

UK GI Panel

UK GI Strategy Scoping Study

19th September 2005

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What it says on the tin

- This is a scoping study not a strategy

The Scoping Study Challenge

1. Do we need a UK GI Strategy? - Current UK situation
2. What will a GI strategy achieve?
3. What is the experience elsewhere?
4. What is the scope of work required?

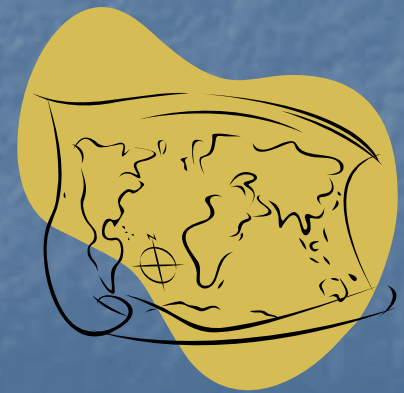
Why we need a UK GI Strategy ?

Current UK GI Issues

- Current inhibitors within UK GI activities that may require intervention / resolution in a UK GI Strategy

Tensions (Plate Tectonics) in UK

- Local <-> Central Government
- Central <-> Central Government
- Public <-> Private Sectors
- Central Government <-> EU



GI Governance Transitions

UK GI Sector

Initial Leader of
Early Adopters

Single
Leadership

Fragmented
Leadership

Shared
Leadership

↑
Current Stage

Inclusion & Diffusion

Governance

- Clarity of roles & responsibilities of stakeholders in implementing and exploiting GI
- A recognised leader or shared leadership model
- Inclusive governing body with representation of wide range of stakeholder communities, especially in application / service areas
- Empowered to make changes – through political support

Business Case

- Need holistic identification of benefits across economic, environmental and social domains that support the political agenda.
- Need to engage and work with a wide range of stakeholders to build a robust business case.
- International evidence of GI enabled benefits is still emerging

Linking with other UK and EU strategies and policies

- UK Regional GI Strategies reflect significant cultural differences, drivers and professional leadership.
- Vast cultural and professional differences across Europe.
- Working within wider information strategies.
 - GI not on the agenda of recent World Summit on the Information Society (WSIS)

Strategic Components	Scotland	Wales	England	NI
Business Case	Red	Red	Red	Orange
Strategy Governance Model	Orange	Light Green	Red	Light Green
Stakeholder Communities [Public / Private]	Red	Orange	Orange	Orange
Integration with wider E-Government Strategy	Orange	Red	Red	Light Green
Common Geospatial Referencing Framework	Orange	Orange	Orange	Orange
Definition of Geospatial Datasets as Infrastructure	Red	Red	Red	Light Green
• Geodetic / GPS Network	Light Green	Light Green	Light Green	Light Green
• Topographic [Large / Medium & Small Scales]	Light Green	Light Green	Light Green	Light Green
• Marine	Red	Red	Red	Red
• Elevation Models	Light Green	Light Green	Light Green	Light Green
• Address Geography	Orange	Red	Red	Light Green
• Statistical Unit Geography	Light Green	Light Green	Light Green	Light Green
• Imagery	Light Green	Light Green	Light Green	Light Green
Geospatial Data Standards	Orange	Orange	Orange	Orange
Geospatial Business Processes, including Quality Management	Red	Red	Red	Orange
Sustainable Funding Model for Strategy Implementation	Red	Red	Red	Orange
Business / Commercial Model	Red	Red	Red	Red
Institutional Reform	Red	Red	Red	Red
New Legislation	Red	Red	Red	Red
R&D Agenda	Red	Red	Red	Orange
Capacity Building	Orange	Red	Red	Orange
Clearing house	Red	Red	Red	Red
Geospatial Portal & Web Services Standards	Red	Red	Red	Orange
Shareware Geospatial Tools	Red	Red	Red	Red
GI Centre of Excellence - Best Practice, Technical Support	Red	Red	Red	Orange

UK Regional GI Strategies

- All four regional GI strategies are at very early stages of both definition and implementation. Northern Ireland is the most advanced and best supported politically
- The major drivers for the creation of the regional GI strategies have been the devolution process and the support of e-government initiatives
- Without intervention at the national level, the implementations of the regional GI strategies will diverge in key areas, e.g. environmental information & addressing, making it progressively more difficult to create a UK SDI

Sustainable Business Model

- Business models vary widely within the Public sector. Difficult to even support Public – Public Partnerships.
- Different public sector datasets have varying pricing and licensing regimes.
- Need to identify a way of effectively operating within this environment.

