Clear Steps to INSPIRE Compliance while gaining real value too!

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What is the INSPIRE Directive

- A statutory instrument which is changing the way we **Discover & View Spatial Data.**
- Aim is to create EU-wide **Spatial Data Infrastructure** (SDI).
- Enable the **sharing of Environmental Spatial Information** among public sector organisations.

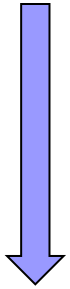
Why do we need to become INSPIRE compliant

The INSPIRE Directive has recently been transposed into Irish law - 03.2010

- **Rationalise** spatial data across Europe
- **Harmonisation** of spatial data from all over Europe
- Provide **access** to Spatial Data across Europe via efficient search mechanisms

What Data must become INSPIRE Compliant

2010



2013

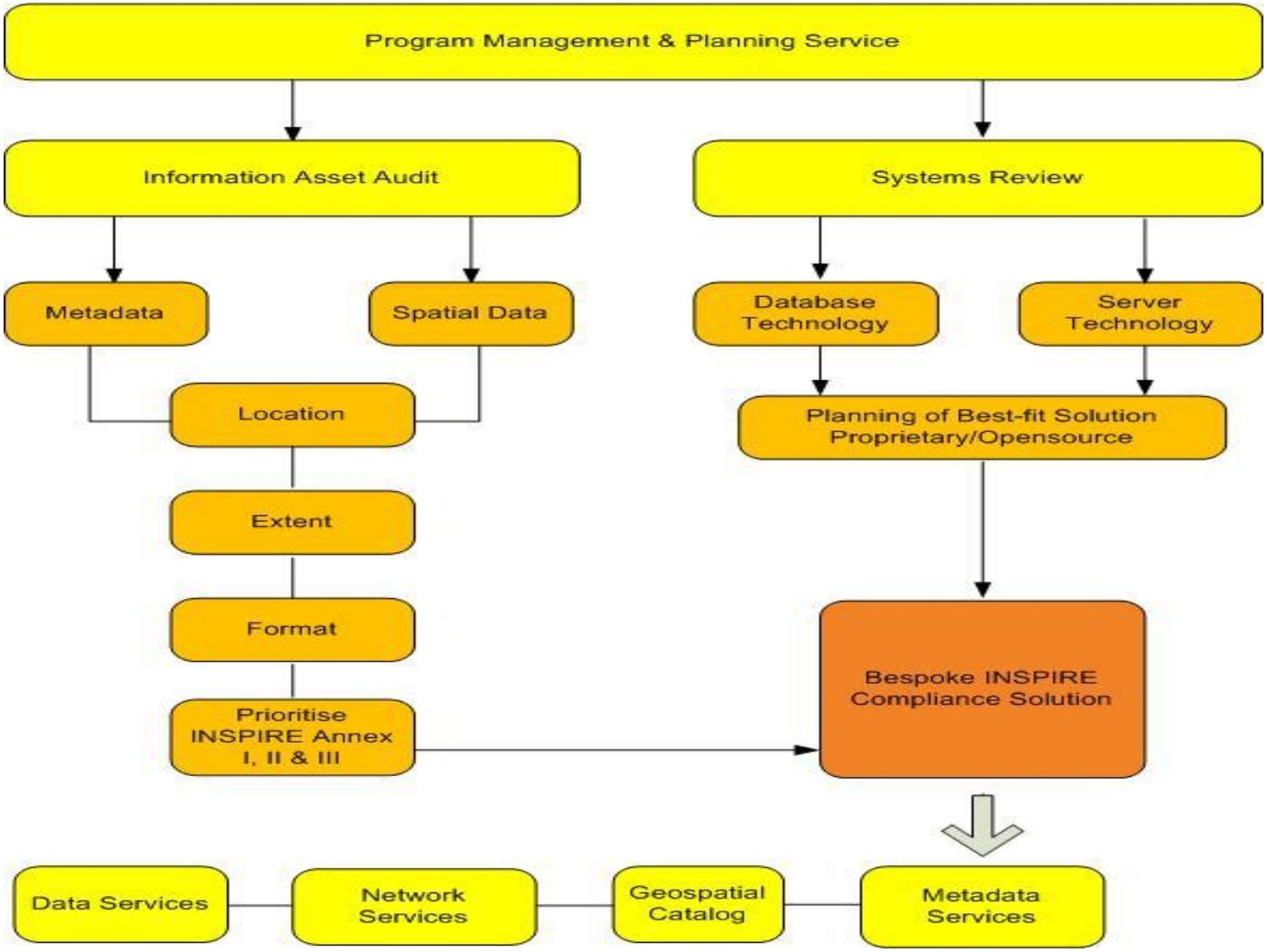
Subject areas described in Annex I,II and III

- Annex I : e.g. boundaries, roads, railways, hydrography
- Annex II: e.g. elevation models, topography, orthophotos
- Annex III: e.g. buildings, geology, land use

Components of INSPIRE Directive – Relevancy for your organisation

- Metadata (Discovery)
  - Web Catalogue Service (CSW) 11.2011
  - Metadata (Annex I, II) must be INSPIRE compliant by 12.2010
- Data (Viewing & Download)
  - Web Map Service (WMS) 11.2011
  - Web Feature Service (WFS) Late 2012
  - Data to be INSPIRE Compliant by 06.2012

