

# Finding one's way with PSI in the European Information Society!

**Chris Corbin**

**Director**

**Info-Dynamics Research Associates Ltd**

(Currently contributing too and involved in the following PSI networks MEPSIR,  
ePSINET, ePSINET-CEE, SPREAD, UK-DCF)

# Presentation outline

- **Setting the context: political, eGovernment**
- **A framework to test the implementation of legislation**
- **The current PSI scene**
- **The PSI opportunity**
- **The Value Chain**
- **Cultural differences**
- **Competition issues arising from public sector financial models**
- **IPR paranoia - is it assisting or deterring!**
- **Level playing and transparency**
- **Conclusions**

## EU Council of Ministers Brussels 22nd & 23rd March 2005

**Agreed on the re launch of the Lisbon strategy: A partnership for growth and employment - A strategy for today's world! The pertinent vital strands were agreed as:**

- Knowledge and innovation - engines of sustainable growth with the following objectives:
  - establishing support mechanisms for innovative SME's
  - Refocusing public procurement on innovative products and services
- Inclusive information society through the i2010 initiative that will focus on
  - ICT research and innovation
  - Content industry development
  - Security of networks and information
  - Convergence and interoperability to establish a seamless information area
- Improving Governance - with tighter focused implementation, monitoring and reporting.

**The above sets the political context for considering whether the implementation of legislation related to public sector information is in accord with the political objective.**

Ref: European Council Brussels 22 and 23 March 2005 Presidency Conclusions Document number 7619/1/05 Rev 1  
[http://ue.eu.int/ueDocs/cms\\_Data/docs/pressData/en/ec/84335.pdf](http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/84335.pdf)

The European Public Administration Network (EPAN) report *Does e-government pay off?* commissioned by the Dutch Presidency and published in November 2004 identified seven interconnected tangible benefits:

1. Improved quality of information and information supply.
2. Reduction of process time
3. Reduction of administrative burdens
4. Cost reduction
5. Improved service level
6. Increased efficiency
7. Increased customer satisfaction

Plus the broader societal, political and economic benefits identified as:

8. Openness and transparency
9. Increased participation in the information society
10. Increased democratic participation
11. Enhanced policy effectiveness
12. Increased economic competitiveness

In civil society terms one of the major benefits is the “TIME-REBATE”

- **Entrepreneurial (Innovation) positive**

(it encourages innovation and entry into the market and/or resolves or minimises the issues at the public private interface)

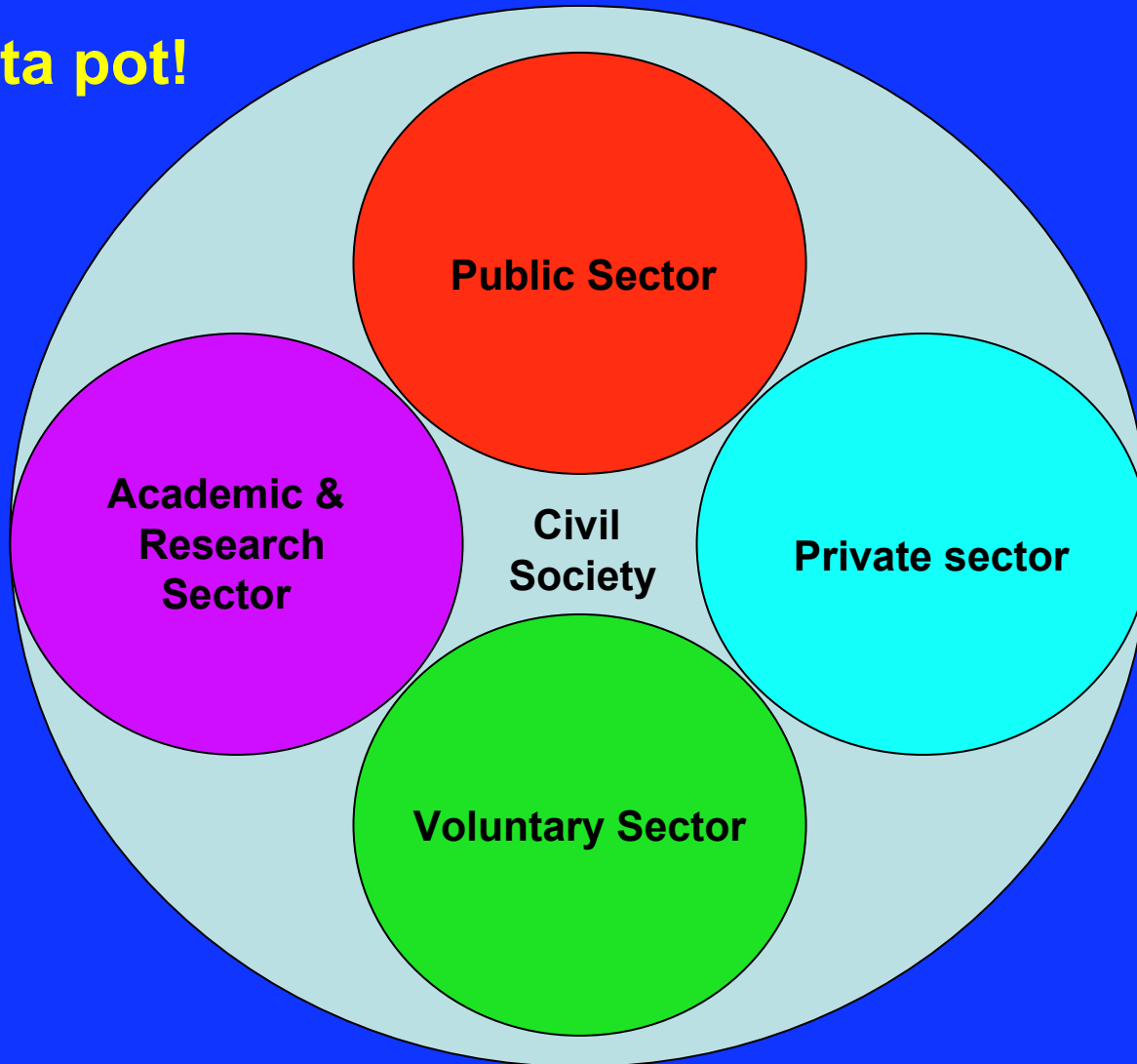
- **Entrepreneurial (Innovation) neutral**

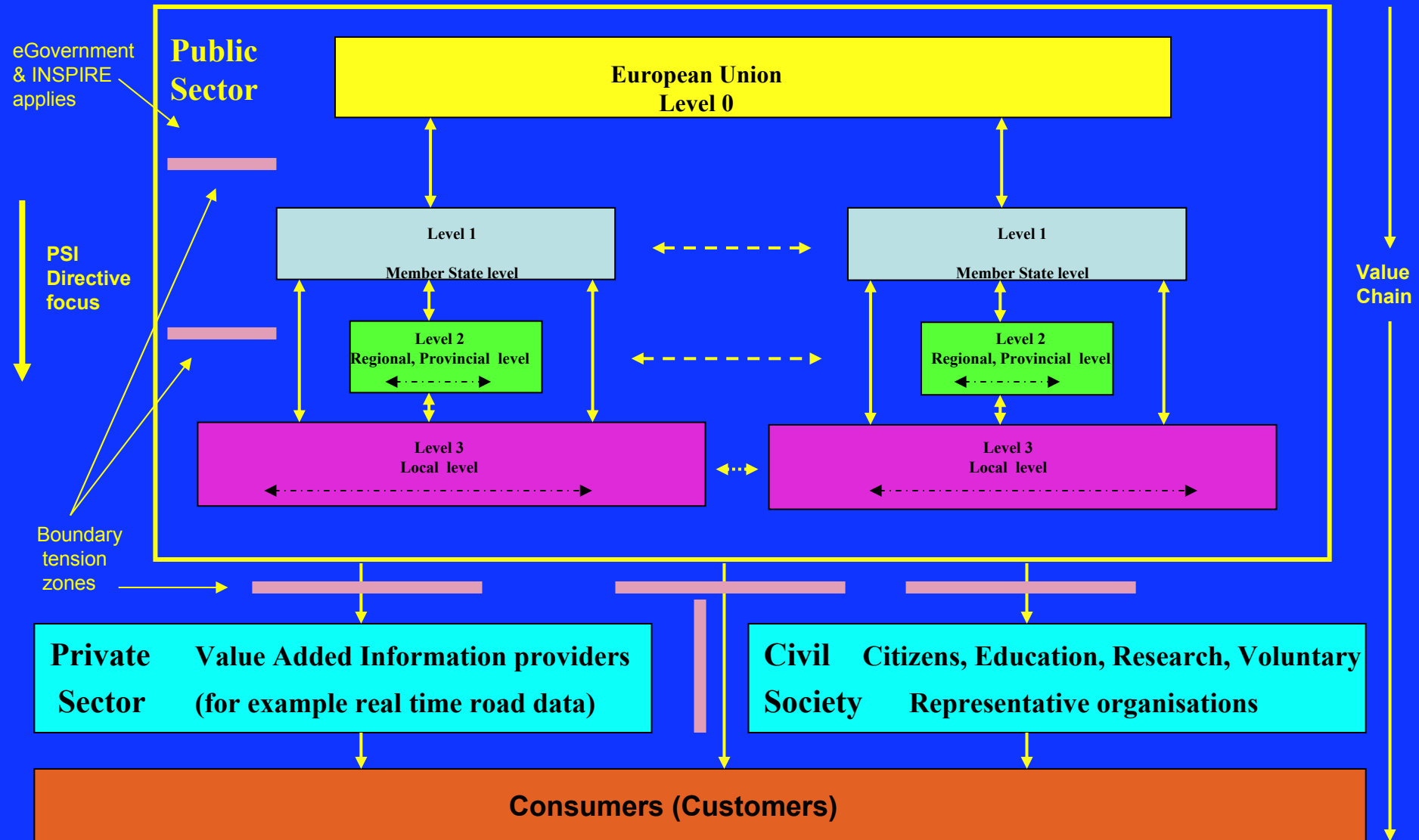
(neither encourages or discourages innovation and entry into the market and/or does not assist resolve the issues at the public private interface)

