



## Local to European SDI:

*"mash-ups"*  
or  
*professional industry-strength infrastructures?*

Keith Murray, Ordnance Survey GB, UK  
Andrew Trigg, Land Registry, UK

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## The agenda:

- Different starting positions
- Mash-ups
- Information Infrastructures
- 2010 & beyond
- Conclusions

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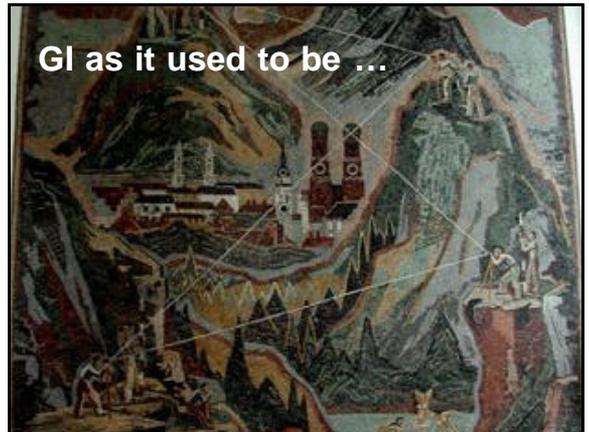
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**We all start from a different place.....**

**GI as it used to be ...**



## National information

- Public and private sector information
  - Local authority/municipality (many)
  - Central Government (many departments)
  - Commercial sector
- Different environments:
  - Political
  - Social
  - Economic
  - Technological

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## Pace of change

- Need for better integration recognised
  - Global level e.g. GSDI
  - Regional level e.g. ESDI
  - National levels
  - Local levels



- Technology change is fast
- Application of technology – less so

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# Mash-ups

# Mash-ups

- “a website or web application that uses content from more than one source to create a completely new service”. - Wikipedia
- New vehicles that exploit geography:
  - Google Earth/Maps,
  - Microsoft Virtual Earth/Local Live
- Many applications now evident....

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**Mash-ups**

Dublin-Dart Line

Tour de France

8-13 Octo

FIG

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Ivybridge

Oberwesel

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FIG

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# Reliability = exponential effort



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# Information infrastructures

## ICT – mainstream information

- Why don't we use mash-ups in banking?
  - Salary payments
  - Credit card bills
- Why have supermarkets invested so much in EPOS systems?
- What forces made the telecoms industry into an interoperable and universal service?

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## Industry examples

- Banking
  - IBAN system
  - EMVCo
  - Standards
- Telecoms
  - EU pressure
  - GSM competition
  - International roaming



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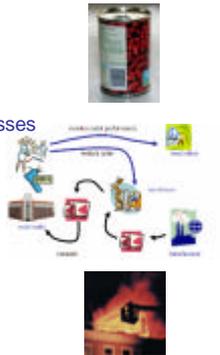
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## Applications

- Electronic Point of Sale
  - revolution in business processes
  - wholesale vs. retail
- Emergency Services
  - Safety = position fixing
    - Address (georeference)
    - Mobile (cell location)
    - Marine (GPS integrated)



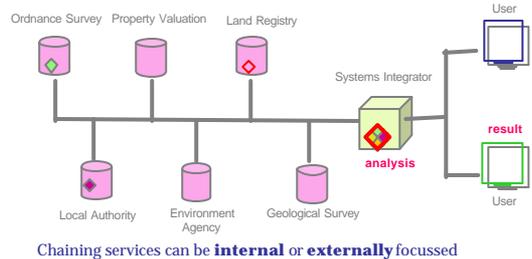
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## GI in information networks...



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## 2010 and beyond .....

## Joined up geography

- Several European National Developments:
  - Germany – AAA model
  - Great Britain – Digital National Framework
  - Netherlands – NEN3610
  - Switzerland – INTERLIS
- New developments in Denmark, Sweden, Ireland ....
- See European State of Play reports on:
  - <http://inspire.jrc.it/home.html>



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# ESDI - INSPIRE



G.M.E.S

- Legislation almost complete
- Five drafting teams working on the "Implementing Rules"



Data Specifications

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# How does GI compare?

	Banking	IT/IS	Mobile Telecoms	Emergency Services	GI
Users (% population)	100%	100%	100%	10%	10%
Criticality	Life/death	Life/death	Life/death	Life/death	Enable Inpr. essential?
Current Auto Process Reliability	100%	95-100%	100%	100%	10-20%
Investment	€ billions	€ billions	€ billions	€ millions	€ billions
Standards	ISO 9000	ISO 9000	ISO 9000	ISO, OGC and industry	ISO, OGC and industry
Information Content	ASX	ASX	ASX	ASX	Complex data types
Hardware	COTS	COTS	COTS	715 & specialist	COTS
Software	Database driven with significant redundancy ATM's sim	Database driven with significant redundancy ATM's sim	Database driven with significant redundancy ATM's sim	Operational systems complex	GIS software complex
Training	Evolution	Evolution	Evolution	Specialist	Specialist systems that Google Earth has changed that.

• Uses of the shelf software  
• New interfaces need little training  
e.g. Google

GI is an enabler  
Essential for some needs  
Investment €10 millions  
ISO & OGC stds – some industry

• Small number of users – growing  
• Process reliability – 20%  
• Data types are complex  
• GIS software complex & high costs

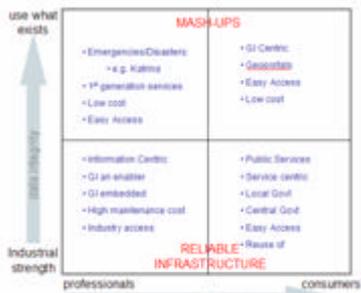
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# Communities & Applications



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# Conclusions

## Conclusions ....

- GI revolution
  - never so much in use by public and business
- GI breaks out of the backroom
  - Web based developments are liberating GI
  - Geoportals – visual resource, anything more?
  - mash-ups are fun!

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## Finally

- GI goes mainstream
  - Embedded GI in applications
    - (not referred to as GI?)
  - GI an enabler, not an end in itself!
  - GI has to support automated processes
- Therefore GI needs to adopt basic ICT best practice to realise its full potential

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# Questions

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