This document gives a brief overview of the LSP proposal that was submitted in October 2007 with the participation of thirteen European countries. The proposal is confidential and can only be used internally in the participating organisations.

**S.O.S. - Smart Open Services - Open eHealth initiative for a European large scale pilot of patient summary and electronic prescription**

**Project Coordinator:** National Centre for Coordination of eHealth - SE  
**Partners:**  
- Ministry of Health and Social Affairs – SE  
- Austrian Federal Ministry of Health - AT  
- Task Force ELGA - AT  
- Integrating the Healthcare Enterprise - BE  
- IZIP - CZ  
- German Federal Ministry of Health - DE  
- Gematik - DE  
- Empirica - DE  
- MedCom - DK  
- Danish National Board of Health (Connected Digital Health in DK) - DK  
- Aristotellean University of Thessaloniki - EL  
- Spanish Ministry of Health - ES  
- Region of Catalonia - ES  
- Region of Andalucia - ES  
- Region of Castilla La Mancha - ES  
- GIP Dossier Medical Personnel - FR  
- French Ministry of Health - FR  
- Lombardy Region - IT  
- Dutch Ministry of Health, Welfare and Sport - NL  
- NICTIZ - NL  
- National Health Information Centre - SK  
- NHS Connecting for Health – UK

List of National Administrations which are represented by one of the above participants:

- Czech Ministry of Health  
- Danish Ministry of Health  
- Italian Ministry of Health and Department of Innovation Technology  
- Department of Health – United Kingdom  
- Slovakian Ministry of Health
In short

Thirteen European countries (15 regions) participate in the project that will run for three years. The project will run in parallel with the CALLIOPE – Thematic Network – project. The project will be lead by the National Centre for Coordination of eHealth from Sweden.

Project Objective

Information and communication technologies (ICT) are deployed on broad scale in healthcare by most member states (MSs). In view of its key priorities of citizen mobility and borderless healthcare a supportive approach by the European Commission outlined in the eHealth Action Plan¹ shall help to ensure seamless pan-European flow of information between interoperable national systems for the benefit of patients. There are multiple factors driving the utilization of eHealth all over Europe: aging societies, increasing percentage of chronic diseases, and financial strain on social security organisations. As a result medicine is going to be more and more information technology-based, relevant for both patients and health care professionals. Accompanied is this development by increasing mobility, also of chronically ill citizens.

But it is not only the positive vision of a common European eHealth space that has been driving this initiative, but also the imminent risk that eHealth might stop at borders. It is well possible that future mobility of patients falls behind of what is currently practiced: paper document can be simply read (translated), laboratory values follow international standards, and pictures or x-rays speak for themselves. With electronic patient records and electronically stored data on cards the cross-border readability could worsen dramatically due to technical access obstacles.

In view of the complexity and diversity of national eHealth applications and the tremendous workforce invested, only little attention is given so far to international interoperability. The strategic approach of the European Commission is to focus on the core applications of electronic prescription and patient summary to serve as “gate-openers” to achieve interoperability on wider European scale.

Implementation and Demonstration

Electronic patient record systems, with their initial focus on both patient summary/emergency data sets and medication record/ePrescription solutions, are being driven forward by European member states. While all are committed to doing this in principle, some regions and countries are more advanced than others in terms of their capacity to implement proposed solutions.

To enhance the possibility of these services being provided across national or regional borders, interoperability among systems and services must be achieved between the national and/or regional systems. To ensure trust in the use of these systems on the part of patients and healthcare professionals, appropriate data protection, system security and performance criteria need to be included in any emerging cross border applications. The national regulatory authorities and competence centres for eHealth that are cooperating in this large scale pilot to implement interoperability for the two proposed focal applications aim to test them out in pilot applications in a range of member states.

The approach, which is based on well-developed and distinct use cases, and associated infrastructural components, aims to deliver both a methodological process and durable implementations (termed ‘building blocks’). These will form the basis for a longer term, pan-European approach to building interoperable service solutions.

Main milestones and tasks

The large scale pilot’s main approach is to define services for pan-European electronic patient summary and ePrescription. These are based on a small set of agreed use cases and an analysis of both existing and foreseeable national solutions.

They will be used to design pilot systems that are based on the principle of interconnecting the respective national solutions. The methodology will strive to build a common architecture and core services for the identification of users and institutions, security and confidentiality aspects, and aim to enhance various semantic aspects of the systems. These technical activities will be prefaced by an understanding of the need for the establishment of an appropriate legal and regulatory framework to enable field testing.

