UK Location Programme Conceptual Design

UK Location Information Infrastructure Blueprint Supplement



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DOCUMENT CONTROL

Change Summary

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0-1	17/07/2009	Tim Manning	Initial draft of document.
0-2	17/08/2009	Tim Manning	Final draft.
1.0	21/09/2009	Keith Murray	Finalised for stakeholder review.
1-1	01/12009	Tim Manning	Updated following Stakeholder Review.
2-0	01/12/2009	Tim Manning	Base-lined version. Placed under Change Control.

References

Ref.	Title/Version/Publication Date/Author
[1]	UK Location Programme, Conceptual Design, UK Location Information Infrastructure Blueprint, August 2009
[2]	Communities and Local Government , "Place Matters: The Location Strategy for United Kingdom", November 2008 http://www.communities.gov.uk/publications/communities/placematters
[3]	Official Journal of the European Union, Directive 2007/2/EC of the European Parliament and of the Council, "Establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)", March 2007 http://inspire.jrc.ec.europa.eu/

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1 PREFACE

This is a supplement to the UK Location Information Infrastructure Blueprint [1]. It covers the following additional information:

- A requirements matrix against the UK Location Strategy [2] and EC INSPIRE Directive [3], summarizing how the UKLII Blueprint addresses the requirements set out in these two strategic documents;
- A summary of the present state legislative framework within which the UK Location Information Infrastructure will work; and
- Dataset Theme Coordination, a summary of the themes and the main organisations currently
 producing datasets corresponding to the UK Location Strategy Core Reference Geographies (CRGs)
 and the 2007/2/EC Annex Themes.

All three sections are intended to support subsequent detailed design and implementation, as we move beyond the conceptual design phase.

However these sections do not represent final policy or a definitive statement, they are intended to indicate the direction of travel and should be read in that light.

2 REQUIREMENTS MATRIX

The table below provides an extract of the UK Location Strategy [2] and EC INSPIRE Directive [3], in the form of a high level requirements matrix, cross-referenced to the Blueprint. This has been used to confirm design coverage; and will be used to drive detailed design and provide traceability during the life time of the UK Location Programme.

Requirements referencing is based on, for UK Location Strategy the list of Strategic Actions, decomposed by statement of requirement; and for the INSPIRE Directive, on the clause (C) or article (A) number and decomposed statement, listed by topic. Only those INSPIRE clauses and articles that place a specific responsibility on Member States have been included. Those relating to timescales are also excluded.

This Requirements Matrix will be maintained as a separate product going forward.

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s	
UK LC	UK LOCATION STRATEGY			
1	We know what data we have.	Creation of UK Discovery Metadata Service for location information.	Data Process	
		To what extent this exposes all the data held by public bodies will be subject to the scope of publication, as defined by the Location Council and the decisions of individual data publishers. The minimum scope are those datasets that fall within INSPIRE Annex I, II and III.		
2	We avoid duplicating data.	Facilitated through the creation of the Core Reference Geographies, INSPIRE themes and theme coordination.	Data Process	
3	We use common reference data so we know we are talking about the same places.	Creation of UK Registry, building on the work of the Digital National Framework (DNF) for geospatial information and theme coordination	Data	
4	We can share location-related information easily through a common infrastructure of standards, technology and business relationships.	Operational frameworks for technical and business interoperability based on common standards and links with mainstream information communities.	Data Data Sharing	
5	We have the appropriate skills, both among geographic professionals and among other professional groups who use location information or support its use.	The creation of an Exploitation Model for the use of location information. This will be implemented through the actions of the Location Council and partner organisations.	Learning ad Skills	

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
6	We have strong leadership and governance to drive through change.	The creation of Location Council and associated bodies. The extent that the Location Council provides appropriate leadership and governance will be dependent on the contributions of individual organisations.	Organisation
1. We k	now what data we have		
1	Each public sector organisation to record and maintain up-to-date details of its location-related data sets:	The creation of the UK Discovery Metadata Service. The minimum obligation will be as required under the INSPIRE Annex I, II and III themes.	Data Process
1.1	To be undertaken for all datasets with location attributes, inc. but not limited to soils, environmental, agricultural, hydrographic, mapping and social-economic information.	Other than for INSPIRE themes, to be implemented on a voluntary basis, based on guidance issued by the Location Council.	Process
1.2	Each public sector organisation should make publicly available the details of its location-related datasets – even if the dataset itself is not publicly accessible or is not free of charge.	Other than for INSPIRE themes, to be implemented on a voluntary basis, based on guidance issued by the Location Council.	Process
1.3	The Location Council to agree and publish exceptions; and individual exception proposals should require explicit approval.	Data Publishing Operational Framework. Exceptions will operate within existing OPSI owned mechanisms; i.e. under the RoPSI Directive. This has existing procedures related to the access of public sector information. These will be reviewed in the context of the UKLII.	Process
1.4	The Location Council to agree and maintain the minimum requirements, to inc. information about how and when the dataset has been collected, its accuracy tolerances, its format and storage, and its access rights. These need to be aligned to the Metadata Implementation Rules.	Policies and standards for Discovery Metadata publishing.	Data
1.5	The Location Council should consider how such information can best be universally accessed – the scope and delivery options for common portals, hubs and repositories, across the wider range of requirements and not just at the implementation of INSPIRE.	Adoption of a 'multiple points of access' approach, based on the distribution of the UK Discovery Metadata catalogue (in part or whole) as part of the Discovery Metadata Service (DMS).	Distribution
1.6	It should be open to private sector organisations to apply the standards and lodge details of their datasets.	Private sector organisations will be free to publish into the UKLII, subject to conforming to the published standards.	Business Model Data

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
1.7	The Location Council should engage with collaborative groups to encourage and facilitate the application of these standards, e.g. the Atlantis Initiative members.	The UKLII will be developed in partnership with a number of Key partner organisations, inc. sector-based SDIs, and other data sharing initiatives. The Roadmap will adopt a pilot based approach, whereby the core deliverables are developed in conjunction with a number of end user business applications, e.g. Atlantis; which are then published for wider adoption.	Business Model
2. We a	void duplicating data		
2.1	Much of the inefficiency today results from the fact that data has developed in organisational silos over the last 30-50 years. They were designed to be self contained (working within the limited technology at the time). This has led to duplication and isolation.	The theme coordination plan will address this issue theme by theme as each theme is required to conform to INSPIRE. The aim should be to minimise duplication and identify original sources for all geographic data. This will depend on identifying which organisation is best suited to maintaining that dataset at the desired level of data quality.	Data Policy
2.2	Moving forward we should be able to coordinate and manage the collection of new data or the extension of existing datasets.	Theme coordination will require the public sector bodies to register and explain their data collection policies, or to pre-register data before collection. This will provide an opportunity to minimise duplication going forward.	Data Process
2.3	The target has to be to transform any public sector investment from duplication in data collection to complementary data collection activities across public sector bodies.	This will require a culture change where an organisation is more willing to use data that already exists elsewhere and then "adds their data to the pot". This will be enabled by online data serving but also requires greater simplification over licensing and charging regimes.	Data Process
2.4	It may not always be possible to eliminate duplication due to the complexity of the data involved or for organisation operational reasons. This does not justify that dataset remaining in isolation and where these circumstances exist – the minimum requirement will be cross referenced the objects in common.	Such cases will require careful analysis and advice to ensure that operational efficiencies are not prejudiced but there is greater connectivity and therefore constraints on data sharing minimised.	Data Process

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
3. We u	ise common reference data, so we know we are talki	ng about the same places	
3.1	A small number of key datasets should be designated Core Reference Geographies (as per Annex I, II and III of INSPIRE Directive), which will form common information frameworks that are defined, endorsed and used by all data holders in both the public and private sector.	A core process within the operation of the UKLII will be Theme Coordination. This process will create Core Reference Geographies and INSPIRE Themes.	Data Process
3.2	Each core Reference Geography should be in the custody of a specified public sector body although it is impracticable to demand that all components of a theme are in the custody of a single organisation.	Theme Coordination Operational Framework.	Data Process
3.3	Core reference geography implies widespread reuse and thereby great dependence by many users for different purposes. This in turn places significant responsibilities on the data provider (these are outlined in the Blueprint) Each theme/dataset will therefore need to be managed to published standards, agreed by the Location Council in consultation with the bodies concerned	Theme Coordination Operational Framework, Data Quality and responsibilities of core reference geography providers.	Data Process
3.4	The Location Council should maintain the list of designated Core Reference Geographies.	Location Council Roles & Responsibilities. Theme Coordination Operational Framework.	Organisation Data Process
3.5	The Location Council should set and publish criteria for the designation of additional Core Reference Geographies, in consultation with data providers and users.	Location Council Roles & Responsibilities. Theme Coordination Operational Framework and is outlined in the Blueprint.	Organisation Data Process
	an share location-related information easily through siness relationships	a common infrastructure of standa	ards, technology
4.1	Establish a common base of business relationships and business processes, supported by business and technical standards and by consistent IT infrastructures.	Creation of related Policies, Standards and Operational Frameworks.	Data Data Sharing Process
STANDA	ARDS		
4.2	The Location Council should develop and endorse the portfolio of Geographic Information Standards to be used in the public sector. This should extend and develop for geographic information the general principles of the forthcoming update of the eGovernment Interoperability Framework (e-GIF).	All UKLII standards will be incorporated into the Cross Government Enterprise Architecture (xGEA) and updated eGIF. This will be overseen by the Location Information Interoperability Board.	Data Organisation
4.3	The framework of Geographic Information Standards to be based on appropriate open standards.	Adoption of de jure and de facto standards (e.g. ISO and OGC) inline with INSPIRE Implementing Rules as well as any that are appropriate when integrating with mainstream information community.	Data

