

TSSG Description

The Telecommunications Software & Systems Group (TSSG) is one of the largest integrated information communication technology (ICT) research centres in Ireland.

It is a place where high quality research addresses the transformation of the telecommunications industry, with a core focus on telecommunications network management, security and mobile services.

It has a strong expertise in next generation service development and deployment, distributed systems and service oriented architectures. TSSG is ranked as one of the top ten European institutes at the forefront of 'Future Internet' research.

Co-founded in 1996 by Dr. Willie Donnelly, Eamonn de Leastar and Mícheál Ó Foghlú, the TSSG is part of the Waterford Institute of Technology (WIT), and is based at WIT's West Campus in Carriganore Co. Waterford, Ireland. Barry Downes joined the co-founders to lead the TSSG's commercialisation activities in 2001.

TSSG Ethos

The TSSG's ethos is based on a trans-disciplinary view of the communications and networks domain which links academic with industrial research through the creation of a balanced portfolio of research activity in: Basic Research, Applied Research, and Commercialisation.

The TSSG has spawned a mobile services cluster of high potential start-up companies (HPSUs) in the South East, creating 60 direct jobs, in the 14 'spin-in' and 'spin-out' companies.

TSSG Expertise

The TSSG has grown into a large research centre, comprising 150 staff and students, working



across a broad project portfolio consisting of approximately 40 active projects per year, funded through competitive research proposals.

The research challenges currently addressed by TSSG's portfolio of projects include:

- » Autonomic Network Management
- » Ubiquitous Network Connectivity through Mobility
- » Security through Trust and Dependability

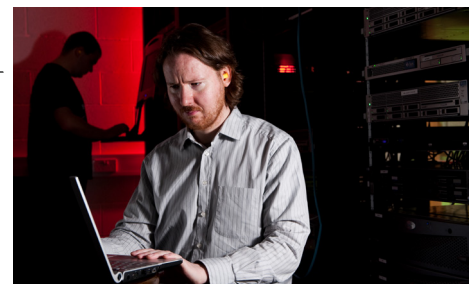
- » Pervasive Service Creation and Deployment
- » Accounting and Billing for Networked Services
- » Context and Location
- » IMS Platforms and services

TSSG Mission

Our mission is to build an unrivalled Research and Innovation centre that shapes the future of communications technologies.

As an academic centre, the TSSG's goal has always been to add value and generate new knowledge in the ICT domain for economic and social progress, and to establish long lasting collaborative relationships with leading academic and industrial global partners.

Working at the NGN Test Centre



Next Generation Networks

The Next Generation Network (NGN) Test Centre is an example of the TSSG's integrated research ethos. This innovative commercial-grade, open access IP multimedia Subsystem (IMS) test network is the first of its kind in Ireland. It is based upon Ericsson IMS Communications Systems (ICS), which provides the infrastructure to enable and deliver multimedia services for fixed and mobile access, and includes the gateway functionalities required for the interconnection with operators' circuit switched networks (PSTN/PLMN).

The NGN Test Centre enables technology providers worldwide to test, trial and validate their converged Internet, mobile and television services on an open access, carrier grade test network before bringing them to market.

Basic Research

- 2 major research programmes
- 10 faculty/research fellows
- 20 PhD/MSc students
- Funding: SFI and HEA

Applied Research

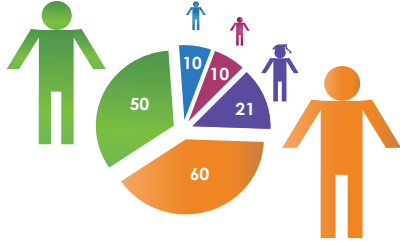
- 2 competence centres
- 60 researchers, software engineers and architects
- Funding: EU FP6 and EU FP7

TSSG Innovation Ecosystem



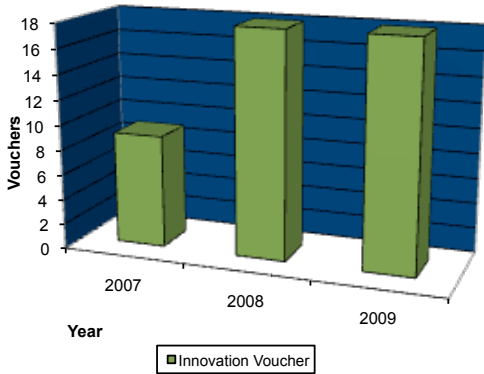
** information contained in this document is valid as of May 2010.*

TSSG Staff & Students

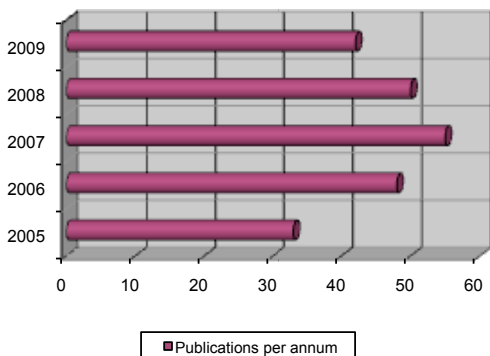


Total TSSG Staff and Students : 151

Enterprise Ireland Innovation Vouchers



TSSG publications



TSSG Knowledge Sharing Event

TSSG Profile

RESEARCH EXPERTISE

- » Autonomic Network Management
- » Ubiquitous Network Connectivity through Mobility
- » Security through Trust and Dependability
- » Pervasive Service Creation and Deployment
- » Accounting and Billing for Networked Services
- » Context and Location
- » IMS Platforms and Services

COMPETENCE CENTRES

- » CIM - Communications Infrastructure Management
- » PCS – Pervasive Communications Systems

COMMERCIAL

- » 3CS

MEMBERSHIPS

- » Irish Future Internet Forum (IFIF)
- » Irish IPv6 Task Force
- » European Future Internet Assembly (EU-FIA)
- » EU TP eMobility
- » EU TP NEM
- » EU TP NESSI
- » ENISA
- » W3C
- » Internet Society
- » TeleManagement Forum

FUNDING BODIES

- » Science Foundation Ireland (SFI)
- » Higher Education Authority (HEA)
- » EU Framework Programmes (EU-FP6 & EU-FP7)
- » Enterprise Ireland (EI)

TSSG Executive

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TELECOMMUNICATIONS SOFTWARE & SYSTEMS GROUP



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