



“opportunity to work with Europe’s best and to liaise with key EU initiatives such as the Future Internet Assembly”

Kevin Doolin  
TSSG, Project Co-ordinator

### Project Description

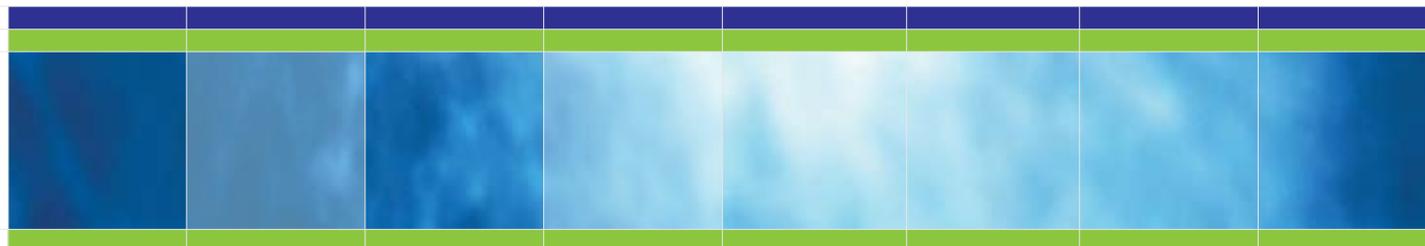
Current trends in the design of pervasive systems have concentrated on the problem of isolated smart spaces (such as smart homes) via a fixed infrastructure. This is likely to lead to the evolution of islands of pervasiveness separated by voids in which there is no support for pervasiveness.

The vision of PERSIST is of a Personal Smart Space, which is associated with the portable devices carried by the user and which moves around with him/her, providing context-aware pervasiveness to the user at all times and places. The Personal Smart Space will cater for the needs of users, adapting to their preferences and learning new ones as these arise.

The objective of PERSIST is to develop Personal Smart Spaces that provide a minimum set of functionalities which can be extended and enhanced as users encounter other smart spaces during their everyday activities. They will be capable of learning and reasoning about users, their intentions, preferences and context. They will be endowed with pro-active behaviours, which enable them to share context information with neighbouring Personal Smart Spaces, resolve conflicts between the preferences of multiple users, make recommendations and act upon them, prioritise, share and balance limited resources between users, services and devices, reason about trustworthiness to protect privacy and be sufficiently fault-tolerant to guarantee their own robustness and dependability.

The TSSG group at Waterford Institute of Technology, with support from Enterprise Ireland, successfully coordinated, wrote and negotiated the FP7 Call 1 PERSIST proposal.

Participating in the project provides the opportunity to “work with Europe’s best and to liaise with key EU initiatives such as the Future Internet Assembly – all of which leads to the formation of a significant contact and knowledge network which is available to all project partners” says Kevin Doolin, who is coordinating the project, as Competence Centre Head of Pervasive Communications Services at the [Telecommunications Software & Systems Group \(TSSG\)](#), Waterford Institute of Technology (WIT)



## Project Partners

Project Coordinator	TSSG, Waterford Institute of Technology (IE)
Germany	German Aerospace Centre
Greece	Institute of Communication and Computer Systems
Ireland	Intel Performance Learning Solutions Ltd Lake Communications Ltd
Italy	Telecom Italia SPA Soluta.net
Portugal	Portugal Telecom
Slovenia	SETCCE
United Kingdom	Heriot-Watt University

## Project Details

**Funding Programme:** 7th Framework Programme (FP7)  
**Sub-Programme:** Cooperation, Information & Communications Technology  
**Funding Scheme:** Collaborative Project  
**Project Duration:** 30 Months  
**Total Project Value:** €5.59m  
**EU Grant-Aid:** €3.63m  
**Funding to Ireland:** €1.22m  
**Website:** <http://www.ict-persist.eu>