Communication Strategy

- Vision and benefit statements use inappropriate language and turn potential supporters off rather than on.
- Key messages not sensitive to different stakeholders' perspectives and interests.
- Messages static and don't move with political imperatives.

Range of Terminology used in a Recent GI Publication

- Spatial geographies
- Geo-spatial information
- Georeferencing
- National geographic information datasets
- GI datasets
- Geographic information
- Geographic data
- Digital geographic datasets
- Robust geographic reference system
- Higher level geographic information
- Geoinformation
- Information with geographic content
- Definitive geographic base
- Information with a geospatial content
- National reference datasets
- National framework
- Infrastructure
- Spatial data / information infrastructures

Human Capacity Building

- Current human capacity in the UK is not meeting the current demand never mind the future demands
- Need to embed persistent GI skills and expertise into a range of professions rather than just produce more GI specialists.
- New range of skills required.

GI Support of Business Applications / Services

- Need to encourage wider exploitation of GI rather than just building it (just an enabler).
- Need to engage and support wider range of professions and stakeholder groups to encourage the expansion of products and services.
- Needs clear, consistent vision / message and support.
- Parachute resources into new sectors?

R & D

- There is no co-ordinated and funded R & D agenda in the academic community to support the implementation of a UK GI Strategy.

What is the experience elsewhere?

- Review of GI Strategies in:
 - Canada
 - France
 - Germany
 - Holland

International Lessons Learned

- GI developments in the UK are well advanced compared to many of the countries reviewed
- There is no single model for a National GI Strategy – all are different and reflect the varying cultural, institutional and political contexts
- There are clear differences between simple data centric strategies and ones that enable through access, connectivity and interoperability. The data centric ones have not delivered many short term benefits
- Majority are public sector focused.