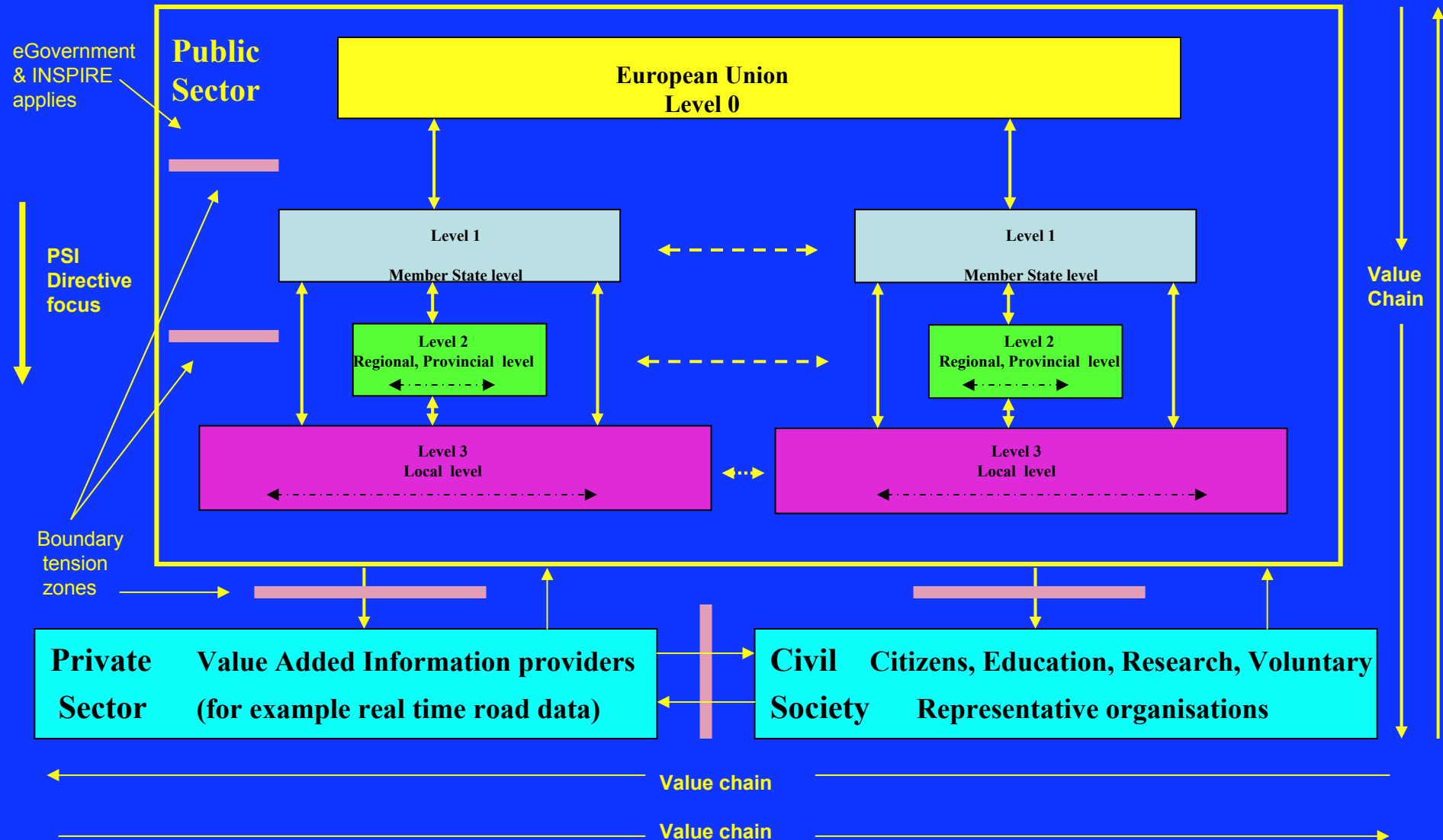
- **Entrepreneurial (Innovation) negative**

(it discourages innovation and entry into the market and/or enhances the issues at the public private interface)

## The Data pot!







# The opportunity: the Market

QuickTime™ and a TIFF (LZW) decompressor are needed to see this picture.



**450+ Million people**

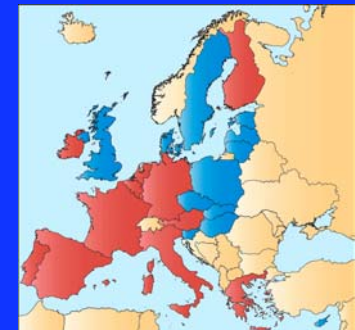
**21+ million enterprises**

**Multi-lingual  
(20+ Languages)**

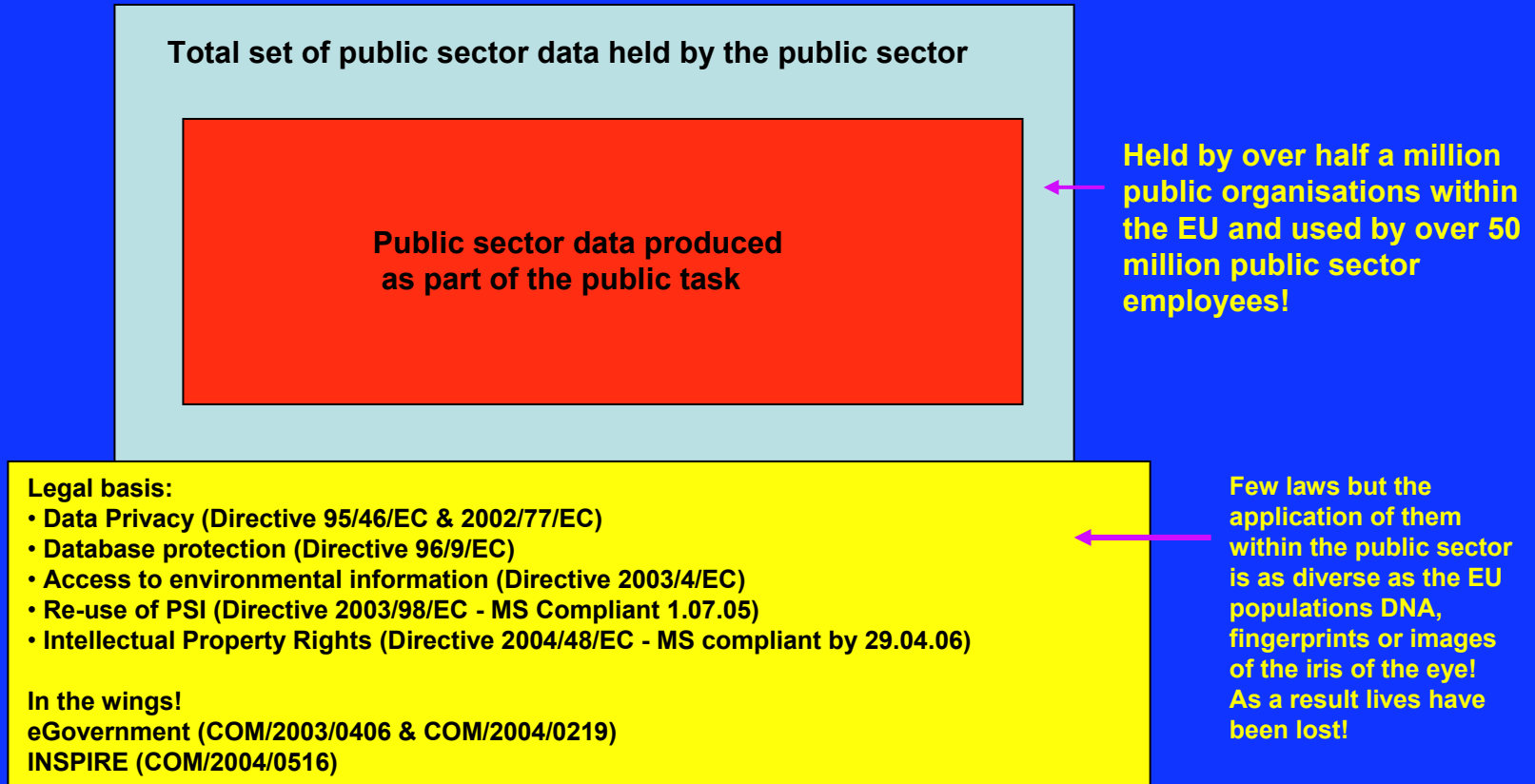
**Multi-cultural**

**500,000+ public sector  
organisations**

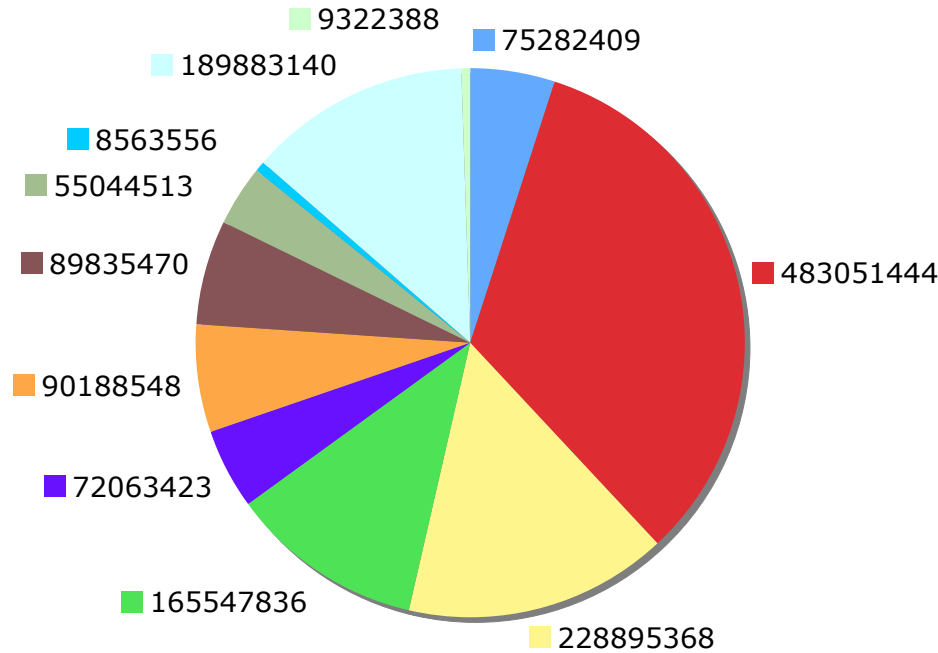
**Euro Zone**



There is no Data Access framework in place at the EU level. Within Members States the access to data and information is often based on the Freedom of Information laws where they exist. Within the EU Cyprus, Germany, Luxembourg and Malta do not have an FOI law. Average access time for a request is 16.58 days (range 1 to 40 days) for the 21 EU states, 3 EFTA, countries and 4 Candidate countries that have FOI laws implemented.



