and procedures of certification thereby managing the diversity of the healthcare settings in the Member States.
Goals	The specific objectives of EHR-Q^{TN} are: To validate and customise for each of the countries the work done in the Q-REC project, benchmarking national language versions while addressing for all the countries the same domain of application in order to progressively increase interoperability of the systems; To produce a database of all stakeholders with an interest in high quality EHR systems (suppliers/vendors, authorities, user organisations and academics); To organise coordination meetings between national instances involved in certification in order to exchange experiences, to harmonise procedures and to progress towards the mutual recognition of certified systems (possibly including intercontinental harmonisation and cross recognition); To organise at least one annual International Conference, preferably together with other major conferences (e.g. the Annual Strategic Ministerial e-Health Conference, the World of Health IT Conference); To organise in each country at least one national workshop per year, respectively on: an EHR Market Overview, hereby also disseminating the EuroRec Certification approach as well as the Recommendations from the Commission related to Certification of EHR Systems; the validation of the content of the EuroRec Repository, the tools and the EHR descriptive statements; the validation of the procedures for EHR quality labelling and certification. To translate a selected set of EuroRec Statements in the national language.
Approach	EHR-Q^{TN} promotes certification by organising national workshops in 27 different European countries, by validating the EuroRec functional statements (over 1.600 statements), translating a substantial set of them in over 20 different European languages and by validating the EuroRec certification tools and procedures. The focus will be on

	validating and translating functionalities in relation with medicinal product prescriptions, medication management, summary records and on generic statements regarding reliability and trustworthiness of the systems as well as on security and access management. EHR-Q^{TN} will also deliver, for each of the countries involved, an EHR market overview. Another report will document possible roadmaps toward sustainable certification at national or even cross-border level.
Expected results & impacts	The outcome of EHR-Q^{TN} is expected to be both documentary as well as practical/concrete by creating a favourable context for a more professional and – up to a certain level – cross-border certification of e-Health products and services. Reports will address experiences and problems encountered regarding both the criteria and the formal procedures for certification. The short term impact of the Thematic Network is crucial for the generalisation of EHR systems' Quality Labelling and Certification in Europe. It is expected to reduce existing but hidden obstacles for EHR systems certification. The long term impact will mainly be the higher quality of professional EHR systems and related e-Health products. This will on its turn reduce the existing market fragmentation. The results of the project will also be instrumental for conducting real pilots and later the full roll-out of European certification based on a common set of functional descriptions and certification procedures.
Addressees	Healthcare authorities and vendors of EHRs
Related projects	QREC, Widenet, HITCH, ARGOS
Events & important dates	Please visit the 'News & events' page at http://www.eurorec.org for important dates and events of the EHR-Q^{TN} project.
Project partners	Beneficiaries: The EuroRec Institute: coordinator ProRec Austria ProRec Belgium RAMIT - Belgium ProRec Bulgaria - Bulgaria Hrvatsko drustvo za medicinsku informatiku - Croatia Cypriotic Society for Medical Informatics - Cyprus České národní fórum pro eHealth, o.s – Czech Republic MEDIQ A/S - Denmark Eesti E-tervise Sihtasutus - Estonia ProRec France - France ProRec Germany - Germany Foundation for Research and Technology – Greece National Institute for Strategic Health Research – ESKI – Hungary ProRec Ireland - Irish Centre for Health Telematics Ltd ProRec Italy CRP Henri Tudor - SANTEC - Luxembourg Stichting ProRec Nederland – The Netherlands KITH AS - Norway Marshal's Office of the Lodz Region - Poland Administraçao Central do Sistema de Saúde, I. P. – Portugal ProRec Romania - Romanian Association for Electronic Registration of Medical Data

	ProRec Serbia - Srpsko udruženje za elektronski zdravstveni karton ProRec Slovakia Ustanova - ProRec Slovenia Hospital Universitario de Fuenlabrada - Spain Instituto de Salud Carlos III - Spain ProRec United Kingdom Associated partners: Ministry for Social Policy - Malta Centro Poliklinika Vilnius - Lithuania
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4.4 epSOS