Programme Management & Planning for Compliancy



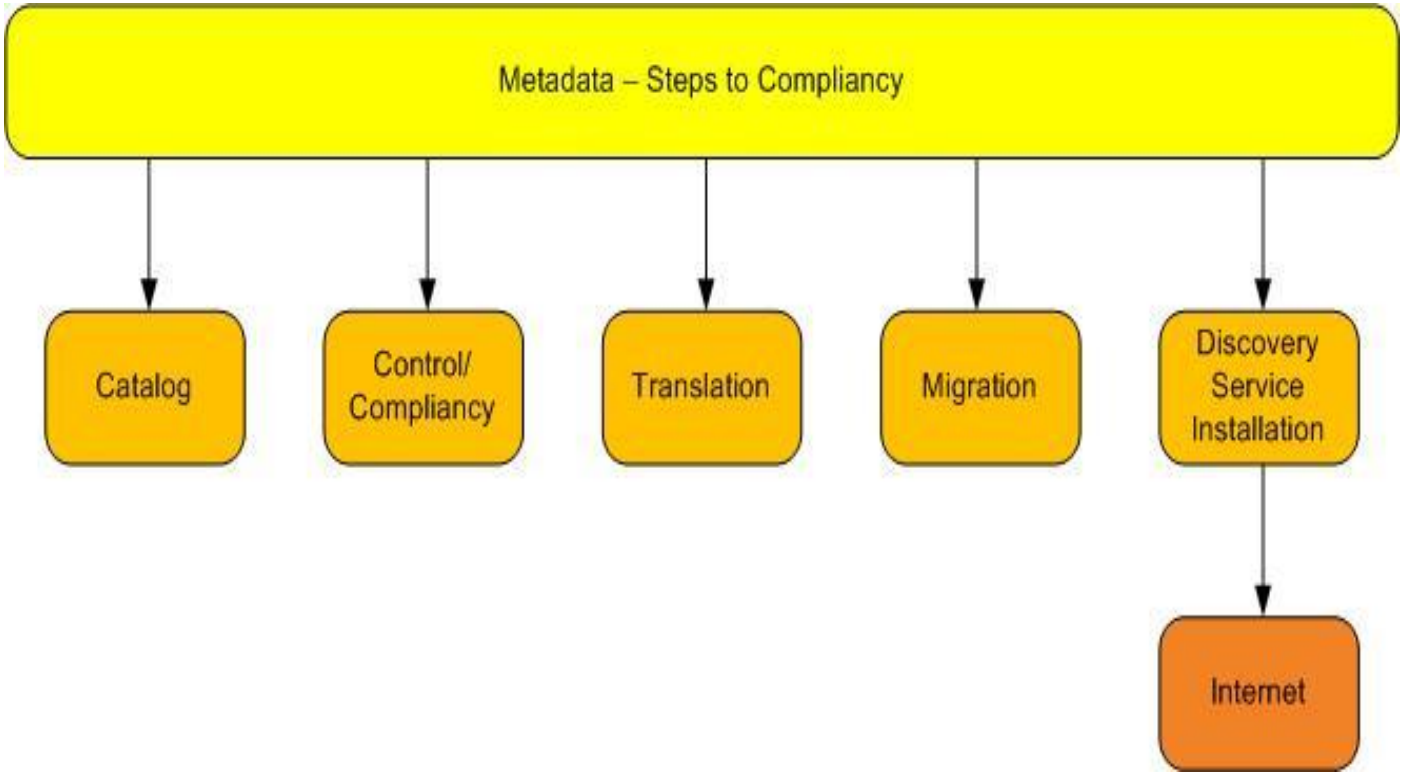
Programme Management – Real Value Add to your Organisation

INSPIRE forces rationalisation and centralisation of metadata/data

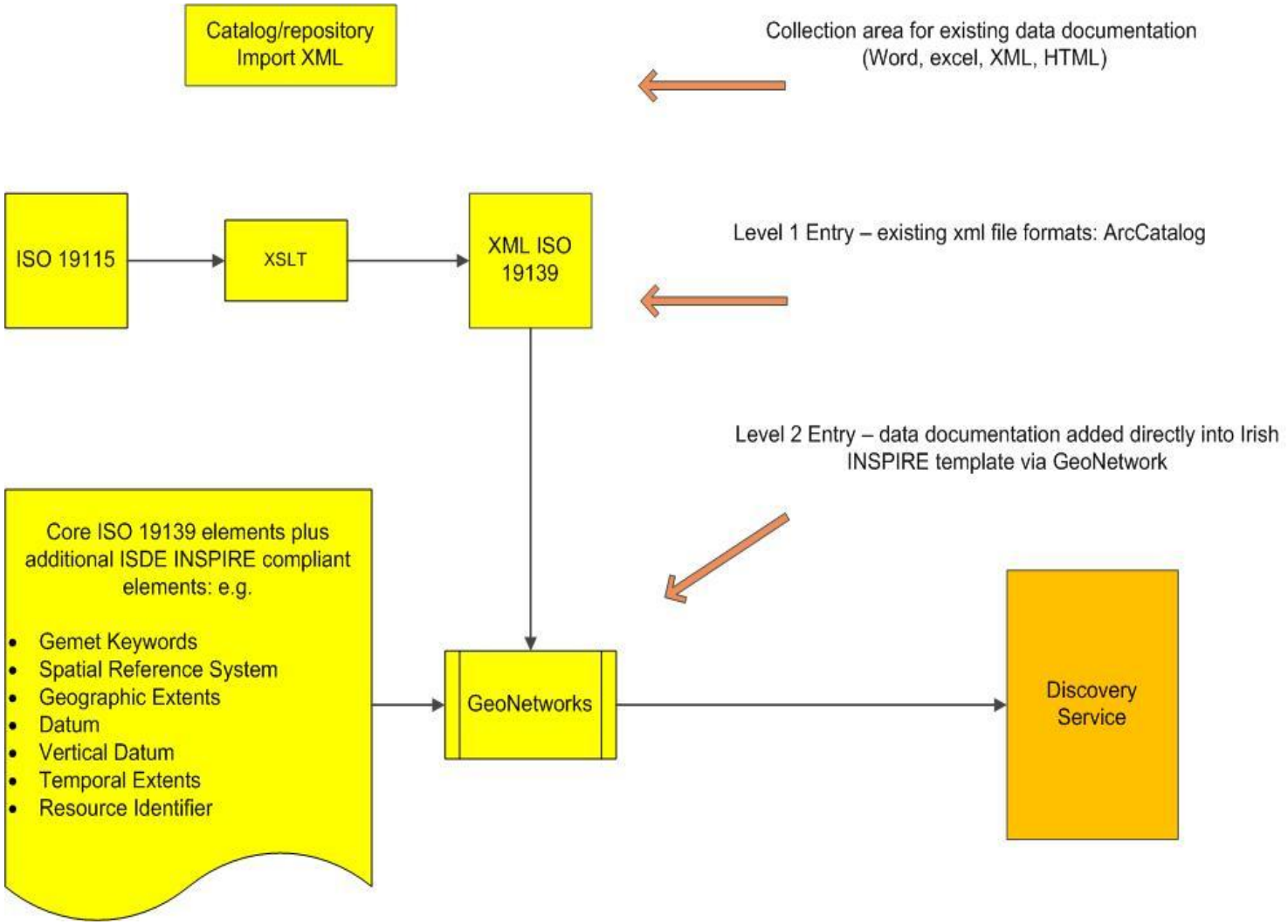
The Advantages in addition to Compliance