**Annual turnover (Euro's) of some of the UK PSI providers for 2003-2004**  
**Total Euro 1.5 billion**



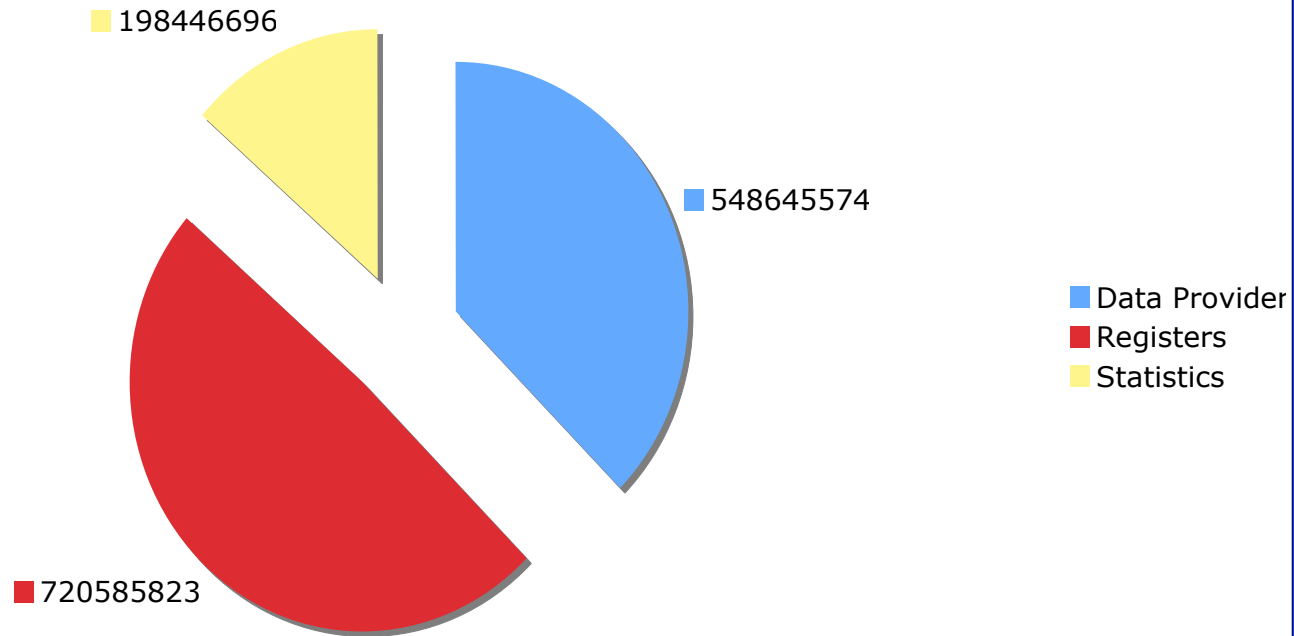
Data Source: Published annual reports

- Companies House
- HM Land Registry
- Met Office
- Ordnance Survey GB
- Patent Office
- Registers of Scotland
- UK Hydrographic Office
- British Geological Survey
- General Registers of Scotland
- Office of National Statistics
- Ordnance Survey Northern Ireland

Annual turnover for all the UK Trading funds that hold PSI for reuse is in excess of Euro 3 billion for 2003-2004

## Annual Turnover (Euro's) 2003-2004 of PSI providers grouped by cate Total 1.5 billion Euro

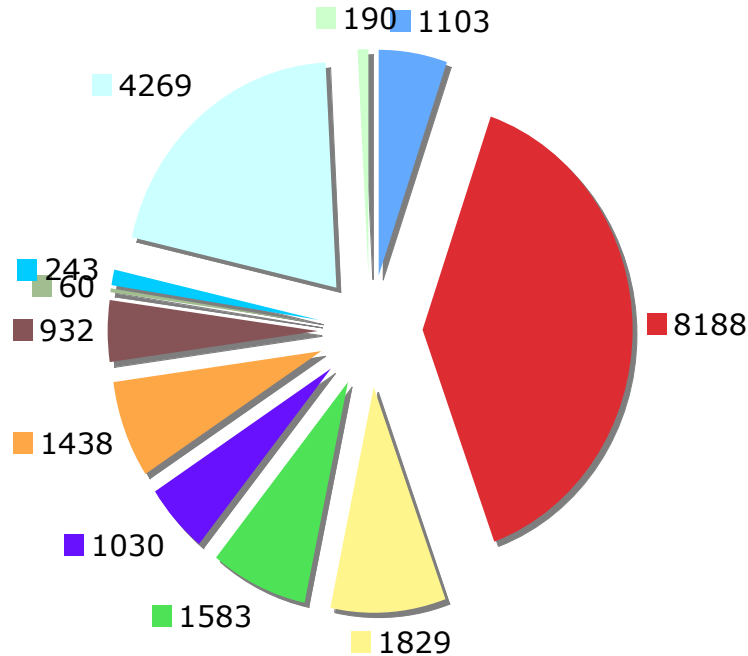
where Data Provider = MetOff+OSGB+UKHO+BGS+OSNI  
where Registers = CompHse+HMLR+PatOff+ROS  
where Statistics - GROS+ONS



Data Source: Published annual reports

## Number of staff employed during Financial Year 20 2004

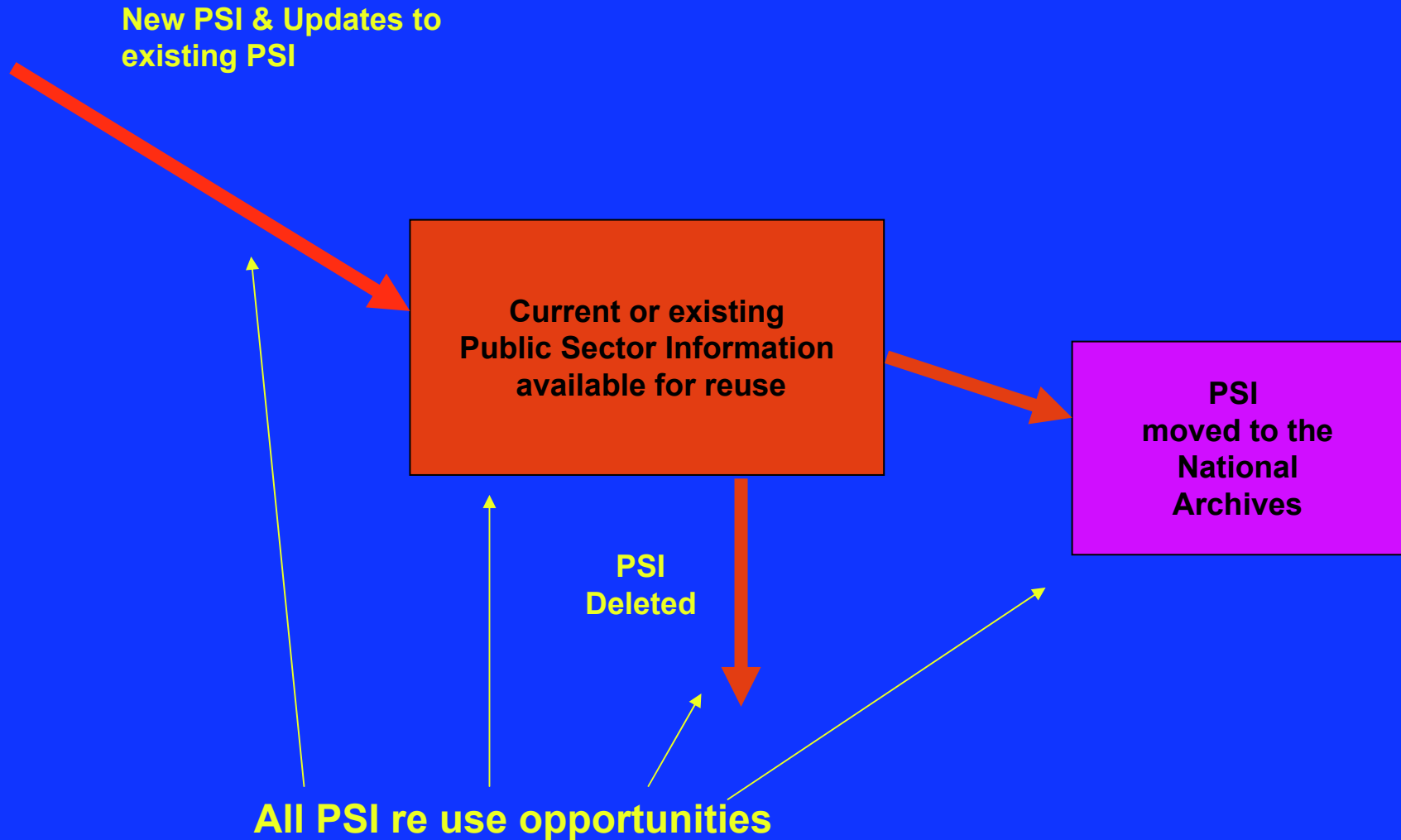
Data Source: Published annual reports



- Companies House
- HM Land Registry
- Met Office
- Ordnance Survey GB
- Patent Office
- Registers of Scotland
- UK Hydrographic Office
- British Geological Survey
- General Registers of Scotland
- Office of National Statistics
- Ordnance Survey Northern Ireland

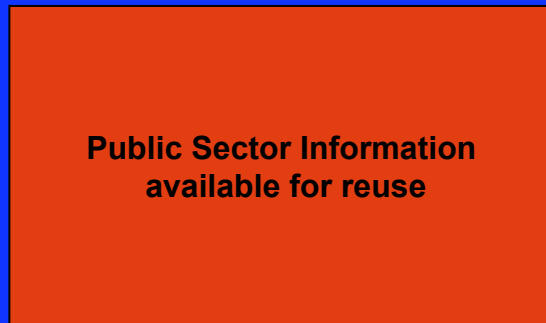
# Opportunities: the raw materials (a dynamic resource)

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



# Opportunities: the raw materials (What is available?)

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



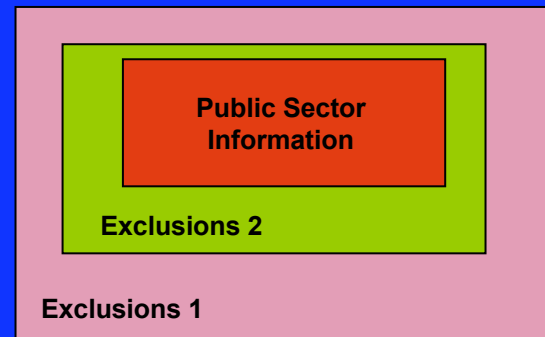
Initial thought on data available



Revised view due to Exclusion 1

EU PSI Dir Article 1.2 (d), (e), (f)  
(broadcaster, educational & research, cultural)

The exclusions reduce  
the quantity of PSI  
data potentially  
available for reuse as a result of  
the data access regime exemptions!

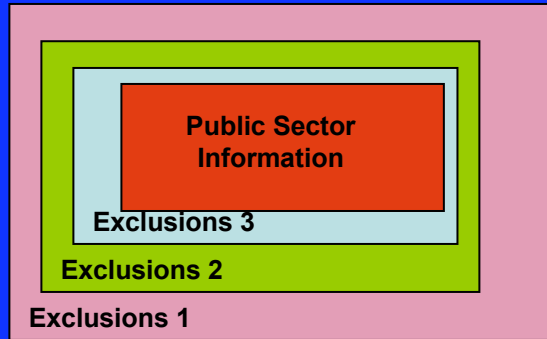


Revised view to  
Exclusions 2

EU PS 1.2 (c) (Security)

# Opportunities: the raw materials (resources)

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



**Revised view to Exclusions 3 IPR**  
EU PSI Article 1.2.5

Revised view to Exclusion 4  
Outside the public task!

