

A satellite-style image of the North Atlantic Ocean, showing the British Isles, Iceland, and parts of North America and Europe. The ocean is dark blue, and the land is green and brown. The text is overlaid on the image.

The UK Location Programme

- exploiting a unique opportunity

HYDROGRAPHY and MARINE spatial data infrastructure symposium, Reading

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INSPIRE Data Specifications DT,
Transport Networks TWG Facilitator &
UK member Initial Operating Capability TF

The word cloud features the following terms:

- INSPIRE** (pink)
- Collaboration** (dark blue)
- Standards** (dark blue)
- UK Location Programme** (dark blue)
- Data Architecture** (dark blue)
- Linked data** (dark blue)
- database** (dark blue)
- reuse** (dark blue)
- URI** (dark blue)
- regulations** (pink)
- SEIS** (pink)
- Power of Information** (pink)
- unique identifier** (dark blue)
- Resource Description Framework** (dark blue)
- INSPIRE timeline** (pink)
- DNF** (dark blue)
- ££savings** (dark blue)
- Interoperability** (dark blue)
- spatial object** (dark blue)
- ontology** (dark blue)
- http://** (dark blue)
- new capability** (dark blue)
- Earth Observation Framework** (pink)
- Mainstream information** (dark blue)
- Leadership** (dark blue)
- UK Location Strategy** (dark blue)
- Making Public Data Public** (pink)
- Location Council** (dark blue)
- GMES metadata** (pink)
- Location Council** (dark blue)

economies of scale >>

User Benefits

infrastructure

Mainstream Information

Location Information

Fully Integrated (spatial is NOT special)
Reusable in all kinds of applications

How do we get there?

1. Current Information Status
2. Unique opportunity
3. UK Location Programme
4. Conclusion

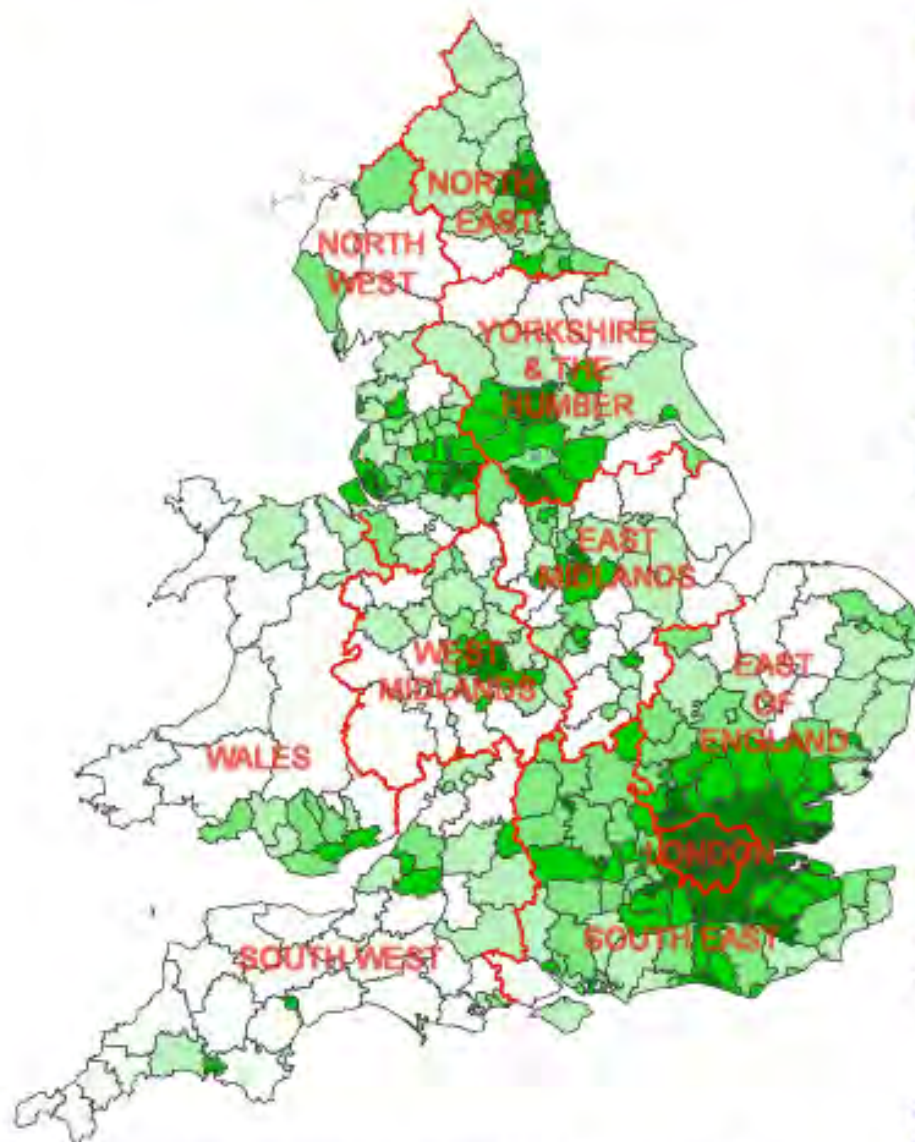


Current Information Status



Census 2001 Interactive Map

Key Statistics for Local Authorities (Feb 03)



1. Choose additional map layers:

- Regions
- Region Names

2. Select Key Statistic:

People 16-74 taking public transport to work (%)

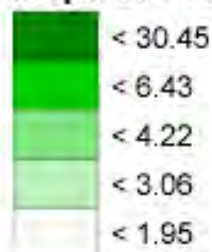
3. Select number of categories (quantiles):

Five

4. Select map colour:

Green

People 16-74 taking public transport to work (%)



District Name: District Name

District Code: District Code

Value: Value

Zoom: Right-click on map for zoom options

Pan: Hold Alt and click+drag in map window to pan map

Data: Left-click on district for individual statistics

Download: [Access these maps in PDF format](#)



- Contents**
- ▼ Hazards
 - Report a hazard
 - Map
 - List
 - Monthly Totals
 - ▼ Authorities
 - List
 - League Table
 - ▶ Information
 - ▶ Pothole News
 - Search
 - Help
 - Contact

User login

Username:

Password:

- [Create new account](#)
- [Request new password](#)

- CTC Websites**
- [Main CTC Site](#)
 - [Accident Line](#)
 - [Cycle insurance](#)
 - [Forum](#)
 - [Holidays](#)
 - [Maps](#)
 - [Shop](#)
 - [Travel Insurance](#)

Map

Click on the map to zoom in, click a hazard marker flag for more information.