epSOS: European Patient Smart Open Services	
Project Name	European Patient Smart Open Services
Acronym	epSOS
Website(s)	http://www.epSOS.eu/
Start date	2008, July 1st
End date	2011, December 31th
Abstract	The challenges which health delivery systems in Europe face are all-too-well known. Systems providing access to the most relevant information on a patient and the healthcare process around him can not only substantially improve integrated care, patient safety, quality and efficiency, but also support clinical research, training and public health. This 'holy grail' of health-care connectivity is a cornerstone for reaping the full benefits of eHealth. However, to fully realise this goal in the Union context of citizen mobility and cross-border healthcare requires inter-operability of such systems within health services organisations and jurisdictions, and across regions and countries. The "collaboration between a number of Member States in the epSOS large scale pilot project seeks to develop cross-border interoperability of summaries of electronic health records and ePrescriptions."
Goals	The European strategic approach is to focus on the core applications of patient summary and electronic prescribing as 'gate-openers' to progress on interoperability across Member States. epSOS (European Patient Smart Open Services), the €22m initiative jointly funded by the Commission and 12 Member States also involving industry (coordinated under IHE-Europe) and other stakeholders, has defined such applications and also specifies how they are tested and validated. This project has started in July 2008 and is presently scheduled to terminate at the end of December 2011. In epSOS, a patient summary is understood to constitute: A reduced set of patient's data which would provide a health professional with essential information needed in case of unexpected or unscheduled care (emergency, accident) and in case of planned care (citizen movement, cross-organisational care path). The content of the Patient Summary is defined at a high level as a minimum data set of information needed for health care coordination and the continuity of care. An ePrescribing service in epSOS I is understood as: The issuing of an electronic prescription by an authorised professional supported by software, the electronic transmission of that prescription from the Prescriber (as a system) to a Dispenser, the electronic recording of dispensing of the medicine, and the electronic transmission of information about the dispensed medicine from the Dispenser to the Prescriber (as a system).
Approach	Work in epSOS is focused on making these two services available in another country of those participating, i.e. beyond the confines of their own regional or national health system. The expected outcomes of epSOS to deliver the following key measurable outputs: • an analysis of the specific constraints applying in different

	member states to the exchange of personal health information, including legal, regulatory, technical and operational issues • expected volumes of information to be accessed (e.g. numbers of travelers seeking healthcare in other member states, etc) • legal and regulatory constraints and comparison of national plans and solutions. a specification for: • identification, authentication and authorisation mechanisms • security and trust mechanisms • recording and exchanging patient consent • a testing process to ensure software quality and compliance with the epSOS interoperability specifications of the implementation of the National Contact Point that provides the interfacing between local health IT environment and the other epSOS countries. The IHE-Europe testing infrastructure tools and its current IHE Connectathon process have been selected as foundation for this epSOS project testing process. Those so-called epSOS Projectathons are scheduled for late in 2010 and early 2011.
Expected impact	It is expected that the European Commission will follow the proposed roadmap in terms of initiating a common ehealth interoperability and conformance testing and certification process. Also, different organization's complementing approaches to ehealth interoperability should be consolidated into a common QMS.
Addressees	Leaders of national and regional projects/organisations for cross-border exchange; authorities; national competence centres for health IT connectivity.
Expected Project results made publicly available	The following key deliverables are planned (M1 is July 2008): Legal and regulatory constraints on EHI design Participating MS (M6) Project evaluation methodology and plan (M7) Final definition of operational service requirements – Patient Summary (M12) Final definition of operational service requirements – ePrescription (M12) Final security services specification definition (M15) Final identity management specification definition (M15) Final SOS System technical specifications (M18) Final semantic services definition (M18) Final common components specification (M18) Interoperability Framework (M18) Final "National Pilot Setup and Deployment Guide (M18) Methodology and Test Plan (M21) Report on SOS Pilot preparation: Overview of Test Sites (M24) S.O.S. Pilot System Components Specifications (M24) Results of Testing (M27) Pilot and project final evaluation report (M36) Recommendation for long term L&R operational services (M36) Final report on SOS Pilot operation: integrated results from WP4.3 to 4.4 (M36)
Related projects	Mandate M/403, HITCH, Integrating the Healthcare Enterprise, Continua Health Alliance, CCHIT, EHRQ Thematic Network, HealthProCard, Calliope, ehrQ^{TN}, SmartPersonalHealth
Events	December 2010: epSOS projectathon with testing of epSOS Interop Specifications