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
4.4	The standards should not only cover technical arrangements for data and network services, but also business meaning and processes.	UKLII Policies, Standards and Operational frameworks for both technical and business interoperability e.g. the OPSI role.	Data Data Sharing.
4.5	Each data set owner should adopt the agreed Geographic Information Standards into their datasets (largely achieved through the INSPIRE Implementing Rules and supplemented by the appropriate adoption of the Digital National Framework protocols).	Data Publishing Operational Framework. To be based on the INSPIRE implementing Rules appropriate adoption of the existing DNF protocols.	Data Data Sharing Process
4.6	In addition to the Core Reference Geographies, the Location Council should identify any other datasets where early convergence on agreed standards would give significant business value to users of the dataset, or allow the data to be shared and exploited more widely.	Location Council and Location User Group Roles and Responsibilities.	Organisation
4.7	Each dataset owner should agree their plans with the Location Council and publish them as part of the Information about their datasets.	Data Publishing Operational Framework – Theme coordination process.	Process
LICENS	BING		
4.8	Each data set owner should simplify their licensing arrangements so as to facilitate the sharing of data to realise greater overall value.	Data Sharing Operational Framework. There will be an external dependency related to what extent data publishers simplify their licensing arrangements, e.g. utilise the UKLII Licensing Model within the OPSI framework	Data Sharing Process.
4.9	The Office of Public Sector Information should set guidelines and minimum standards for simplification (convergence of terms and conditions; common approach to the 'derived data issue' of creating a dataset from reference data, which could potentially be a substitute for it in a commercial market; the introduction of developmental and commercial licences to encourage innovation.	Rights Management operational framework will be based on OPSI policies, procedures and mechanisms, with any required extensions specific to geospatial information.	Data Sharing
4.10	The simplification should take account of the trading nature of the owners of the core Reference Geographies and should not duplicate the Governments separate review of the pricing of public sector information by trading funds. The simplification should ensure that Crown Copyright is protected appropriately.	Rights Management operational framework will be based on OPSI policies, procedures and mechanisms, with any required extensions specific to geospatial information. This will address all sources of public data, not just data sourced from Trading Funds.	Data Sharing
ICT INF	RASTRUCTURE		
4.11	The Government CIO Council should drive forward the implementation of ICT infrastructures which allow stakeholders to share geographic information services within and across organisations.	Key Partner roles and responsibilities.	Business Model

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
4.12	The CIO/CTO Council should ensure the greater coordination of ICT investments so as to create shared web-based information services.	Key Partner roles and responsibilities.	Business Model
BUSINE	BUSINESS RELATIONSHIPS		
4.13	Public sector bodies should form and promote local, regional or functional partnerships to exploit location-related information available on the shared technical infrastructure. An existing example of this is the Atlantis Initiative, a joint collaboration between 6 public bodies to provide better information about flooding.	Use of Publishing Agents to provide publishing and exploitation services – organisational, sector, thematic or business application.	Distribution
4.14	The Location Council should provide guidance and model terms of reference for such partnerships; actively facilitating their formation; promoting the sharing of knowledge about achieving success through such partnerships.	Data Publishing Operational Framework – Publishing Agents.	Distribution
4.15	Government departments and other public bodies should establish a number of pilots and joint ventures to encourage the adoption of the new standards and approaches by creating innovative public services combining different government data.	Outside scope of Blueprint. Roadmap will propose the identification and adoption of a number of application pilots as the means to develop and test UKLII deliverables; and demonstrate benefits.	n.a.
BUSINE	ESS PLANNING		
4.16	The UKLII will require a planning horizon longer than normally possible in a single Spending Review period. The Location Council should develop, in conjunction with HM Treasury and the CIO Council, a strategic planning and business framework which establish an adequate period of sufficient certainty and predictability (inc. funding and pricing) for dataset owners and users to make the necessary sustainable investments.	Key partner roles and responsibility. Financial Model.	Business Model
5. We have the appropriate skills, both among geographic professionals and among other professional groups who use location information or support its use			fessional groups
5.1	The delivery of the outcomes of the UK Location Strategy requires a step change in our capability to understand, provide access to and to use location information. This capability needs to move from just a limited specialist community into the mainstream of policy development, service design and systems delivery.	Creation of a highly accessible point of access for location information, designed around the data user. Links to specialist sites and end user applications. Data user resource centre. Development of a Location Information Exploitation Model'.	Conceptual model Learning and Skills IT System Architecture

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s	
5.2	The Location Council should lead a capability building programme to embed geographic information awareness and analytical skills as a business tool enabler across public services and professions. This should be informed by an initial audit, or current and future requirement; and leverage existing initiatives such as Professional Skills in Government and the IT Professionalism programme.	Development of Exploitation Model and its implementation. This will be based on partnerships with existing bodies, e.g. National School of Government.	Learning and Skills	
5.3	The Location Council should promote the sharing of knowledge about location-based information and methods; and their application within and outside the public sector. Equally skills and knowledge from the mainstream information community and new developments (like linked data) should be embraced.	UK Geoportal data user Resource Centre. Exploitation Model. Key Partner Network.	Conceptual Model Business Model Learning and Skills	
5.4	The Location Council should communicate case studies and examples of good practice, inc. those that could be adopted across a wider group of organisations. In doing so, it should work closely with sector-specific innovation and improvement groups such as the IDeA and NPIA.	UK Geoportal data user Resource Centre. Exploitation Model Key Partner Network.	Conceptual Model Business Model Learning and Skills	
5.5	The Location Council should establish networks and communities of interest to ensure continued participation, engagement and sharing of knowledge.	UK Geoportal data user Resource Centre. Exploitation Model Key Partner Network.	Conceptual Model Business Model Learning and Skills	
5.6	The Location Council and the CIO/CTO Council should agree joint developments to ensure that location information issues are better understood by the wider IT community and that IT issues are better understood by the location community.	UK Geoportal data user Resource Centre. Exploitation Model Key Partner Network.	Conceptual Model Business Model Learning and Skills	
6. We h	nave strong leadership and governance to drive thro	ugh change		
GOVER	GOVERNANCE STRUCTURE			
6.1	The Government should create a new Location Council to deliver the Location Strategy, the implementation of INSPIRE and associated initiatives.	Location Council role and responsibilities.	Organisation	
6.2	The Location Council should bring together senior professionals in government to ensure common, joined up outcomes for effective and efficient public services through co-ordinated action and convergence on best practice. It should:	Location Council membership.	Organisation	

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
6.3	Be an inclusive Council, with an overview of all public sector location initiatives at local devolved and central government levels.	The precise membership of the Location Council and its subgroups may change over time, as the infrastructure is developed and its utilisation expands. In the initial foundational phase, membership will be limited to a small core group, e.g. funders and pilot organisations; and the devolved administrations.	Organisation
6.4	Develop the Implementation Plan for the UK Location Strategy and manage, co-ordinate and implement the UK Location Strategy alongside the INSPIRE Directive.	Location Council and its various sub-groups.	Organisation
6.5	Act as the steering group to co-ordinate the UK's implementation of the INSPIRE Directive.	Delivery Group.	Organisation
6.6	Take the lead on strategic issues about geographic information and its use.	Location Interoperability Board and Location User Group.	Organisation
6.7	Advise the responsible Minister (and through the Minister, the devolved administrations); and under the authority of the Minister, set standards, policies and implementation requirements for those involved in geographic information and its use.	Location Interoperability Board role and responsibilities.	Organisation
6.8	Report twice a year to the DA(PED) Ministerial Committee.	Performance Management process.	Process
6.9	Publish an Annual Report of its activities, progress and proposals for further strategic action to increase the value gained from location information.	Planning Process.	Process
6.10	Defra will be the lead department for the Location Strategy, fulfilling the cross-government role and ensuring alignment with the implementation of the INSPIRE Directive.	Lead Department role and responsibilities.	Organisation
6.11	The Location Council should have a membership representative of all key public sector stakeholders.	The precise membership of the Location Council and its sub-groups may change over time, as the infrastructure is developed and its utilisation expands. In the initial foundational phase, membership may be limited to a small core group, e.g. funders and pilot organisations; and the devolved administrations.	Organisation
6.12	The Location Council should be supported and advised by two sub-groups:	Location Interoperability Board and Location User Group.	
6.12.1	The UK Location Information Interoperability Board, to oversee UK data and interoperability standards and support their implementation in conjunction with INSPIRE Implementing Rules It will have representatives from all appropriate domains and standards bodies	Interoperability Board role and responsibilities.	Organisation

Ref.	Requirement	Blueprint Coverage and Constraints	Architectural Domain/s
6.12.2	A Location User Group, to ensure that the implementation of the UK Location Strategy is driven by user needs and priorities.	Location User Group role and responsibilities.	Organisation
7. COS	ST MODEL		
7.1	Obligations under INSPIRE Directive to be met from within individual organisation's CSR settlements For local government. In England, the Cabinet's New Burdens policy applies (to INSPIRE obligations).	Part of Financial Model.	Business Model
7.2	The marginal costs for individual organisations associated with implementing the UK Location Strategy are likely to be relatively small; and within the estimating margins for INSPIRE; as the principle cost drivers are the same.	Part of Financial Model.	Business Model
7.3	Start-up and infrastructure work to be undertaken will be met through a dedicated budget.	Part of Financial Model.	Business Model

Ref	Requirement	Compliance	Architectural
			Domain/s

DIRECTIVE 2007/2/EC - INSPIRE

Please note: the authority for the INSPIRE Directive in the UK is the legal Transposition [Regulations] and these statements below should be read in conjunction with that document [which was not finalised at the time of writing this supplement]