- Fast & efficient access to information
- Auditability of data assets
- Optimised use of data infrastructure resources
- Harmonisation of data throughout organisation
- Optimum use of space

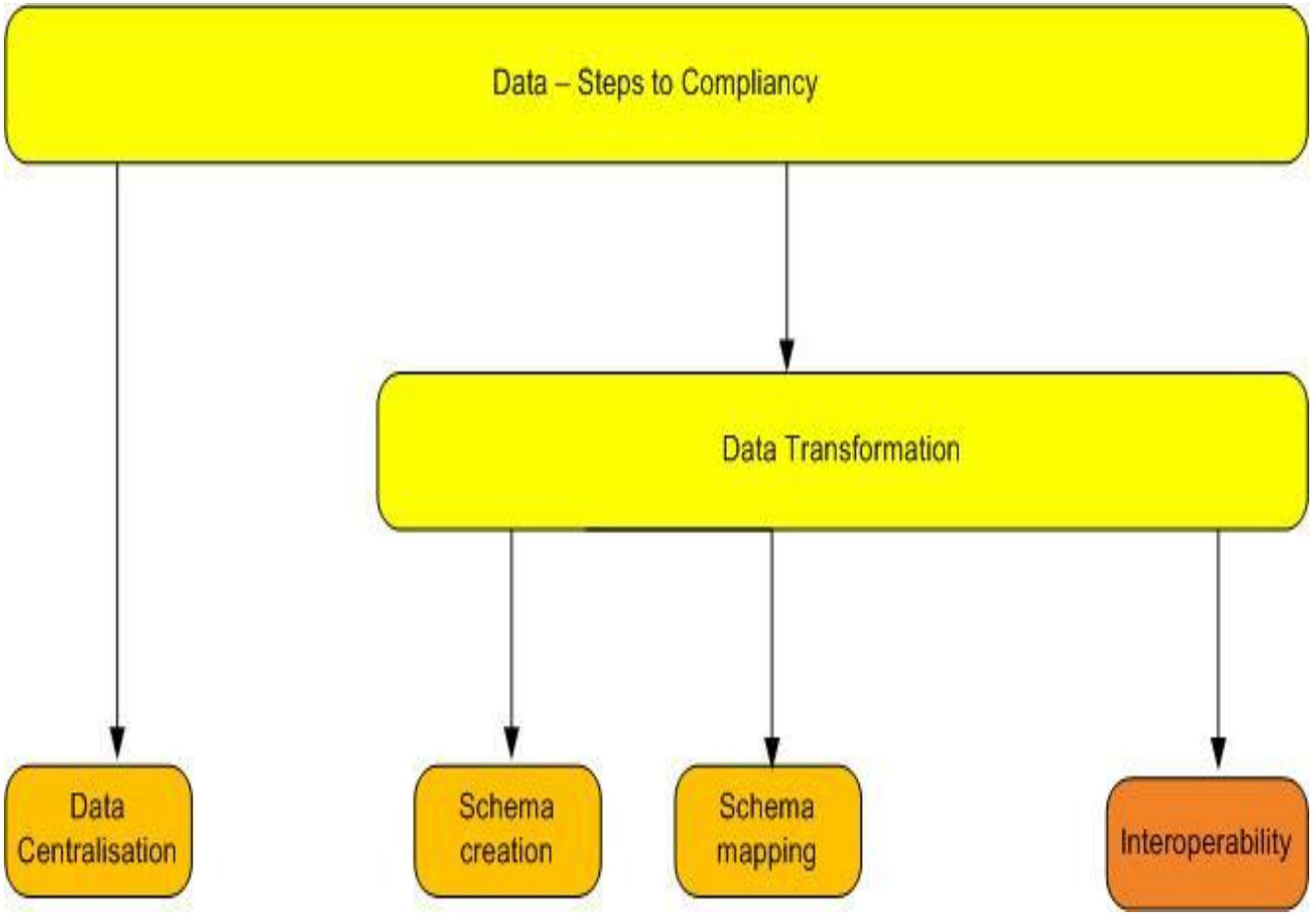
Metadata


Metadata – Steps to Compliancy
Catalog
Control/ Compliancy
Translation
Migration
Discovery Service Installation
Internet

