

**First Forum  
Seoul, Republic of Korea, 24-26 October 2011**

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Capacity Building and Knowledge Transfer:  
some thoughts for the future \*

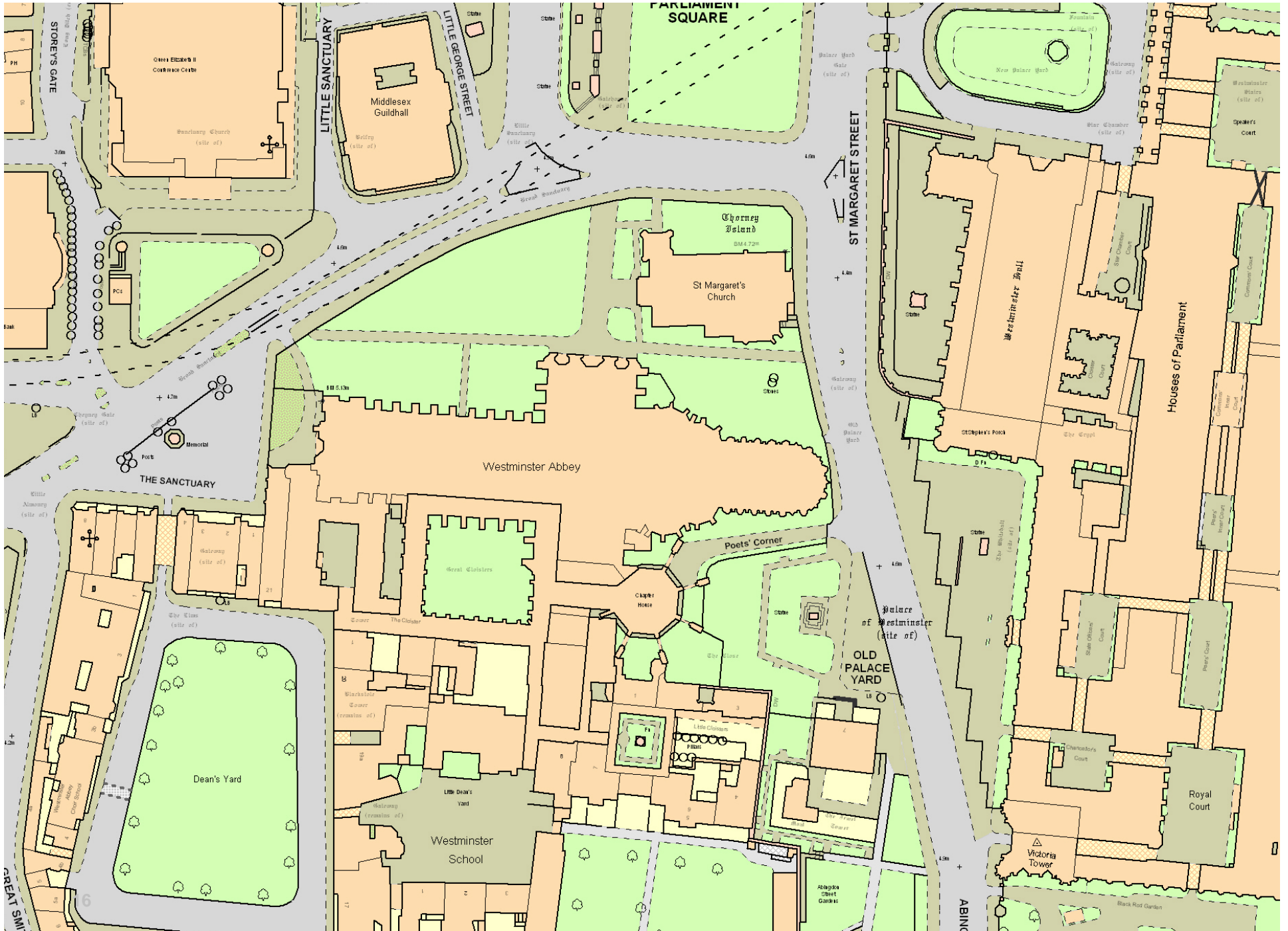
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Submitted by: Ms. Vanessa Lawrence CB, Director General and Chief Executive, Ordnance Survey, United Kingdom