## Irish Contacts

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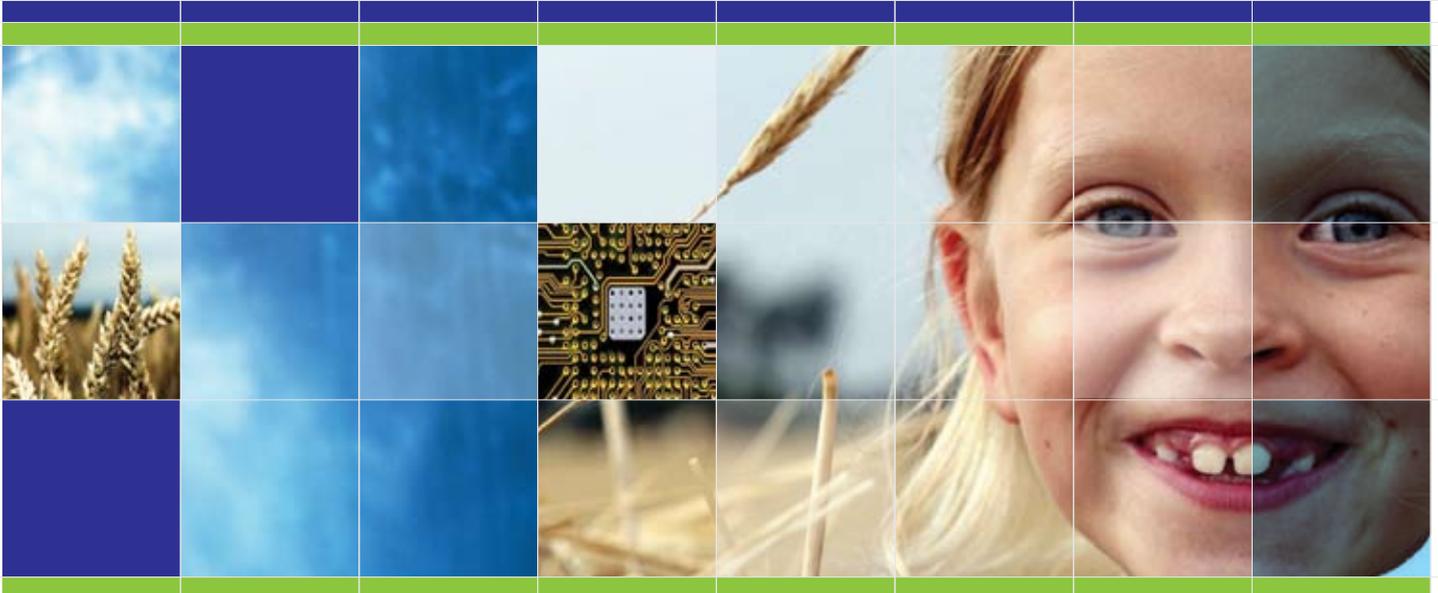
This series of case studies is designed to provide an insight on participating in the Seventh EU Framework Programme for Research and Technological Development (FP7) 2007-2013 from the perspective of both individual researchers and companies that were successfully funded in FP7.

If you are interested in finding out more about participating in FP7 or reading more case studies about the experiences of academic researchers, small & medium enterprises and multinational companies in FP7 visit [www.fp7ireland.com](http://www.fp7ireland.com)  
 The FP7 case study series was produced by the National Support Network for FP7 in Ireland, [info@fp7ireland.com](mailto:info@fp7ireland.com)

## Member organisations of the National Support Network for FP7 in Ireland



Leading Ireland's participation in FP7



“a great opportunity to work with project partners from a variety of backgrounds, and has broadened our understanding of the healthcare models used across different EU countries”

Dr. Yvonne Nolan  
Valentia Technologies

### Project Description

The overall concept of the CD-MEDICS Integrated Project (IP) is to develop a technology platform for point-of-care diagnostics, capable of simultaneous genomic and proteomic detection, with embedded communication abilities for direct interfacing with hospital information systems. This will be achieved by exploiting breakthroughs at the confluences of bio-, micro- and nano- technologies to create a low-cost non-invasive intelligent diagnosis system.

This platform will be developed in a modular format, which will allow each module to be developed and exploited individually. The modules will subsequently be integrated to facilitate the desired application. Advances in data communications, molecular biology and biosensor technology, with the integration of nanostructured functional components in macro and microsystems, will facilitate the realisation of a minimally invasive generic platform, which is capable of multi-parametric monitoring and will be interoperable with electronic health records (EHRs).

According to Dr. Yvonne Nolan of Valentia Technologies “CD-MEDICS is a great opportunity to work with project partners from a variety of backgrounds, and has broadened our understanding of the healthcare models used across different EU countries.”

Valentia Technologies role in the project is centred on the development of communication protocols for interoperability between hospital EHRs and the CD-MEDICS point-of-care device. As there is no EU-wide approach for EHRs or patient identifiers, a comprehensive review of existing standards within each EU country has been undertaken to ensure that the approach used to integrate results into patients' EHRs is applicable in each country. The system will use existing standards for the exchange, integration, sharing and retrieval of electronic health information (such as HL7), to ensure that the system can be readily interfaced with disparate hospital systems across the EU.

Valentia Technologies are also managing the demonstration of the pre-production prototype in a clinical setting, which will take place in University Medical Centre, Maribor, Slovenia during 2010 and 2011. The goal of this task is to develop a test environment that is responsible for an in-depth evaluation of CD-MEDICS from a scientific, technical and commercial perspective in order to underpin the release of a commercially viable product.

## Project Partners

Project Coordinator: Universitat Rovira I Virgili

Belgium: Association of European Coeliac Societies

Finland: Finnish Red Cross Blood Service

Germany: Institut für Mikrotechnik Mainz GmbH, Microfluidic Chip Shop GmbH, Clemens GmbH and Inno-Train Diagnostik GmbH

Greece: Intracom S.A. Telecom Solutions and Microsystems-Microfluidics for Genetic Tests S.A

Ireland: Valentia Technologies

Italy: Eurospital SPA and Fondazione IRCCS Policlinics San Matteo

Slovenia: Maribor General Hospital

Spain: Asociación de Celiacos de Madrid

United Kingdom: University of Newcastle upon Tyne, Kings College London, Coeliac UK and iXscient Ltd.

Sweden: TATAA Biocentre and MULTI-D Analysis

## Project Details

**Funding Programme:** 7th Framework Programme (FP7)

**Sub-Programme:** Cooperation, Information & Communications Technology

**Funding Scheme:** Collaborative Project

**Project Duration:** 48 Months

**Total Project Value:** €12.8m

**EU Grant-Aid:** €9.5m

**Funding to Ireland:** €364,000

**Website:** <http://www.cdmedics.eu/>

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