ID 12290

Status: Reported

Description: Most of the Northern side of Fishlake Meadows road is in very poor condition. In particular the 4-6 feet of road nearest the kerb are generally very uneven and there are several potholes.

More information [#12290](#)

[Link to this view](#)

 [Google Earth KML](#)

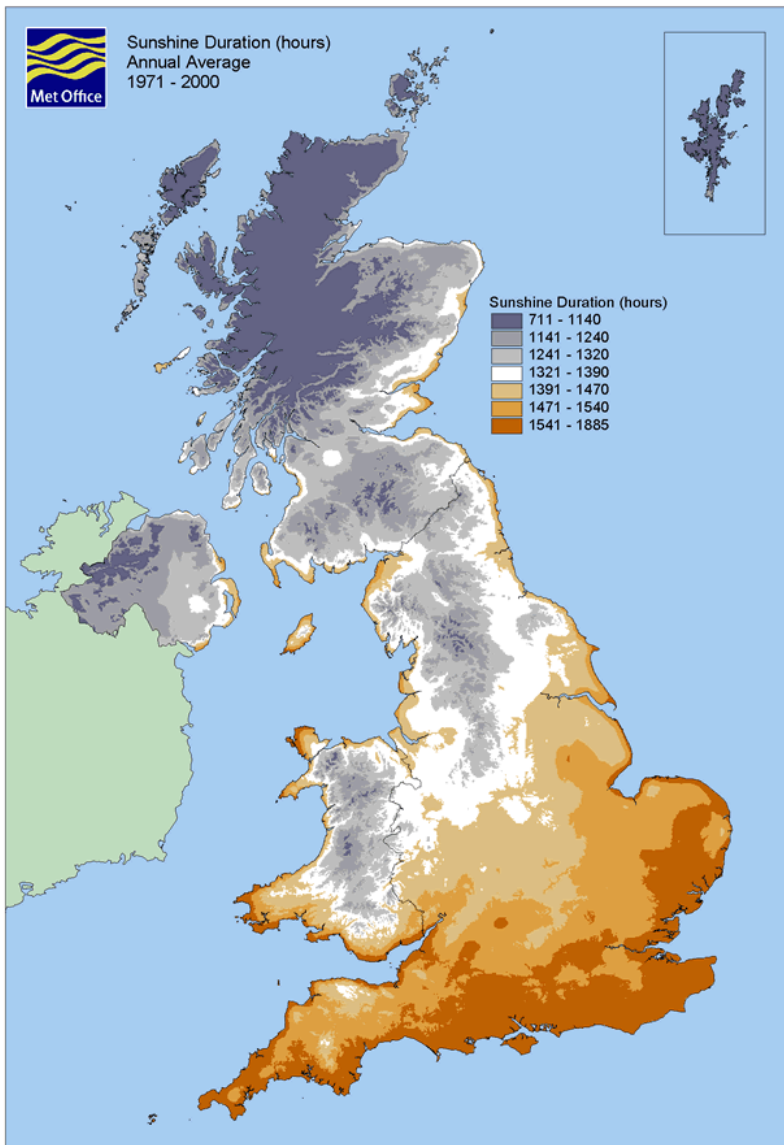
Go To Hazard

#

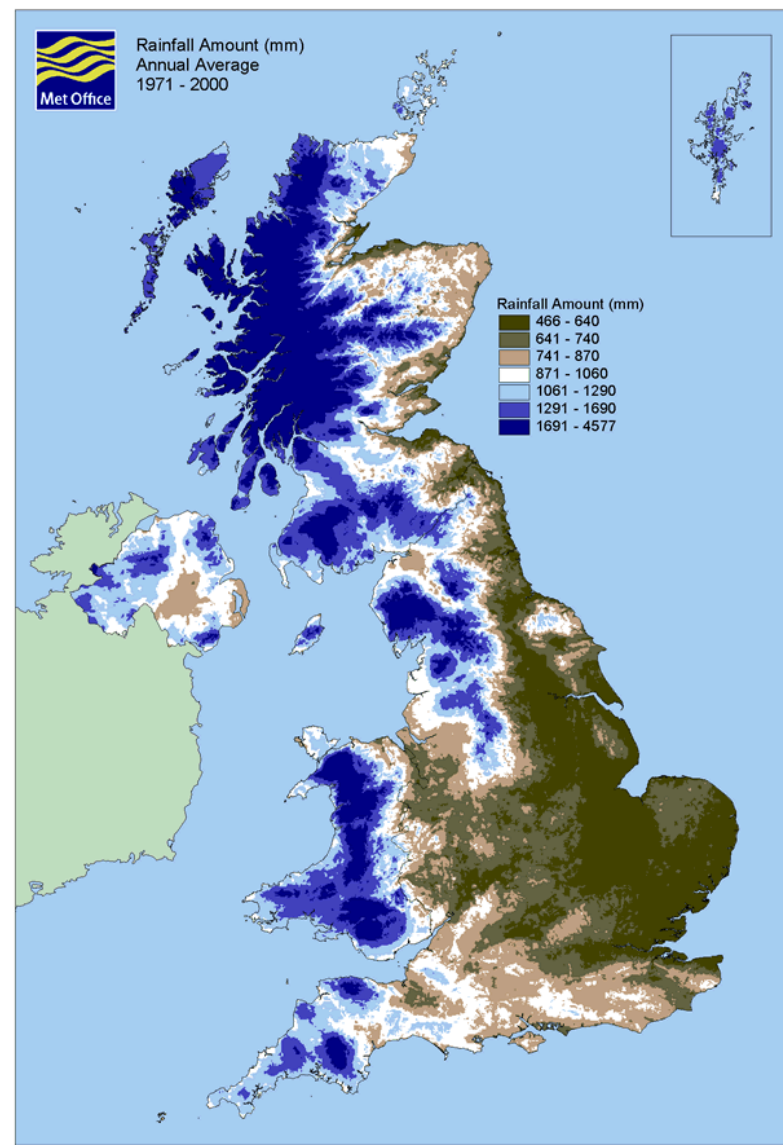
Site Statistics

Total reports:	20,875
Fixed reports:	7,246
Percent fixed:	35%
Reports per day:	23.6





