

The United Kingdom's Location Programme A Unique opportunity!

**A Paper by Ray Boguslawski, Stefan Carlyle,
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Presented by Miles Gabriel

**UK-EOF Data Solutions Workshop
25th June 2009**

Why did we need a Location Strategy for the United Kingdom?

- Current users of geographic information spend large amounts of time (up to 80%) collating and managing information
- ...instead of devoting this time to analysing information to solve problems and generate benefit
- Much of the information collected is not reusable
- Data is likely to have been collected using local rules preventing its reuse (with data about the same location from another organisation)
- Data may have been collected in a particular format not universally used
- Quality of the data maybe unknown



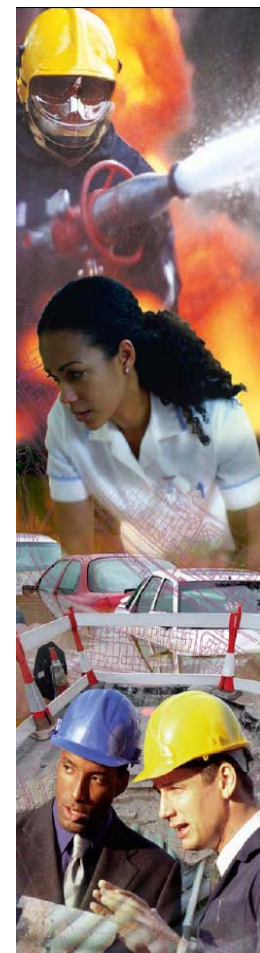
Note: It is estimated that up to 80% of Public Sector data has a location element

Place Matters: The Location Strategy – 5 Strategic Actions

28. To ensure that the UK exploits the full value of its information the Location Strategy requires a programme of strategic actions which ensure that:

1. we know what data we have, and avoid duplicating it;
2. we use common reference data so we know we are talking about the same places;
3. we can share location-related information easily through a common infrastructure of standards, technology and business relationships;
4. we have the appropriate skills, both among geographic professionals and among other professional groups who use location information or support its use;
5. we have strong leadership and governance to drive through change including the implementation of this Strategy and the implementation of INSPIRE.

Note: Para 28 of the UK Location Strategy



UK Location Strategy – why are we doing this?

“Good maps and location intelligence can help determine how quickly our ambulances turn up, where a policeman patrols, how we act in a national emergency. Knowing more about where we live can help us make the best decisions. But across the Country there is still too little sharing of the best practice and we are wasting time and money trying to find the information we need. The Location Strategy will ensure we make better use of information already held so we can use it faster and with less expense.”

**Baroness Andrews, Parliamentary Under Secretary of State,
Communities and Local Government, November 2008**



- **EC INSPIRE Directive**
 - Introduces standards to improve the interoperability of spatial information across Europe for environmental policy making
 - Discovery, view and download services for EC, public authorities and the public
- **UK Location Strategy**
 - Re-use of all public sector location information
 - Broader interpretation than INSPIRE – will provide information for sustainable development, socio-economic analysis and many other purposes
 - For improved policy making and public sector service delivery, economic benefit, open government and citizen engagement
- **Joint programme to implement INSPIRE and UK Location Strategy because of the huge synergies**

The UK Location Programme will deliver significant benefits

Better Service Delivery

- Improved / more effective Public Service
- Improved responsiveness
- Better cross organisational coordination

Delivering more for less

- Reducing costs of delivery while providing more value
- Cutting duplication and promoting reuse

Enabling the provision of innovative new services

- Providing services which have been impractical or not cost effective to date
- New knowledge from different combination of data / data sets