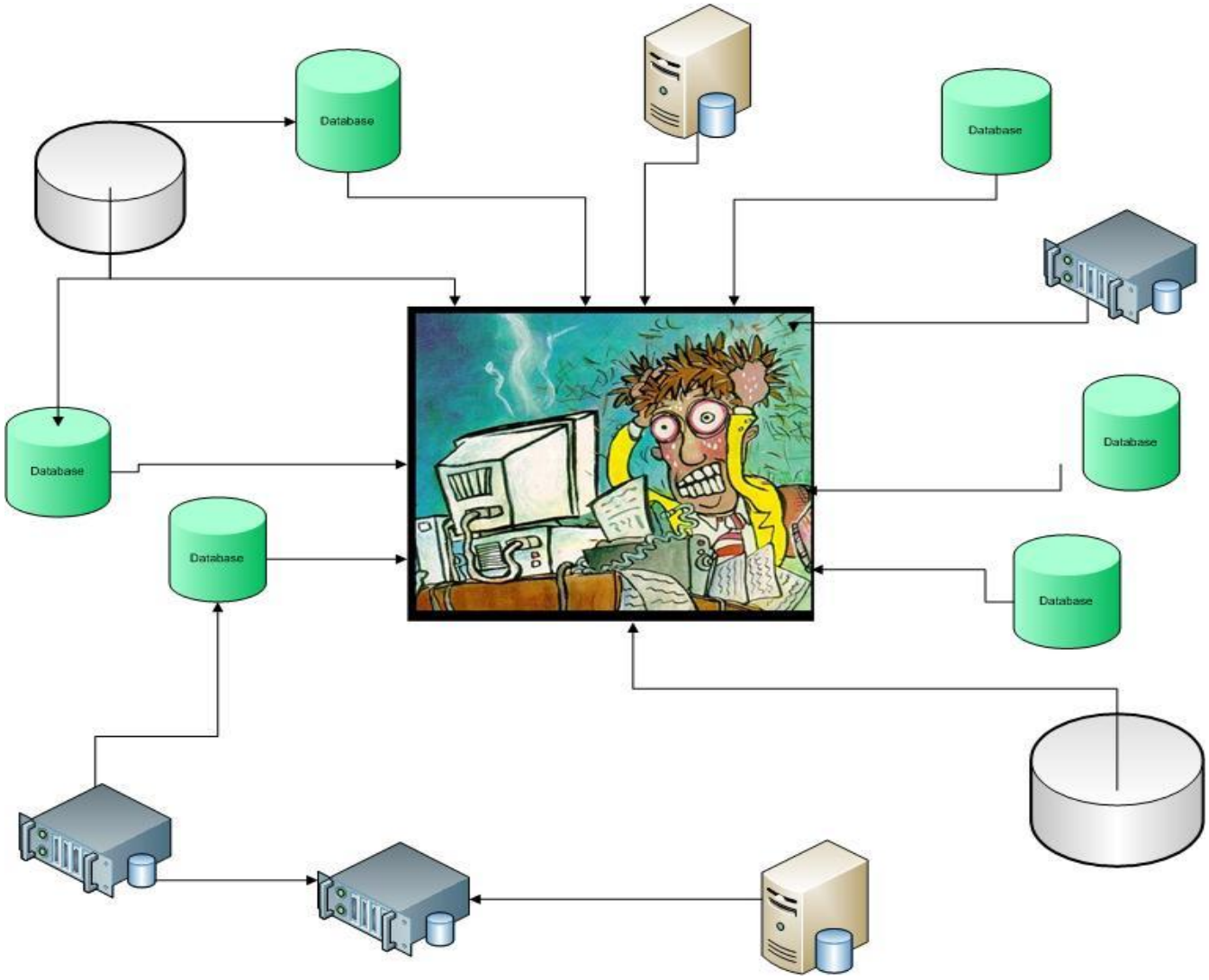
Dynamics of Change – Proprietary & Open Source Options