	2011: Pilot testing across 10 participating countries
Important dates	2011: Pilot testing across 10 participating countries
Project partners	12 countries plus Industry Team (over 30 vendors). SALAR, SENA, ATNA, ELGA, IZIP, DENA, Gematik, MEDCOM, DKNA, UNIVERSITY OF THESSALONIKI, CATA, ANDA, CLM, ASIP Santé, LOMBARDY, NLNA, NICTIZ, NHS, FHGISST, PHARMAXIS, IHE
Contact person (Email/Address)	Mr. Fredrik Linden, project coordinator Fredrik.Linden@cehis.se

4.5 HPRO Card

HPRO Card: Health Professional Card	
Project Name	Health Professional Card
Acronym	HPRO Card
Website(s)	http://www.hprocard.eu
Start date	2008, March 1st
End date	2009, August 31th
Abstract	This project was funded by the European Commission in the framework of VP/2007/014 of Directorate general for Employment, Social Affairs & Equal Opportunities. The main objectives of the card will be to facilitate the free movement of health professionals in Europe while protecting patients from the small number of professionals that could be subject to severe disciplinary sanctions. In the future, the card could have other possible applications such as validation of continuing education, access to medical records … A working group has been created in early 2007, composed by members of each five health professions (Doctors, Pharmacists, Midwives, Nurses and Dentists) proposed a common design of the Professional cards for all member states. In late February 2008 the European Commission has decided to give a grant of almost 300 000 euro to the group in order: • To identify competent authorities of the health professional listed in the directive in each of the 27 Member states; • To study the current state of the art of health professional cards through all European Union; • To study the implementation conditions of health professional's strong authentication; • To study the interoperability of the different health professional's strong authentication system; • To communicate on the European health professional card project (HPRO Card).
Goals	In order to advance in the harmonization, the main task of the HPRO Card project will be a study on the interoperability issues, on the usages of the card, on the authentication techniques of the health professional along with the building of the list of the competent authorities.
Approach	The approach was to identify and to learn more on the different competent authorities of Healthcare professionals in each Member States, on architectures and business processes of the organisation of the smart cards delivery to professionals. Based on the work of the group on harmonization of the format and design of the smart cards, the project has developed network and knowledge on the following topics : • Identification of the competent authorities and the authorized organisations in charge of issuing continuing education and training for health professionals in the European Union Member States • Knowledge of the progress of Health Professionals Cards in Europe • Conditions for the implementation of strong authentication of

	health professionals • Interoperability of different health professionals authentication systems
Expected impact	Free movement of health professionals in Europe whilst ensuring patient safety by assuring the interoperability of smart cards over Europe
Addressees	Competent authorities for each Healthcare Professionals categories, Member States
Expected Project results made publicly available (URL? License?)	Deliverables : http://www.hprocard.eu/en/accueil/deliverables.html • List of the competent authorities for each health Professional and in European Member States (address, contact, phone number, …) • List of the competent authorities in charge of issuing contuing education and training validation • Mapping of smart cards, identifiers and frames of reference of health professionals in the Member state • Proposals for adapted architectures that integrate the conditions of confidentiality of personal information exchanges • Report on interoperability based on statutory, organisational, semantic and technical criteria • Report on convergence and interoperability of smart cards previously identified • Report on frames of reference and directory security • Report on valuated interoperability scenarios
Related projects	
Events	
Important dates	terminated
Project partners	CNOP (conseil naitonal de l'ordre des pharmaciens), GIP CPS, Minsitère de la santé et des sports, Kadrix Consultants, CNOM (conseil National de l'ordre des Médecins), Ordre des Pharmaciens de Belgique
Contact person (Email/Address)	Mr. Patrick Fortuit CNOP 4, avenue Ruysdaël 75008 PARIS FRANCE