C5	Based on the infrastructures for spatial information created in member states.	The UK Location Information Infrastructure is a national SDI.	General
C5.1	Made compatible through common implementing rules and supplemented with measures at Community level, ensuring that they are compatible and usable in a Community and transboundary context.	Based on the INSPIRE Implementing Rules, with extensions to UK specific needs.	Data Sharing
C6.1	Designed to ensure that spatial data are stored, made available and maintained at the most appropriate level.	Federated approach, with all published data being stored and maintained at originating source or publishing agent.	Distribution
C6.2	That it is possible to combine spatial data from different sources across the Community to be combined in a consistent way and shared between several users and applications.	INSPIRE theme coordination in line with the published data specifications. This may be extended to other themes, as determined by the Location Council.	Data
C6.3	That it is possible for spatial data collected at one level of public authority to be shared between other public authorities.	Publishing of public authority datasets, compliant to UKLII interoperability standards and operational framework.	Data Sharing

Ref	Requirement	Compliance	Architectural Domain/s
C6.4	Made available under conditions which do not unduly restrict their extensive use.	The Data Sharing Operational Framework will seek to minimise business barriers to re-use.	Data Sharing
C6.5	That it is easy to discover available spatial data; to evaluate their suitability for the intended purpose and to know the conditions applicable to their use.	Creation of UK Geoportal, enabling the discovery and evaluation of location information. The UK Discovery Metadata Catalogue will also be made available to the EU INSPIRE Geoportal and other points of access. Discovery Metadata will include conditions applicable to a dataset's use.	Data Data Sharing Distribution IT System
C7	The Directive should be without prejudice to Directive 2003/4/EC on public access to environment information (article 2).	The UKLII is designed within the context of the overall legislative framework.	General
C8	The Directive should be without prejudice to Directive 2003/98/EC on the re-use of public sector information (article 3).	The UKLII is designed within the context of the overall legislative framework.	General
C9	The directive should not affect the existence or ownership of public authorities' intellectual property rights.	The UKLII is designed within the context of the overall legislative framework.	General
C10	Member States should consider using the data and services resulting from Galileo and GMES as they become available, in particular those related to the time and space references from Galileo.	Integrating the UKLII with other community and UK data services will be considered as part of detailed implementation.	General
C11	Many initiatives are taken at national and community level to collect, harmonise or organise the dissemination or use of spatial information. The Directive will not only complement such initiatives by providing a framework that will enable them to become interoperable, but it will also build upon existing experience and initiatives rather than duplicate the work that has already been done.	UKLII will Build on existing national and global infrastructures and initiatives.	Distribution Data Data Sharing
C12	The Directive should apply to spatial data held by or on behalf of public authorities and to the use of spatial data by public authorities in the performance of their public tasks. Subject to certain conditions, it should also apply to spatial data held by natural or legal persons, other than public authorities, provided that they request it.	Will permit the publishing of all location information that falls within the scope of INSPIRE.	General

Ref	Requirement	Compliance	Architectural Domain/s
C14	The implementation of the national infrastructures should be progressive. The spatial data themes covered by this Directive should be accorded different levels of priority. The implementation should take account of the extent to which spatial data are needed for a wide range of applications in various policy areas, of the priority of actions provided for under Community policies that need harmonised spatial data and of the progress already made by the harmonisation efforts undertaken in the member states.	Outside the scope of the Blueprint. Address by UKLP Roadmap.	Roadmap
A1.2	Inspire shall build upon infrastructures for spatial information established and operated by Member states.	Establishment of a UK Spatial Data Infrastructure (the UKLII).	Conceptual model Business Model
A4.1	The Directive shall cover spatial data sets which fulfil the following conditions: They relate to an area where a Member state has and/or exercises jurisdictional rights; They are in electronic format; They are held by or on behalf of any of the following: a public authority, having been produced or received by a public authority, or being managed or updated by that authority and falling within the scope of its public task; A third party to whom the network has been made available in accordance to Article 12; They relate to one or more of the themes listed in annex I, II or III.	Data publishing policies. Data publishing operational framework. The scope of publication into the UKLII will be defined by the Location Council, with INSPIRE setting the minimum requirement that needs to be met. Beyond this, it will be a voluntary process, subject to any further legislation brought forward to increase re-use. Within the development of the INSPIRE implementing rules (D2.5 the generic conceptual model) it was agreed that any data used for intermediate internal production processes (ie is not published externally) was not in scope of the harmonisation components but any data published externally would be (eg unique identifiers).	Data
A4-2	In the case where multiple identical copies of the same spatial data set are held by or behalf of various public authorities, this Directive shall apply only to the reference version from which the various copies are derived.	Data publishing policies. Data Publishing operational Framework.	Data

Ref	Requirement	Compliance	Architectural Domain/s
A4-3	The Directive shall also cover the spatial data services relating to the data contained in the spatial data sets referred to in paragraph in 4-1.	Data publishing policies. Data Publishing Operational Framework. Annex I, II and III datasets will be supported by associated services (view, download and invoke). The Location Council may decide that datasets can be published without associated services, to fulfil the objective "we know what we have".	Data
A4-5	In the case of spatial data sets which comply with the condition set out in paragraph 1(c), but in respect of which a third party holds intellectual property rights, the public authority may take action under the Directive only with the consent of that third party.	Data publishing policies.	Data Sharing
A4-6	The Directive shall cover spatial data sets held by or on behalf of a public authority, operating at the lowest level of government, only if the Member State has laws or regulations requiring their collection or dissemination (article 4, clause 6)	Data publishing policies.	Data
A4-7	The description of the existing data themes referred to in Annex I, II and III may be adapted in accordance with the regulatory procedure with scrutiny referred to in Article 22 (3), in order to take into account the evolving needs for spatial data in support of Community policies that affect the environment.	Data publishing policies. Policies relating to data publishing will be adapted in response to changes in requirements for Annex I, II and III themes. Harmonisation efforts will only commence with the publishing of theme data specifications.	Data
DATA D	ISCOVERY (METADATA)		
C15	Member states should provide descriptions of available spatial data and services in the form of metadata, such that it is possible to discover, inventory and use them.	Discovery Metadata Service.	Data Process IT System
A5-1	Member States shall ensure that metadata are created for the spatial data sets and services corresponding to the themes listed in Annexes I, II and III, and that those metadata are kept up to date.	Discovery Metadata Service Operational Framework.	Data Process IT System
A5-2	 Metadata shall include information on the following: Conformity to Implementing Rules Conditions applying to access, use and corresponding fees Quality and validity Responsibility for establishment, management, maintenance and distribution Limitations on public access and reasons for 	Discovery Metadata Service Standards and Operational Framework.	Data

Ref	Requirement	Compliance	Architectural Domain/s
A5-3	Member States shall take the necessary measures to ensure that metadata are complete and of a quality sufficient to fulfil the purpose set out in point (6) of Article 3.	Data providers will be encouraged to use metadata creation tools that have built in validation mechanisms. Online and bulk record submission will have built-in quality checks. Quality assurance will be performed by the Coordination Unit, against a sample of metadata records.	Data IT System Process Organisation
INTER-C	PERABILITY		
C16	Implementing measures should be provided to facilitate the use of spatial data from different sources across Member States. These measures should be designed to make spatial data sets interoperable, and Member States should ensure that any data or information needed for the purposes of achieving interoperability are available on conditions that do not restrict their use for that purpose.	The INSPIRE Implementing Rules on technical and business interoperability will be adopted, with UK non- mandatory extensions to meet national needs. Resources will be created to support the achievement of interoperability by data providers. These will be openly published for use via the UK Geoportal	Data Sharing IT System
	Spatial data sets shall be made available in conformity with the implementing rules, either through the adaptation of existing spatial data sets or through the use of transformation services.	Theme coordination and the development of transformation services by data providers or their agents.	Data Distribution Process IT System
A7-1	Implementing Rules laying down technical arrangements for the interoperability and where practicable, harmonisation of spatial datasets and services, shall be adopted.	All IR requirements will be incorporated, as these become known.	Data Data Sharing Process IT System
A10-1	Member States shall ensure that any information including data, codes and technical classifications, needed for compliance with the implementing rules provided for in Article 7 (1) is made available to public authorities or third parties in accordance with the conditions that do not restrict its use for that purpose.	All such information will be published through the UK Geoportal and will not be subject to any restrictions of use by public authorities.	General

Ref	Requirement	Compliance	Architectural Domain/s
A10-2	In order to ensure that spatial data relating to a geographical feature, the location of which spans the frontier between two or more Member States, are coherent, Member States shall, where appropriate, decide by mutual consent on the depiction and position of such common features.	The UKLII will be a joint venture across devolved administrations. Those datasets that are split across administrative boundaries will be coordinated in accordance with this article. This cooperation will extend internationally, e.g. the Northern Ireland devolved administration shall be responsible for resolution on the border with Ireland; and where datasets extend beyond national borders.	Data
NETWO	RK SERVICES		
C17.1	Network services are necessary for sharing spatial data between various levels of public authority in the community. These network services should make it possible to discover, transform, view and download spatial data and to invoke spatial data and e-commerce services.	The UKLII is based on the establishment of a web services architecture. This will include the INSPIRE Network Services, supplied by Data Providers and third parties.	Business Model IT System
C17.2	The services of the network should work in accordance with commonly agreed specifications and minimum performance criteria in order to ensure the interoperability of the infrastructures established by the Member States.	The requirements for Network Services will be as per the Implementing Rules, supplemented as necessary by national non-mandatory extensions to support local needs.	IT System
C17.3	The network of services should also include the technical possibility to enable public authorities to make their spatial data sets and services available.	The UK will operate a federated system, whereby data is published directly by data providers or an agent.	Distribution IT System
C18	Certain spatial data sets and services relevant to Community policies that directly or indirectly affect the environment are held and operated by third parties. Member States should therefore offer third parties the possibility of contributing to the national infrastructures, provided that the cohesion and ease of use of the spatial data and spatial data services covered by those infrastructures is thereby not impaired.	There will be no restrictions on third parties publishing compliant data and services through the UKLII.	Business Model Data
C19	Member states should make available as a minimum, free of charge, the services for discovering and, subject to certain specific conditions, viewing spatial data sets	Free to discover and view will be deemed the norm, with specific and Location Council approved exceptions.	Data Sharing