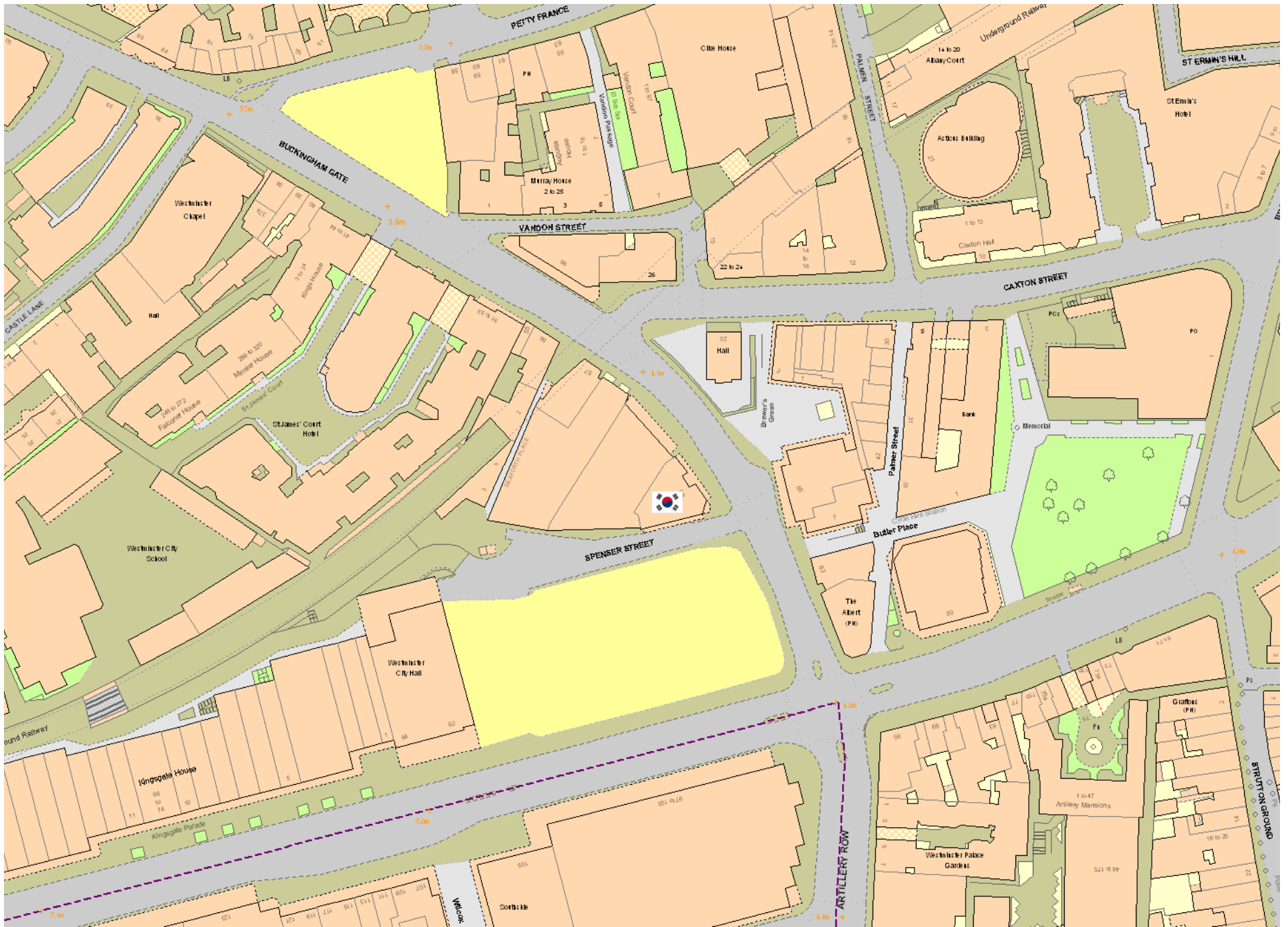


# Capacity Building and Knowledge Transfer: some thoughts for the future

Dr Vanessa Lawrence CB  
Director General and Chief Executive







# Ordnance Survey Great Britain

- Independent Government Department and Executive Agency reporting directly to a Government Minister
- Trading Fund since April 1999; investment over £20m/annum
- Annual Report for 2010/11: Revenue of £129.4m, profit before exceptional items of £24.1m, dividend £6.3m
- ‘Ordnance Survey and its **Partners** will be the content providers of choice for location based information in the new information economy’
- 500 Partners; over £30m income for Ordnance Survey; £350-400m new revenues to British economy
- Mapping from Ordnance Survey underpins over £100bn of the British economy each year



# Many stakeholders shaping our decisions







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The First High Level Forum on United Nations  
Global Geospatial Information Management  
Global Challenges, Global Mechanism, Global Leadership  
Oct 24(Mon)-26(Wed), 2011  
Coex Convention Center, Seoul, Korea







# The First High Level Forum on United Nations Global Geospatial Information Management

Global Challenges, Global Mechanism, Global Leadership

Oct 24(Mon)-26(Wed), 2011  
Coex Convention Center, Seoul, Korea



# The importance of location recognised politically

## **White House Memo, August 2009:**

**“Various federal programs can function more effectively if they include well-focused, place-based strategies”**

From: Peter R. Orszag, Office of Management and Budget

Melody Barnes, Domestic Policy Council

Adolfo Carrion, Office of Urban Affairs

Lawrence Summers, National Economic Council

## **Herman van Rompuy, President of the European Council, October 2010:**

**“Effective policy depends on good information...it is vital to understand not just what is happening, but also where it is happening”.**

## **Sir Tim Berners-Lee, April 2010:**

**“Whatever sort of data you find, crime data, health data, it’s got location in it... when you look at different sorts of data the first thing people naturally do is stick it on a map... a map makes contact with the way they think.”**



# The importance of location recognised politically

***“...geospatial technology is a tool for empowering India”***

**Science and Technology Minister Kapil Sibal, Dec 2010**

***“With Hyderabad and Andhra Pradesh having contributed a great deal to IT revolution, we now need to think of a geospatial revolution. Geospatial is a technology that permeates into all fields and helps them to work more profitably”***

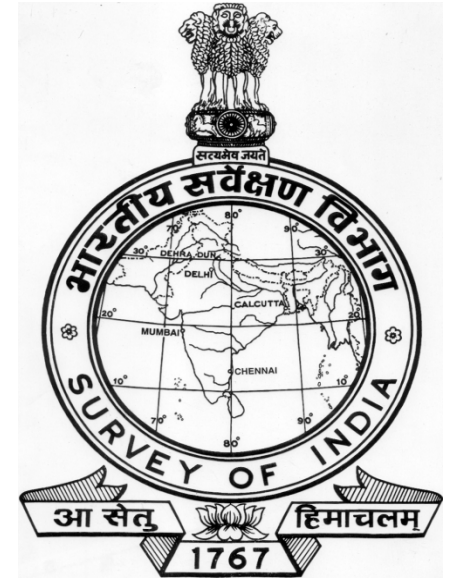
**M Shashidhar Reddy, vice-chairman of the National Disaster Management Authority, Jan 2011**

**India's first Geospatial Technology Park announced**





# The Indian response to the political attention



- Survey of India currently embarking on the creation of a National Topographic Database at 1:10k scale for all rural areas of the country; 1:2,000 scale for 800 of the country's cities; and 1:1,000 for its metro cities, due to be completed within the next three years.
- Detailed GI sought as it enables comfortable depiction of buildings like hospitals, schools, police stations, post offices etc, important for a wide range of sectors including Defence, Disaster Management and many others; and supports assessing areas essential for rural development such as natural resource endowments, agricultural practices, grazing lands and village forests.

## The Indian response to the political attention

# Govt to bring in geospatial data Bill in Budget session, says Sibal

## Regulator to oversee licensing of geospatial information

**Our Bureau**

Hyderabad, Jan. 18

Geospatial sector in India is expected to get a shot in the arm next month with the Union Government hoping to introduce and pass the National Geospatial Data Authority Bill in the Budget session.

"It is being discussed in inter-ministerial meetings. We expect that it will be introduced in the Budget session," Mr Kapil Sibal, Minister for Science and Technology, Human Resources Development and IT and Telecom, said.

The geospatial sector in the country has been growing with the entry of private and international companies utilising data generated from space-based platforms like remote sensing and near-earth orbiting satellites about various features of natural resources and developing geo-



Mr Kapil Sibal, Minister for HRD, Science and Technology, Earth Science, Communications and Information Technology, at the Geospatial World Forum meeting in Hyderabad on Tuesday. Also seen are (from left) Dr K. Kasturirangan, MP and Member of Planning Commission; Dr M. P. Narayanan, Chairman, GIS Development; and Dr R. Sivakumar, CEO, National Spatial Data Infrastructure. - P.V. Sivakumar

12<sup>th</sup> Five-Year Plan should use geospatial technology in planning.

He said a National GIS System was being developed to synergise geospatial data and create a system to access the same.

A task force would look into the capacity requirement for the industry and evolve a geospatial culture in the country.

The task force was expected to submit its report in a month.