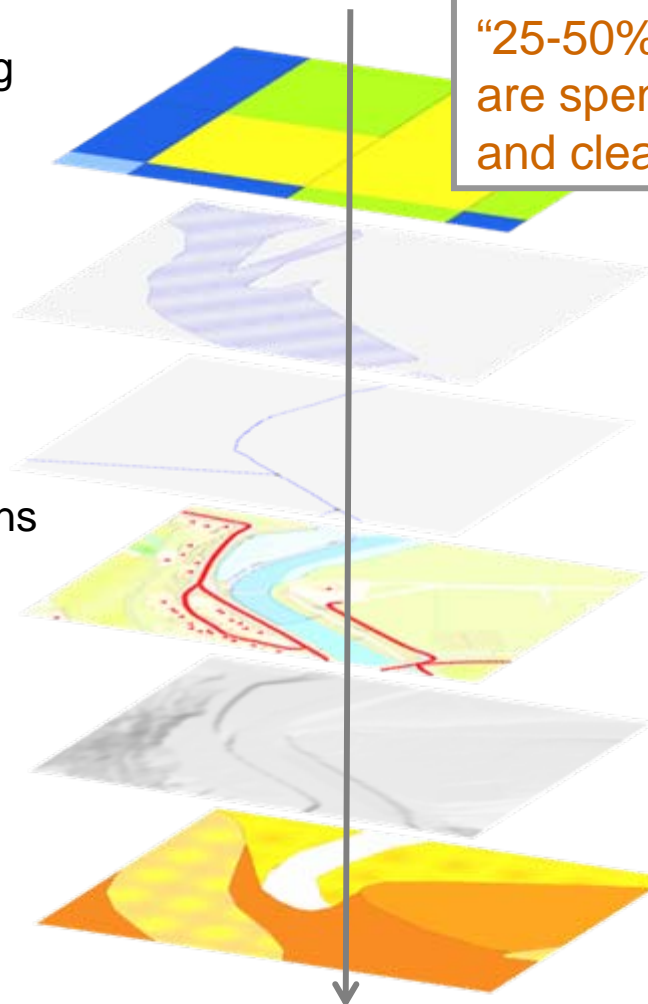
Case Study: A collaborative approach to manage flooding – the Atlantis project

Context:

- Pitt Review 2007– better flood modeling needed
- Atlantis was created to understand the issues and agree standards to provide interoperable base geographic and environmental data

Benefits

- Consistent approach to flooding
- Improving flood modeling and predictions
- Improved forecasting and warnings
- Better planning for national or local responses



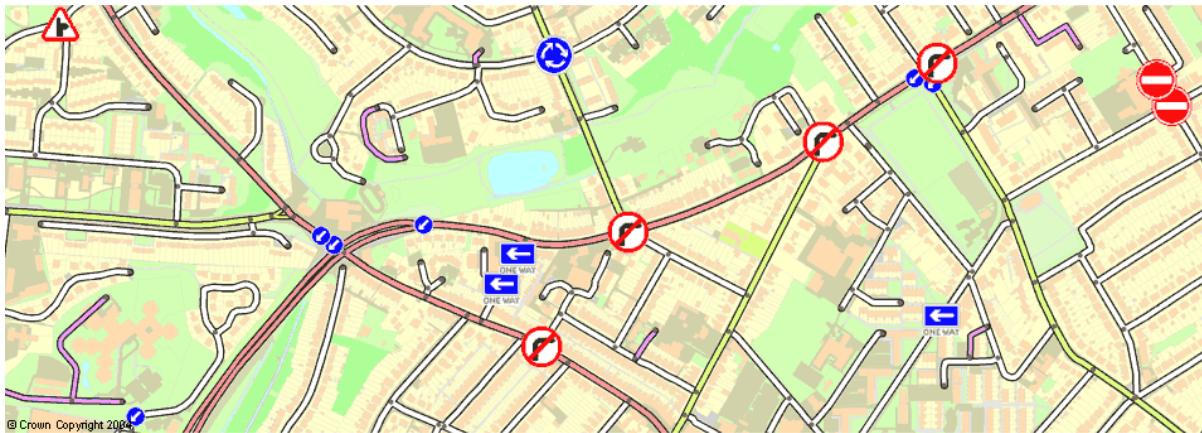
“25-50% of project costs are spent on accessing and cleaning up data”