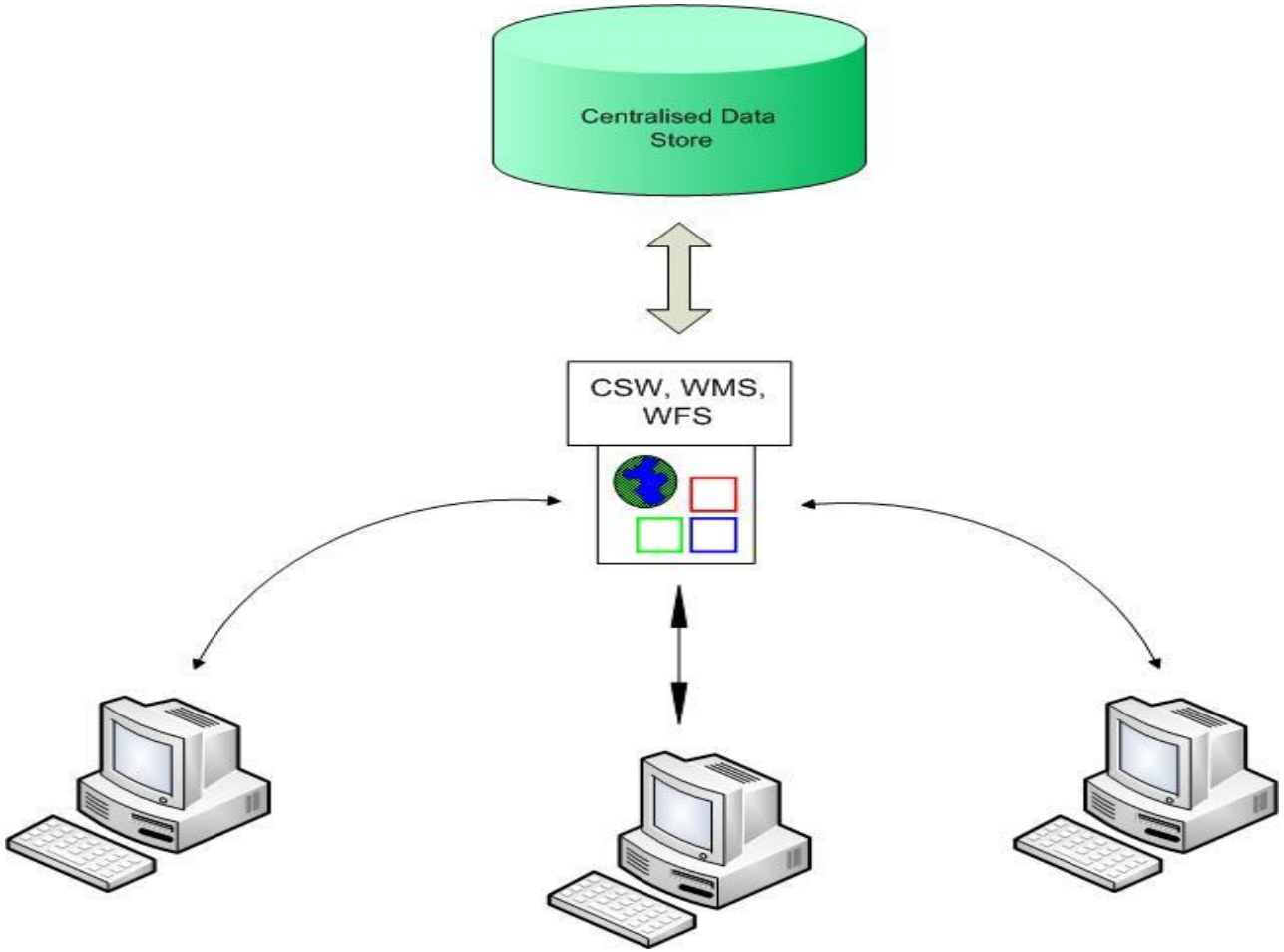
Data


Data – Steps to Compliancy
Data Transformation
Data Centralisation
Schema creation
Schema mapping
Interoperability

Data Centralisation – The Reality !