GI Strategic Transitions

UK GI Sector

Map
Centric

Data
Centric

Information
Centric

Services
Centric

↑
Current Stage

Inclusion & Diffusion

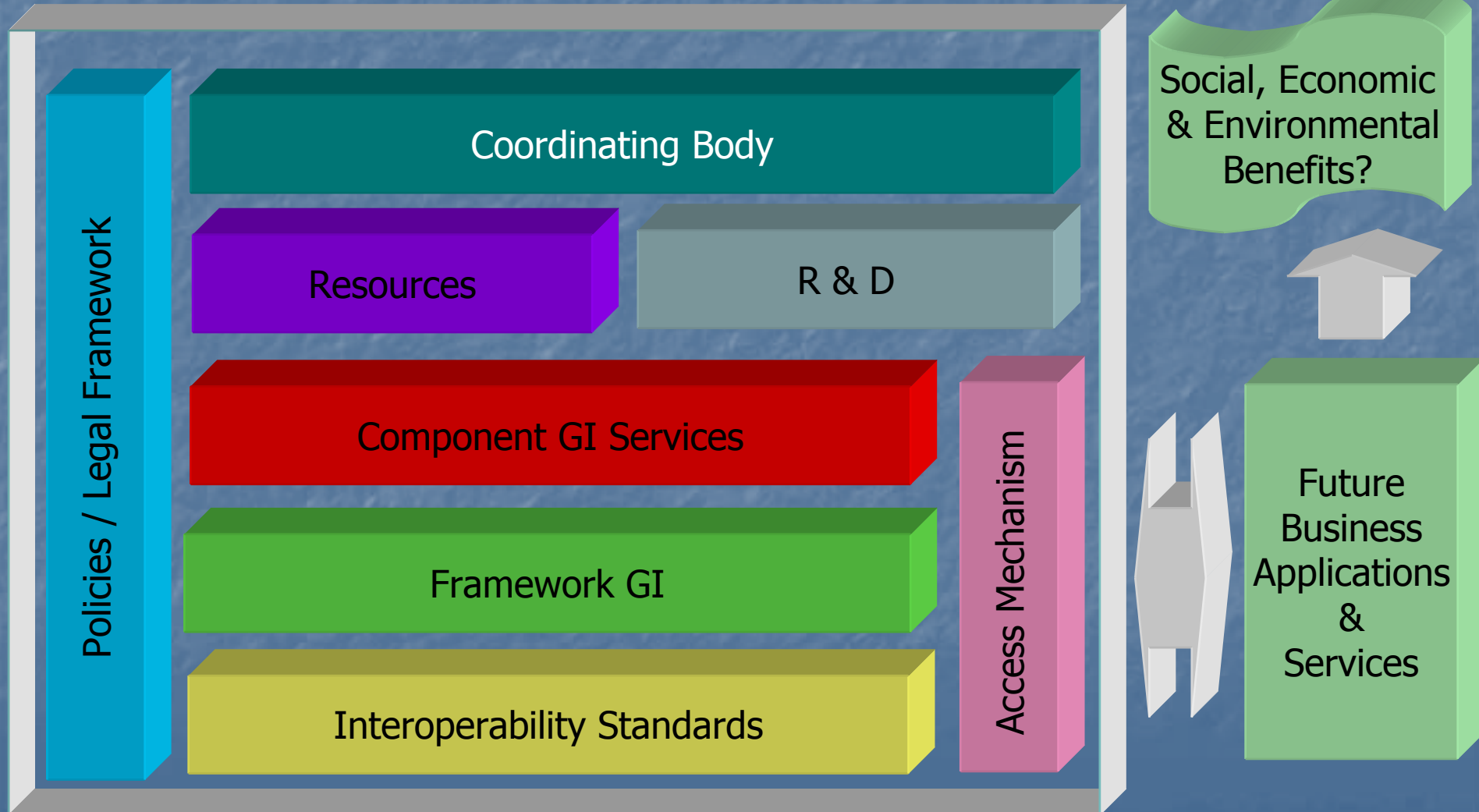
International Lessons Learned

- The development of skills / capacity building is a critical success factor
- Many of the countries reviewed are highly federated and initial GI initiatives were focused at the local level. However, all required national intervention to create cohesion in their initiatives.
- All countries have obtained parliamentary / ministerial backing
- The implementation timescales involved are long

What will a UK GI Strategy Deliver?

What a UK GI Strategy Will Deliver

National Spatial Data Infrastructure [NSDI]

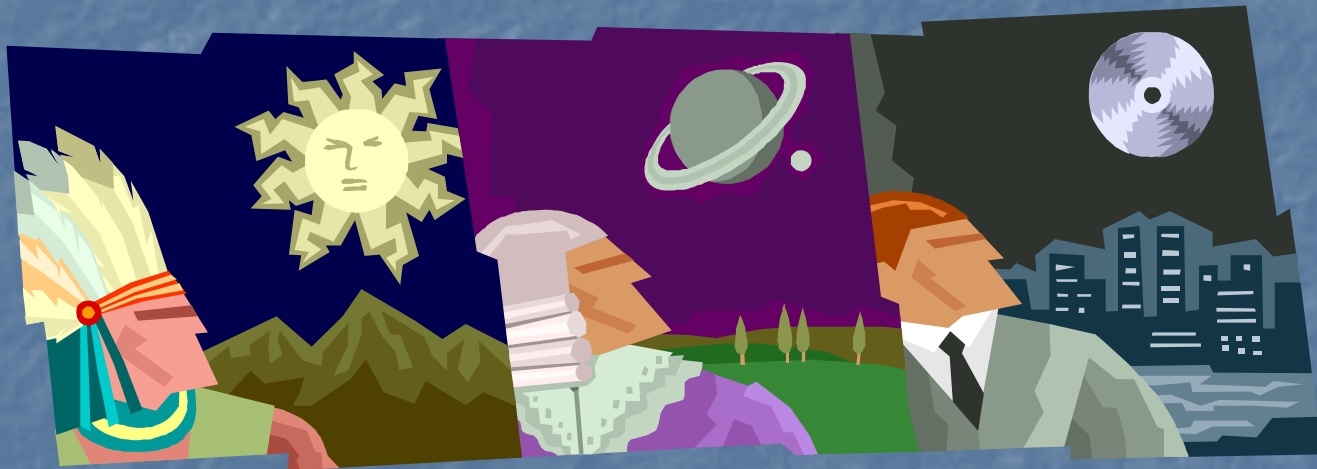


What will a UK GI Strategy Deliver?