Sunshine 1971-2000 Annual Average



Rainfall 1971-2000 Annual Average

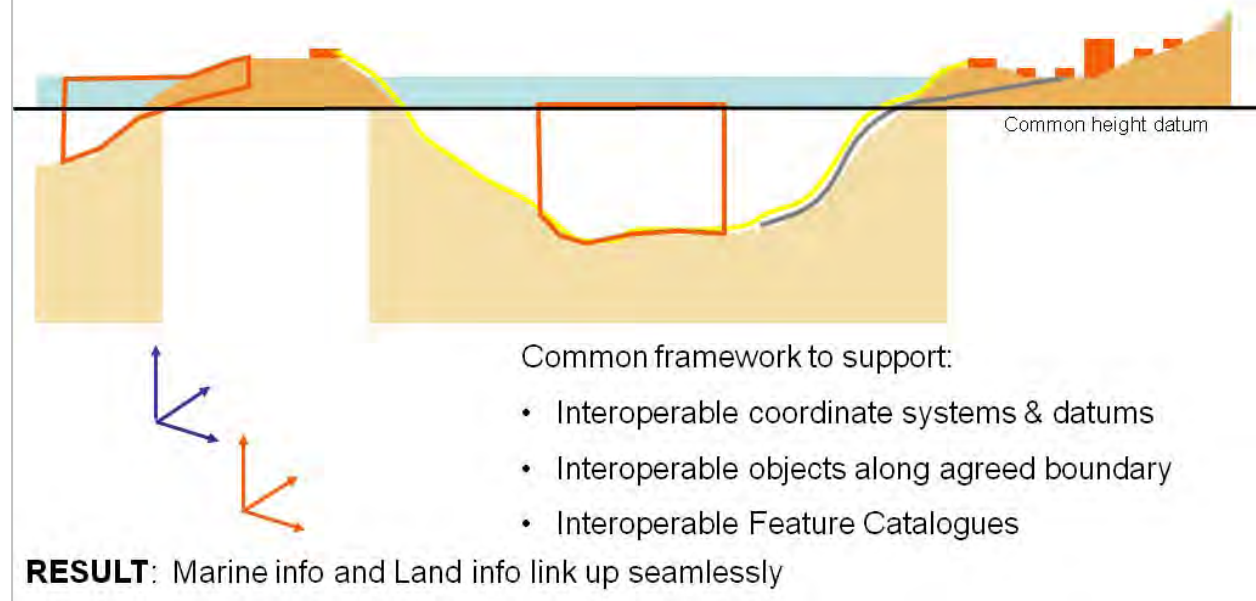
IHO Workshop

Havana
Feb 2007

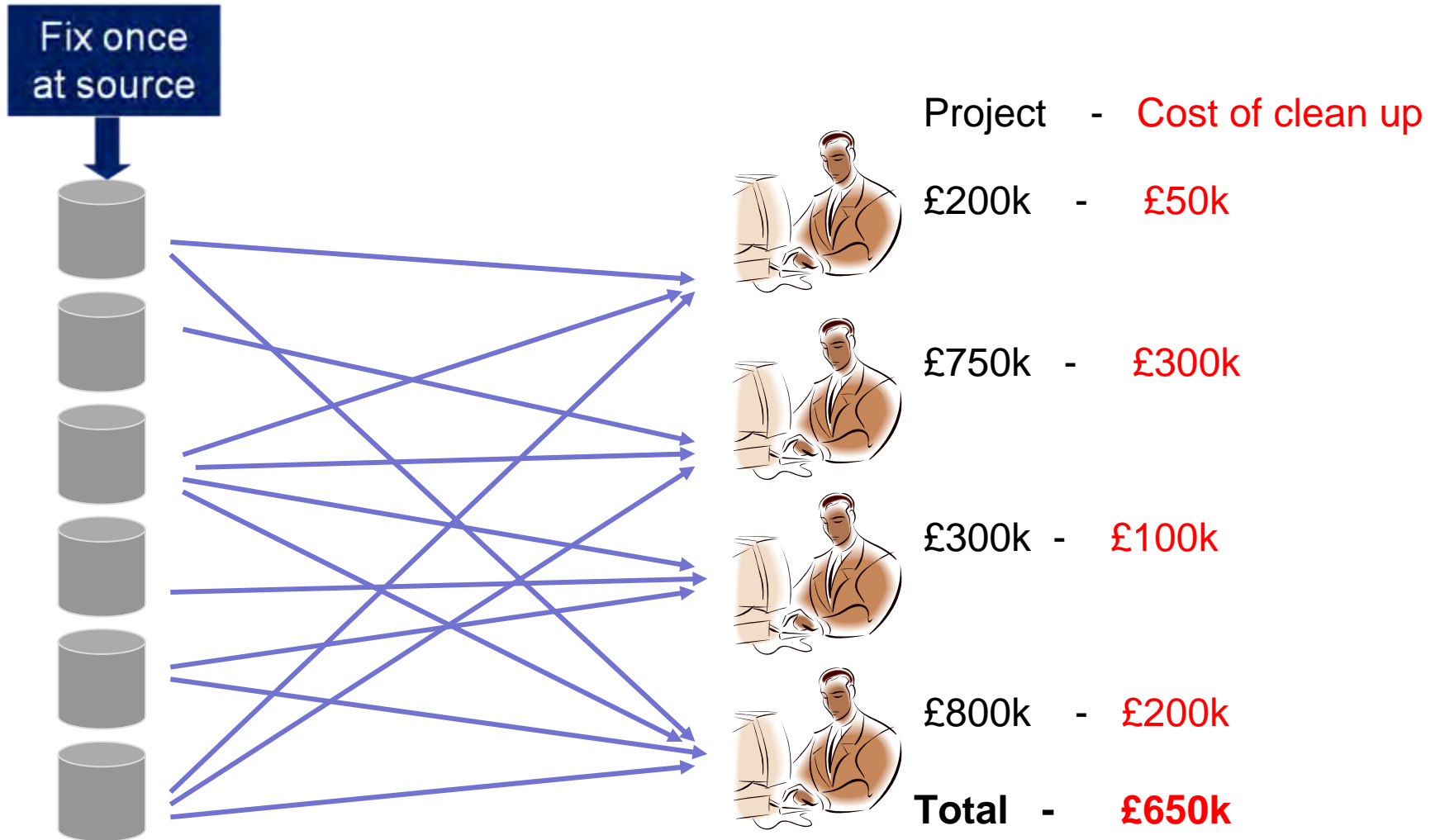
The real world

The mapping/charting “solution”

An “information” solution

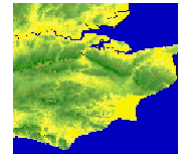
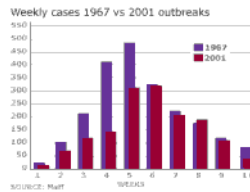


The cost of the data silo approach

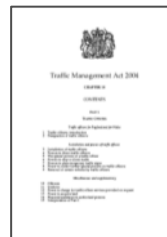


Atlantis Initiative: market research - one third of respondents spend 25% -50% of their project costs sourcing and cleaning up data – just getting it ready to use!

But - where can I get information?

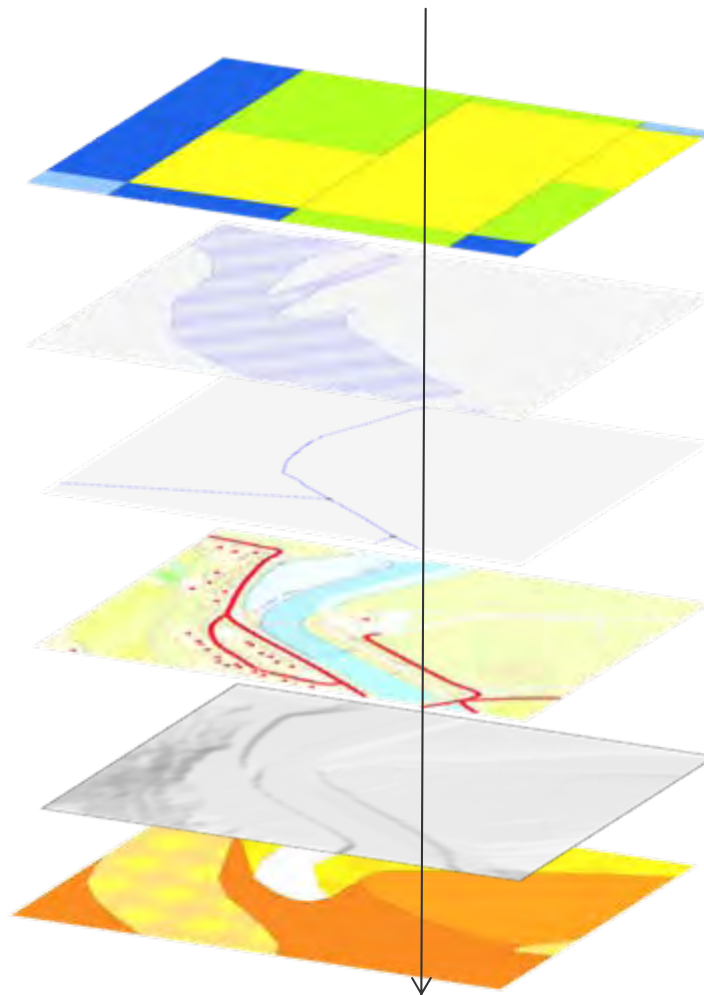


- How do you find what you need?
- What do you need to do with it before you can use it?
- Can you reuse it in your next task?
- Is it easier to collect new data?



- Don't we need to do something about this?

Atlantis Initiative: easier to use data from multiple sources: flooding examples *via collaboration*



Unique Opportunity 1:

Place Matters: The Location Strategy for the United Kingdom



The Five Strategic Actions

“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. (the Location Council) “



Unique Opportunity 2:

INSPIRE Directive & Regulations

- Discovery Metadata
- Data Specifications
- Network Services
- Data and Service Sharing
- Monitoring & Reporting



A framework for any spatial object/theme



Data: two step approach

1. Generic Conceptual Model
2. Applied to INSPIRE defined themes for consistency
 - for UK LP - all other UK themes brought in scope by the LC

Data Scope



Regs: late 2010

Regs: late 2013?

Annex I	Annex II	Annex III [Specification not as stringent]	
<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)

Information connectivity

Organisational Business Data
Spatial Objects

Report
(PDF)

010010
100010
010100
010101
111101
11111



23 March 2001

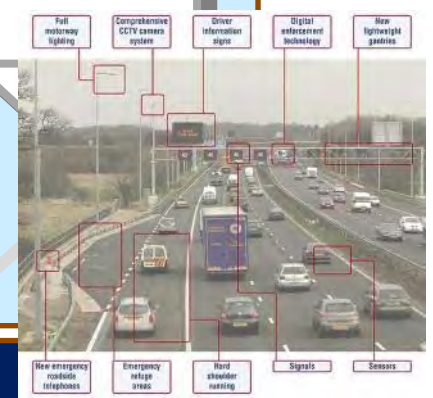
Weekly cases 1967 vs 2001 outbreaks



Week	1967	2001
1	10	10
2	100	100
3	200	150
4	400	150
5	450	300
6	300	300
7	200	180
8	180	150
9	100	100
10	50	50