Ref	Requirement	Compliance	Architectural Domain/s
C20	Member States should provide access to their infrastructure through a community geo-portal, operated by the Commission, as well as through any access points they themselves decide to operate	Discovery Metadata Catalogue and UK Registries will be made available for use within points of access, inc. the community Geoportal. This will automatically provide access to published services through any point of access that holds a copy of the catalogue.	Distribution
A11-1	Member States shall establish and operate a network of the following services for the spatial data sets and services for which metadata have been created in accordance with this Directive:		
	Discovery services making it possible to search for spatial data sets and services on the basis of the content of the corresponding metadata and to display the content of the metadata;	UK Discovery Metadata Catalogue.	Data Data Sharing IT System
	View services making it possible, as a minimum, to display, navigate, zoom in/out, pan, or overlay viewable spatial data sets and to display legend information and any relevant content of metadata;	Data Publishing Operational Framework, Web Mapping Service Specification.	Data Sharing
	Download services, enabling copies of spatial data sets, or parts of such sets, to be downloaded and where practicable, accessed directly;	Data Publishing Operational Framework, Discovery service.	Data Sharing
	Transformation services, enabling spatial data sets to be transformed with a view to achieving interoperability;	Data Publishing Operational Framework, Transformation service.	Data Data Sharing
	Services allowing spatial data services to be invoked.	Data Publishing Operational Framework, Invoke Services.	Data Sharing
	These services shall take into account relevant user requirements and shall be easy to use, available to the public and accessible via the Internet or any other appropriate means of telecommunication.	Data Publishing Operational Framework. Service standards.	Data Sharing
A11-2	For the purposes of the services referred to in point 11-1 (a), as a minimum the following combination of search criteria shall be implemented; (a) Keywords; (b) classification of spatial data and services; (c) the quality and validity of spatial data sets; (d) degree of conformity with the implementing rules provided for in Article 7 (1); (e) geographical location; (f) conditions applying to the access to and use of spatial data sets and services; (g) the public authorities responsible for the establishment, management, maintenance and distribution of spatial data sets and services.	The UKLII will comply with the Implementing Rules for Metadata and Discovery services.	Data IT System
A11-3	The transformation services referred to in point (d) of paragraph 11-1 shall be combined with the services referred to in that paragraph in such a way as to enable all those services to be operated in conformity with the implementing rules provided in Article 7 (1).	The UKLII will support 'service chaining', allowing transformation web services to be combined with other web services.	IT System

Ref	Requirement	Compliance	Architectural Domain/s
A12-1	Member States should ensure that public authorities are given the technical possibility to link their spatial data sets and services to the network referred to in Article 11(1).	The UKLII will provide the policies, standards and operational framework to enable public authorities to link their data sets and services to the network. The technical ability to do so will rest with the data provider or their publishing agent.	IT System
A12-2	The service will also be made available to third parties, whose spatial data sets and services comply with the implementing rules, in particular metadata, network services and interoperability.	There will be no restrictions on third parties publishing compliant data and services through the UKLII.	Business Model Data
A13-1	Member States may limit public access to spatial data sets and services through the services referred to in point (a) of Article 11, or to the e-commerce services referred to in Article 14(3), where such access would adversely affect any of the following: (a) the confidentiality of the proceedings of public	Rights access will be the responsibility of the data provider or their publishing agent, i.e. it will need to form part of the published service.	Data Sharing
	authorities, where such confidentiality is provided for by law;		
	(b) international relations, public security or national defence;		
	(c) the course of justice, the ability of any person to receive a fair trial or the ability of a public authority to conduct an enquiry of a criminal or disciplinary nature;		
	(d) the confidentiality of commercial or industrial information, where such confidentiality is provided for by national or Community law to protect a legitimate economic interest, including the public interest in maintaining statistical confidentiality and tax secrecy;		
	(e) intellectual property rights;		
	(f) the confidentiality of personal data and/or files relating to a natural person where that person has not consented to the disclosure of the information to the public, where such confidentiality is provided for by national or Community law;		
	(g) the interests or protection of any person who supplied the information requested on a voluntary basis without being under, or capable of being put under, a legal obligation to do so, unless that person has consented to the release of the information concerned;		
	(h) the protection of the environment to which such information relates, such as the location of rare species.		

Ref	Requirement	Compliance	Architectural Domain/s
A13-2	The grounds for limiting access, as provided for in paragraph 13-1, shall be interpreted in a restrictive way, taking into account for the particular case the public interest served by providing this access. In every particular case, the public interest served by disclosure shall be weighed against the interest served by limiting or conditioning the access. Member States may not, by virtue of points (a), (d), (f), (g) and (h) of paragraph 1, limit access to information on emissions into the environment.	The right to access will be administered under existing provisions, e.g. those associated with the FOIA and EIR. No additional provision will be made as part of the UKLII.	Data Sharing
A13-3	Within this framework, and for the purposes of the application of point (f) of paragraph 13-1, Member States shall ensure that the requirements of Directive 95/46/EC are complied with.	The UKLII Coordination Unit assurance.	Organisation
A14-1	Member States shall ensure that the services referred to in points (a) and (b) of Article 11(1) are available to the public free of charge.	Discover and view services will be generally free of charge to the public. Exceptions will be managed under policies and procedures to be defined by OPSI.	Data Sharing
A14-2	By way of derogation from paragraph 14-1, Member States may allow a public authority supplying a service referred to in point (b) of Article 11(1) to apply charges where such charges secure the maintenance of spatial data sets and corresponding data services, especially in cases involving very large volumes of frequently updated data.	Discover and view services will be generally free of charge to the public. Exceptions will be managed under policies and procedures to be defined by OPSI.	Data Sharing
A14-3	Data made available through the view services referred to in point (b) of Article 11(1) may be in a form preventing their reuse for commercial purposes.	This will be subject to the Implementing Rule for discovery and view; and any additional UK guidance.	Data IT System Data Sharing
A14-4	Where public authorities levy charges for the services referred to in points (b), (c) or (e) of Article 11(1), Member States shall ensure that e-commerce services are available. Such services may be covered by disclaimers, click-licences or, where necessary, licences.	The provision of e-commerce services will rest with the data provider or their publishing agent, i.e. the service will need to form part of the data service to which charges apply. The UKLII will provide operational guidance and standard licenses in support of these services. Brokerage services may be made available through third parties.	Data Sharing

Ref	Requirement	Compliance	Architectural Domain/s
A15	The Commission shall establish and operate an INSPIRE geo-portal at Community level. Member States shall provide access to the services referred to in Article 11(1) through this INSPIRE geo-portal. Member States may also provide access through their own access points.	The ability to access will only be constrained by the ability to discover the data and services, e.g. by virtue of holding or being able to access a copy of the Discovery Metadata Catalogue. This will be openly available to information access points, inc. the INSPIRE geoportal.	Distribution
DATA S	HARING		
C21	In order to make information from various levels of public authority available, Member States should remove the practical obstacles faced in that regard by public authorities at national, regional and local level when performing their public tasks that may have a direct or indirect impact on the environment.	The UKLII Data Sharing Operational Framework will seek to remove any practical obstacles that prevent the re- use of location information.	Data Sharing
C22	Member States should take the necessary measures to prevent practical obstacles to the sharing of data, e.g. by using prior agreements between public authorities.	The Data Sharing Operational Framework will seek to remove any practical obstacles that prevent the re-use of location information, inc. the use of pan-government agreements and standard licensing models.	Data Sharing
C23.1	Where a public authority supplies another public authority in the same Member State with spatial data sets and services required for the fulfilment of reporting obligations under community legislation relating to the environment, the Member State concerned should be free to decide that those spatial data sets and services shall not be subject to any charging.	Requirement will be incorporated within RM operational framework.	Data Sharing
C23.2	The mechanisms for sharing spatial data sets and services should take into account the need to protect the financial viability of public authorities, in particular those that have a duty to raise revenue.	Defined by government policy (announced in 2009 Spring Budget). Will be incorporated into new regime defined by OPSI, which in turn will be incorporated into the UKLII Data Sharing Operational Framework.	Data Sharing
C23.3	Any charges applied should not exceed the cost of collection, production, reproduction and dissemination together with a reasonable return on investment.	The ability to charge will be incorporated into new regime defined by OPSI, which in turn will be incorporated into the UKLII Data Sharing Operational Framework.	Data Sharing
C24	The provision of network services should be carried out in full compliance with the principles relating to the protection of personal data in accordance with Directive 95/46/EC.	Responsibility of data provider. Will be incorporated into Data Publishing Operational Framework.	Data Sharing