Case study: Local decision-making improved resulting in cash savings

Council improves School Transport Services

- East Riding Council used road data together with pupil home address records and road flow / congestion data to analyse school bus routes
- They **saved £160,000 annually** by improving school bus services for just two secondary schools in addition to giving the children a better service



Case study: Providing environmental information to citizens

MAGIC

Site Map Close

Search Options

Map Tools

Change Map Topic



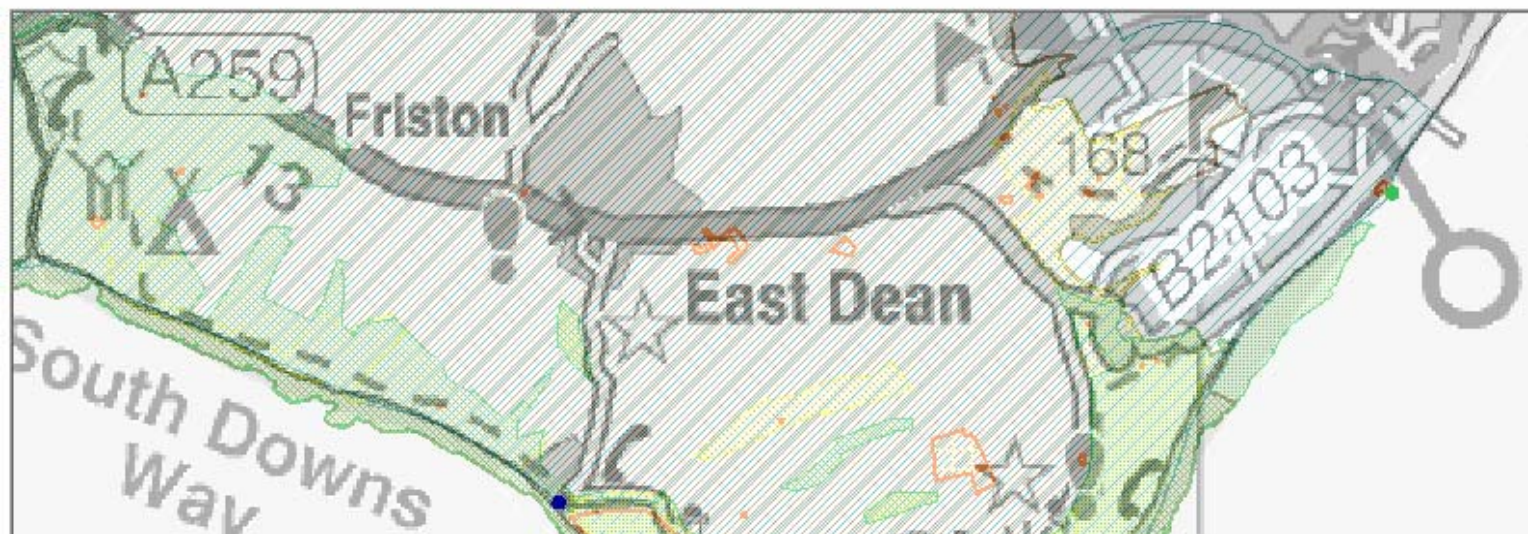
Reload Map



List of Layers

Bathing Waters Directive (England)

- Not Classified
- Closed
- Fail
- Imperative
- Guideline
- Scheduled Monuments (England)
- Protected Wreck Sites



Query/Selection Results - Windows Internet Explorer

http://www.magic.gov.uk/website/magic/identifyForm.htm

National Park - proposed: South Downs intended boundary 2009

Area_ha	Reference	Date of Designation Order	Hotlink
23.767128198	10	Sun, 1 Dec 2002 00:00:00 UTC	HTTP://WWW.NATUREENGLAND.ORG.UK/OURWORK/CONSERVATION/DESIGNATEDAREAS/NEW/SOUTHDOWNSD/DEFAULT.ASPX

Case study: Discovering data

Map Viewer



Scale 1: 191301

Go

OS

AP

Both

Reset All



Selection Tools



Select one of the pick tools to select features

Selected Features

Order Status

You have added items to your basket

Layer: Special Areas of Conservation (England)