SOURCE: Maff

Timetabl
e



Application specific - referenced

Widely reused - widely referenced

Loose coupling



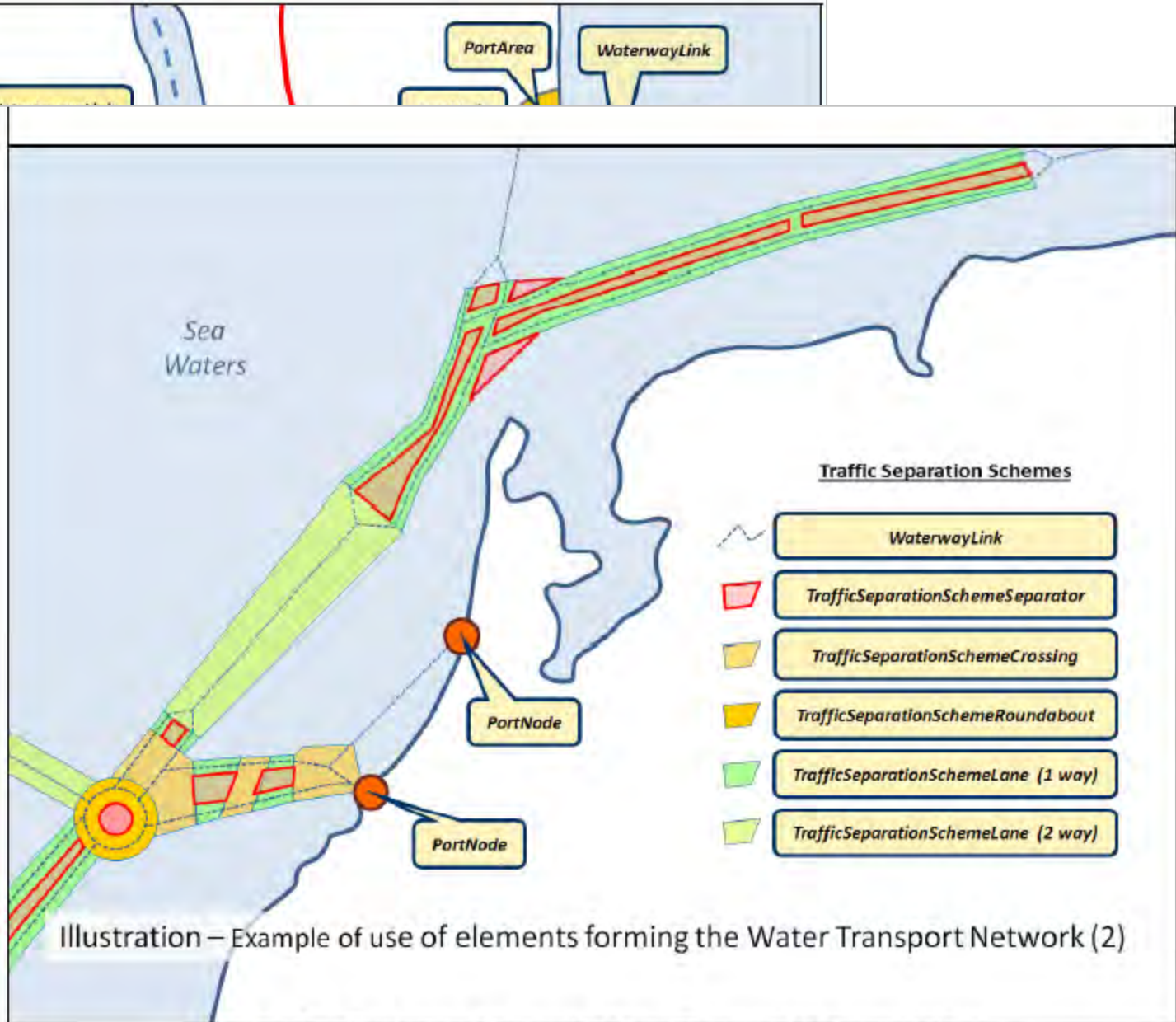
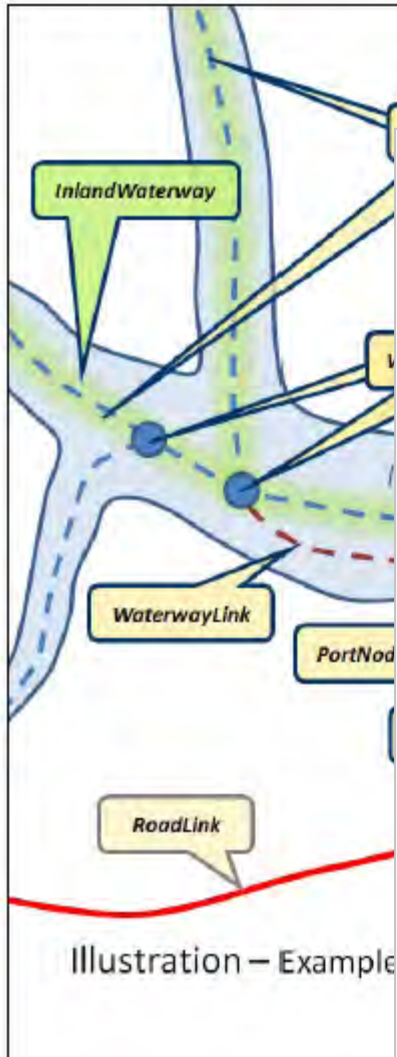
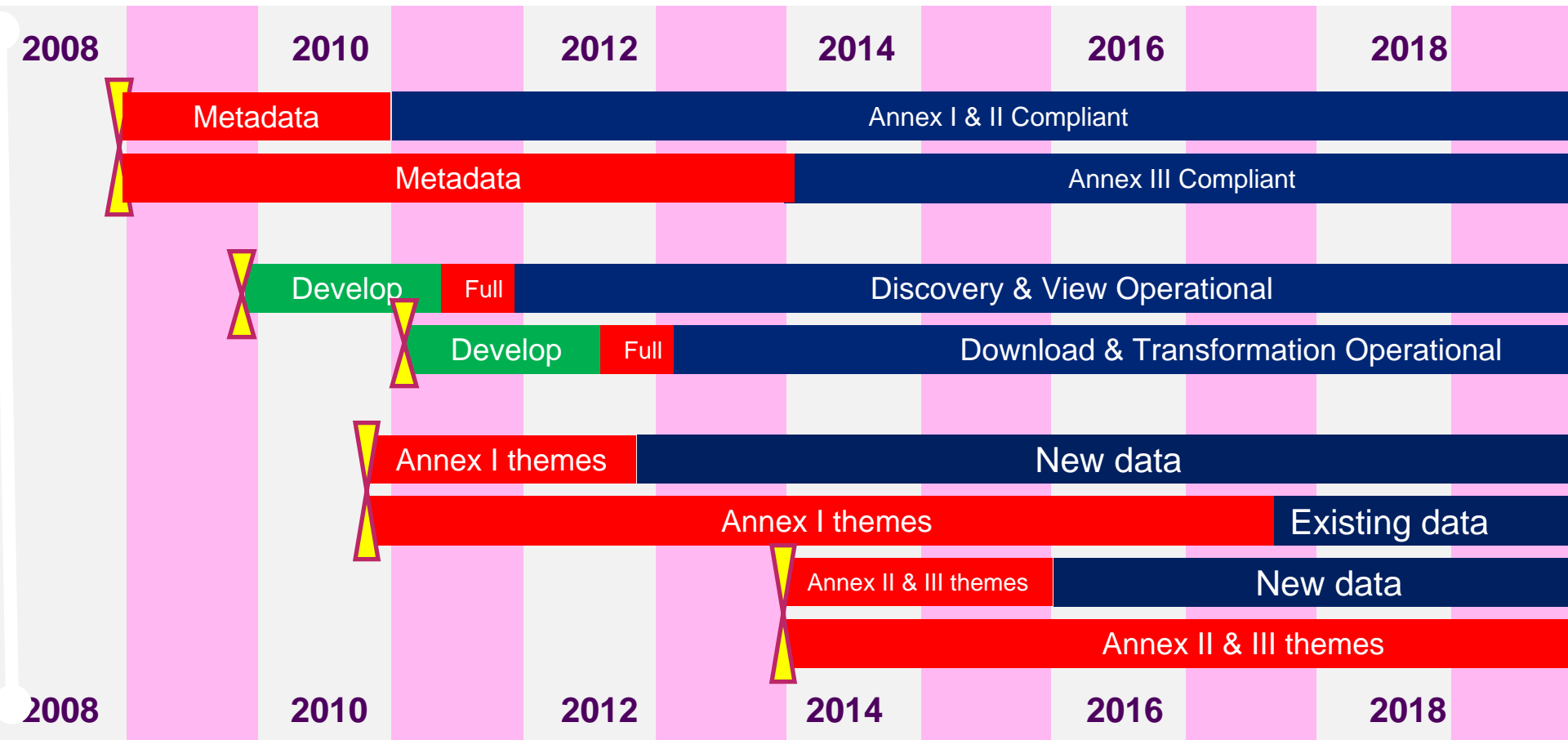