Ref	Requirement	Compliance	Architectural Domain/s
C25	Frameworks for the sharing of spatial data between public authorities upon whom the Directive imposes a duty to share should be neutral in respect of such public authorities within a Member State, but also in respect of such public authorities in other Member States and of the Community Institutions.	The data sharing operational framework will seek to be neutral, although it may not be possible to be so in all cases, e.g. the incorporation of existing pan-government agreements which are restricted to a partial set of organisations.	Data Sharing.
C26	With a view to stimulating the development of added-value services by third parties, for the benefit of both public authorities and the public, it is necessary to facilitate access to spatial data that extend over administrative or national borders.	The UKLII will be an open environment. The UK Discovery Metadata catalogue will be openly available in export form, such that it can be integrated with other national catalogues (in part or full) and used at any point of access (information portal), however scoped in terms of information coverage.	Distribution
A17-1	Each Member State shall adopt measures for the sharing of spatial data sets and services between its public authorities referred to in point (9)(a) and (b) of Article 3. Those measures shall enable those public authorities to gain access to spatial data sets and services, and to exchange and use those sets and services, for the purposes of public tasks that may have an impact on the environment.	Discovery Metadata Service. Operational frameworks for technical and business interoperability. Use of open web services for the publishing of data.	Data Data Sharing IT System
A17-2	The measures provided for in paragraph 17-1 shall preclude any restrictions likely to create practical obstacles, occurring at the point of use, to the sharing of spatial data sets and services.	Operational frameworks for technical and business interoperability. Use of open web services for the publishing of data. The degree of harmonisation achieved, particularly concerning rights management, will be largely dependent on the degree to which data providers adopt standard licenses.	Data Sharing IT System

Ref	Requirement	Compliance	Architectural Domain/s
A17-3	Member States may allow public authorities that supply spatial data sets and services to license them to, and/or require payment from, the public authorities or institutions and bodies of the Community that use these spatial data sets and services. Any such charges and licenses must be fully compatible with the general aim of facilitating the sharing of spatial data sets and services between public authorities. Where charges are made, these shall be kept to the minimum required to ensure the necessary quality and supply of spatial data sets and services together with a reasonable return on investment, while respecting the self-financing requirements of public authorities supplying spatial data sets and services, where applicable. Spatial data sets and services provided by Member States to Community institutions and bodies in order to fulfil their reporting obligations under Community legislation relating to the environment shall not be subject to any charging.	The right for public authorities to charge other public authorities for the use of their data will be governed by OPSI. Charging will be subject to a policy and procedure regime. Stringent criteria will need to be met to permit charging. Where there is charging, it will be the responsibility of the data provider to accommodate the situation where this is waived, e.g. due to the intended use of the data.	Data Sharing
A17-4	The arrangements for the sharing of spatial data sets and services provided for in paragraphs 17-1, 2 and 3 shall be open to public authorities referred to in point (9)(a) and (b) of Article 3 of other Member States and to the institutions and bodies of the Community, for the purposes of public tasks that may have an impact on the environment.	These arrangements will be open to all, subject to the restrictions covered elsewhere.	Data Sharing
A17-5	The arrangements for the sharing of spatial data sets and services provided for in paragraphs 17-1, 2 and 3 shall be open, on a reciprocal and equivalent basis, to bodies established by international agreements to which the Community and Member States are parties, for the purposes of tasks that may have an impact on the environment.	These arrangements will be open to all, subject to the restrictions covered elsewhere.	Data Sharing
A17-6	Where the arrangements for the sharing of spatial data sets and services provided for in paragraphs 17-1, 2 and 3 are made available in accordance with paragraphs 17-4 and 5, these arrangements may be accompanied by requirements under national law conditioning their use.	The specific handling of this requirement will be set out in the appropriate Operational Framework. It is likely that those data providers who apply restrictions to the use of their data will need to make provision for this use within their published services.	Data Sharing
A17-7	By way of derogation from this Article, Member States may limit sharing when this would compromise the course of justice, public security, national defence or international relations.	The relevant operational framework will include the prevision for the suspension of a published service in this event.	Data Sharing

Ref	Requirement	Compliance	Architectural Domain/s
A17-8	Member States shall provide the institutions and bodies of the Community with access to spatial data sets and services in accordance with harmonised conditions. Implementing rules governing those conditions, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 22(3). These implementing rules shall fully respect the principles set out in paragraphs 1 to 3.	The UKLII will incorporate the INSPIRE Implementing Rule requirements.	Data Data Sharing IT System
CO-ORI	DINATION AND COMPLEMENTARY MEASURES		
C27	The effective implementation of infrastructures for spatial information requires coordination by all those with an interest in the establishment of such infrastructures, whether as contributors or users. Appropriate coordination structures, which extend to the various levels of government and take account of the distribution of powers and responsibilities within Member States, should therefore be established.	UK Coordination will be through the establishment of the Location Council and associated sub-groups, the Coordination Unit and the UK Location Programme.	Organisation
A18-1	Member States shall ensure that appropriate structures and mechanisms are designated for coordinating, across the different levels of government, the contributions of all those with an interest in their infrastructures for spatial information. These structures shall coordinate the contributions of, inter alia, users, producers, added-value service providers and coordinating bodies, concerning the identification of relevant data sets, user needs, the provision of information on existing practices and the provision of feedback on the implementation of this Directive.	UK Coordination will be through the establishment of the Location Council and associated sub-groups, the Coordination Unit and the UK Location Programme. The Location Council will have representation across the public sector and contributing third parties.	Organisation
A19-2	Each Member State shall designate a contact point, usually a public authority, to be responsible for contacts with the Commission in relation to this Directive. This contact point will be supported by a coordination structure, taking account of the distribution of powers and responsibilities within the Member State.	The responsible authority is the Department of the Environment, food and Rural Affairs (Defra).	Organisation
A21-1	Member States shall monitor the implementation and use of their infrastructures for spatial information. They shall make the results of this monitoring accessible to the Commission and to the public on a permanent basis.	Performance Management	Process Organisation

Ref	Requirement	Compliance	Architectural Domain/s
A21-2	No later than 15 May 2010 Member States shall send to the Commission a report including summary descriptions of: (a) how public sector providers and users of spatial data sets; and services and intermediary bodies are coordinated, and of the relationship with the third parties and of the organisation of quality assurance; (b) the contribution made by public authorities or third parties to the functioning and coordination of the infrastructure for spatial information; (c) information on the use of the infrastructure for spatial information; (d) data-sharing agreements between public authorities; (e) the costs and benefits of implementing this Directive.	Report to be produced by the UK Location Programme. The UKLII Blueprint and this Supplement will be a supporting document.	n.a.
A21-3	Every three years, and starting no later than 15 May 2013, Member States shall send to the Commission a report providing updated information in relation to the items referred to in paragraph 21-2.	Performance Management	Process Organisation

3 PRESENT STATE LEGISLATIVE FRAMEWORK

The implementation of INSPIRE sits within a wider framework of existing legislation and public sector information schemes relating to data sharing and re-use. These are summarised below to provide additional context to the coverage provided within the Data Sharing Architecture section of the Blueprint [1].

The Freedom of Information Act 2000

This was passed on 30th November and was "challenged with the task of reversing the working premise that everything is secret, unless otherwise stated, to a position where everything is public unless it falls into specified excepted cases" (Lord Chancellor's first Annual Report on the implementation of the Freedom of Information Act 2000; November 2001).

The Act came into force on 1 January 2005 and gives a general right of access to all types of recorded information held by public authorities that have functions in England, Wales and/or Northern Ireland, sets out exemptions from that right (for example if releasing the information might present a risk to national security or public safety, or if to do so would breach the Data Protection Act) and places a number of obligations on public authorities. The Act also amends the Data Protection Act 1998 and the Public Records Act 1958.

The Act also requires that every public authority adopt and maintain a publication scheme setting out how it intends to publish the different classes of information it holds, and whether there is a charge for the information.

Environmental Information Regulations 2004

This came into force at the same time as the Freedom of Information Act 2000. They clarify and extend previous rights to environmental information.

The public has a right of access to environmental information held by public authorities and some other organisations. Requests for environmental information do not have to be in writing; they may come in any form. Nor do they need to mention the EIRs specifically in order for them to apply. There is also no geographical restriction; the information may relate to anywhere in the world, and may be requested by anyone, anywhere in the world.

The definition of "environmental information" is wide and covers elements of the environment, such as: air, water, land, natural sites, flora and fauna (including crops, livestock, GMOs and biodiversity), built environment and health. It also covers all information relating to decisions or activities affecting, or likely to affect, any of these, including environmental protection and cost benefit analyses.

The EIRs provide a general right of access to environmental information, subject to certain limited exceptions. These include information that, if released, would adversely affect: natural sites; international relations; national defence; public security; the proceeding of public authorities, and the course of justice; and intellectual property rights or commercial confidentiality. There are also exceptions relating to: voluntarily supplied information; and personal data, particularly if the disclosure may breach an individual's rights under the Data Protection Act.

There is also a special exception to protect the environment to which the information relates. Authorities would not wish to release information if, in doing so, they placed at risk a rare species breeding site, for example.

Data Protection Act 1998

This regulates the way that private and public sector organisations in the UK process personal information about living, identifiable individuals. In general there are eight Data Protection Principles that govern how personal information is managed, including its collection and use, its accuracy and relevancy, its retention, and its security and disposal.

The DPA provides individuals with a right to request a copy of the personal information held about them, and have it provided within a statutory time limit. If any of the information held about an individual is incorrect, the individual has the right to correct this (and have the inaccurate information removed / destroyed). The DPA applies to personal information held both in computerised and manual form.

Re-use of Public Sector Information Regulations 2005

This came into force on 1st July 2005 and are based on the European Directive on the re-use of public sector information which was approved by the Council of Ministers on 27 October 2003 and is currently undergoing the five year review.

The Regulations apply to Central Government and the wider public sector including Local Government and the NHS although not the education sector, and set out a framework for making the re-use of public sector information easier and more transparent.

They are based on the principles of fairness, transparency, non-discrimination and consistency of application. The Regulations complement access to information legislation (the Freedom of Information Act, the Environmental Information Regulations and the Data Protection Act) through regulating the re-use of public sector information once it has been made available, either through publishing or in response to a request.