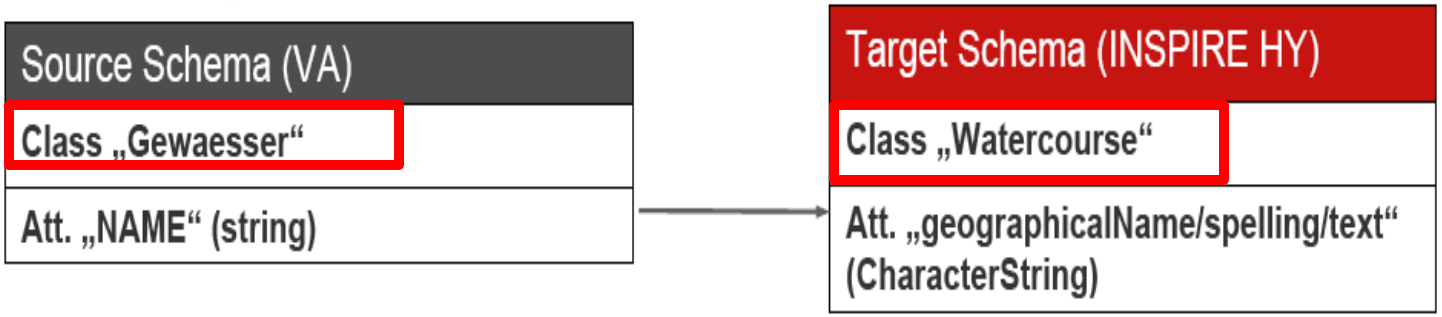


Data Centralisation – Advantages via INSPIRE Compliancy

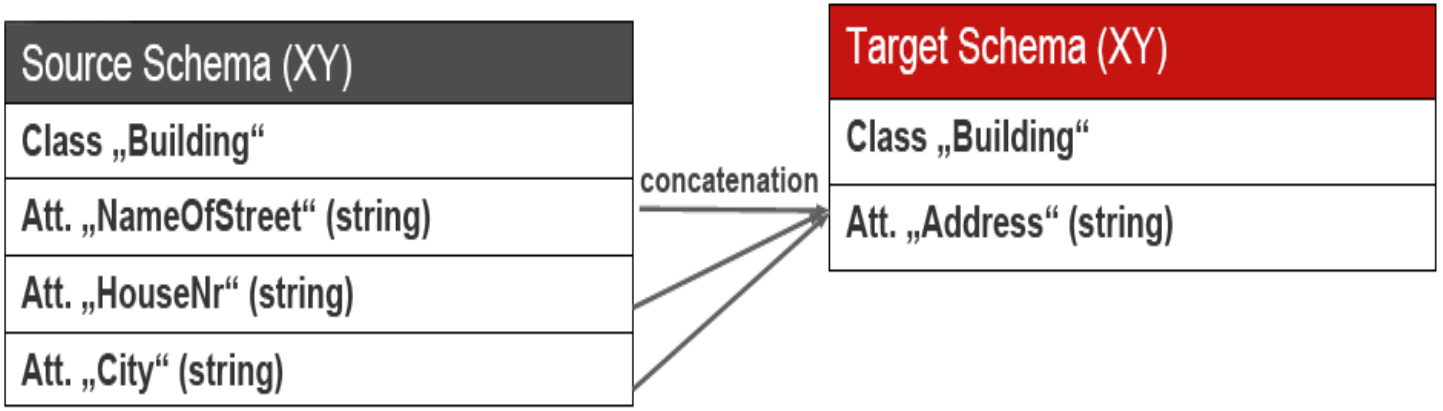


Data Transformation - Interoperability

- Renaming feature class or attributes