Estimated File Size: 166.0 kb

Order Size: 0.16% full

Clear

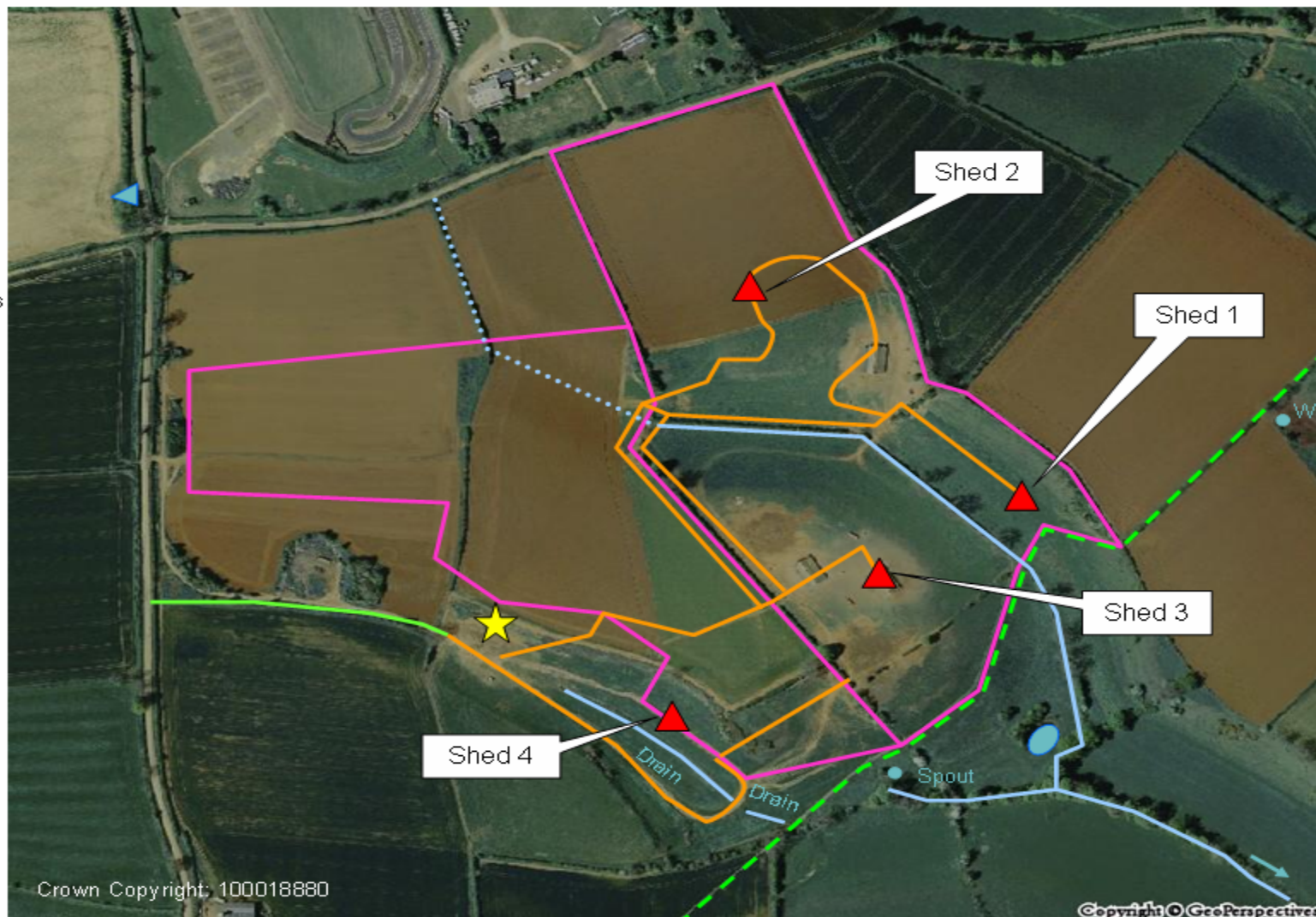
Next

Case study: Managing animal disease incidents



Legend

- ▲ Infected Poultry Sheds
- ★ Dwelling and Barn
- Ponds
- Water Course
- Internal Tracks
- Electric Range Fence
- Drain Watercourse
- Clean Drive
- Public Footpath