### AWARDS

Mr Sibal presented awards to natural Resources Canada (category - Premier mapping Agency); Ms Vanessa Lawrence CB, Director-General and Chief Executive of United Kingdom's Ordnance Survey (Geospatial personality of Decade); Ralta group (World Leaders in Geospatial



## Why leaders are needed

- Provide vision
- Create a collective effort to achieve desired outcomes
- Develop conditions that enable people to achieve
- Inspire performance out of people
- Foster a growth environment which breeds success





# Federal Government, State/Territory Governments, Peak Government Committees and Associations, Academia and Industry Associations



## Leadership in Australia – a 10 month journey



Drew Clarke PMS, Secretary, Department of Resources, Energy and Tourism and formally a Surveyor in Australia and Antarctica



# Leadership in Australia – a 10 month journey

**APS Reform**  
*Building the future together*

APS Reform - Citizens needs Leadership and direction Workforce capabilities Efficiency and high standards

**APS 200**

**About the APS 200**

The APS200, comprising the Secretaries Board (SES Band 3) and selected agency heads (equivalent to SES Band 2), has been established as the new senior leadership forum for the Australian Public Service. The APS200 has a leading role in communicating the vision of the reform and leading the understanding, engagement and commitment of staff to the reform agenda. As well as undertaking specific policy or change management projects commissioned by the Secretaries Board, APS200 members will bring forward ideas and proposals for consideration and provide feedback on the progress of the reform agenda and APS culture, attitudes and beliefs. APS200 members are encouraged to flag emerging issues or concerns.

Four APS200 projects have been commissioned by the Secretaries Board so far. They cover:

- Innovation:** examining how to facilitate innovation across the APS. The project will involve immediate activities such as ongoing development of the Innovation Toolkit. It will identify how each of the recommendations of the report *Empowering Change: Rethinking Innovation in the Australian Public Service* can be implemented and measured, as well as developing options for progressing specific recommendations such as mechanisms of challenge and a collaborative experimentation program. The project will also examine and share current successful practices and identify opportunities for future innovation across the APS.
- Mental health:** exploring the evidence base underpinning government involvement in mental health service delivery, the current service gap, the needs of particular groups at risk of stress and developing a targeted pathway of action for the reform forward.
- Vulnerable Youth:** exploring the evidence base underpinning government involvement in assisting disadvantaged youth, particularly those not in education, employment or training, to ongoing working activities and participating gaps in policy and services considering successful models and approaches and exploring opportunities for better collaboration across governments, the third sector and business and developing a suite of government positions on the issue of disadvantaged youth with recommendations, action-leading budgetary processes and the fiscal environment, for consideration by the Commonwealth government.
- Coastline:** developing options to address location information policy, governance, and investment.

For information on the APS200 and APS200 projects or to advise on membership, contact [aps200@aps.gov.au](mailto:aps200@aps.gov.au) or to telephone, Director, Office of Future Reporting, APSIC on 02 6202 2913.

**Contact the APS 200**

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**APS 200 Events**

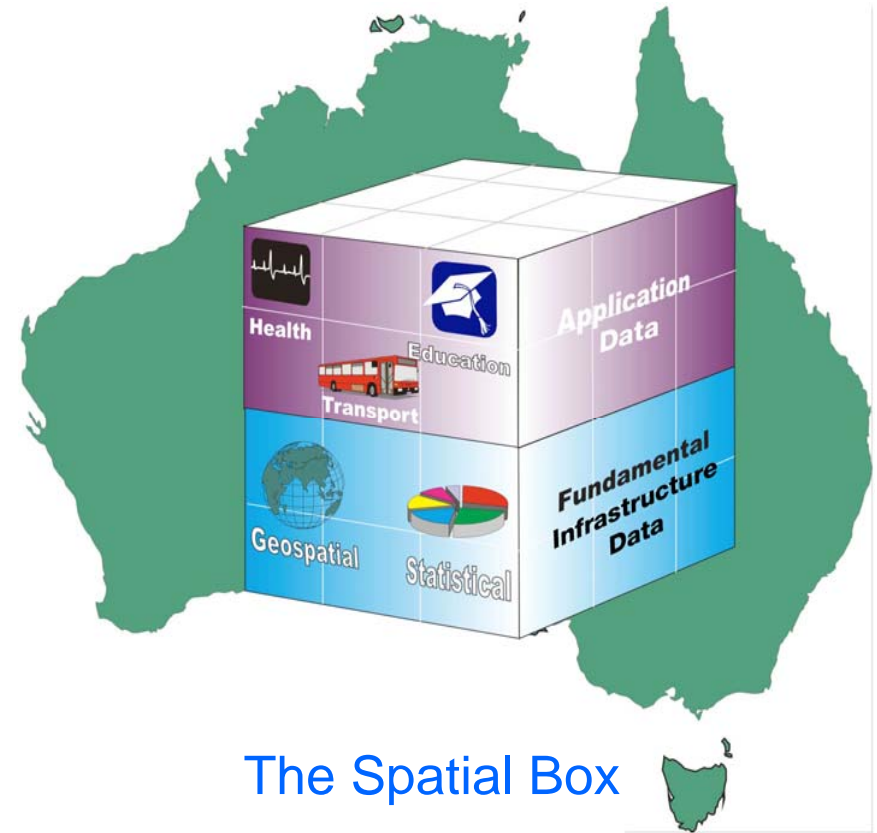
For information on APS200 Events held in 2012 or future 2012 events, please contact [Therese@aps.gov.au](mailto:Therese@aps.gov.au) or contact [Program and Events on 02 6202 2940](mailto:Program and Events on 02 6202 2940) or [Workwiththeaskram@aps.gov.au](mailto:Workwiththeaskram@aps.gov.au)

**Current projects**

Public Sector Innovation

**This is your APS**

Citizen needs	Leadership and direction	Workforce capabilities	Efficiency and high standards
<ul style="list-style-type: none"> <li>Identify Australian Government services for citizens</li> <li>Develop better ways to deliver services through the territories and private sector</li> <li>Improve service delivery performance (e.g. time, quality and cost)</li> <li>Reduce unnecessary business regulatory burden</li> <li>Enable citizens to collaborate with government to solve real world issues (and/or to obtain justice)</li> </ul>	<ul style="list-style-type: none"> <li>Develop strategic policy</li> <li>Lead performance with business and performance and the community</li> <li>Improve public administration</li> <li>Recruit and embed the APS values</li> <li>Enhance the vision and responsiveness of leadership</li> <li>Manage employment management for Government</li> <li>Develop leadership across the APS</li> <li>Manage talent management across the APS</li> <li>Recruit APS with responsibility to lead the APS</li> </ul>	<ul style="list-style-type: none"> <li>Secure exceptional engineering arrangements support our life</li> <li>Access the size and scale of the APS</li> <li>Coordinate multiple planning</li> <li>Develop recruitment and retention solutions</li> <li>Engage and strengthen learning and development</li> <li>Strengthen the performance framework</li> <li>Encourage employees to expand their career horizons</li> </ul>	<ul style="list-style-type: none"> <li>Embed agency capability across Government shared activities across Australia</li> <li>Apply relevant real time to growth opportunities</li> <li>Maximise the efficiency of agency efforts</li> <li>Strengthen the government framework (and agencies) to measure the efficiency of their respective functions</li> </ul>