## The patch work QUILT effect

PSI availability within the 25 Member States. (White = none, Red = available, other shades partial coverage)

MS1	Red	Red	White	MS5
	Pink	Red	Red	Red
	Light Pink	Red	Pink	Pink
	Light Pink	Red	White	Light Pink
MS20	White	Red	Pink	MS25

Multi  
Dimensional  
For each  
Date theme  
Or category

The exclusions reduce  
the quantity of PSI  
data potentially  
available for reuse!

## PSI potential variances across Member State boundaries

### Some examples of the cross border issues that may arise

<u>Attribute</u>	<u>Member State 1</u>	<u>Member State 2</u>
Data	Available for reuse	Not available for reuse
Licence	Required	Not required
Charging	Free	Charge
Time to respond	Set, formal and monitored	Informal and long

## Opportunities: the raw materials (resources)

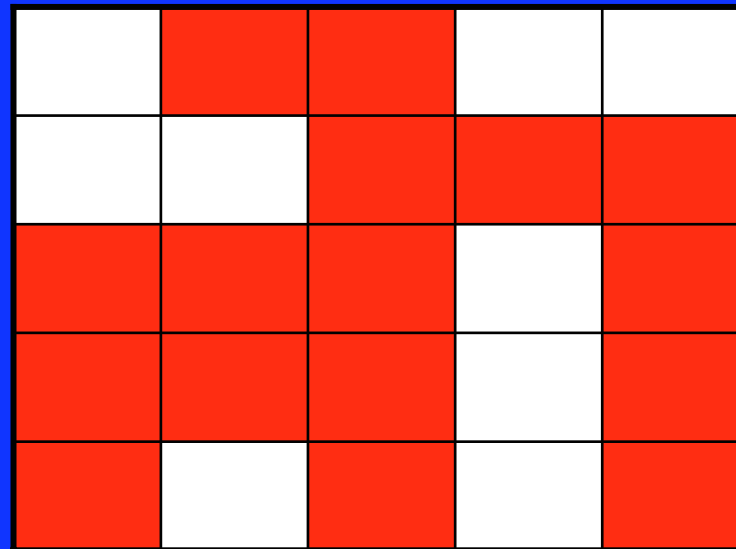
### The patch work QUILT effect continued

- The quilt effect also occur at the local level.
- Requesting the same data type from adjacent public sector organisation's will result in data being available from some organisation's but not others for IPR reasons.
- Requesting from the IPR holder if they can be found may help fill the missing geographic areas

Multi Dimensional cube for  
each date theme or category

Where:

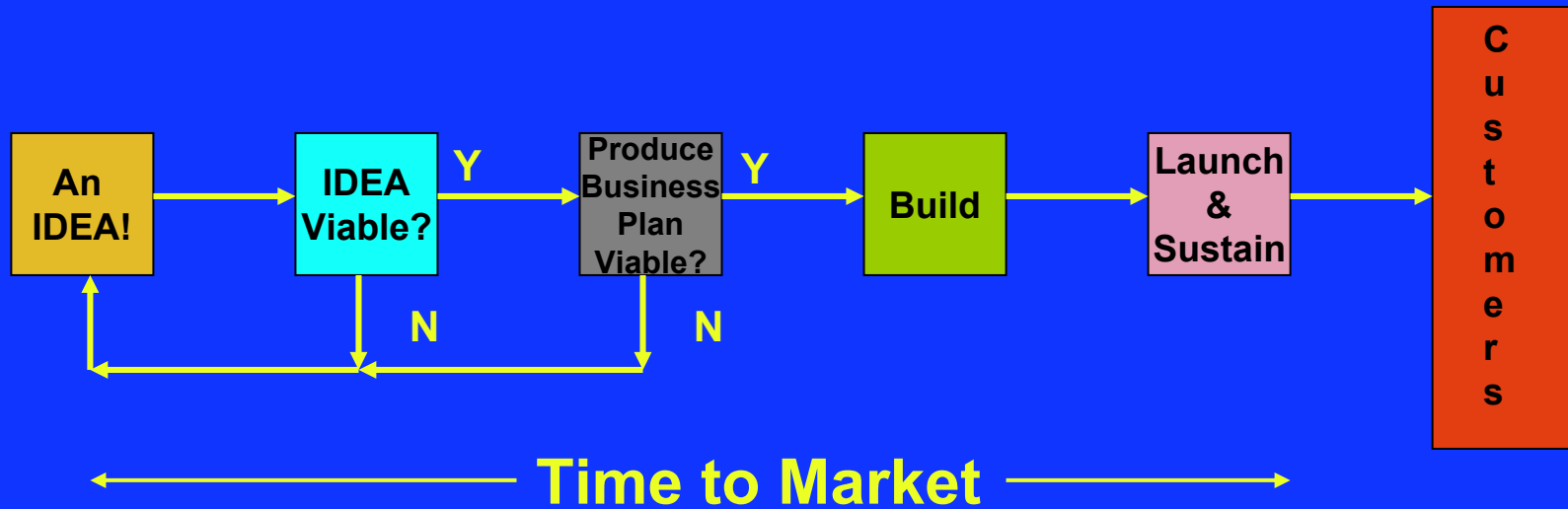
White = data not available  
Red = data is available.



White	Red	Red	White	White
White	White	Red	Red	Red
Red	Red	Red	White	Red
Red	Red	Red	White	Red
Red	White	Red	White	Red

# Considering the opportunity! Time is of the essence!

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



## Time factors that will be considered:

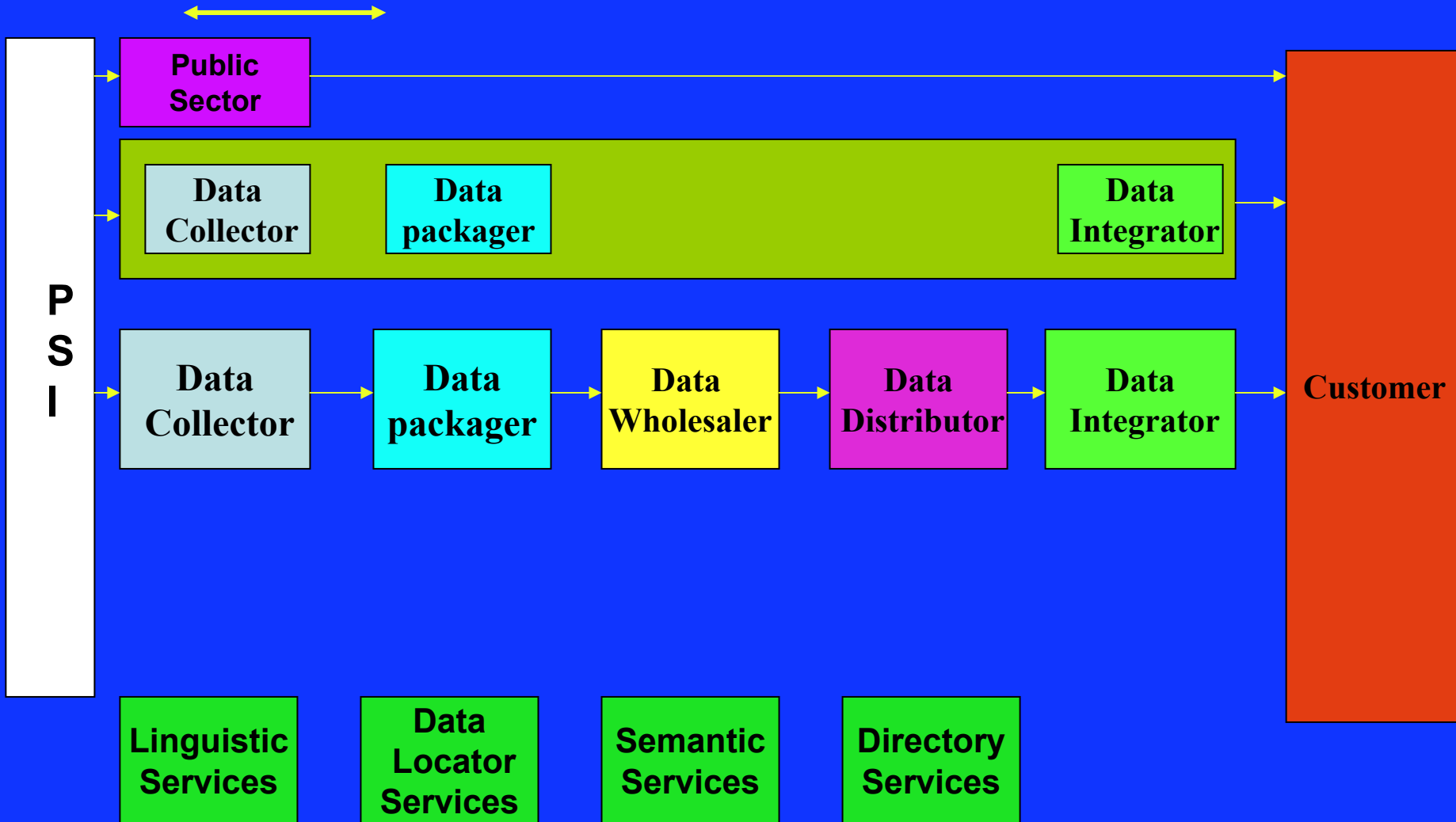
- Window of opportunity
- Time to achieve return on investment
- Period of profitability

## Business testing & planning

- Market analysis
- Resource analysis
- Risk analysis
- Price analysis
- Growth analysis
- Sustainability analysis