Figure 33 – Overview of the main *Water Transport Networks* objects

Timeline: INSPIRE Regulation dates

Metadata, Discovery & View dates are all accurate – all other dates are best estimates



Regulation in the Official Journal (20 days)

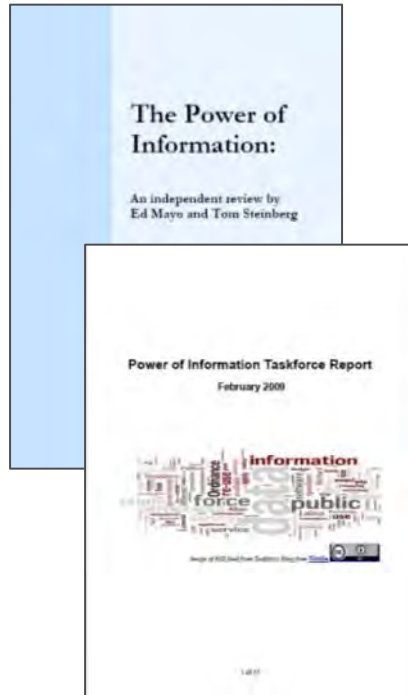
The United Kingdom: global <> local

- Global view
- European view
- National view
- Regional view
- Local view

- Seamless transition
- Macro to Micro



Pol Task Force: Improvement topics



- The report calls for action in six areas where the Taskforce believes significant improvements can be made to government's use of digital technologies:
 - *enhancing Digital Britons' online experience by providing expert help from the public sector online where people seek it;*
 - *creating a capability for the UK public sector to work with both internal and external innovators;*
 - *improving the way government consults with the public;*
 - *freeing up the UK's mapping and address data for use in new services;*
 - *ensuring that public sector information is made as simple as possible for people to find and use;*
 - *building capacity in the UK public sector to take advantage of the opportunities offered by digital technologies.*

Digital Engagement



PUBLIC INFORMATION DELIVERY

The Prime Minister's appointment of Sir Tim Berners-Lee as expert advisor on public information delivery -

http://www.cabinetoffice.gov.uk/newsroom/news_releases/2009/090610_web.aspx

Providing better access to public information through a common portal and mechanism:

`http://{sector.}data.gov.uk/{ref}`

where:

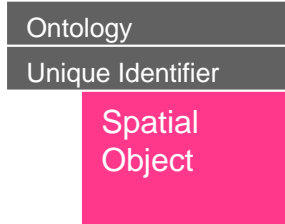
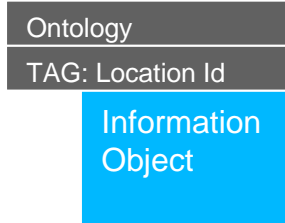
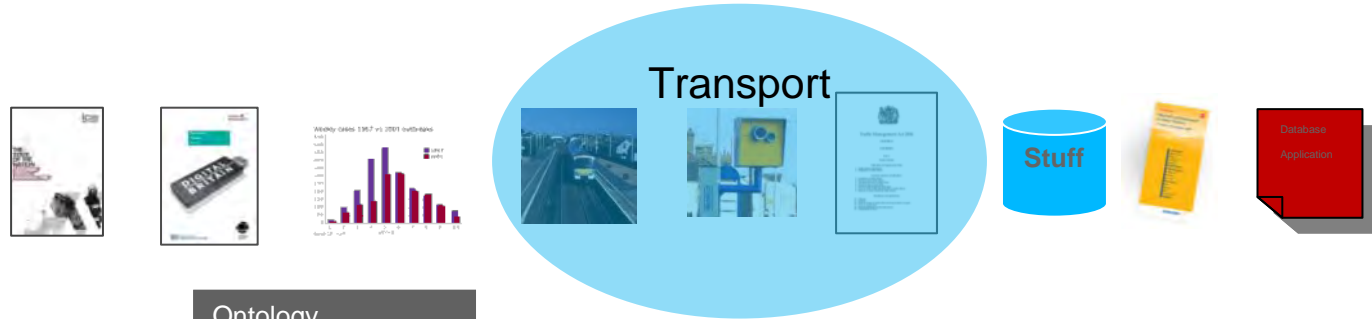
{sector} ~ transport, health, education etc