HM Treasury Selling into Wider Markets Policy Note

This encourages bodies to make better use of their assets by developing commercial activities using surplus public sector assets. An activity deemed Wider Markets must pass certain tests – be discretionary, use spare capacity and be provided in a market where there is or may be competition for the provision of those services. An explicit component of the initiative is the encouragement it provides to public sector bodies to expand the commercial experience and skills of employees by exposing them to commercial markets and the private sector.

The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environment Matters (the Aarhus Convention)

This was adopted on 25th June 1998 in the Danish city of Aarhus at the Fourth Ministerial Conference in the 'Environment for Europe' process.

The Aarhus Convention, which came into force on 25 June 2003 and was required to be adopted by all Member States by 25 June 2005, has three elements focusing on information, participation and justice.

Under the information element any member of the public has a right of access to environmental information held by a public authority and the convention sets out timescales for the provision of this information.

Exemptions apply, as with the other information access legislation, but are to be weighed against the public interest of disclosure. Public authorities also have requirements to gather and pro-actively disseminate environment information and there is a clear link between the requirements of the Aarhus Convention and public bodies' responsibilities in providing Public Registers.

Information Fair Trader Scheme

The Information Fair Trader Scheme, which, although optional for non-Crown bodies, offers accreditation from the Office of Public Sector Information (OPSI) where organisations demonstrate their commitment to trading in information fairly. The scheme sets and assesses standards for public sector bodies. It requires them to encourage the re-use of information and reach a standard of fairness and transparency based upon five core principles: openness, transparency, fairness, compliance and challenge. It should be noted that the Information Fair Trader Scheme is due update its principles and verification process (see section 6.4.5 Rights Management Architecture View) and is considered a key driver in the standardisation of licensing.

Office of Fair Trading Commercial Use of Public Information (CUPI) Report

The Office of Fair Trading Commercial Use of Public Information (CUPI) Report, which aimed to examine whether the way in which Public Sector Information Houses (PSIHs) supply information works well for businesses, to the best advantage for consumers. The study examined whether the sector was working as well as it should be in certain particular areas. Whilst the report does not place any legislative obligations upon public sector bodies, it contains detailed case studies of certain bodies and has fed into the longer term debate with regards access and re-use of public sector information.

Operational Efficiency Programme

The Operational Efficiency Programme published by HM Treasury on 21 April 2009 is again non-legislative but does influence access and re-use of public sector information of relevance to UKLII. The report contains an announcement relating to the assessment of Trading Funds undertaken by the Shareholder Executive (part of BIS). Box 3.A on page 41 confirms that OPSI will provide enhanced oversight and governance to ensure the application of key principles of good practice across the Trading Funds that create significant amounts of information. Moreover, a new business strategy for Ordnance Survey has been developed (see Box 3.H) which also will ensure easier and simpler access to high-quality information.

Intellectual Property Rights

Intellectual Property Rights are the legal rights granted to creators and owners of works that are usually the result of human intellectual creativity. The general objective of intellectual property rights is to protect the rights of the author and allow the public to access the creativity. The principal intellectual property rights are:

- Copyright (under Copyright, Designs and Patents Act 1988);
- Database Rights (under Copyright and Rights in Database Regulations 1997);
- Patents (under Patents Act 1977 & 2004 and European Patent Convention 2000);
- Trade Marks (under Trade Marks Act 1994);
- Registered and Unregistered Design Rights (under Registered Design Act 1949);
- rights that arise from the ability to prevent Passing Off;
- rights that arise from the law of Confidential Information.

4 DATASET THEME COORDINATION

This section contains a summary of the themes and the main organisations currently producing datasets corresponding to the UK Location Strategy Core Reference Geographies (CRGs) and the 2007/2/EC Annex Themes.

For datasets in scope of the UK Location Strategy and INSPIRE the following criteria apply:

- obligations apply only to public authorities (though private sector organisations can contribute of they adopt the same obligations); and
- the information is currently published externally for third parties to re-use (i.e. internal datasets are out of scope) and the data is in a spatial form.

Notes:

- 1. The inclusion or exclusion of any dataset does not confer any legal or other kind of responsibility or acceptance within the UK Location Programme or UK legal Transposition;
- 2. The tables are included to illustrate the diversity of data providers for each theme and the relationship of the UK Location Strategy Core Reference Geographies and INSPIRE themes;
- 3. The tables detailed incorporate source information from the following sources, and is as up to date as is practicable at this stage:
 - a. INSPIRE definitions from D2.3 "Descriptions of Themes"; and
 - b. Analysis of data providers from the work undertaken in support of the UK Location Strategy;
- New datasets may emerge or old ones withdrawn. A definitive list will only emerge from the discovery metadata service;
- 5. Corrections for inclusion or omission are therefore welcome: please contact: uklocationprogramme@defra.gsi.gov.uk.
- 6. These tables will be maintained as a separate product going forward.

Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
UKLS							
N/A	Topographic Data (CRG)	A dataset of objects representing physical features in the landscape. Provides a framework to enable consistency of any other spatial objects that are associated with it. The data may be 2D, 2.5D or on occasion 3D	Ordnance Survey GB and Land and Property Services [NI] are the only two suppliers of complete topographic coverage over significant areas. This is being extended offshore, but such data will be recorded under the relevant themes below. The national highway/rail and other bodies often collect data to design new civil engineering schemes. This often held in CAD form but maybe made available in within small communities.	Ordnance Survey	Land and Property Services (OSNI)	Ordnance Survey	Ordnance Survey

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
Al	INSPIRE Annex						
Al.1	Coordinate reference systems (CRG)	Systems for uniquely referencing spatial information in space as a set of coordinates (x,y,z) and/or latitude and longitude and height, based on a geodetic horizontal and vertical datum.	ETRS89 is now the main land CRS for the UK. Equivalent systems in the marine & met domains: WGS84, Chart Datum and work is advanced in being able to transform between land and marine systems (VORF & ICZMap project). The Natural Environment Research Council (NERC) provides various CRS used for met/ocean models.	Ordnance Survey United Kingdom Hydrographic Office (UKHO) Met Office Civil Aviation Authority	Land and Property Services (OSNI) United Kingdom Hydrographic Office (UKHO) Met Office Civil Aviation Authority	Ordnance Survey United Kingdom Hydrographic Office (UKHO) Met Office Civil Aviation Authority	Ordnance Survey United Kingdom Hydrographic Office (UKHO) Met Office Civil Aviation Authority
AI.2	Geographical grid Systems (CRG)	Harmonised multi- resolution grid with a common point of origin and standardised location and size of grid cells.	National Grid based on OSGB36 in GB and Irish Grid/ITM in Northern Ireland. c/w transformations to ETRS89 and appropriate height datums. Transformations for UK by OS and L&PS in NI. NERC provides various grids used for met/ocean models.	Ordnance Survey	Ordnance Survey Land and Property Services (OSNI)	Ordnance Survey	Ordnance Survey

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AI.3	Geographical names (CRG)	Names of areas, regions, localities, cities, suburbs, towns or settlements, or any geographical or topographical feature of public or historical interest.	No UK official body. Welsh & Gaelic languages are also an issue. Co-ordination of Gaelic place names by Ainmean-Àite na h-Alba (AAnhA). (Scottish Place Names Society)	Ordnance Survey Landmark & Dotted Eyes Local Authorities ONS Boundary Commission	Land and Property Services (OSNI) Local Authorities Landmark & Dotted Eyes	Ordnance Survey Local Authorities Scottish Place Name Society Landmark & Dotted Eyes	Ordnance Survey Local Authorities Welsh Language Board Landmark & Dotted Eyes
Al.4	Administrative Units (CRG)	Units of administration, dividing areas where Member States have and/or exercise jurisdictional rights, for local, regional and national governance, separated by administrative boundaries.	Separate Boundary Commissions in each part of the UK work with their respective Electoral Commission - with translation to the map & dissemination by OS. Separate Boundary Commission in Scotland for national boundaries and other administrative boundaries created by Scottish Government and General Register Office for Scotland. Local Authorities are involved in defining administrative boundaries. The City of London does not go through the Boundary Commission.	Ordnance Survey Office for National Statistics (ONS) Boundary Commission/Elec toral Commission/CL G	Land and Property Services (OSNI) Boundary Commission NI/ Electoral Commission	BC Scotland, LGBC, OSGB, General Register Office for Scotland (GROS), Scottish Government Boundary Commission Scotland / Electoral Commission	Ordnance Survey Welsh assembly Govt Boundary Commission Wales/Electoral Commission Wales/ Electoral Commission

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AI.5	Addresses (CRG)	Location of properties based on address identifiers, usually by road name, house number, postal code.	Postal addresses are listed by Royal Mail in Postcode Address File (PAF) for UK; LAs create local address gazetteers and pass this to their National Land & Property Gazetteer (NLPG) in E&W the Scottish Government and LAs have created the Digital National Address file for Scotland. The Valuation Office in England address and list taxable objects (hereditaments) and in Northern Ireland Pointer is a collaborative L&PS, Royal Mail and LGvt address list. In OS GB georeferences PAF with accurate position + others and links to buildings and streets in AddressLayer2.	Royal Mail Ordnance Survey Valuation Office Local Authorities Intelligent Addressing	Royal Mail Land and Property Services (OSNI)	Royal Mail Scottish Assessors Ordnance Survey Local Authorities	Royal Mail Local Authorities Ordnance Survey Intelligent Addressing
AI.6	Cadastral Parcels (CRG)	Areas defined by cadastral registers or equivalent.	Cadastral parcels have equivalents in the UK as "title plans" – these are held by the three land registry bodies that have a legal mandate to register property ownership.	Land Registry	Land and Property Services	Registers of Scotland (RoS)	Land Registry
AI.7	Transport Networks (CRG – Road only)	Road, rail, air and water transport networks and related Infrastructure. Includes links between different networks.	Department for Transport, Highway Authorities, Network Rail, British Waterways, and the CAA hold sectoral datasets OSGB (OS MasterMap	Road Ordnance Survey Highways Agency Local Authorities	Road Land and Property Services	Road Ordnance Survey Transport Scotland Local Authorities	Road Ordnance Survey Welsh Assembly Govt Local Authorities