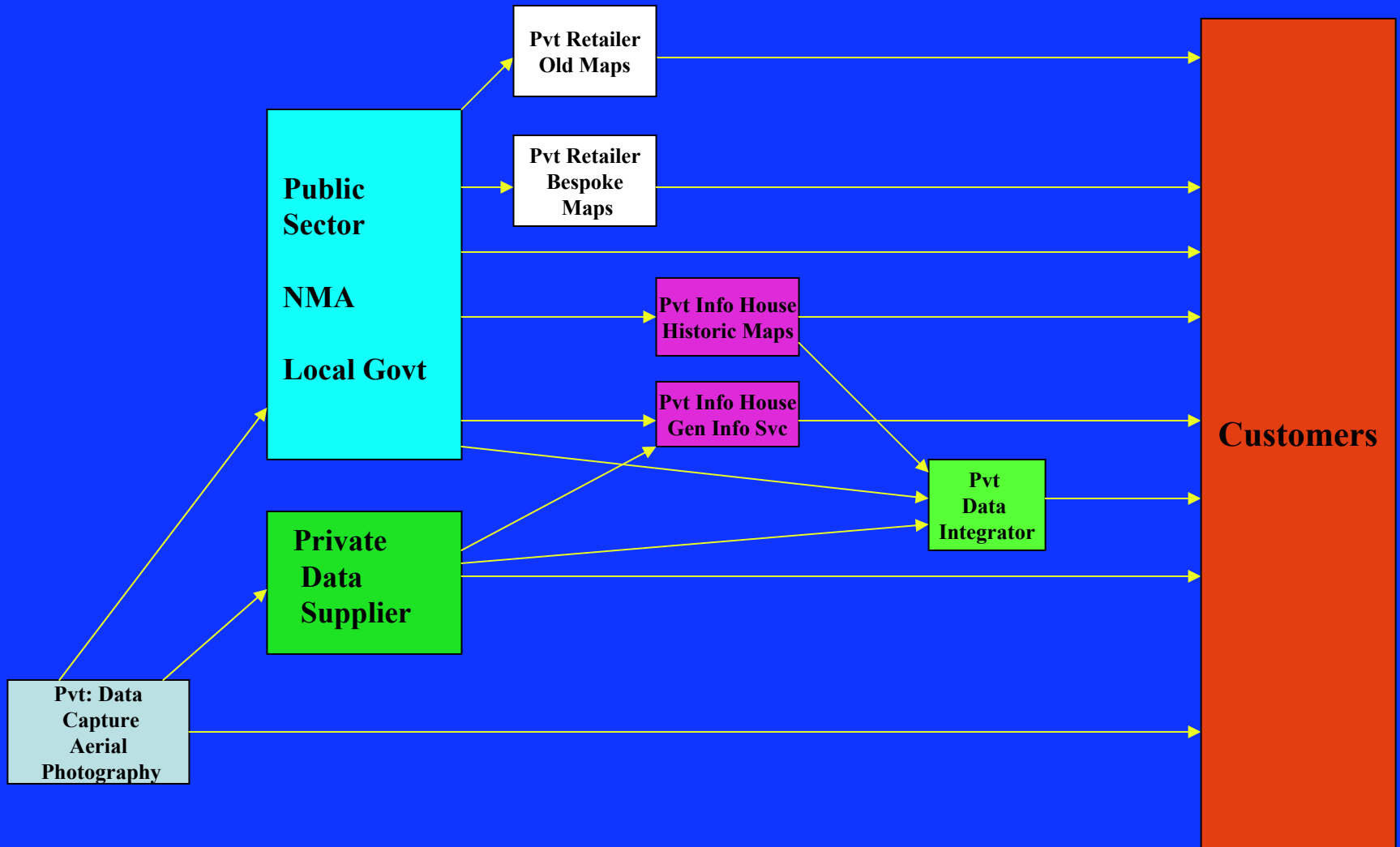
# PSI opportunities: Value Chain 1

QuickTime™ and a TIFF (LZW) decompressor are needed to see this picture.



# Opportunities: Value Chain 2 - the data market

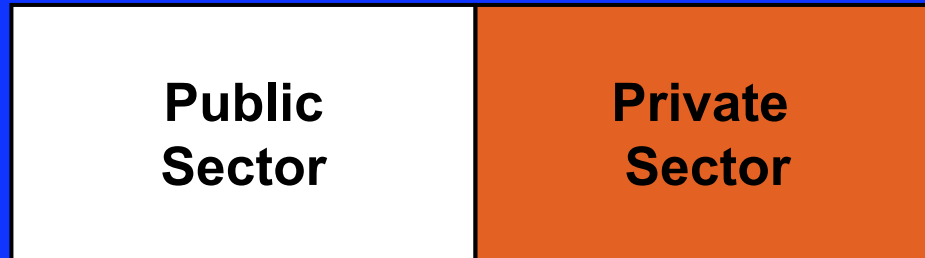
QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



# The public - private boundary

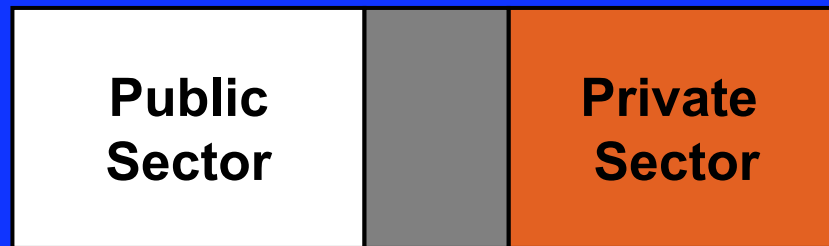
**View 1 of the boundary** (The position of the boundary will vary dependent on the type of economy in this diagram it is assuming it is a mixed economy)

Is this the real world situation? It might have been at one time!



**View 2 of the boundary**  
Is this the real world situation?

The boundary!

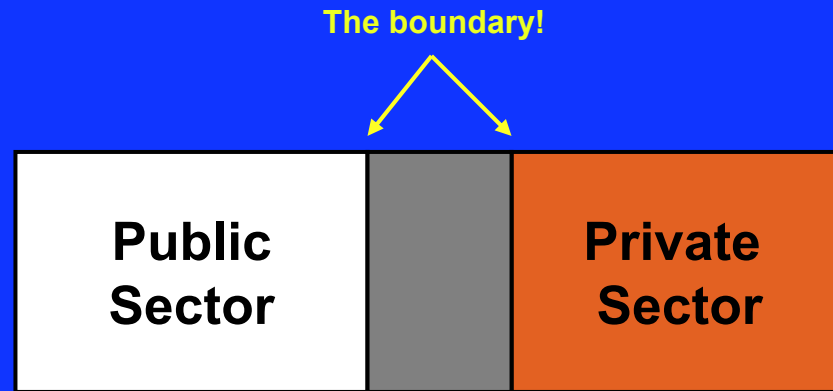


**Observations:**

- The boundary is constantly moving
- The boundary is different in each member state
- The boundary is where the trading tension occurs

**Potential reasons**

- eGovernment
- Pvt Sector also provides same Data and information as the public sector
- Politicians trying to reduce the Tax burden by making public Sector data assets sweat!
- Pvt Sector not sensing the boundary is moving and do not reposition their business!



## Some examples of the cultural issues at the interface

<u>Attribute</u>	<u>Private Sector</u>	<u>Public Sector</u>
Time	Of the Essence	Not of the essence
Decision making	Responsive	Slow
Risk	Keen	Averse

**The public sector does not operate on a competitive market where prices are a competitive factor. As a result:**

- the fees charged are not necessarily related to the costs.
- does not have accounting and control systems implemented that provide data about the cost of each individual service, unit costs.

**Conversely the private sector does operate in a competitive market where prices are a competitive factor. As a result:**

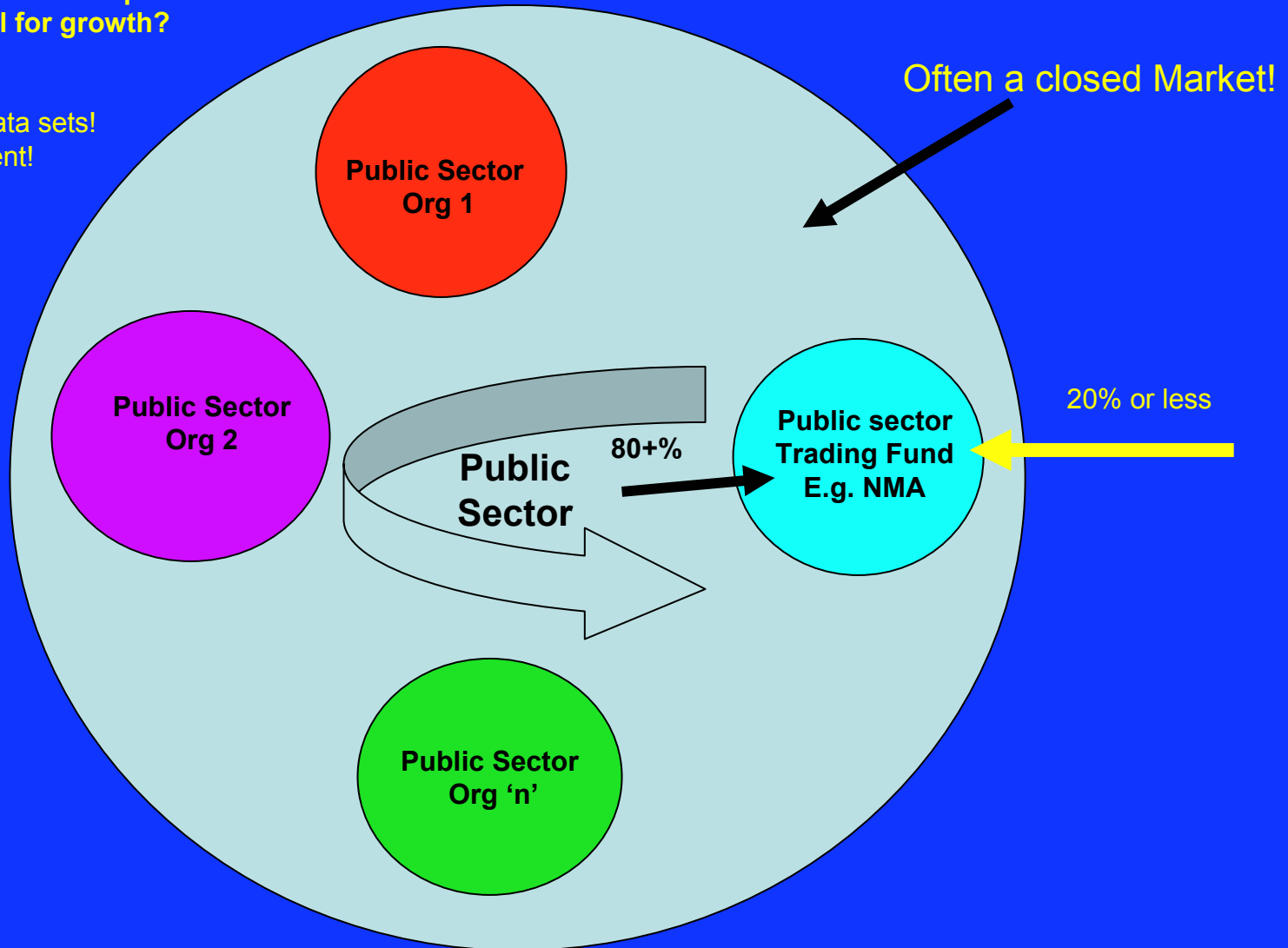
- the fees charged are closely related to the costs.
- accounting and control systems are in place that provide data about each of the individual processes/services as well as unit costs.