Crown Copyright: 100018880

Copyright © GeoPerspectives

DATE CREATED: 2008-06-13 12:00hrs
CREATOR: RADAR Team, Defra
Sources: Animal Health, New Perspectives

NB: Aerial photograph shows location of sheds in the past

Scope of data

- Topographic surface objects
- Terrain
- Marine (topographic)
- Underground – natural
- Underground – man-made
- Atmosphere

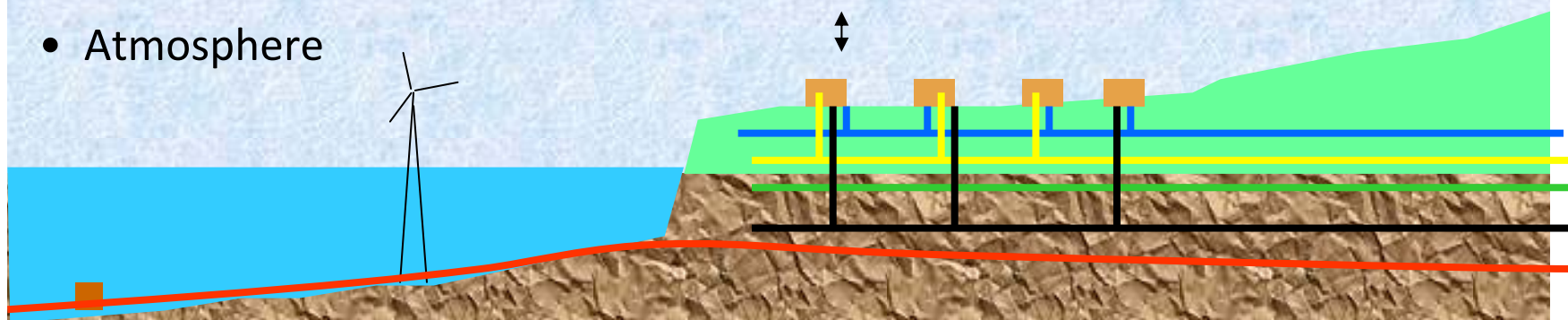
Business Information

Spatial Object

Referenced



Common system



Extent: UK territorial waters (as defined in the Marine Bill) tbc

Data Scope



Annex 1	Annex 2	Annex 3	
<ul style="list-style-type: none"> • Geographical names • Administrative units • Addresses • Cadastral parcels • Transport networks (streets) • Hydrography • Protected sites • Coordinate reference systems • Geographical grid systems 	<ul style="list-style-type: none"> • Elevation • Land cover • Ortho-imagery • Geology 	<ul style="list-style-type: none"> • Statistical units • Mineral resources • Natural risk zones • Soils • Species distribution • Environmental monitoring facilities • Population dist. & demography • Meteorological features • Agricultural and aquaculture facilities • Oceanographic features • Area management restriction/regulation zones & reporting units 	<ul style="list-style-type: none"> • Buildings • Sea regions • Land use • Energy Resources • Habitats & biotopes • Human health & safety • Utility & govt. services • Atmospheric conditions • Bio-geographical regions • Production & industrial facilities

Topographic data (2.5D)

Types of data

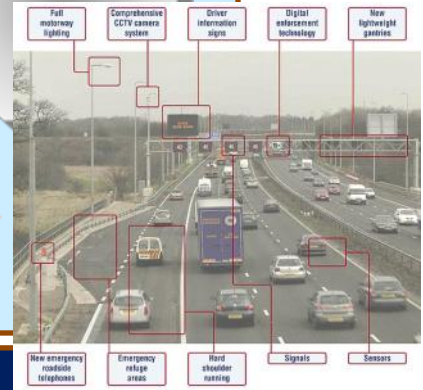
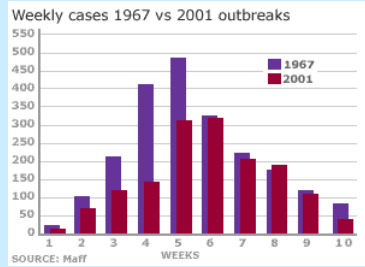
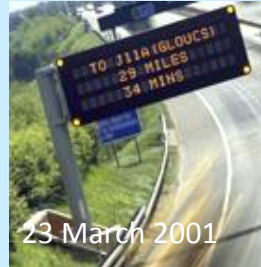
Organisational Business Data