4.6 EC Mandate 403

Project Name	EC Mandate 403:2007 eHealth Standardisation
Acronym	EHealth Interop
Website(s)	http://www.ehealth-interop.nen.nl
Start date	Phase 1 from December 2007. Phase 2 was scheduled to start by mid-2009, but has been delayed until late 2010.
End date	Phase 2 was proposed to last three years from the start of phase 2.
Abstract	M403 eHealth addresses the need to develop the necessary support for the adoption and implementation of eHealth standards in Europe. The goal is to assess the requirements or use case, establish a process for the harmonization of eHealth standards to support the adoption of profiles (detailed standards implementation guidance), develop test tools, and provide the sharing of best practices to accelerate the adoption of standards-based interoperability in eHealth projects across Europe.
Goals	Profile relevant standards and establish testing support for interoperability of future European eHealth applications. Provide platforms for stakeholders wishing to contribute to the adoption of international standards towards eHealth interoperability. The goal is to accelerate the adoption of standards for health information exchange, not to develop new standards.
Approach	The Phase #1 Report defines an efficient process with the following principles: • user-orientation & use-case-prioritisation, • generic profiles supporting implementation specific constraints (rather than modifications), • interoperability testing tools and connectivity testing events • sharing of best practices
Expected impact	It is expected that the joint organisation created and staffed by the various eHealth stakeholders in Europe will prioritise relevant European use-cases and publish recognized supporting profiles. This is intended to provide clear guidance to both eHealth projects and industry. Both will benefit from the test tools and test plans developed. This eHealth Interop Mandate will leverage the experience of profiling organizations such as IHE and Continua and will strive to expand on the work already accomplished by specific European projects such as epSOS, HITCH, Smart PHS, etc.
Addressees	ESOs and all eHealth stakeholders at european level
Expected project results made publicly available	eHealth Profiles (rather than new standards) possibly published as "workshop agreements" – by the European Standards Organizations.
Other related projects	epSOS, ETSI eHealth, HITCH, HcardPro, etc.
Important dates	Phase #2 may last for an apriori unlimited time
Project partners	CEN, CENELEC, ETSI and associated stakeholders (e.g. IHE, Continua, etc.)
Contact	http://www.ehealth-interop.nen.nl/publicaties/2875 Mr. Charles Parisot (GE Healthcare)

4.7 Smart PHS

Smart PHS: Smart Personal Health	
Summary / Description of the project	**Smart Personal Health** is a European initiative to promote awareness about issues and challenges related to personal health systems interoperability, from technical to organisational and legal aspects. A plethora of devices and applications, some converging from the consumer electronics world, are coming onto the market, many recommended by doctors and health insurers to help people monitor their health and wellness. These "personal health systems" (PHS) are a key element of growth of eHealth in Europe. Their full benefit can only be realised if they are interoperable - that is, if a device from one vendor works easily and seamlessly together with another and other eHealth applications. The European Commission has called for action to support a wider understanding of interoperability amongst key stakeholders, and has funded this Support Action to promote interoperability among personal health systems and to other eHealth systems. The project Smart Personal Health started on 1 January 2010 and will run for one year.
Achievements	In order to let Europe reap the full benefit of personal health systems, stakeholders must understand and support the range of challenges in personal health systems interoperability, from technical to organisational and legal aspects. Key activities of Smart Personal Health will include three thematically focused regional stakeholder workshops and one central pan-European PHS Interoperability Conference. Further networking and dialogue with healthcare providers, patients, industry, insurers, standard development organisations will be carried out. The Continua Health Alliance web portal will provide relevant information. The workshops and related networking will result in a report addressed to the European Commission highlighting the current status, concerns, barriers and incentives to accelerate the development and adoption of interoperable PHS systems. Recommendations for interoperability promotion will be proposed to the EC, national governments, stakeholder groups and industry. Partners are: • Continua, the global industry consortium to promote the interoperability of PHS devices and systems, • ETSI, the European Telecommunications Standards Institute, responsible for standardization of ICT within Europe, • IHE, worldwide reference organisation for the interoperability of healthcare information systems and devices, • empirica, a European research institute with a broad understanding of political, business and socio-economic issues surrounding eServices and telematics applications, • The Centre (coordination), a think-do-tank with expertise in project coordination, EU policies and regulation, events organization, and communication.
Status	The project will run throughout 2010.

	Key activities of Smart Personal Health will include three thematically focused regional stakeholder workshops and one central pan-European PHS Interoperability Conference. Two workshop have been held, one in Barcelona and one in Belfast.
Next steps / deadlines	The next workshops are planned for Berlin and Amsterdam. Berlin, September 2010 The workshop will be hosted by the VDE (German Association for Electrical, Electronic & Information Technologies) and be primarily directed at vendors (small and medium enterprises), integrators and industrial partners. Brussels, December 2010/January 2011 The final conference will coincide with the Continua Health Alliance International Symposium 2010 in Brussels and directed at major pan-European and worldwide associations and actors.
Name of contact persons	Mr. Charles Parisot (GE Healthcare) The programme is run by Continua Health Alliance, IHE-Europe, ETSI and Empirica, coordinated by The Centre, and funded under European Commission's FP7 Programme.
Website	Find out more about the project at: http://sph.continuaalliance.org