{ref} might be: road/m5/junc/24

<http://writetoreply.org/ukgovurisets/designing-a-uri-set/>



Common web page based approach



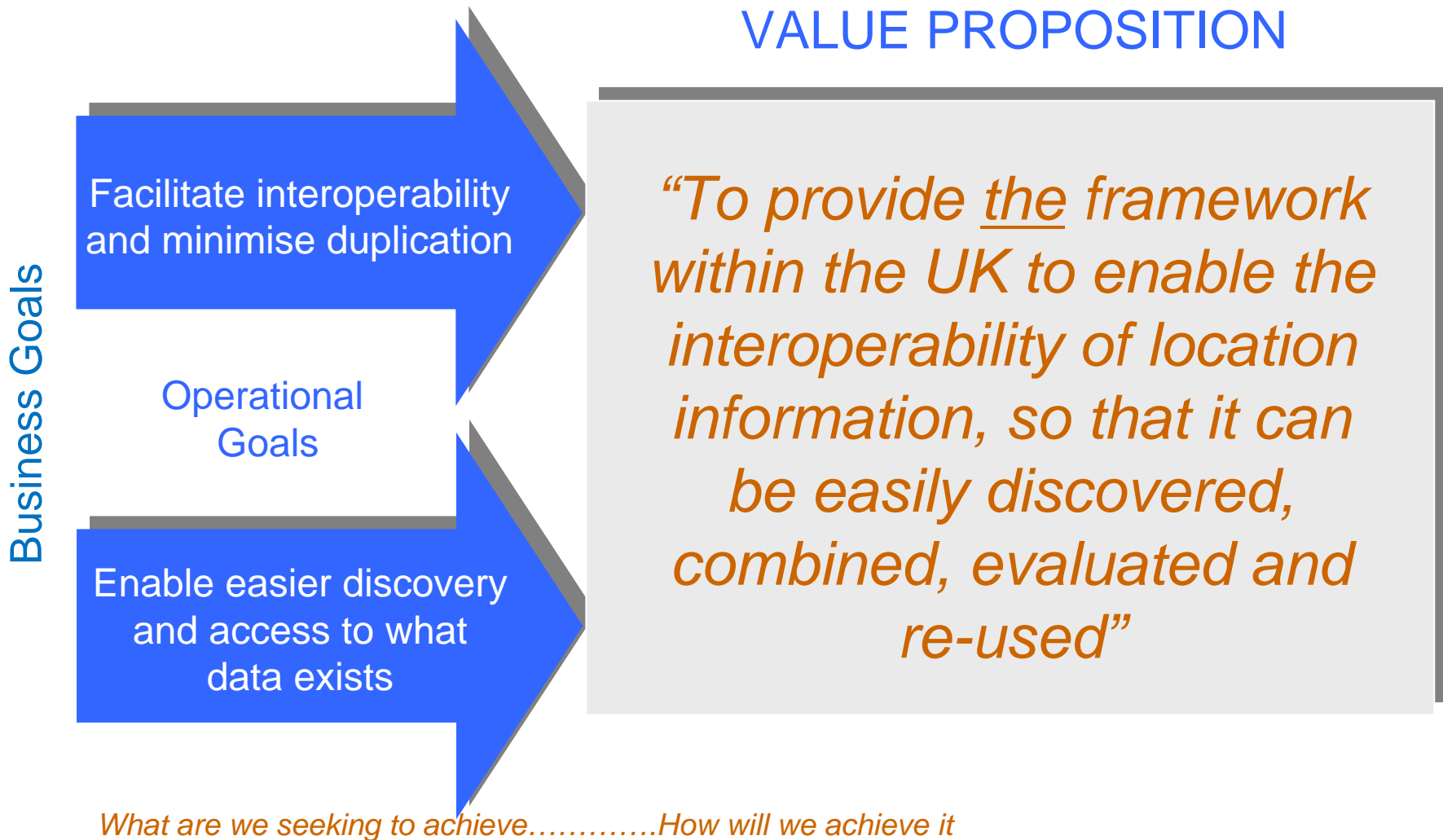
**WORK IN
PROGRESS**

UK Location Programme



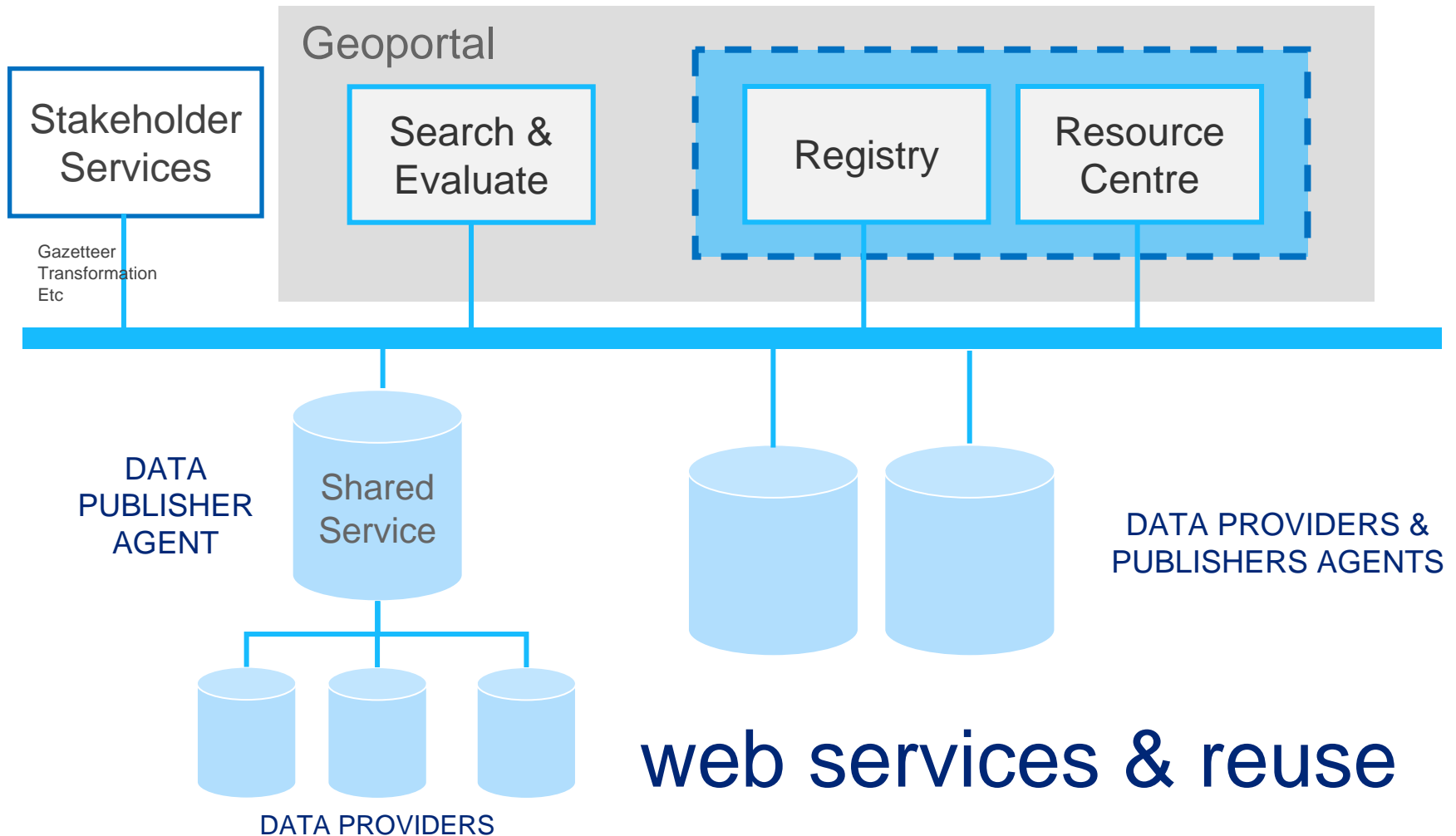
UK Location Programme

- Goals & Value Proposition



Delivery Chain, On-line Services & Resources

technology independent



Information: Geographic Scope



Domains:

- *Air*
- *Land Topography*
- *Marine Topography*
- *Underground-natural*
- *Underground –manmade*

and all associated spatial objects with each of those domains e.g. admin areas

In an interoperable framework

UK LP Pilots – set off on the right track

UK Location Programme Pilots:

- to demonstrate future vision and obtain essential buy-in
- pilot the infrastructure
- integrated with organisational datasets to solve key problems.



Conclusion



Conclusion

- The external environment and user expectation is changing very fast
- Spatial is NOT special
- Take ownership for your own domain, aligned **within** a federated & coherent **infrastructure**
- **Marine** information is a key part of that infrastructure



Communities and Local Government

Place matters:
the Location Strategy for the United Kingdom

November 2008

gi GEOGRAPHIC INFORMATION PANEL



Official Journal of the European Union L 285

1

Article 17: Transparency Directive (2002/95/EC)

DIRECTIVE

OF THE EUROPEAN PARLIAMANT AND OF THE COUNCIL

of 16 March 2006

Directive for Special Information in the European Community (DSPI)

OBJECTS OF THE DIRECTIVE

1. The purpose of this Directive is to ensure that information is available to the public in a timely and accessible manner in order to achieve the objectives set out in this programme.

2. The Directive shall be applied to the following information:

- (a) information on the availability of public information;
- (b) information on the availability of public information in a timely and accessible manner;
- (c) information on the availability of public information in a timely and accessible manner;
- (d) information on the availability of public information in a timely and accessible manner;
- (e) information on the availability of public information in a timely and accessible manner;
- (f) information on the availability of public information in a timely and accessible manner;
- (g) information on the availability of public information in a timely and accessible manner;
- (h) information on the availability of public information in a timely and accessible manner;
- (i) information on the availability of public information in a timely and accessible manner;
- (j) information on the availability of public information in a timely and accessible manner;
- (k) information on the availability of public information in a timely and accessible manner;
- (l) information on the availability of public information in a timely and accessible manner;
- (m) information on the availability of public information in a timely and accessible manner;
- (n) information on the availability of public information in a timely and accessible manner;
- (o) information on the availability of public information in a timely and accessible manner;
- (p) information on the availability of public information in a timely and accessible manner;
- (q) information on the availability of public information in a timely and accessible manner;
- (r) information on the availability of public information in a timely and accessible manner;
- (s) information on the availability of public information in a timely and accessible manner;
- (t) information on the availability of public information in a timely and accessible manner;
- (u) information on the availability of public information in a timely and accessible manner;
- (v) information on the availability of public information in a timely and accessible manner;
- (w) information on the availability of public information in a timely and accessible manner;
- (x) information on the availability of public information in a timely and accessible manner;
- (y) information on the availability of public information in a timely and accessible manner;
- (z) information on the availability of public information in a timely and accessible manner;

Information Taskforce Report
July 2009

information

public

www.informationpublic.com



a unique opportunity for all