Spatial Objects

Standards



01001010
00100101
00010101
11110111
11100100
10110100



Loose coupling

Application specific - referenced

Widely reused - widely referenced



Extensive use of shared data envisaged




Users: citizen, consumer, public and private sector, academia

Public Sector

3rd Sector

Private Sector

External applications

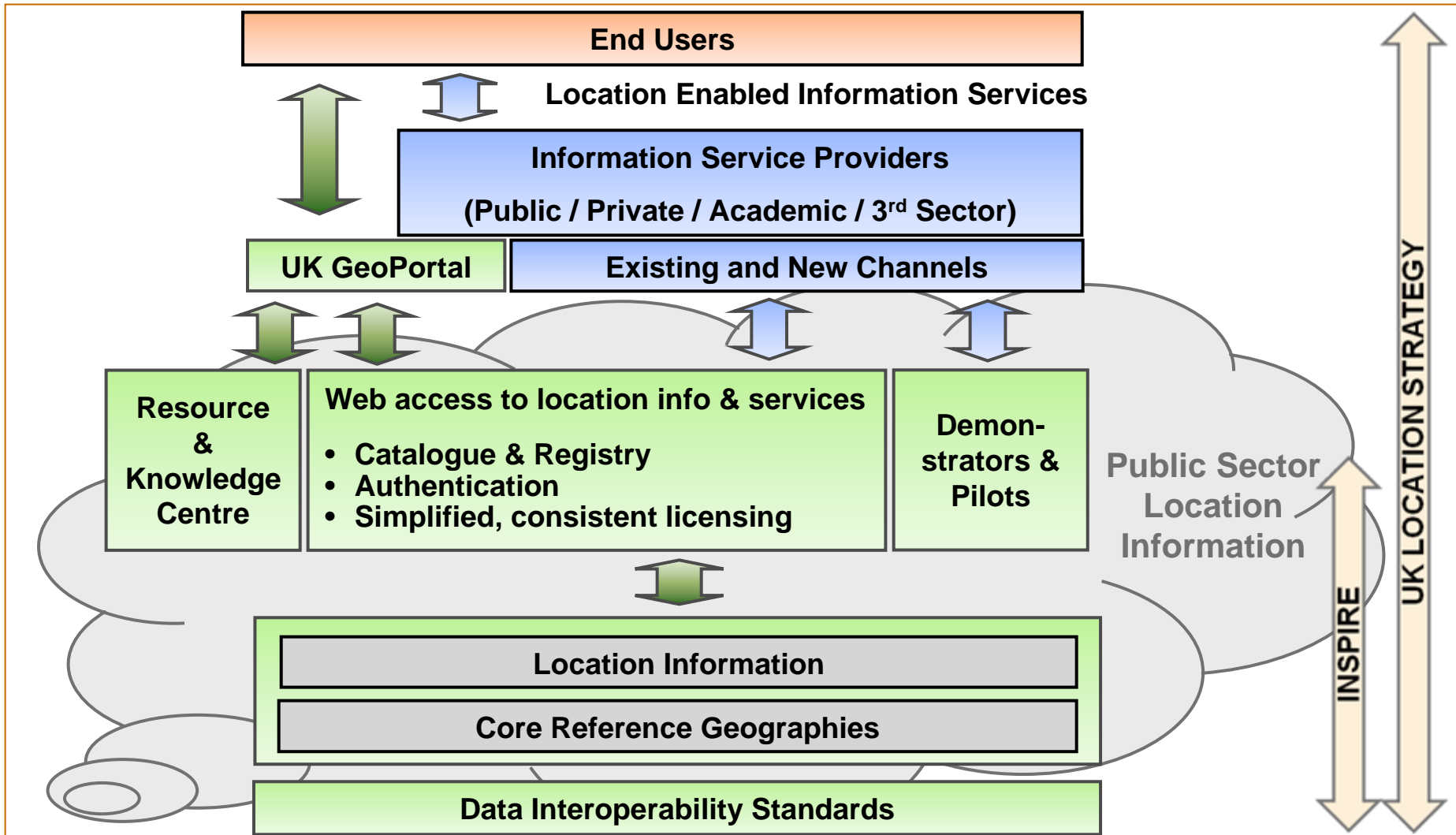
<p>Local Services Planning Statistics</p>  <p>Weather Leisure & recreation</p>	<p>Local democracy Local Risks</p> <p>User feedback Journeys & Transport</p>	<p>Community events</p>  <p>Campaigns Wildlife & habitats</p>	<p>Property Search Demographics</p>  <p>Location Based Services</p>	<p>In-car Navigation Security</p> <p>Web mapping Insurance</p>
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Internal applications