# The Location Strategy

**Published 25<sup>th</sup> November  
2008**

[www.communities.gov.uk  
/publications/communities  
/locationstrategy](http://www.communities.gov.uk/publications/communities/locationstrategy)



Place matters:  
the Location  
Strategy for the  
United Kingdom

November 2008



# Place Matters: the Location Strategy for the United Kingdom

The Ministerial Committee on Domestic Affairs took responsibility for agreeing the UK Location Strategy

The Committee comprises:

- Minister for the Cabinet Office; and Chancellor of the Duchy of Lancaster (Chair)
- Secretary of State for Justice and Lord Chancellor
- Secretary of State for the Home Department
- Secretary of State for Health
- Secretary of State for Environment, Food and Rural Affairs
- Secretary of State for Business, Enterprise and Regulatory Reform
- Secretary of State for Work and Pensions
- Secretary of State for Transport
- Secretary of State for Communities and Local Government
- Secretary of State for Children, Schools and Families
- Secretary of State for Culture, Media and Sport
- Chief Secretary to the Treasury
- Secretary of State for Innovation, Universities and Skills
- Attorney General
- Parliamentary Secretary, Cabinet Office

# Members of the Location Council

- Tim Allen, Programme Director - Research and Knowledge Management, LGA
- Ray Boguslawski, Deputy Director, Business Solutions
- Brian Collins, Chief Scientific Advisor, Department for Transport & BERR
- Peter Collis CB, Chief Land Registrar, Land Registry
- Jos Creese, Head of IT, Hampshire County Council
- Belinda Crowe, Information Director, Ministry of Justice
- Karen Dunnell, National Statistician, Office for National Statistics
- Steve Erskine, Director Integrated Service Management, Home Office
- Grant Fitzner, Chief Economist and Director of Analytical Services, Department for Communities and Local Government
- David Frazer, Director of Information, DWP
- Iain Greenway, Chief Survey Officer, Land & Property Services Northern Ireland
- Michael Harrington, Group Director of Corporate Information and Services Division (CISD), Welsh Assembly Government
- Vanessa Lawrence CB, Director General and Chief Executive, Ordnance Survey
- Jamie McMichael-Phillips, Head of Joint Geospatial Information Branch, Defence Intelligence Staff, Ministry of Defence
- James Meldrum, Keeper, Registers of Scotland
- Miles Parker, Director of Science, Defra (Chair)
- Andrew Sutherland, Acting Director of Operations, The NHS Information Centre for Health and Social Care
- Andrew Stott, Deputy Government Chief Information Officer
- Carol Tullo, Director, Controller and Queen's Printer
- Stefan Carlyle, Programme Director, UK SDI Programme
- Keith Murray, Technical Director, UK SDI Programme





# ‘everything happens somewhere’

- ‘In almost everything, people need to know when and where things happen: place matters.’
- ‘The Location Strategy for the United Kingdom is a thoughtful, authoritative and important document and its recommendations are closely aligned to the delivery of government policy in many areas. Ministerial colleagues share with me in recognising the reality, identified by the Strategy that ‘everything happens somewhere’.

Baroness Andrews, Parliamentary, Under Secretary of State, Department for Communities and Local Government.



# Northumbrian Water Limited – investing in GI

The return on investment is real and demonstrable and includes:

- Additional income alone of well over £1m through improved management of empty properties.
- A sustainable cut of at least £60,000 in operating costs through the call centre solve-at-source principle.
- Significant savings in time and cost in the provision of timely and accurate asset information to field technicians.



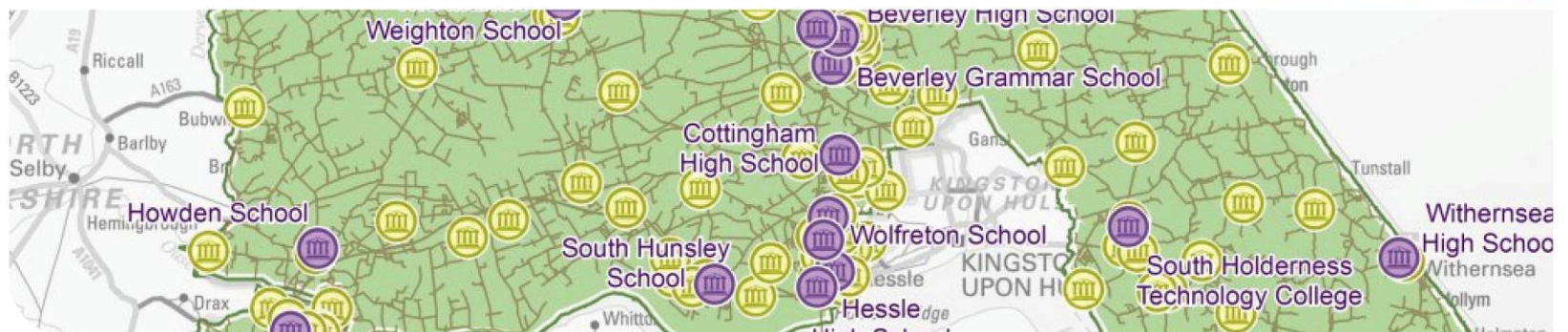
*'From the customers' point of view and from the business point of view, GIS has been of great benefit and our investment has been well worth it'.*

Ian Donald, Customer Services Director concludes:



## Council improves school transport services

- East Riding Council used OS MasterMap Integrated Transport Network (ITN) data
- East Riding Council saved £160,000 annually by improving school bus services for just two secondary schools





# Leaders reflect the team culture

Ordnance Survey - the 20th century organisation:

- Paternalistic - characterised by:
  - expectation that the organisation would provide
  - 'entitlement culture'
  - sense of orderliness
  - caring paternalism
  - security for employees
  - slow moving



# Changing our working culture

- Promoting cultural change – a recognition that our current culture would not serve us for the future:
- In order to meet and exceed the ever growing demand of our customers we had to change the way we worked
  - Culture of entitlement and lack of pace to be replaced with one of quick decision making and agility
  - In order to deliver on our promises we had to evolve a new working culture...



# Project Platinum

## A Two Year Journey

Challenging our...