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
	European transport network, as defined in Decision 1692/96/EC of the European Parliament and of the Council of 23 July 1996 on Community guidelines for the ITN)) provides road centreline and additional information. Most local highway authorities produce local street gazetteers that are passed to the National Street Gazetteer (NSG). Local Authorities in Scotland maintain	Rail Ordnance Survey Network Rail Transport for London (Tubelines) Underground and tram operators	Rail Land & Property Services Translink Underground and tram operators	Rail Ordnance Survey Network Rai) Underground and tram operators	Rail Ordnance Survey Network Rail Underground and tram operators		
		network and future revisions of that decision		Water Ordnance Survey British Waterways Environment Agency Maritime and Coastguards Agency UK Hydrographic Office	Water Land and Property Services Northern Ireland Environment Agency UK Hydrographic Office	Water Ordnance Survey British Waterways Scottish Environment Agency	Water: Ordnance Survey Environmental Protection Agency United Kingdom Hydrographic Office British Waterways
				Cableway Ordnance Survey Any overhead cable/ski tow operator	Cableway Land & Property Services Any overhead cable/ski tow operator	Cableway Ordnance Survey Any overhead cable/ski tow operator	Cableway Ordnance Survey Any overhead cable/ski tow operator

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
				Air Civil Aviation Authority NATS (En Route) Ministry of Defence	Air Civil Aviation Authority NATS (En Route) Ministry of Defence	Air Civil Aviation Authority NATS (En Route) Ministry of Defence	Air: Civil Aviation Authority NATS (En Route) Ministry of Defence
AI.8	Hydrography (CRG – marine and inland).	Hydrographic elements, including marine areas and all other water bodies and items related to them, including river basins and sub-basins. Where appropriate, according to the definitions set out in Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy [2], and in the form of networks.	Assumed to include coastal waters. NERC (British Oceanographic Data Centre - BODC) provides various hydrographic survey data.	Ordnance Survey Environment Agency British Waterways UKHO/Seazone Hydrospatial Centre for Ecology & Hydrology	Land and Property Services (OSNI) Northern Ireland Environment Agency Seazone Hydrospatial Centre for Ecology & Hydrology	Ordnance Survey Scottish Environmental Protection Authority UKHO/Seazone Hydrospatial Centre for Ecology & Hydrology	Ordnance Survey Environment Agency Wales UKHO/Seazone Hydrospatial Centre for Ecology & Hydrology

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)				
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales	
AI.9	Protected Sites	Areas designated or managed within a framework of international, Community and Member States' legislation to achieve specific conservation objectives.	Many of the categories refer to conservation of nature, but could also refer to other objectives, e.g. fishing or forest resources, or cultural heritage objects or areas. Nature protection may be linked to certain landscapes, habitats or species. Protected areas may be located in terrestrial, aquatic or marine environments. Protected sites differs from environmental founded classifications of natural or cultural resources and objects, as localisation, boundary and area of protected sites are based on formal, legal or administrative agreements/decisions.	Natural England Joint Natural Conservancy Council (JNCC) Local Authorities English Heritage	Environment and Heritage Service (EHS)	Historic Scotland (HS), Scottish Natural Heritage (SNH)	Welsh Historic Monuments (CADW), Countryside Council for Wales (CCW) Local Authorities	

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ANNEX II Data Specifications are expected to become EU Regulations in the second half of 2013.

Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)				
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales	
All	Annex\II							
All.1	Elevation	Digital elevation models for land, ice and ocean surfaces. Includes terrestrial elevation, bathymetry and shoreline.	EA have high resolution LIDAR coverage in E&W. OSGB integrates this with its own cover and complete photogrammetric model to create a complete model for exposed land in GB. UKHO/Seazone provides bathymetry. NERC: BODC, National Oceanography Centre Southampton (NOCS), possibly also British Geological Survey (BGS)) – bathymetry soundings, ocean topography, Several private sector data providers.	Ordnance Survey NextPerspectives Seazone Hydrospatial Intermap Environment Agency Highways Agency	Ordnance Survey Land and Property Services (OSNI) NextPerspectives Seazone Hydrospatial Intermap	Ordnance Survey Land and Property Services (OSNI) NextPerspectives Seazone Hydrospatial Intermap	Ordnance Survey Land and Property Services (OSNI) NextPerspectives Seazone Hydrospatial Intermap Environment Agency Wales	
All.2	Land Cover	Physical and biological cover of the earth's surface including artificial surfaces, agricultural areas, forests, (semi-)natural areas, wetlands, water bodies.	LCM2000 from Centre for Ecology & Hydrology, commissioned by Defra - claims to cover whole UK. Harmonised European CORINE also available. Scottish Government holds historical land cover data (Land Cover Scotland 1988)	Centre for Ecology and Hydrology	Centre for Ecology and Hydrology	Scottish Natural Heritage/ Macaulay Institute Centre for Ecology and Hydrology	Centre for Ecology and Hydrology	

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
All.3	Ortholmagery	Geo-referenced image data of the Earth's surface, from either satellite or airborne sensors.	Some available from OSGB and OSNI and several other commercial suppliers used by other govt agencies. British National Space Centre (BNSC), NERC (NERC Earth Observation Data Centre (NEODC), British Atmospheric Data Centre (BADC), RSDAS) – numerous remote sensing data sets.	Ordnance Survey NextPerspectives NERC GetMapping Forestry Commission GeoInformation Group	Land and Property Services (OSNI) NextPerspectives NERC GetMapping Forestry Commission GeoInformation Group	Ordnance Survey NextPerspectives NERC GetMapping Forestry Commission GeoInformation Group	Ordnance Survey NextPerspectives NERC GetMapping Forestry Commission GeoInformation Group
AII.4	Geology	Geology characterised according to composition and structure. Includes bedrock, aquifers and geomorphology.	Bedrock maps, increasingly in 3D are provided by the two geological surveys.	British Geological Survey (BGS)	Geological Survey of Northern Ireland (GSNI)	British Geological Survey (BGS)	British Geological Survey (BGS)

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ANNEX III Data Specifications are expected to become Regulations in the second half of 2013.

Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)				
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales	
AIII	Annex III							
AIII.1	Statistical Units (CRG)	Units for dissemination or use of statistical information.	The main unit of dissemination over the last decade has been the Output Area to provide a neutral and stable geography for statistical reporting.	Office for National Statistics (ONS)	Northern Ireland Statistics and Research Institute (NISRA)	GROS, Scottish Government	Office for National Statistics (ONS) & Welsh Assembly Government	
AIII.2	Buildings (CGR)	Geographical location of buildings.	Building footprints (no register as such), listed buildings.	Ordnance Survey Local Authorities	Land and Property Services	Ordnance Survey	Ordnance Survey Local Authorities	
AIII.3	Soil	Soils and subsoil characterised according to depth, texture, structure and content of particles and organic material, stoniness, erosion, where appropriate mean slope and anticipated water storage capacity.	Varying resolution datasets. NERC (BGS).	National Soils Resources Institute (NSRI)	DARD/OSNI	MLURI	National Soils Resources Institute (NSRI)	

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.4	Land Use	Territory characterised according to its current and future planned functional dimension or socio—economic purpose (e.g. residential, industrial, commercial, agricultural, forestry, recreational).	National Land Use Database (NLUD) identifies 'brownfield' sites in England only. Local Development Plans/Frameworks (from Local Planning Authorities) are incomplete and inconsistent for all land uses. Environmental agencies and agriculture Departments will also hold land use data.	Communities and Local Government (CLG) NLUD (partial), Local Planning Authorities (LPAs)Valuation Office	Communities and Local Government (CLG) NLUD (partial), Local Planning Authorities (LPAs)	Communities and Local Government (CLG) NLUD (partial), Local Planning Authorities (LPAs)	Communities and Local Government (CLG) NLUD (partial), Local Planning Authorities (LPAs) Valuation Office
AIII.5	Human Health and Safety	Geographical distribution of dominance of pathologies (e.g. allergies, cancers, respiratory diseases) information indicating the effect on health or well-being of linked directly or indirectly to the quality of the environment (air/water quality, pollution, access to green space, noise, food, genetically modified organisms) to the quality of the environment.	Likely to include information from a variety of government depts and agencies. Medical Research Council.	National Health Service (NHS), Public health authorities, Department of Health (DoH) - Medical Research Council	National Health Service (NHS), Public health authorities, Department of Health Medical Research Council	National Health Service (NHS), Public health authorities, Scottish Government Medical Research Council	National Health Service (NHS), Public health authorities, Welsh Assembly Government Medical Research Council

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.6	Utility and Government Services	Includes utility facilities such as sewage, waste management, energy supply and water supply, administrative and social governmental services such as public administrations, civil protection sites, schools and hospitals.	Utility services/networks: Physical construction for transport of defined products: These may include pipelines for transport of oil, gas, water, sewage or other pipelines. Transmission lines may include electrical, phone, cable-TV or other networks. Transmission lines for both land and at sea/water (bottom) is important. All kinds of transmission systems have nodes and are linked to facilities for production and treatment of different kinds of products. Despite being heavily interlinked, the themes in INSPIRE are treated separately – the production and treatment facilities are treated mainly in the theme production and industrial facilities. Transmission systems may be of different kinds;	Utility Services NUAG/NJUG/ DEAL Local Authorities NHS	Utility Services NUAG/NJUG DEAL Local Authorities NHS	Utility Services NUAG/NJUG DEAL Local Authorities NHS	Utility Services NUAG/NJUG DEAL Local Authorities NHS