The pilot will also necessarily include various generic project elements (project management, communication, dissemination, quality control and evaluation).

Electronic Patient Summary

According to the ICT PSP Work Programme for 2007, a Patient Summary “should be understood to be a minimum set of patient’s data which would provide a health professional with essential information needed in case of unexpected or unscheduled care.”

The content of the Patient Summary is defined at a high level as the minimum set of information needed for health care coordination and the continuity of care. The specific context here is delivery of care in a pan-European situation. In this project a modular minimum dataset for a European Patient Summary will be defined by the participating member states in close collaboration with relevant stakeholders. The developed dataset would be made available from a national contact point in each participating country, making it possible for citizens to access from abroad.

It is expected, that the Patient Summary would be built on a Service Oriented Architecture creating an open, vendor neutral, technical infrastructure. In such a SOA infrastructure data are published by a national web service provider by means of solid and complete interoperability web service specifications.

ePrescription

The electronic transmission of prescriptions is considered to form a central ‘building block’ on the path towards a systematic electronic data interchange within European healthcare systems. Prescriptions are a form of transaction that very frequently interlink different health and organisational sectors.

The participating National Contact Points should post two cross-border services: “Prescription Service” and “Medication Summary Service”. Both services should be provided as unstructured Internet access and as structured XML web services.

Resources to be committed

Overall costs for project work are estimated at € 22 million - not counting the contributions by ministries participating in the project but not requesting funding, the value of which has been estimated to € 4 million. All of these costs relate only to activities and expenditures for developing and implementing the trans-European health services as described above, i.e., they relate
exclusively to the interoperability issues described. No costs are included in this budget that relate to activities/services of a solely national nature.

Overall, an EC contribution of € 11 million or 50% of costs is requested. All participating beneficiaries, both national administrations (ministries) as well as national competence centres and other beneficiaries have committed themselves in writing to contribute the resources as described in these tables.

Involvement of partners

The consortium consists of 23 beneficiaries from 13 member states. Among the partners six are national ministries of health, 15 are national or regional competent centres which have been certified by their respective administration that they have been designated to act on its behalf for the purpose of the pilot, and 2 other entities for administrative management respectively representing industry involvement.

The consortium thus represents both national and regional health authorities that are responsible for the political and regulatory elements necessary for the eHealth applications of their country’s or region’s electronic health records or electronic prescription applications. When regional authorities are involved, they are doing so with the official acknowledgement and approval from the national authority. National competence centres for the implementation of these eHealth services which they are responsible are also represented directly in the consortium. This composition takes into account the twofold objectives of the pilot: (i) to give orientation and guidance to the necessary political and strategic decisions and (ii) to provide usable interoperable cross border services for European citizens. The involvement of national competence centres with hands-on implementation experience will ensure a good fit with the needs of those who will be using directly the eventual services (e.g. citizens and patients, general practitioners, community pharmacists and a variety of healthcare professionals, among others).

Project domains

There are four project domains / themes during the project period that will run in parallel. These are
1. Analysis and Evaluation,
2. Legal and regulatory issues,
3. Specification and implementation,
4. Field testing and
5. Project management.

No pilot sites have as such been identified. It is expected and foreseen (in the budget) that Denmark will be one of these.

MedCom participate in the following work packages:

Project Domain 3: Specification and implementation
WP3.1 Definition of ePrescription services 
WP3.2 Definition of Patient Summary services
WP3.3 System architecture
WP3.4 Common components specification
WP3.6 Identity management
WP3.7 Security services
WP3.8 Integration and customisation (WP leader)
WP3.9 Development of pilot system
WP3.10 Proof of concept

**Project Domain 4: Field Testing**
WP4.1 Specification of test scenarios including site choice
WP4.2 Preconditions and EU/site level preparation
WP4.3 Pilot implementation (EU, national and local)
WP4.4 Operation I
WP4.5 Operation II

**Project Domain 5: Project Management**
WP5.2 Technical management

The Danish National Board of Health (Connected Digital Health in Denmark) participates in:

**Project Domain 1: Analysis and Evaluation**
WP1.1 Analysis and comparison of national plans/solutions
WP1.2 Overall evaluation of the project

**Project Domain 2: Legal and regulatory issues**
WP2.1 Analysis and comparison of legal and regulatory issues

**Project Domain 3: Specification and implementation**
WP3.5 Semantic services

**Budget for MedCom and Danish National Board of Health (Connected Digital Health in Denmark)**

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<th>Budget</th>
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<td>MedCom</td>
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<td>Danish National Board of Health</td>
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