**Values**

**Beliefs**

**Traditions**

**'Norms'**

**Attitudes**

**Priorities**







# 'The Ordnance Survey Experience'

- An intensive set of interactive activities in which virtually all staff participated
- Aim - to create a shared understanding of Ordnance Survey's Vision
- The activities were designed to help staff connect with the Vision
  - based on dialogue and personal challenge
  - catered for different learning styles
  - led by the board and senior managers
  - wide opportunities for feedback
  - enabled staff to draw their own conclusions







## What 'Your Say' told us:

- Indicated our major success has been that our people **understand The Vision** and what they have to deliver to contribute towards it (90%)
- We recognise why it is important to focus on **improving our customer Service** (99%)
- People are asking for further **support and tools** to help them to do a good job (55%)
- The Difference between the **'What'** and the **'How'**

I understand how what we are investing in now will impact on how we do things in the future

I understand why it is important for us all to focus on improving our customer service

I clearly understand how what I do contributes to Ordnance Survey achieving its aims

My manager helps me to identify the areas where I need to learn new things

I am recognised when I do good work

I understand **what** Ordnance Survey is trying to achieve

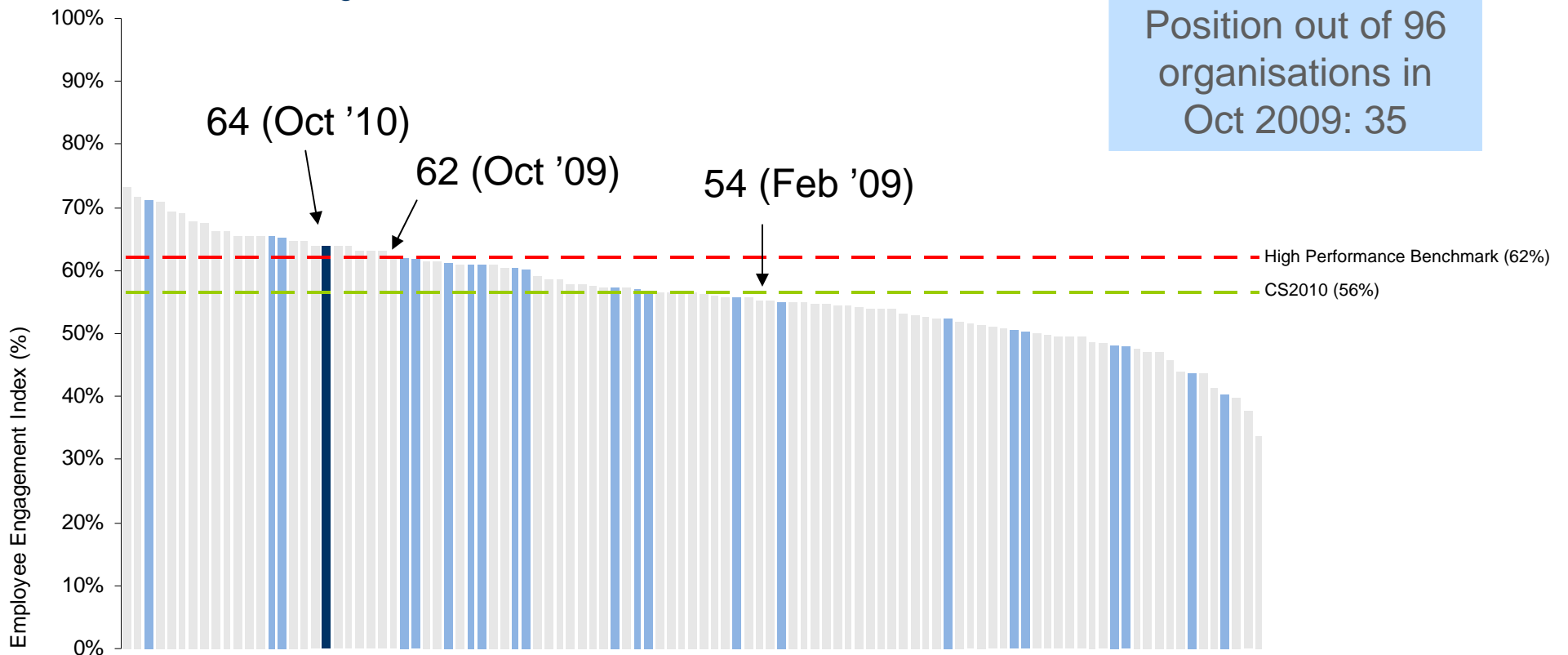
I am clear about what I am expected to deliver

# Ordnance Survey engagement results 2009-10

- Each bar in the chart below represents an organisation
- Ordnance Survey is indicated by the dark blue bar
- Mid blue bars represent other organisations with 1,000 - 2,499 employees
- The Executive Agencies EEI is 56%

Position out of 103 organisations in 2010: 19

Position out of 96 organisations in Oct 2009: 35



# Leaders reflect the team culture

Ordnance Survey - the 21st Century organisation:

- performance culture based on outcomes
- creating high performing teams
- ideas culture
- accountability
- provide opportunities and set challenges
- fail fast and celebrate successes
- accelerating the tempo of many activities



*We aim to guarantee employability not  
employment for staff*



"How do they know?"