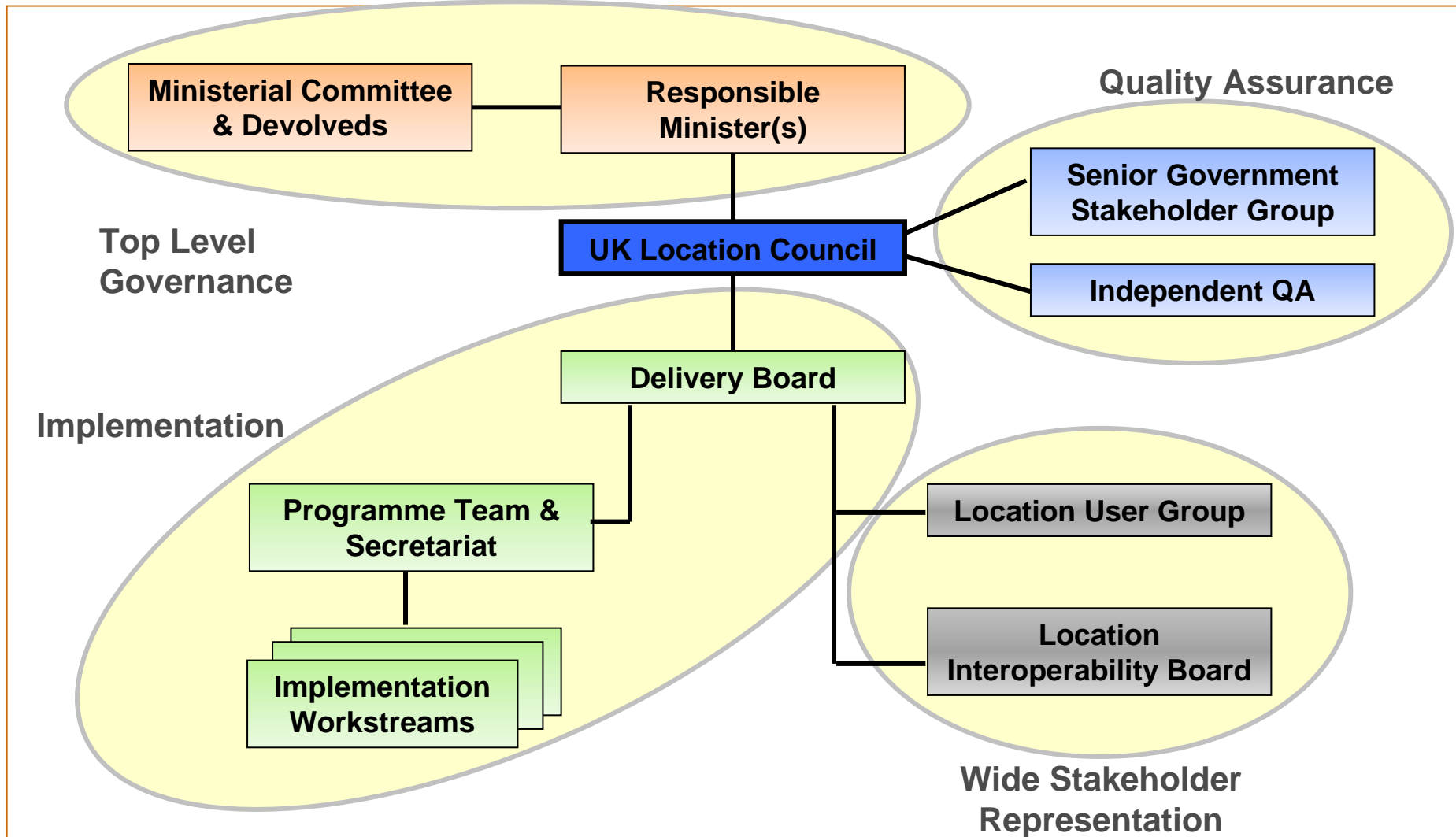
<p>Policy implementation Reporting</p>  <p>Policy making Asset Management</p>	<p>Emergency Response Security</p> <p>Investment Risk Management</p>	<p>Investment planning</p> <p>Asset Management Risk Assessment</p>	<p>Estate & Asset Management</p>  <p>Network operations</p>
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Coordinated Location Information within wider information infrastructure