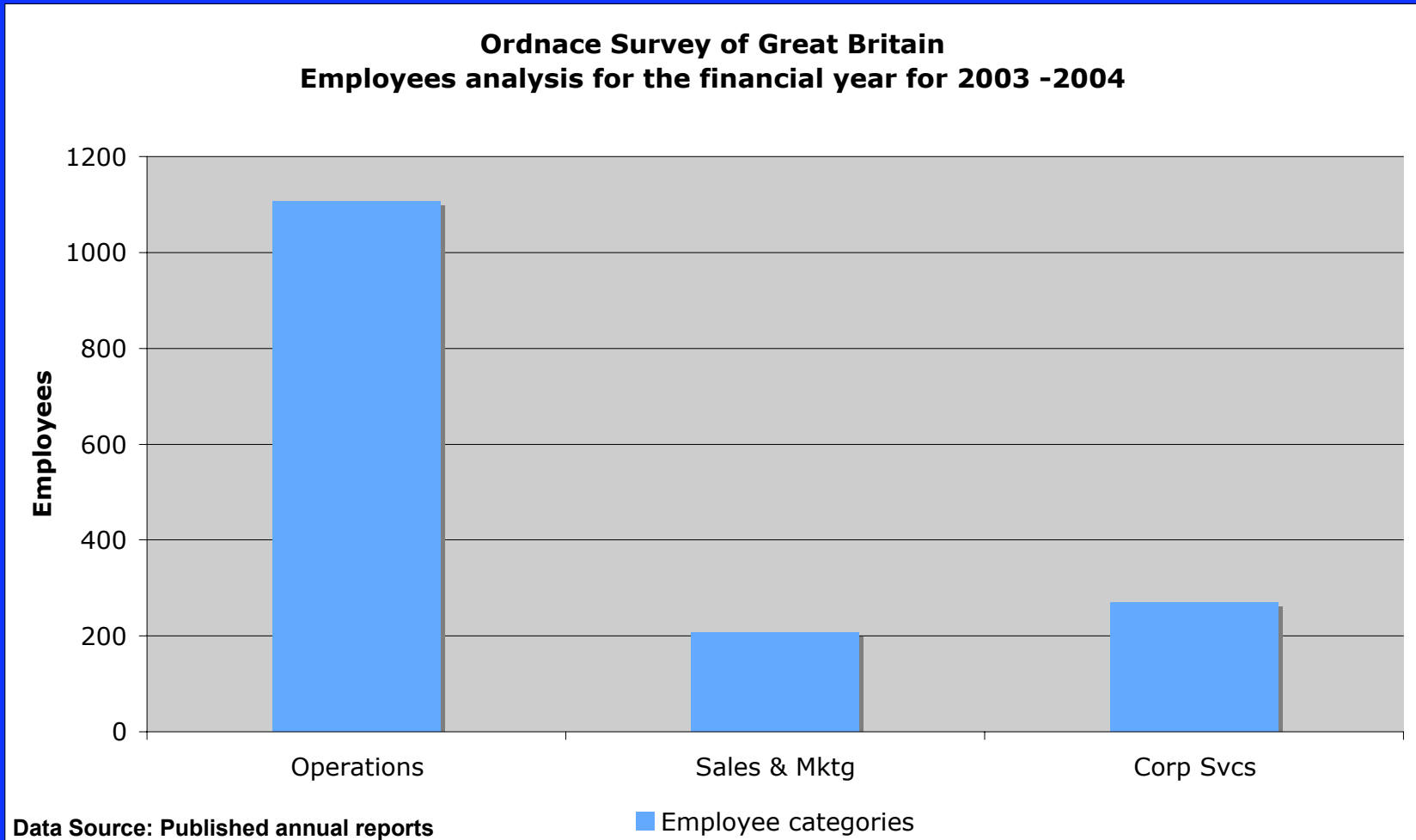
Source: IDABC eGovernment Observatory - Back ground Research paper "The impact of e-government on competitiveness, growth and jobs. Published February 2005. Page 28 Section 111. 1.3 Measuring the impact of e-government on public sector efficiency.

# Public Sector Information - cost recovery model

**Circulating money within the public sector**  
**What is the potential for growth?**

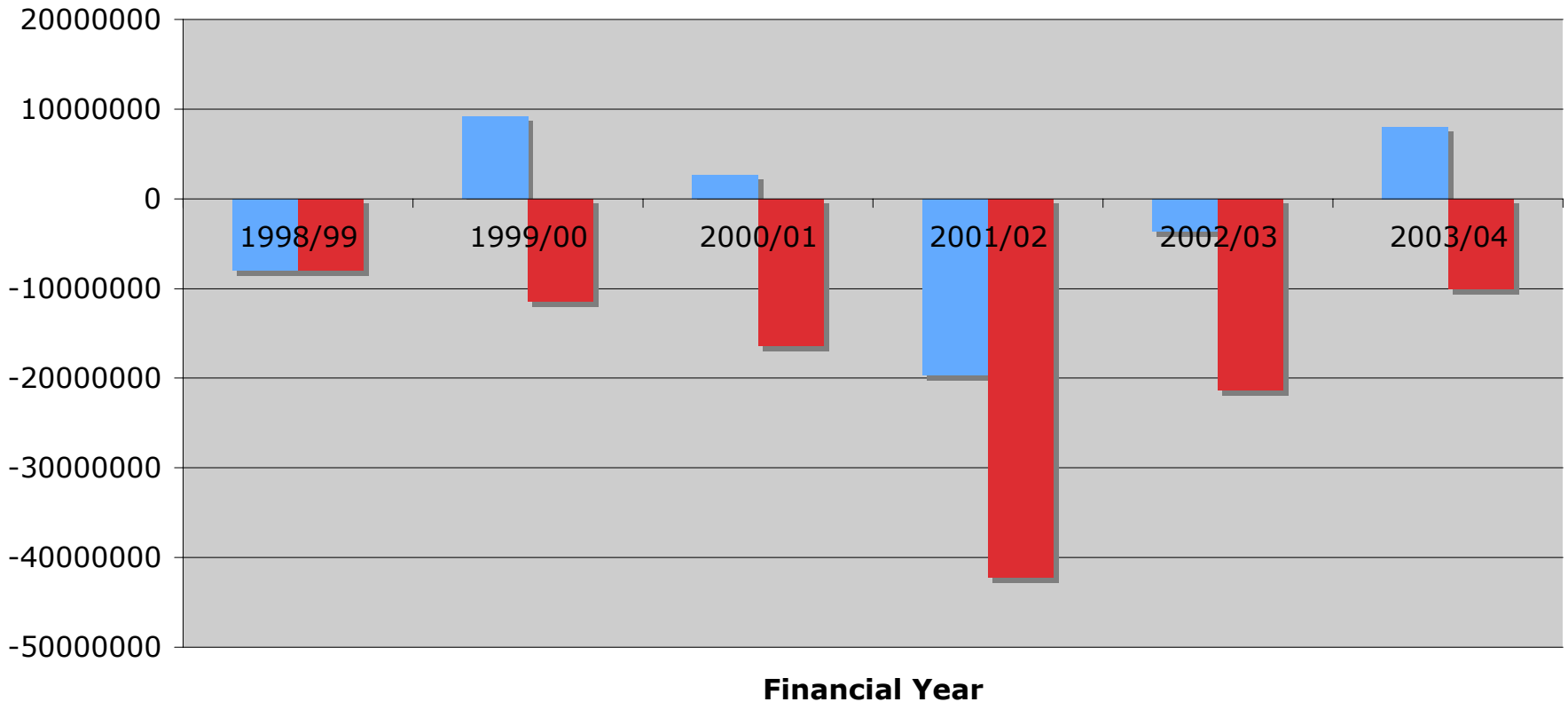
- **Increase use!**
- **Increase range of data sets!**
- **Employee deployment!**





**Total employees = 1583 plus 240 temporary staff**  
**Cost Euro 81.7 million, approx 49% of turnover, approx 52% of Operating costs.**  
**Trading turn over was Euro 165.5 million.**

## Ordnance Survey of Great Britain



Data Source: Published annual reports

■ Profit and Loss ■ Profit and Loss less NIMSA

Estimated average cost of Marketing and Sales personnel for the period 1998 to 2004 = Euro 11 million.

## An example: UK Local Government for England and Wales

- Since 1st April 1995 Local government has held three successive Service Level Agreements with the Ordnance Survey of Great Britain (OS-GB) for the supply of geographic information. These were not open procurement contracts. (Closed internal to public sector)
- Due to growth in use within Local Government and the need to comply with the EU Public Sector Procurement Directive combined with a need to test the market Local Government placed a notice in OJEC on 6<sup>th</sup> June 2003 for 9 batches of different GI data sets.
- The tender specification states that the contract was to run from 1<sup>st</sup> April 2004 through to 31<sup>st</sup> April 2007
- The contract was awarded to two private companies (Intermap Technologies (for digital height data) and Intelligent Addressing (for address data)) and the OS-GB early in 2004.
- As of 11<sup>th</sup> May 2005 the contract still has not been signed as a result of the OS-GB.
- One third of the contract period has now passed!
- IPR Notices have been issued to Local Government regarding OS digital height data that maybe embedded within Local Government data sets.

(Reference Guardian Newspaper article "Councils Lost without any Maps: New Data deal remains unsigned" 26<sup>th</sup> January 2005 URL: <http://society.guardian.co.uk/e-public/story/0,,1398070,00.html> )

## An example: UK Local Government for England and Wales continued

- Coincidentally on the 12th October 2004 the OS-GB released a press release announcing that they will release an enhanced national digital height data set.
- Coincidentally during 2004 the OSGB becomes active on the National Spatial Address Infrastructure (NSAI)

### Observations:

1. Local Authority's have been left hanging which has had a knock on affect on budgets and deployment of GI based solutions.
2. The Private Sector having won the contract through open competitive tender have been disadvantaged with respect to income.
3. The above series of actions gives the impression rightly or wrongly that the OS-GB has held back from signing the Local Government procurement contract in order to role out data products that the OSGB believe would overcome the need for Local Government to source data from other than OSGB.

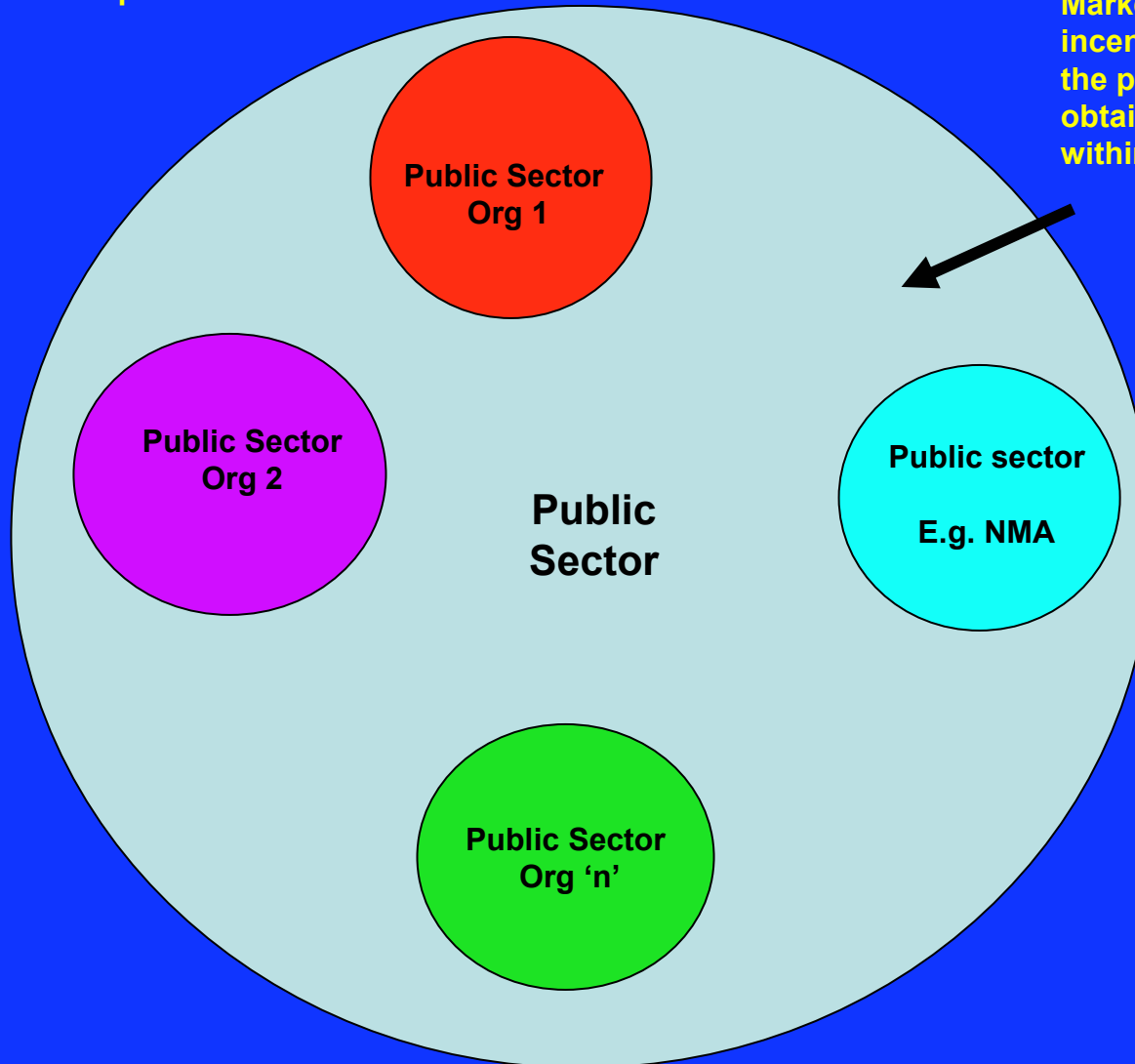
(Reference OSGB Digital height data: <http://www.ordnancesurvey.co.uk/oswebsite/media/news/2004/oct/land-formprofileplus.html> )