# Over 6 million free maps 2002 - 2011

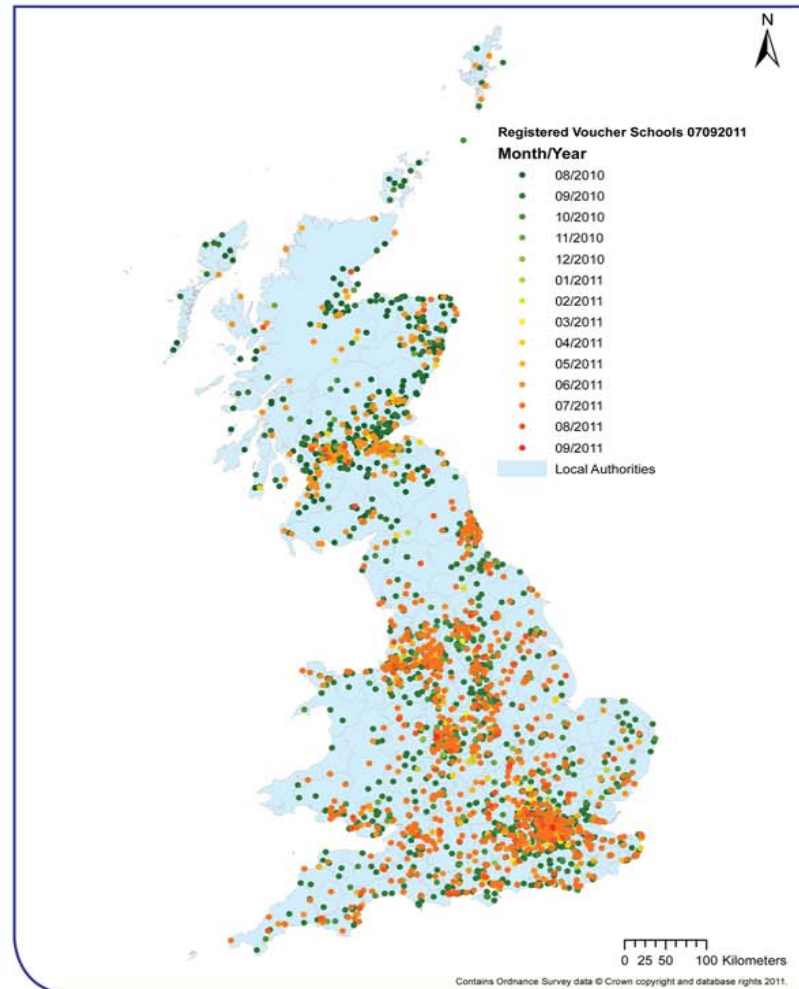




# Digimaps for Schools

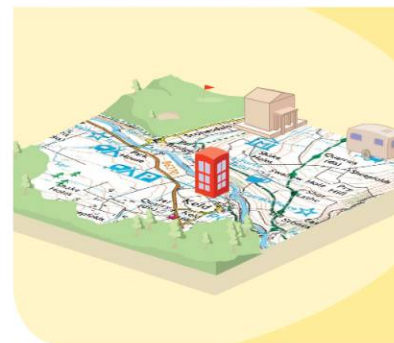
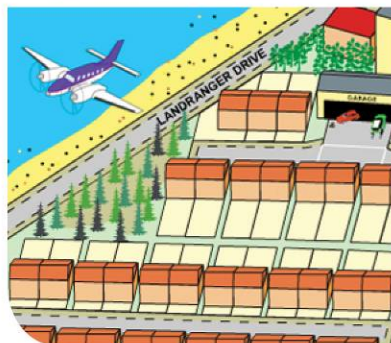
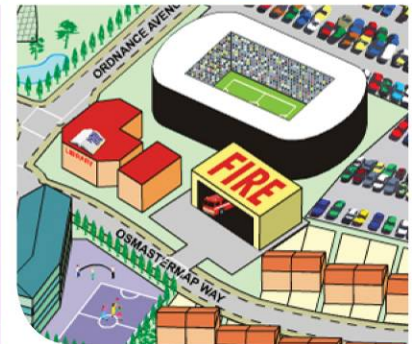
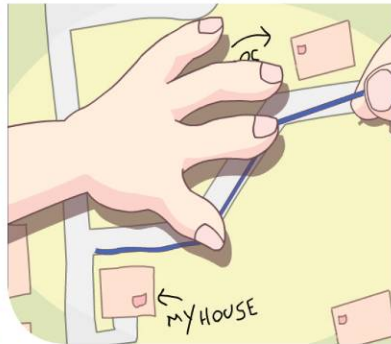
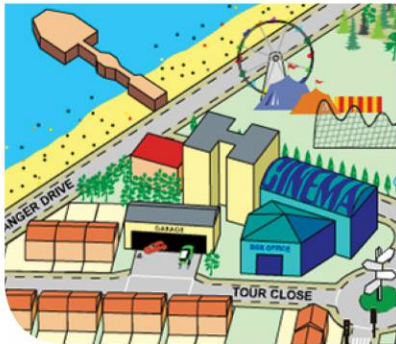


# Distribution of registered Digimap for Schools...four months after launch






# Educational resources



# Data supply to Further Education and universities – Digimap Ordnance Survey collection

- Collaboration with EDINA at University of Edinburgh, JISC Collections which is part of the UK Higher and Further Education funding councils



**Digimap**  **EDINA**

Home Help | Contact Us | Log-Out

- Help
- Getting Started
- About Mapping Products
- Copyright/Terms of Use
- Accessibility Statement
- About Digimap OS
- Teaching Resources
- Local Information
- Contact Us
- Change User Details

**User:** Nick Groome  
**Last Visit:** 08-Sep-2011

**Services Available to you:**  
Roam  
Carto  
Postcode Query  
Gazetteer Query  
Unlock  
OpenStream Web Map Service

**Welcome to Digimap OS.**  
Click on the icon for the facility you wish to use.

**View and create your own maps from Ordnance Survey data.**

- Roam**  
View, annotate and print maps in an easy to use interface. [More details ?](#)
- Carto**  
Advanced map creation; specify content, area and scale. Print up to A0. [More details ?](#)

**Download Ordnance Survey data for use in GIS and CAD software.**

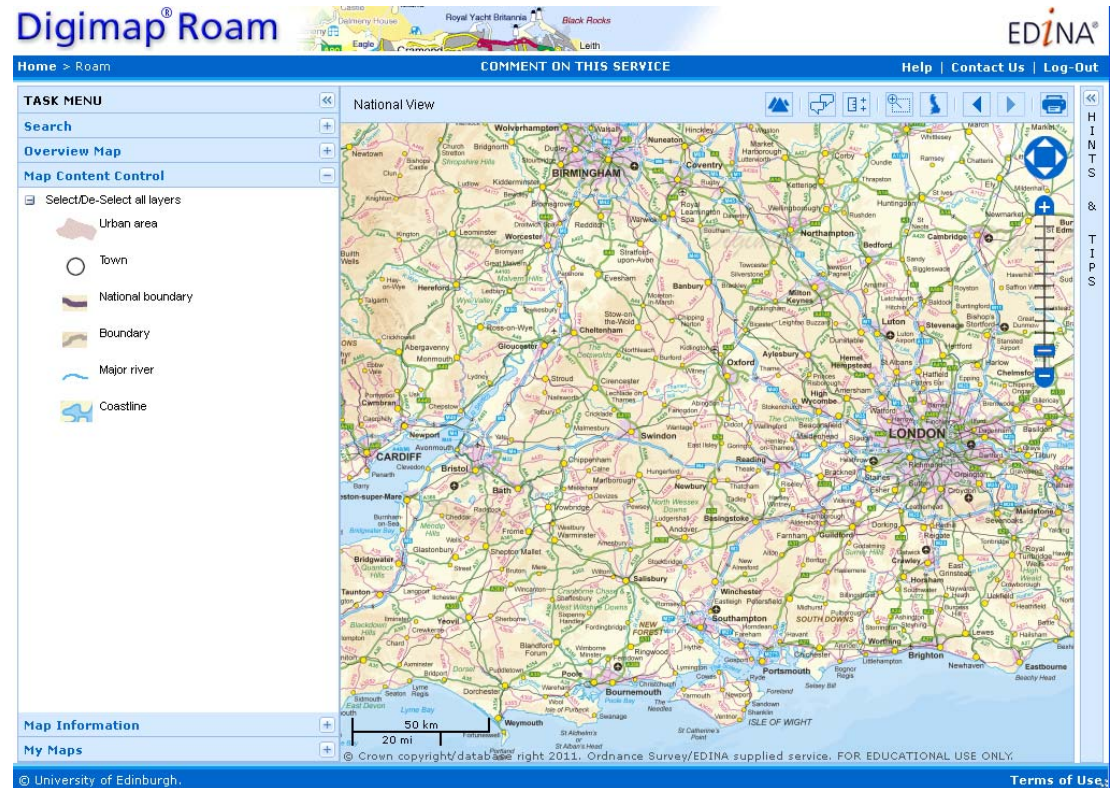
- Data Download** (not available)  
Download tiled geographic data for GIS or CAD. [More details ?](#)
- MasterMap Download** (not available)  
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**Find information about postcodes and place names.**

