



Roinn an Taoisigh
Department of the Taoiseach

2008

Taoiseach's Public Service Excellence Awards

Project Summaries



Introduction

Organisations from across the Public Service were invited to nominate innovative projects for the Taoiseach's Public Service Excellence Awards 2008. A total of 183 submissions had been made by the deadline (26 October 2007). This represents an impressive 20% increase on the previous Awards.

Given the quality and diversity of the submissions, the independent selection committee – which was chaired by Professor Mary Daly, College of Art & Celtic Studies at UCD – faced quite a challenge in selecting the final Awards recipients.

This book gathers together brief summaries of each of these outstanding projects. It also includes copies of the presentations made by the organisations at the showcase conferences that form part of the overall Taoiseach's Public Service Excellence Awards process. The showcase conferences are being held in Sligo and Dublin in April 2008.

This booklet only outlines the main points of each project. Should you require further information, you will find the contact details for the key personnel involved in each of the project summaries.

The presentations and speeches made by the Project Teams will also be made available on the Department of the Taoiseach's Public Service Modernisation website www.bettergov.ie.

Public Service Modernisation Division

Department of the Taoiseach

April 2008



Health Atlas Ireland

A project from the HSE, Health Atlas Ireland has been developed to bring health related datasets, statistical tools and GIS together in a web environment to add value to existing health data.

Health Atlas Ireland enables controlled access to maps, data and analyses for service planning and delivery, major incident response, epidemiology and research to improve the health of patients, their families and the population.

It is a joint Health Service Executive (HSE) and academic initiative. In the absence of an off-the-shelf solution, a new system was designed and developed. An EU restricted tendering process selected OpenApp and Siemens Ireland as development partners. OpenApp were subsequently awarded full project development responsibility. The project continues to evolve and remains on schedule and within budget.

The project sponsors are the National Director of Population Health, HSE and the Assistant National Director, Health Intelligence, HSE. The project is led by the Health Information Unit (HIU), Health Intelligence, Population Health, HSE in collaboration with the Health Protection Surveillance Centre, UCD, NUIM and DCU. A grant from the Health Research Board provided seed money for development, with subsequent funding from the HSE. The Project is governed by a Board of Management. Excellent collaboration both within and outside the HSE including OSI, CSO, AnPost/GeoDirectory, the Universities, ESRI, National Cancer Registry, Road Safety Authority, National Roads Authority, and An Garda Síochána, assist the project.

Health Atlas Ireland is built upon open source software allowing it to capitalise on worldwide expertise without software licensing costs. Web access to powerful statistical, geographical and database components provide a cost-effective solution to health intelligence.

Good information governance is assured through adherence to legislative requirements; inclusion of statistical data only; user training; role-based access with restriction to relevant datasets/subsets; signed information governance undertaking; small numbers can be suppressed from being seen by the user or shown externally; disallowing record linkage; and deployment of strict security technologies.

It is easy to show on tables or maps as numbers, colours or symbolisation demographic patterns; hospital activity; service locations and catchment areas; and health patterns. GeoDirectory is embedded so addresses can be pin pointed on a map. Drug prescribing, financial and human resources, disease registers, resource allocation, quality of care, travel times/distances, and environmental data will be added, together with a public view.

Health Atlas Ireland enables “joined up thinking” within and between agencies. The open source design has international potential. The system is at an early stage of development but is already in everyday use.

Contact:	Carmel Cullen
Tel:	(01) 635 2752
e-mail:	carmel.cullen@hse.ie

Health Atlas Ireland

Feidhmeannaíocht na Seirbhíse Sláinte
Health Service Executive

Health Intelligence, National Population Health Directorate, HSE
Johnson H, Cullen C, Boyle E, Doyle D, McDonald, Kavanagh P, P Dack, O'Boycce B,
Beaton D, Davids De La Harpe

Health Protection Surveillance Centre, HSE
Brazil J, McKeown P

Dublin City University/University College Dublin
Staines A

Department of Geography, National University of Ireland, Maynooth
Pringle D

OpenApp, Dublin
McIntyre M, Hennessey C

The dream

Integrate ...

Raw health data
Inaccessible silos

Statistics
Basic & complex

Maps
Beyond reach of most

Queries

Local population
Locate a service
Health concern
Water contamination
Exclusion zone
Dangerous roads

* Service planners
* Epidemiologists
* Emergency responders
* Researchers

at any desk, anywhere, anytime

not skilled in data, stats, GIS

to easily access
& work together
on a range of data

Requirements

Practical
Intuitive
Powerful
User friendly
Could evolve

Never done before

Heath Atlas Ireland

The steps ...

- * Competed for Health Research Board grant 2004
- * Detailed specification = vision
- * European Union tendering process (restricted) 2005
OpenApp (software developers & project management)
- * Kick off Spring 2006
- * Led by small team in Health Intelligence, HIU, HSE
- * Where are we now? Today 2008

The team(s) ...

Project Board
Health Intelligence
HIU
HPSC
UCC, DCU
NUI

Project Manager
Geospatial Systems Analyst
DB Manager
Senior Registrar
Head HIU

Project Manager
Lead Developer
Developers

- * Stakeholder "grand tour" early on – opened doors
- * Dynamic interaction between teams
- * Iterative approach (3 months) – challenging but crucial
- * Threw out the "conventional" rule book in many ways

Under the bonnet ...

Software
Open source exclusively

Web enabled - no extras



Enterprise infrastructure
Servers run on Linux
Database = Post GIS, PostgreSQL
Statistics = R
Maps = MapServer
Spatial analysis = GRASS
Web interface = content management
= Zope

App = Javascript, Joomla, PostgreSQL, Oracle OPI, Python & PHP.

Information governance



- * Training
- * No record linkage
- * Signed user agreement
- * No names or addresses
- * Username & password
- * Small nos (<5) See v Show
- * Every map uniquely numbered
- * Data held on server, web accessed
- * Role based access - analyst or viewer
- * Controlled access to each dataset (or part of)
- * Stringent security - VPN, certs, HTTPS, monitoring

Accreditation will be sought

Finally ...

- ✓ Respond to pressing health questions
- ✓ Help front line staff to find locations, service areas
- ✓ Exploit HIT creatively, open source ...
- ✓ Achieve excellent VFM
- ✓ Reduce complexity to simplicity
- ✓ Teaching potential recognised by Universities
- ✓ In everyday use – no challenge too challenging
- ✓ Continually evolves
- ✓ **Health Atlas Ireland – is airborne**



achievement awards 2007
Health Service Research Foundation
Health Atlas Ireland
HEALTH ATLAS IRELAND
HSE Health Information Systems
HSE Health Information Systems
Senior Staff