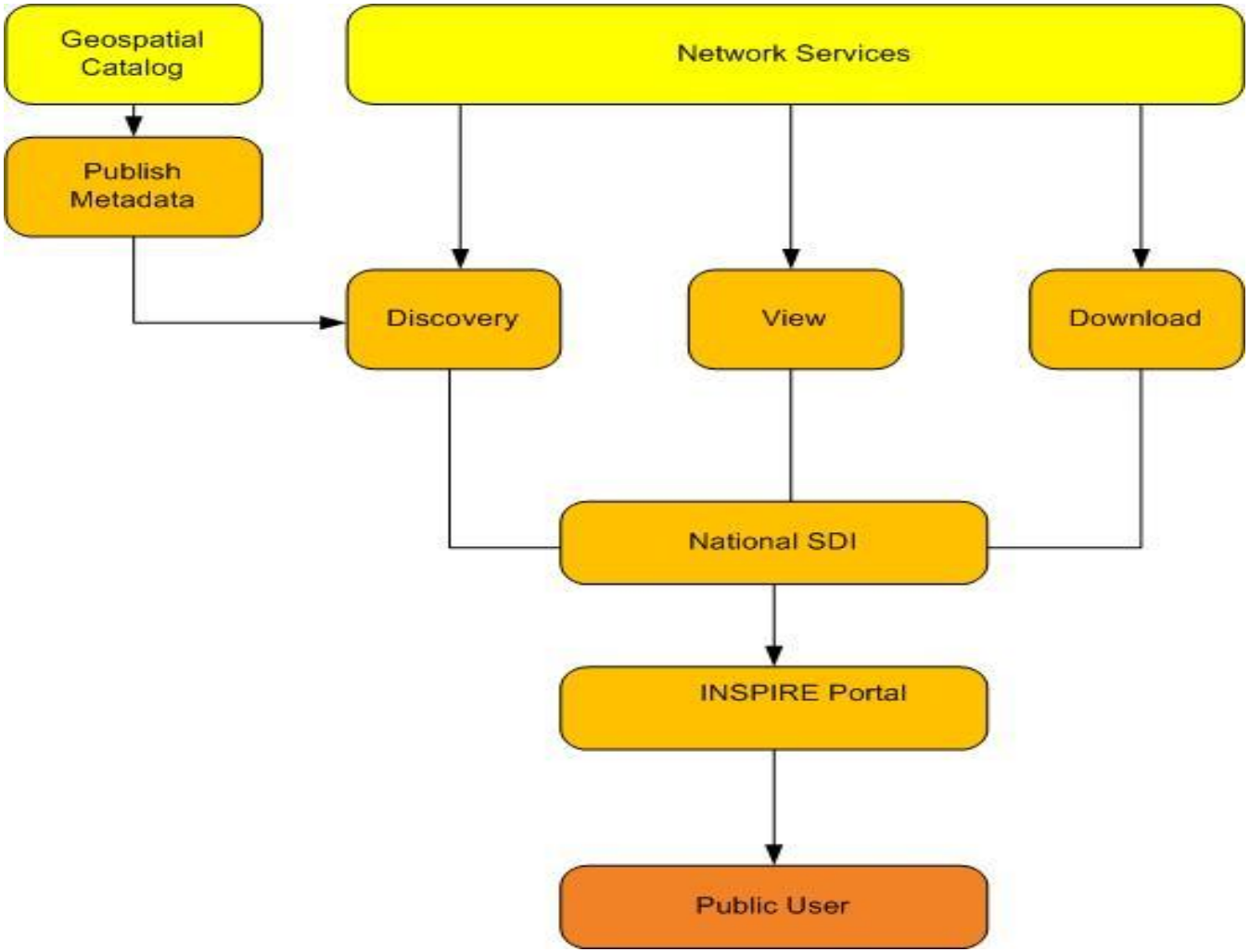


- Merge/Split of features or attributes

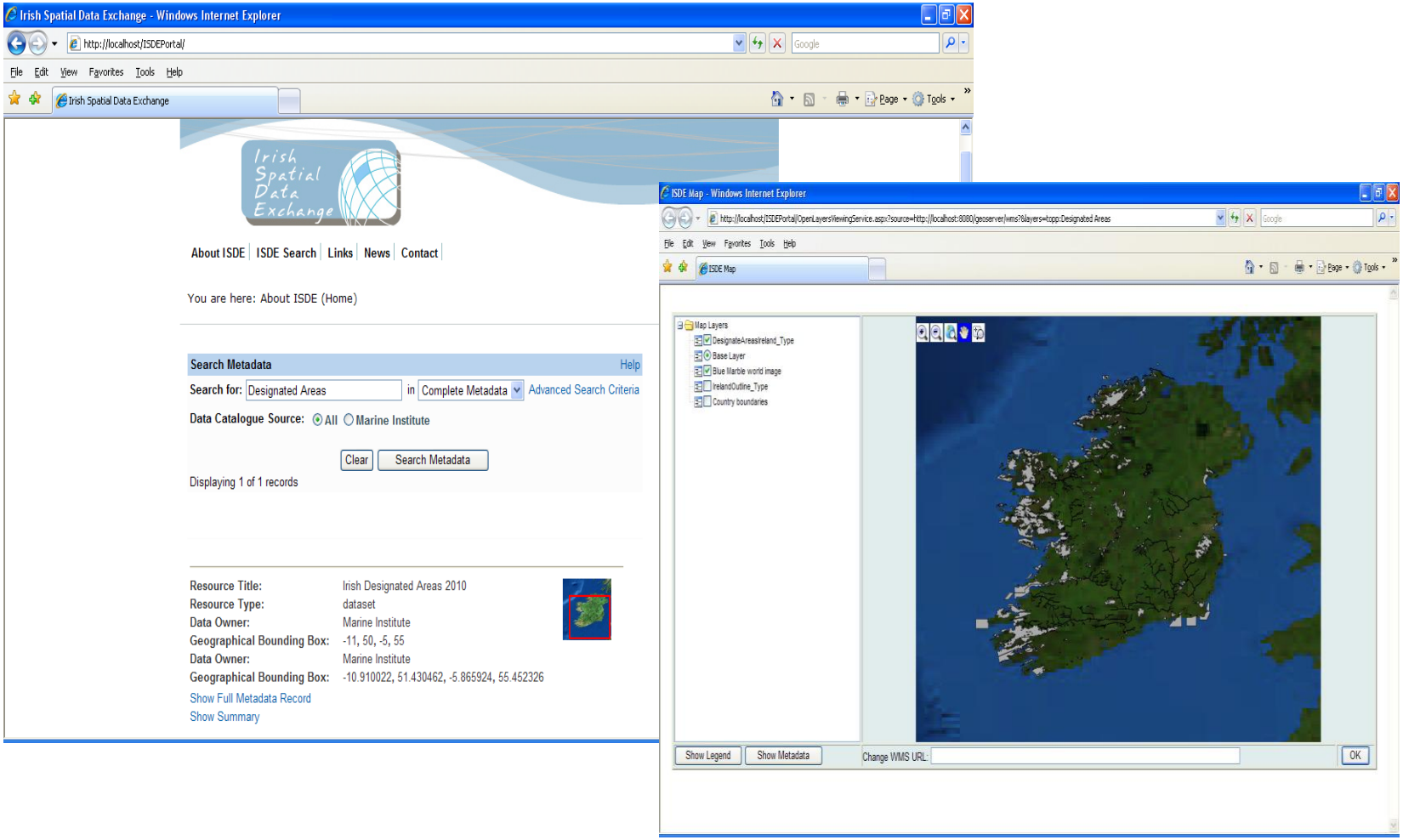


Open Source HUMBOLDT - Hale Tool

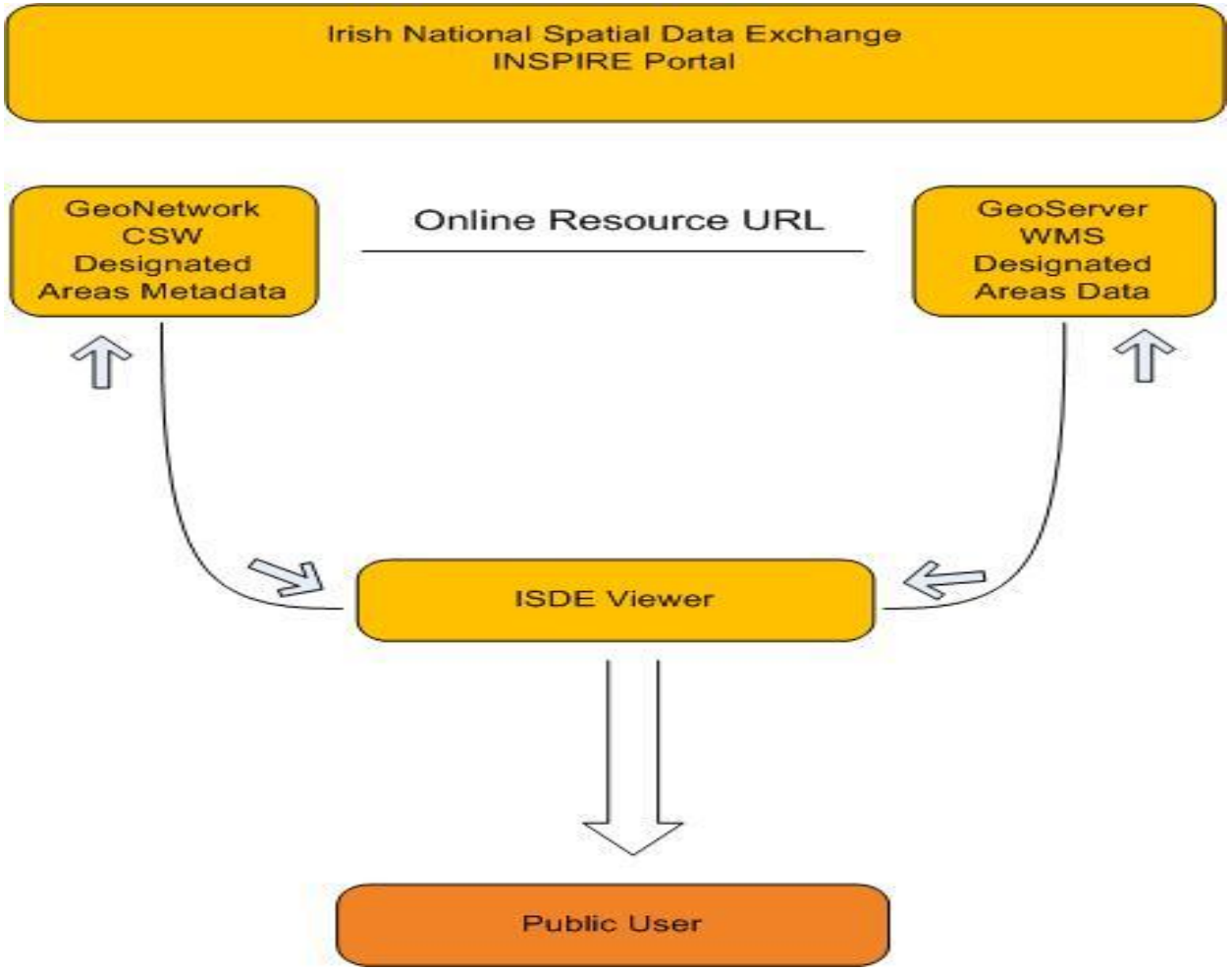
Bringing it all together – Network Services