- Gazetteer Query**  
Search for place names and view their locations. [More details ?](#)
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Search and download place name records by location and attributes. [More details ?](#)
- Postcode Query**  
Look up postcodes to view their location and attributes. [More details ?](#)

# Digimap Ordnance Survey collection

- Started in 2000 - 158,000 registered users since
- Thriving service used by many academic disciplines
- Subscription but free at point of use
- Supplies 106 HE and 44 FE Colleges
- Currently more than 47,000 active users
- Recognised internationally as world leading





## Expansion of Digimap service – platform for a number of GI agencies

Service has grown to include

- Historic Digimap



- Geology Digimap



- Marine Digimap



## CC: The Exchange 2005

- **A challenge was issued Mr Jean Dotse, Director of Surveys, Ghana**
  - NMOs from Developed countries should take ownership of the issue of support for the NMOs of Developing countries.
  - Sustainability and funding debate will be raised by GSDI and at the Joint Board of Geospatial Information Sciences



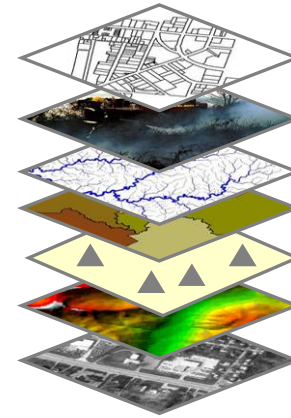
# National Mapping Organisations – John Dhotse’s four levels

- NMO in developed world at the leading edge of using technology
- NMO in developed world who follow the leading edge
- NMO in developing world who have funds to develop systems
- NMO in developing world where there are continuously no funds or very few funds



## Moving forward – optimising support

- **Development of a knowledge bank**
  - Providing a knowledge framework for common access. It would contain fundamental documents so that relearning does not have to take place from ground zero. They would be practical papers *not* academic papers.





# Geographic Information Knowledge Portal



[GI Community Registry](#)

**Geographic Information Community Registry**

Put yourself and your organization on the global map!

[Deposit Spatial Documents](#)

**Deposit Spatial Documents**

Contribute your works that address spatial data infrastructure and geographic information development concepts to an open access depository.

[Find Spatial Documents](#)

**Find Spatial Documents**

Search the spatial docs depot or explore links to best papers, best practices, and other geospatial document collections.

[Mapping Agency Central](#)

**Mapping Agency Central**

Explore the national mapping agency contact list, the status of national mapping agency spatial data infrastructure programs, the mapping agency discussion forum, equipment exchange and human resource exchange.

[SDI Survey Responses](#)

**Spatial Data Infrastructure Survey Responses**

See survey responses from across the globe on the status of national, sub-regional and local spatial data infrastructure developments.

[Quarterly Global Survey](#)

**Quarterly Global Survey**

Express your opinion in this quarterly one question survey. Accumulated responses are posted at the end of each quarter.

[Best Geo Web Resources](#)

**Best Geo Web Resources**

View link collections to geospatial journals, newsletters, news lists, conference announcements, blogs, map mashups and geospatial organizations.

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The Geographic Information Knowledge Portal is supported by: GSDI Association, ... (& any other supporting geospatial organizations). These organizations encourage their members to contribute to this geospatial community resource. You are encouraged to join any or all of these organizations to help support this service and many related efforts.



## National Mapping Agencies in Africa



[Directory of agencies](#) | [Knowledge and resources](#) | [Available expertise](#) | [Available equipment](#) | [Links](#)

### Home

#### Features

[View more](#)



#### [Mapping conference set to expand horizons in a shrinking world](#)

Senior representatives and leaders from mapping and cadastral organisations across the world are set to meet in Cambridge, England, during July.

The Cambridge Conference - hosted by Britain's Ordnance Survey - is a unique occasion, giving top experts the chance to discuss mapping and land management issues of global importance. Held every four years, it includes exhibitions, speeches, debates...

#### What's new

[View more](#)

#### [Mapping the Maasai](#)

#### [Impacts of Industrial Logging in Central Africa Studied](#)

### About us

[Who we are](#) and [what we do](#)

[About our role](#) in national mapping in Africa



# Geographic Information Knowledge Network



## Primary Links

- [GI Community Registry](#)
- [SDI Implementation Experiences](#)
- [Contribute or Find Spatial Documents](#)
- [Geospatial Discussion Lists](#)
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- **Supporting Organizations**
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## [Geographic Information Community Registry](#)

To access the registry *by country*, use the [map index](#).

To access the registry *by category*, consult the registry listings of:

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- [Government Agency Profiles](#)
- [Company Profiles](#)
- [NGO, Non-Profit Organization, and Academic Institution Profiles](#)

To access the registry by animated random geographic location, use [Geospatial Scope](#)

To access the registry by key words, Search the Registry

For more information, email [GIKnetwork@gsdi.org](mailto:GIKnetwork@gsdi.org)

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[GIK Network](#) > [Spatial Data Infrastructure Implementation Experiences](#)

## Spatial Data Infrastructure Implementation Experiences

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### ▼ nation (political level 1)

- [Bahrain Spatial Data Infrastructure \(BSDI\)](#)

### ▼ province/state/region (political level 2)

- [MyProvince SDI](#)