- Efficiencies in information collection & management
- The UK SDI is just an enabler for GI enabled applications & services
- The UK SDI will be a public & private sector collaboration
- The GI enabled applications & services will deliver social, economic & environmental benefits
- Evidence of these benefits is still emerging world-wide

What is the scope of work
required?

Evolution or Intervention ?



Type of UK GI Strategy ?

- Supports diffusion and inclusion
- Is an issues based strategy rather than a neutral enabler
- Supports existing national GI initiatives as well as regional GI strategies, where appropriate
- Must invoke pragmatic and incremental implementation
- Information / services centric
- Intervention is focused for maximum effect

UK GI Strategic Components

Strategic Mission & Vision

Scope / Aims / Objectives

Guiding Principles

Information Infrastructure & Access

Information Management

E-Government

Requirements

Effective Partnerships

UK & EU Strategies & Policies

Legal Framework

Sustainable Business Model

ICT / Information Interoperability Framework

Communication Strategy

Funding Model

Governance Framework

Audit / Quality Management

Capacity Building

R&D

UK National SDI

Vision

Framework / Key GI

Access Mechanism / Metadata

Component GI Services

Policy / Legal Framework

Standards / Interoperability

Coordinating Body

Resources

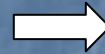
R & D

Exploitation

Implementation

UK Wide Spatially Enabled Applications & Services in Public & Private & Voluntary Sectors

Business Case



Scope of Strategic Intervention

Strategic Component	Option 1	Option 2	Option 3
1. Strategic Mission & Vision, Scope / aims / objectives, Guiding Principles	√	√	√
2. The Requirements	√	√	√
3. Business Case	√	√	√
4. E-Government			√
5. Linking with other UK and EU strategies and policies	√	√	√
6. Sustainable Business Model		√	√
7. Effective Partnerships (Public / Public and Public / Private)		√	√
8. Information Infrastructure & Access	√	√	√
9. Information Management			√
10. ICT / Information Interoperability		√	√
11. Legal Framework (including EU Directives)			√
12. Governance Framework	√	√	√
13. Funding model	√	√	√
14. Capacity Building		√	√
15. Communications Strategy	√	√	√
16. Research & Development			√
17. Audit / Quality Management			√
18. Implementation Programme	√	√	√

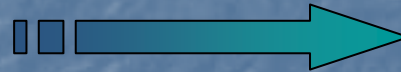
Strategic Transformations

Transition

Outcome

Fragmented Leadership

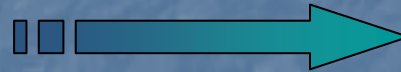
Adopt Shared Leadership Model



Strong Governance & Decision Making

Sector / Partner Friction

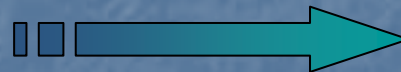
Partnership/ Business Model



Effective Partnerships

Disjoint Framework GI

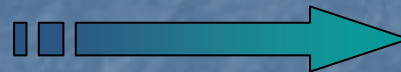
Define Framework GI & Interoperability



Information Interoperability

Difficulty in Identifying & Accessing GI

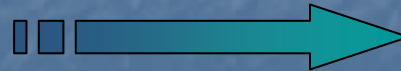
Effective Access Mechanism



Wider Exploitation of GI in Applications / Services

Limited GI Skills & Experiences

Capacity Building



Capacity to Significantly Expand GI Sector

Conclusions

- The UK GI Panel should consider a UK GI Strategy essential to enable maximum exploitation and benefit from GI.
- There is an immediate need for a UK GI Strategy to inform and guide the regional GI strategies and other regional and local GI initiatives.
- Options 1 or 2 should be considered for the scope of the tender.
- The UK GI Panel should review the results of the business case before authorising the rest of the consultancy services to create the UK GI Strategy.

“Traveller, there is no path,
paths are made by walking”

Antonio Machado