What is the programme delivering?



Decision making and engagement



Roadmap for the programme

MID 2009 – MID 2011 BASIC INFRASTRUCTURE AND SERVICES	MID 2011 – MID 2013 EXTENDED SERVICES AND APPLICATIONS	MID 2013 ONWARDS BUSINESS AS USUAL ENHANCEMENTS
<p>Communications website INSPIRE transposition into UK legislation Agree INSPIRE implementing rules and UK specifications Initial demonstrators and pilots Initial advice, guidance and toolkits Metadata tool Geo-portal with catalogue, registry, simple view facilities and resource centre Set up Co-ordination Unit and reporting</p>	<p>Further legislative updates (if necessary) Common licence agreements Data providers supported in making changes to their systems Extended advice, guidance and toolkits Geo-portal with basic rights mgmt and links to download facilities Extend the breadth of data and applications</p>	<p>More extensive rights management Extended reference geographies BAU service enhancements</p>
<p>BUILD THE FUNCTIONS AND TOOLS ALIGNED TO INSPIRE AND UK LS</p>		<p>More extensive rights management Extended reference geographies BAU service enhancements</p>
<p>DATA DELIVERY TO MEET INSPIRE AND WIDER UKLS REQUIREMENTS</p>		
<p>BUSINESS CHANGE</p>		

Conclusion

- Cross-government programme is underway to deliver INSPIRE and the UK Location Strategy
- Legal transposition will be completed this year
- Conceptual design work nearing completion – “support” model to deliver value well understood
- Top level governance established and wider governance planned
- Engagements taking place with key stakeholders to understand needs and deliver benefits
- Next steps to agree business case and begin creating the UK SDI



Communities and Local Government

**Place matters:
the Location
Strategy for the
United Kingdom**

November 2006

gi GEOGRAPHIC INFORMATION PANEL

Official Journal of the European Union L 288/5

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MEMORANDUM TO THE ACCOMPANYING DOCUMENT

MEMORANDUM TO THE ACCOMPANYING DOCUMENT

DIRECTIVES

OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

OF 15 July 2006

on the location strategy for the United Kingdom (2006/2006/EC)

CONTEXT OF THE DIRECTIVE

The location strategy for the United Kingdom is a key element of the national spatial strategy and is an integral part of the national spatial strategy. It is a key element of the national spatial strategy and is an integral part of the national spatial strategy.

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a unique opportunity

Thank you

For further information visit:

<http://www.defra.gov.uk/location/>

Or contact the UK Location Programme by email:

uklocationprogramme@defra.gsi.gov.uk