### ▼ Other

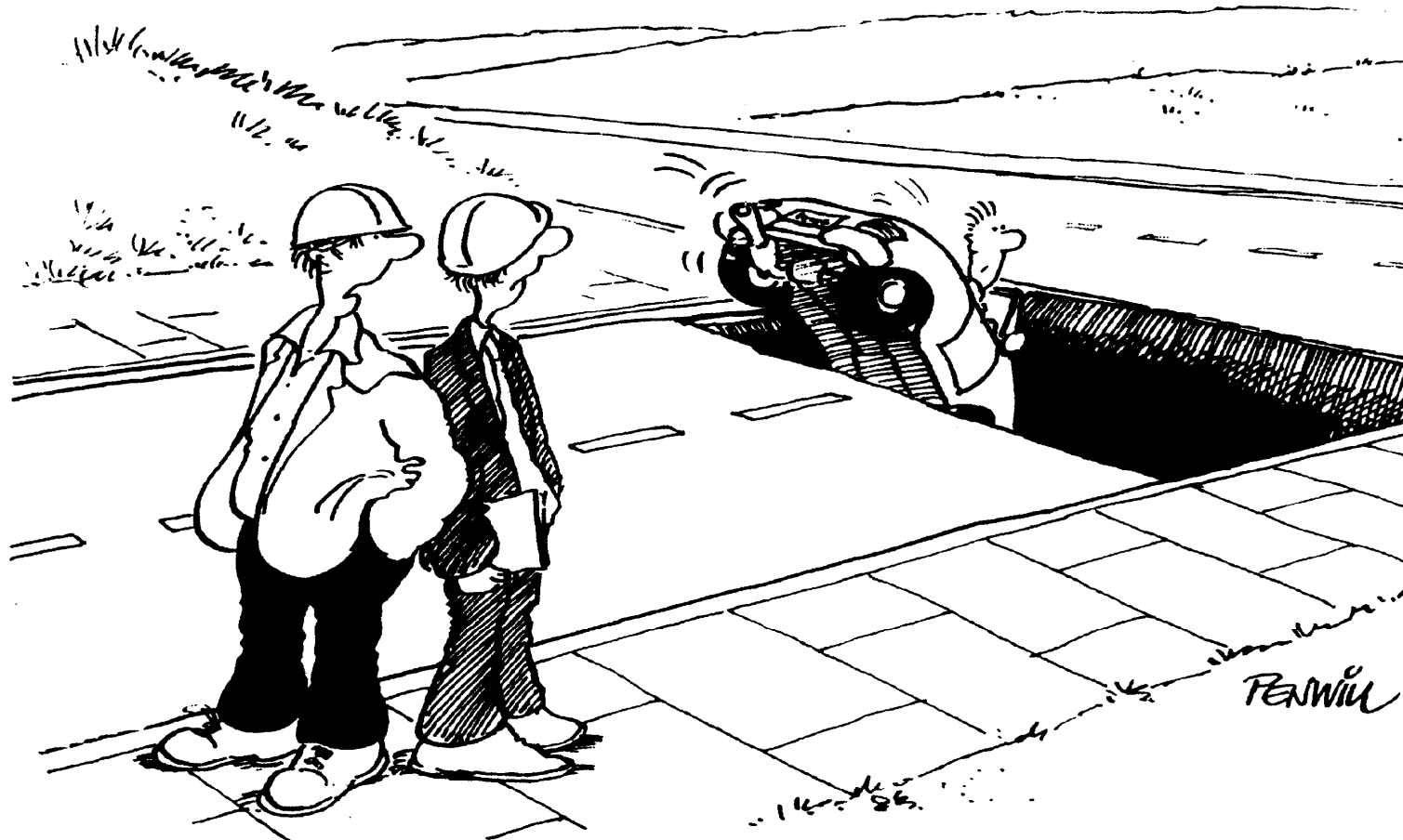
- [UK Location Strategy and Programme](#)
- [TestProgram](#)

For more information, email [GIKnetwork@gsdi.org](mailto:GIKnetwork@gsdi.org)

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## UN-GGIM going forward

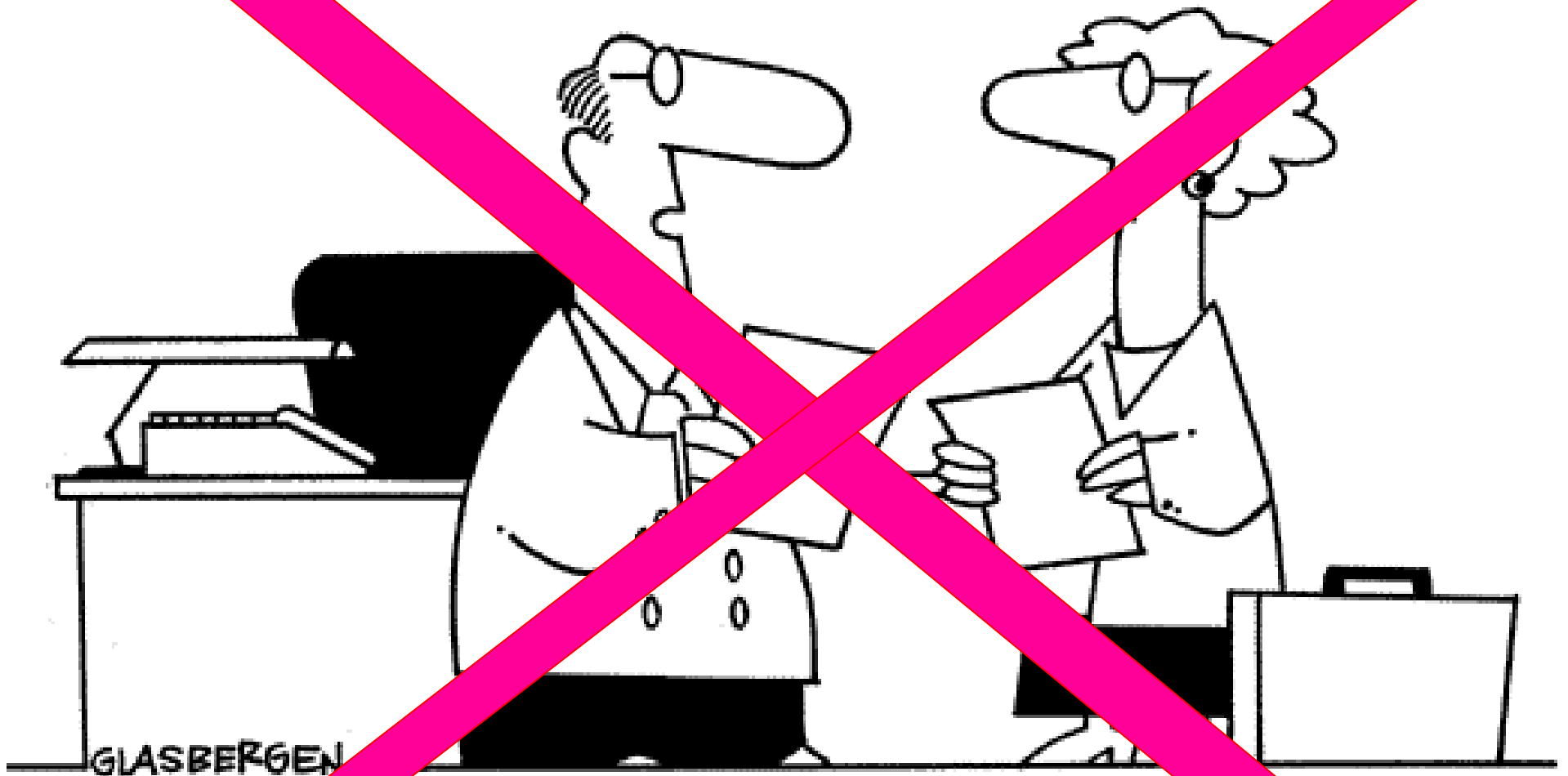


" I GUESS MAP CLEAN-UP SHOULD HAVE BEEN DONE  
BEFORE WE BUILT THE ROAD "

# UN-GGIM going forward: our needs

- Senior leadership to influence the most senior members of governments and influencers around the world
- A road map against which to measure performance
- Materials to assist ‘each and everyone of us’ to grow our organisations both technically and culturally
- Materials to influence ‘others’ of the importance of place in their world
- Materials to assist the youth of our countries to understand that ‘accurate current authoritative place-based information underpins their world’





Let's form a committee, to create a task force, to develop a team, to meet at sometime to make a decision!