(Reference OSGB NSAI submission to the House of Commons Select Committee on Constitutional Affairs enquiry on Electoral Registration <http://www.publications.parliament.uk/pa/cm200405/cmselect/cmconst/243/243we21.htm> )

# Public Sector Information - No charge or marginal cost model

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.

Is the data used within the public sector  
Fit for purpose?



Market reduced as no  
incentive to procure outside of  
the public sector as data  
obtained at no cost from  
within the public sector!

**UNLESS**  
The free data is not fit for  
purpose

## Quality of data versus no charge, marginal cost, market price

<u>Category</u>	<u>Type of Public sector organisation</u>	<u>Example</u>	<u>Sensitivity to re use price &amp; fitness for purpose</u>
1	Dependent upon its own data to deliver services	Local government	Not sensitive
2	Regulators, Registers liable for the data quality	Cadastres, Land registries Environment Agencies	Not sensitive
3	Compiles and maintains data for others	NMA Hydrographic	Sensitive

## Automated standard licences such as a Click-use-standard-licences - save resources!

PSI Directive Article 8: Licences introduces the concept of STANDARD LICENCES

The proposed INSPIRE Directive Article 24 introduce the concept of Common Licences.

### **BUT**

The European Parliament ENVI Committee Amendment 26 introduces the concept of click-use-licence with respect to Article 20.1 regarding constraining data discovery and data viewing being available to the public free of charge on the basis of possible IPR infringements!

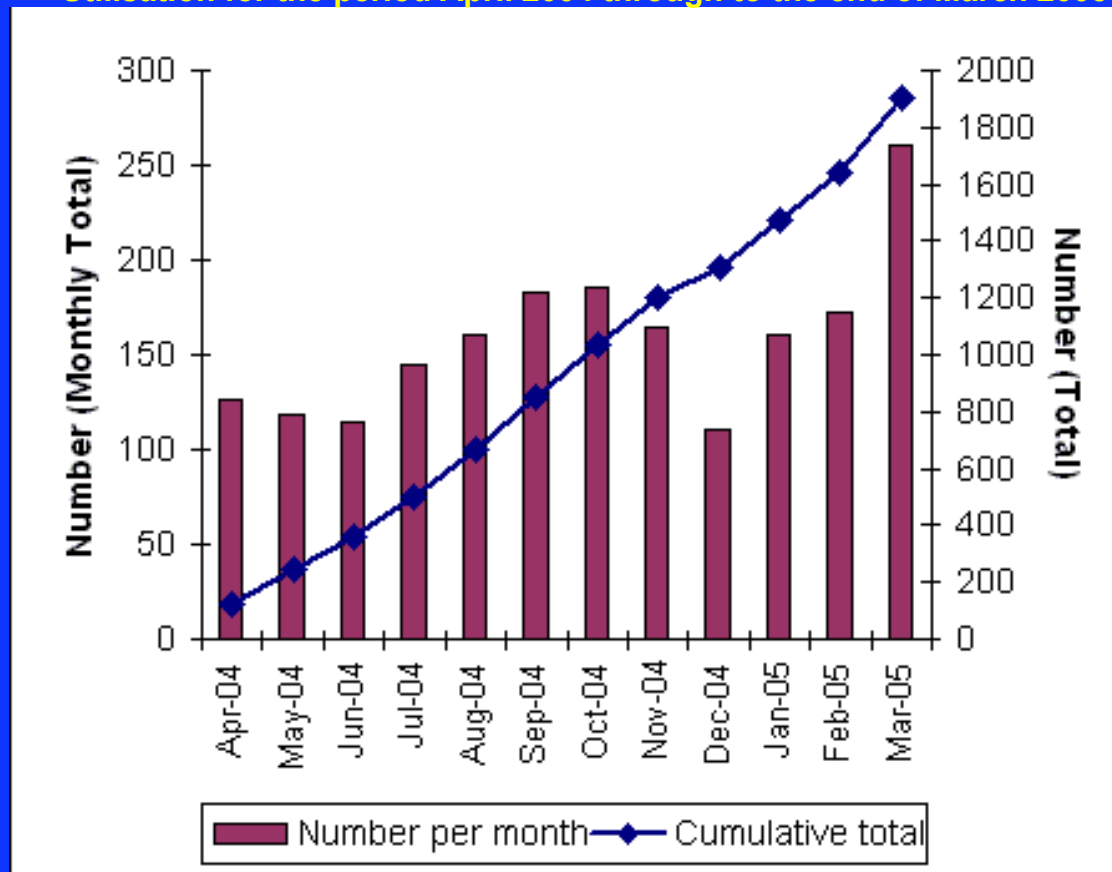
The European Parliament ENVI Committee Amendment 32 (new addition to Article 24) to ensure competition is not restrained by the use of common licences!

## Click-use-licence - save resources!



### UK example (Office of Public Sector Information) :

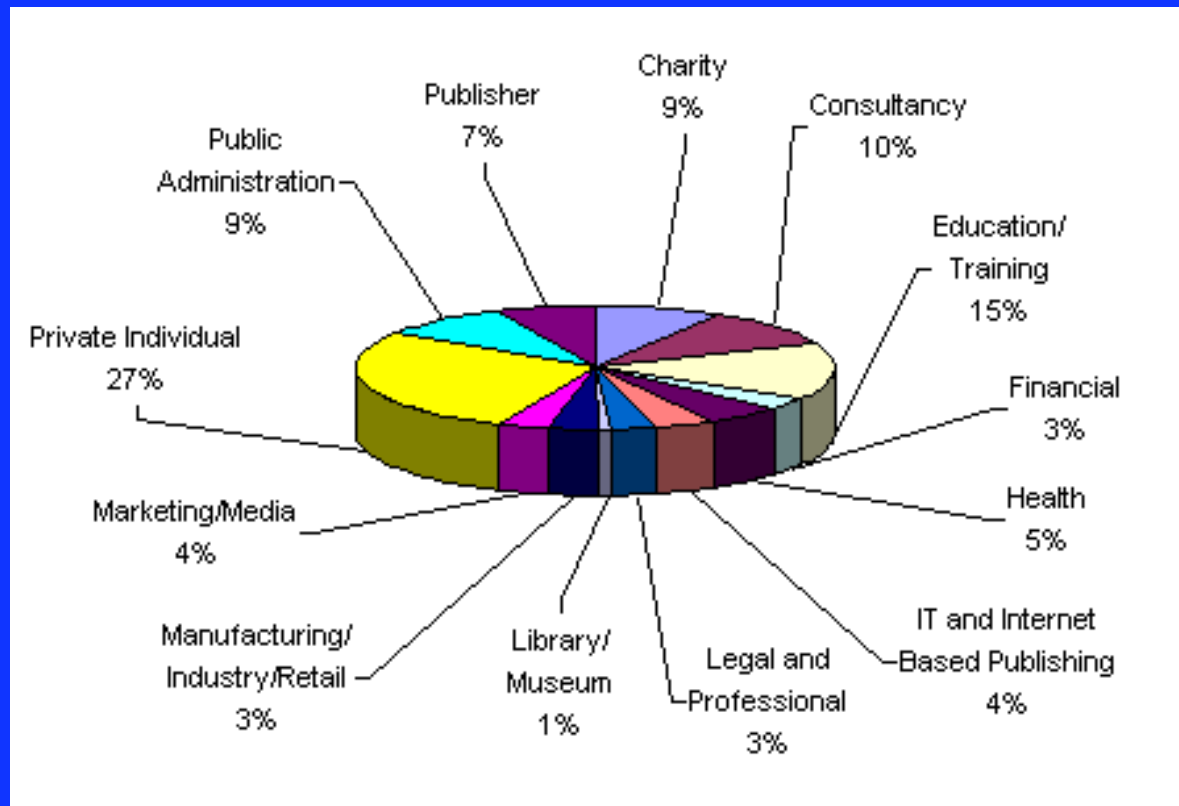
Utilisation for the period April 2004 through to the end of March 2005



## Click-use-licence - save resources!



### UK example continued (Office of Public Sector Information) :



## Transport Direct

- **Focus:** A complete transport journey planner for Great Britain. Developed by a private sector consortium for the Department of Transport.
- **WWW:** <http://www.transportdirect.info/TransportDirect/en/>
- **Example:** a portal service (No charges involved to use and view the information). The service involves a number of public sector data providers including real time travel information.
- **Authors:** Led by the Department of Transport.
- **Users:** Any person wishing to plan a journey
- **Funding:** eGovernment Funding Euro 22 million (2003 - 2005) - a 10 year programme
- **General Information:** Obtainable from <http://www.transportdirect.gov.uk>
- **Standards:** Visit URL for standards information <http://www.transportdirect.gov.uk/programme/standards.htm>