Irish Spatial Data Exchange



ISDE


Irish National Spatial Data Exchange
INSPIRE Portal
GeoNetwork
CSW
Designated
Areas Metadata
Online Resource URL
GeoServer
WMS
Designated
Areas Data
ISDE Viewer
Public User

A Hybrid Approach for a Dynamic Solution

Compass Network Services Portfolio makes use of Open Source Technologies & GeoSpatial Web Services combined with Proprietary Software.

Operating systems/database systems (e.g. Microsoft Windows OS and SQL Server 2008)

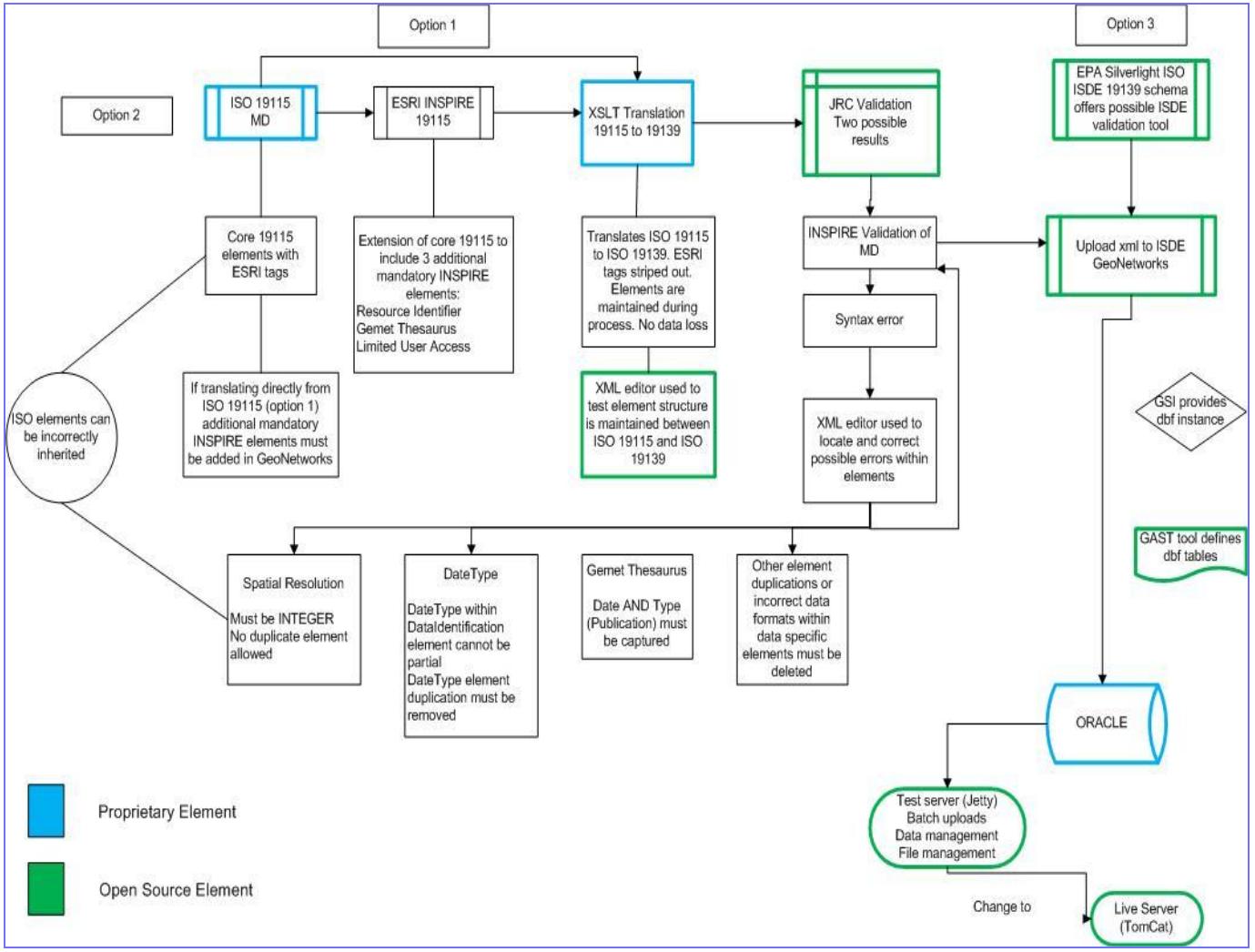
+ Open source solutions (e.g. GeoNetwork, MapServer/GeoServer)

+ Proprietary Software

= INSPIRE compliant solution

CSW
GeoNetwork
(Jetty/TomCat)
Data
Harmonisation
Humboldt
Viewing
OpenLayers
Gaia
WMS
ArcGIS Server
CSW
GeoPortal
Extension
WMS/WFS
GeoServer
MapServer
CSW/WMS
WFS
ERDAS Apollo
Essentials - SDI
Compass
Hybrid
Approach

Achieving INSPIRE compliancy – Geological Survey of Ireland



Added Value at European Level

'INSPIRE will unlock the potential of existing spatial data and spatial data infrastructures and gradually harmonise data and information services allowing integration of systems and datasets at different levels into a coherent spatial data infrastructure'

(INSPIRE Reference Data & Metadata Position Paper (2002))