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.7	Environmental Monitoring Facilities	Location and operation of environmental monitoring facilities includes observation and measurement of emissions, of the state of environmental media and of other ecosystem parameters (biodiversity, ecological conditions of vegetation, etc.) by or on behalf of public authorities.	Environmental monitoring facilities are facilities for observations and measurements of emissions, status and effects of environmental media (e.g. air, forest, marine water) and/or other environmental aspects (e.g. biodiversity, human health.	Defra Environment Agency Natural England Forestry Commission MET Office	Northern Ireland Environment Agency MET Office	Scottish Executive Scottish Environmental Protection Agency Scottish Natural Heritage MET Office	Welsh Assembly Government Countryside Council for Wales MET Office
AIII.8	Production and Industrial Facilities	Industrial production sites, including installations covered by Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control and water abstraction facilities, mining, storage sites.	Location of production industry, mines, waste/disposal sites and energy production facilities. Concerning industry these may be chemical, hydrocarbons (oilgas), mines or any other industry. Usage of PRTR categories as common nomenclature for such facilities is relevant as it comprises a very broad set of relevant industrial activities. The categorisation may be mapped to other international categorisation systems like NACE, SERIEE or ISIC.	Environment Agency	Environment Agency NI	Scottish Environmental Protection Agency	Environment Agency Wales

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.9	Agricultural and aquaculture facilities	Farming equipment and production facilities (including irrigation systems, greenhouses and stables).	Examples of farming productions facilities are irrigation systems, greenhouses, stables, tanks and pipelines. The definition of a facility should be clarified, e.g. if facilities such as wall systems for prevention of erosion, channel systems used in irrigation, terrace systems used for fruit production are constructions outside the scope of a "facility". Aquaculture does only include permanent or semi-permanent systems for breeding of the organisms, and does not include locations for catching animals or plants in their natural environment. Aquaculture facilities may exist both in marine waters, inland water environments and as terrestrial production systems.	Defra Marine and Fisheries Agency Environment Agency CEFAS Food and Environment Research Agency (FERA) Forestry Commission	DARD Environment Agency Forestry Commission	Scottish Government Scottish Environmental Protection Agency Forestry Commission	Environment Agency Wales Forestry Commission

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)				
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales	
AIII.10	Population distribution – demography	Geographical distribution of people, including population characteristics and activity levels, aggregated by grid, region, administrative unit or other analytical unit.	Includes a broad spectrum of information sources, such as regional statistics at EuroStat; other European and National data, Regional data and Local breakdowns. The theme may thematically be divided into several components. The Directive text points at broad groups of sub-themes - population characteristics - population/ human activity levels	Office for National Statistics	NISRA	GROS	Welsh Assembly Government	

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Annex Ref.	Theme Title	Theme Description	ription Notes within a UK context Organisation(s)				
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.11	Area management/ restriction/ regulation zones and reporting units	Areas managed, regulated or used for reporting at international, European, national, regional and local levels. Includes dumping sites, restricted areas around drinking water sources, nitrate-vulnerable zones, regulated fairways at sea or large inland waters, areas for the dumping of waste, noise restriction zones, prospecting and mining permit areas, river basin districts, relevant reporting units and coastal zone management areas.	Sector-specific management areas contain information about management zones in sectors, not already being covered by the INSPIRE theme "Administrative units". Here only a few examples are given. These may include health care management regions, defence enrolment regions, school catchment areas, fire fighter management regions, police responsibility regions, rescue operation regions, National and IMO adopted Traffic Separation Schemes (TSS) and Deep Water Routes, Military Practice Areas, Explosive Dumping Grounds etc	Local/Regional Planning Authorities NHS. MoD, Emergency Services	Local Authorities NHS. MoD, Emergency Services	Local Authorities NHS. MoD, Emergency Services	Local Authorities NHS. MoD, Emergency Services

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AllI.12	Natural risk zones	Vulnerable areas characterised according to natural hazards (all atmospheric, hydrologic, seismic, volcanic and wildfire phenomena that, because of their location, severity, and frequency, have the potential to seriously affect society), e.g. floods, landslides and subsidence, avalanches, forest fires, earthquakes, volcanic eruptions.	Natural hazards are natural processes or phenomena occurring in the biosphere that may constitute a damaging event. "Natural risk zones" are zones where natural hazards areas intersect with highly populated areas and/or areas of particular environmental/ cultural/ economic value. Risk in this context is defined as: risk = hazard x probability of its occurrence x vulnerability of the exposed populations and of the environmental, cultural and economic assets in the zone considered.	British Geological Survey Civil Contingency Teams	GSN I Civil Contingency Teams	British Geological Survey Civil Contingency Teams	British Geological Survey Civil Contingency Teams
AIII.13	Atmospheric conditions	Physical conditions in the atmosphere. Includes spatial data based on measurements, on models or on a combination thereof and includes measurement locations.	Focus is on atmosphere rather than weather but D2.3 recognises overlap and suggests that: The scope of 'Atmospheric conditions' thematic data should be limited to (six-hourly) synoptic analyses and forecasts (typically gridded model fields), climatological data, and other integrated and/or summary data.	Met Office British Atmospheric Data Centre	Met Office British Atmospheric Data Centre	Met Office British Atmospheric Data Centre	Met Office British Atmospheric Data Centre

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.14	Meteorological geographical features	Weather conditions and their measurements; precipitation, temperature, evapotranspiration, wind speed and direction.	The scope of 'Meteorological geographical features' thematic data should be limited to local-level high-resolution (weather-related) data, typically observations and derived models (eg "front", wind direction and speed)	Met Office British Atmospheric Data Centre	Met Office British Atmospheric Data Centre	Met Office British Atmospheric Data Centre	Met Office British Atmospheric Data Centre
AIII.15	Oceanographic geographical features	Physical conditions of oceans (currents, salinity, wave heights, etc.).	The scope of the "Oceanographic geographical features" theme as being concerned with the high seas and larger oceanic physical/dynamic structures. Four broad types of data are included in the oceanographic geographic features theme: Observations; Synoptic Analysis:; Forecasts & Oceanographic Summary Data.	Met Office British Oceanographic Data Centre	Met Office British Oceanographic Data Centre	Met Office British Oceanographic Data Centre	Met Office British Oceanographic Data Centre
AIII.16	Sea regions	Physical conditions of seas and saline water bodies divided into regions and sub-regions with common characteristics.	Seas and saline water bodies divided into regions and sub-regions. Each region with common characteristics, concerning water flow/circulation, adjacent river catchments, bio-chemical or temperature of water, based on scientific criteria. Wave height etc	Met Office British Oceanographic Data Centre	Met Office British Oceanographic Data Centre	Met Office British Oceanographic Data Centre	Met Office British Oceanographic Data Centre

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AllI.17	Bio- geographical regions	Areas of relatively homogeneous ecological conditions with common characteristics.	Bio-geographical regions show the extent of areas with common characteristics, usually based on climatic, topographic and geobotanical information. Thus the bio-geographical regions show areas with relatively homogeneous ecological conditions.	Natural England, CEH Wildlife Trust Local Authorities JNCC,	Northern Ireland Environment Agency CEH Wildlife Trust Local Authorities	Scottish National Heritage, CEH Wildlife Trust Local Authorities	Countryside Council for Wales (CCW), CEH Wildlife Trust Local Authorities
AIII.18	Habitats and biotopes	Geographical areas characterised by specific ecological conditions, processes, structure, and (life support) functions that physically support the organisms that live there. Includes terrestrial and aquatic areas distinguished by geographical, abiotic and biotic features, whether entirely natural or seminatural.	Common to all spatial data that falls under this category is characterisation of the distribution of geographical areas being functional areas for living organisms, biotopes being the spatial and biotic environment of a biotic community/biocoenosis, while habitats being the spatial environment of specific species.	Natural England, CEH Wildlife Trust Local Authorities JNCC,	Northern Ireland Environment Agency CEH Wildlife Trust Local Authorities	Scottish National Heritage, CEH Wildlife Trust Local Authorities	Countryside Council for Wales (CCW), CEH Wildlife Trust Local Authorities

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Annex Ref.	Theme Title	Theme Description	Notes within a UK context	Organisation(s)			
	CRG: UKLS Core Reference Geography	Taken from D2,3 "INSPIRE Description of Themes" (apart from Topographic Data)		England	N. Ireland	Scotland	Wales
AIII.19	Species distribution	Geographical distribution of occurrence of animal and plant species aggregated by grid, region, administrative unit or other analytical unit.	Pan-European, national or local mapping initiatives, resulting in spatial data for species in terrestrial and marine environments, e.g. for birds, insects, mammals, amphibians, reptiles, fish or vascular plants.	Natural England RSPB Wildlife Trust UK Butterfly Survey	Northern Ireland Environment Agency RSPB Wildlife Trust UK Butterfly Survey	SNH RSPB Wildlife Trust UK Butterfly Survey	CCW RSPB Wildlife Trust UK Butterfly Survey
AIII.20	Energy resources	Energy resources including hydrocarbons, hydropower, bio-energy, solar, wind, etc., where relevant including depth/height information on the extent of the resource.	The location and exploitation of natural or other resources and the conversion to energy.	Dept Energy and Climate Change British Geological Survey Dept Energy and Climate Change	GSNI.	Scottish Government British Geological Survey	Welsh Assembly Government British Geological Survey
AIII.21	Mineral resources	Mineral resources including metal ores, industrial minerals, etc., where relevant including depth/height information on the extent of the resource.	Location of deposits: areas bearing mineral concentrations with economic potential.	Dept Energy and Climate Change British Geological Survey	GSNI	Scottish Government British Geological Survey	Welsh Assembly Government British Geological Survey

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