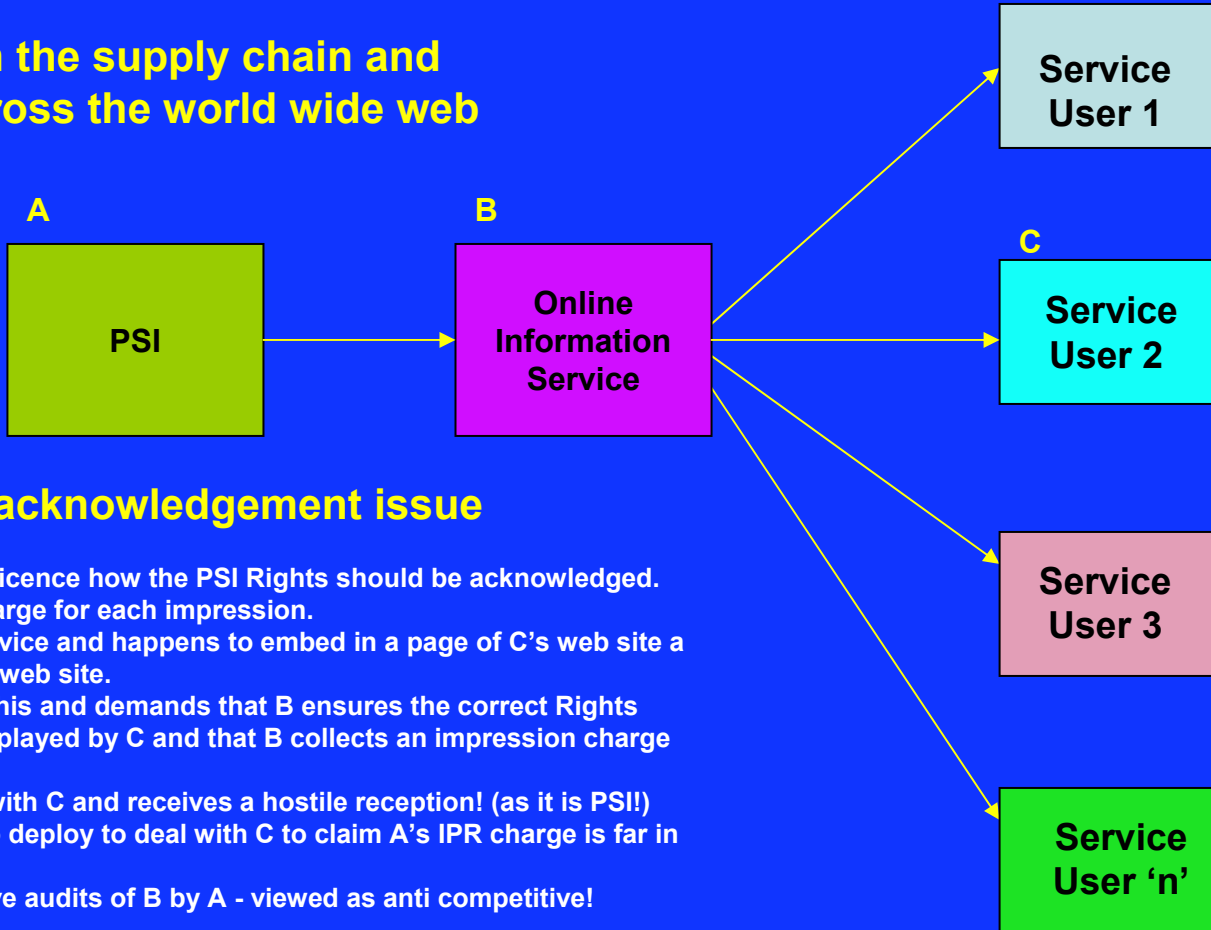
## Transport Direct

The screenshot shows the Transport Direct website interface. At the top, there's a navigation bar with 'Home', 'Quick planners', 'Look for routes', 'Maps', and 'Live travel'. Below this, a search bar shows the route from London to Edinburgh. The main content area displays a 'Summary of journey options' table with columns for From, To, Changes, Operator, Leave, Arrive, Duration, and Select. The first row is highlighted in yellow, showing a direct flight from London City to Edinburgh Turnhouse on Scott Airways.

From	To	Changes	Operator	Leave	Arrive	Duration	Select
London City	Edinburgh Turnhouse	0	Scott Airways	19:15	21:20	2 hours, 45 mins	<input type="radio"/>
London Gatwick	Edinburgh Turnhouse	0	British Airways	19:55	22:15	2 hours, 20 mins	<input type="radio"/>
London Luton	Edinburgh Turnhouse	0	Easyjet	20:00	22:30	2 hours	<input type="radio"/>
London Stansted	Edinburgh Turnhouse	0	Easyjet	20:55	22:55	2 hours	<input type="radio"/>
London Gatwick	Edinburgh Turnhouse	0	British Airways	09:40 (21/00)	09:10 (21/10)	2 hours, 30 mins	<input type="radio"/>
London Gatwick	Edinburgh Turnhouse	0	Easyjet	09:45 (21/00)	09:15 (21/00)	2 hours, 30 mins	<input type="radio"/>
London Heathrow	Edinburgh Turnhouse	0	BMI British Midland	09:50 (21/00)	09:25 (21/00)	2 hours, 35 mins	<input type="radio"/>

Note: "Change" means getting off one vehicle to board another.  
Also, please recheck your journey details within 2 weeks of travelling as some services may change.

## IPR Issues in the supply chain and dispersal across the world wide web



## The IPR rights acknowledgement issue

- A stipulates to B via a licence how the PSI Rights should be acknowledged.
- A charges B an IPR charge for each impression.
- C makes use of B's service and happens to embed in a page of C's web site a copy of a page from B's web site.
- A notices C has done this and demands that B ensures the correct Rights acknowledgement is displayed by C and that B collects an impression charge from C.
- B takes the matter up with C and receives a hostile reception! (as it is PSI!)
- The resources B has to deploy to deal with C to claim A's IPR charge is far in access of the charge!
- Often leads to excessive audits of B by A - viewed as anti competitive!

A CLASSIC example of the public sector body not having a true appreciation of unit costs per process. The impression charge and the bad public relations in effect loses the use and ultimately the customer (B) in this example who will go elsewhere.

Ref: Intellectual Property Rights Directive 2004/48/EC Article 8

# Derived IPR!

## A public sector body when producing and maintaining data may well unknowingly place itself at risk due to derived IPR!

A few examples of derived copyright:

- drawing the boundary of a planning application using as a guide (a back drop) a topographic map.
- capturing tree preservation orders or street furniture by pointing at a topographic map or an aerial photograph or a high resolution satellite image captures a co-ordinate (x, y) and places it in the tree or street furniture database.
- Checking the quality of an address data set by comparing it with another.
- Automatically populating some of the fields in a new database by copying them from another that is held by that public body.
- In a public body call centre (Many have appeared as part of eGovernment initiatives). The caller is asked for their post code and the operative enters that into the computer that automatically extracts a list of potential addresses from an address file, the operative asks a further question to identify which in the list and at that point the computer application automatically fills out the address data in the record.
- capturing objects from one database and placing them in another.

**Usually within the public sector no attention is given to this when the data that is used is from another public sector body. UNTIL and here comes the surprise!**

## UNTIL!

- The public body wishes to procure data from the private sector as the data that has been procured up to that point within the public sector is considered no longer fit for purpose or not competitive. Then public trading body being ousted pops up to say **“Hey there is derived copyright in your data base you will still need to pay us IPR charges (Copyright charges)!”**
- The PSI Directive came along and a private sector body requests data from a public sector body say a Municipality!

**Suddenly what all seemed to be sweetness and light becomes heavy and draconian! What then happens well public sector culture will kick in!**

**This is no joke this is taking place today in the EU!**

# PSI and the IPR trap!

- **If PSI is provided - does the public sector indemnify the PSI re-user against subsequent claims?**
  - arising from other parts of the public sector?
  - arising from outside the public sector?
- **Who resolves IPR issues within the public sector?**
  - The public sector body holding the information?
  - A public sector IPR clearing house?
  - The re-user has to walk the public sector?

## Checking whether the PSI of interest has:

- **An existing exclusive arrangements in place?**
  - If Yes when will it lapse?
  - If Yes what reuse does it apply to?

Depends on transparency to be ascertained

- **What is the likely hood of an exclusive arrangement being put in place in the *public interest*?** (reviewed every 3 years)
- **Are there existing partnership arrangements in place?**
  - If partners receive favourable terms currently when will these be phased out?

Reference: PSI Article 11

## Business Analysis: pricing & Service level precedence



**Data Required:** Changes in the built environment, Street names.

**Transaction A:** Some member states charge (Sweden) others do not (UK)

**Transaction B:** Conditions should be the same for that Member State.

Due to precedence one would expect conditions will be the same for A and B

**Question:** Where would one find this information?

EU PSI Directive Article 7 (Transparency), Article 10.2 (Level playing field)

# The Regulators

**Where are they?      Who are they?**

**Who ensures FAIR Play within a Member State?**

**Will they be effective when dealing with PSI  
market issues?**

## PSI Directive

- The framework set out in the Directive is needed.
- The transpositions of the Directive into National law will provide an uneven implementation of the framework which may well not promote cross border reuse and new digital content to be produced. As a result the PSI Directive will be **Entrepreneurial (Innovation) neutral!**

## PSI Directive continued

- The complexity of the public sector as a result of:
  - the different structures,
  - different financing models,
  - the many and varied ways that the public sector works with the private sector.

Will mean that the PSI Directive will be **Entrepreneurial (Innovation) neutral** due to the *time is of the essence* requirement not being met.

## PSI Directive continued

- The awareness of the PSI Directive remains low
- The public sector bodies that already provide data for re use are showing no sign as yet that they will change their practices to meet pricing transparency, handling of IPR.
- There is little evidence so far that public sector bodies are ensuring there are online data asset lists.

- IPR conditions (Rights Acknowledgement) placed on data and information re users act as **Entrepreneurial (Innovation) neutral** in that these issues are already existing in some quarters within the public sector and there is no evidence that the PSI Directive will have brought about a change.
- The eGovernment initiatives although impacting at times on the value chain resulting in private sector companies to reposition (or go out of business) overall eGovernment is positive towards the re use of public sector information.

- The PSI reuse exploitation opportunities are certainly there **BUT** so are the risks!
- The behaviour of some public sector bodies is not in accord with the political objective. The re vitalised Lisbon Treaty highlights the need for enforcement and application of the legal Directives hopefully in a harmonised way.
- The behaviour of some public sector bodies is not in accord with either eGovernment or commercial practices. Highlighting a cultural issue and misplaced intentions within parts of the public sector.
- The Directives are not being formulated consistently which lead to varied implementation. The legislators also are not in accord at times with the re vitalised Lisbon Treaty.



# Thank you for Listening

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.

**Don't despair - we are all learning our way as the society comes to grips with the Information Society and Knowledge economy.**

**If in doubt consider the reaction to the 26th December 2004 Indian Ocean earthquake and the resulting tsunami which demonstrated the Information Society in action not just in spreading the news but how information sources were quickly used by many across the world to provide information on the consequences of this natural disaster. A point worth keeping in mind when dealing with data infrastructures such as INSPIRE.**

**In the tsunami event humanity outstripped Governments in how to react!**