UK Location Council

Annual Report
2011-12

uk location

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FOREWORD

This annual report summarises the achievements of the UK Location Programme in the financial year 2011-12 and highlights some of the issues dealt with during the year.

During the course of the year the Location Council initiated a discussion around refreshing the Location Strategy which also developed into a consideration of the future purpose, role and shape of the Location Council. The importance and scope of this debate meant that the Council decided not to set formal strategic objectives for 2012-13 for the UK Location Programme team. The existing Location Strategy and careful Programme planning was used instead to guide the Programme team in its work during the year.

The value of sharing and re-using location information is increasingly recognised and it will not be long before an impact is seen in the wider UK economy. In 2011-12 the UK Location Programme continued to drive forward high standards for opening up data. There are clear and shared aims with other Government initiatives to open up data but I must emphasise that the aims of the Location Strategy go much further than just simply opening up data; we are working also to make data interoperable and with a common reference base.

INSPIRE is an important strand of the Strategy and I am pleased to report that milestones for Metadata, Discovery and View Services were achieved this year. Good progress was made on helping data publishers understand what is required of them and by when, so that the coming Download Services milestones can be met.

We made sure that UK was actively involved in INSPIRE EC discussions and that we always had sound evidence to use to influence the direction of those discussions. We were challenged by the EC to defend our approach to metadata in 2011-12, and we were able to present a robust defence which was tested and proved to be correct. On another occasion we promoted and had accepted a common sense approach to an EC issue. New working connections with other Member States were established to promote INSPIRE aims and these will deliver results in 2012-13.

To achieve other strands of the UK Location Strategy, in 2011-12 we strengthened our working links with colleagues in the Devolved Administrations and partners in other Government Departments. The capability and performance of the UK Location Information Infrastructure was enhanced and expanded in collaboration with colleagues in Cabinet Office. New tools for data publishers were developed in partnership with Ordnance Survey and were made available and supported with comprehensive guidance. The Association for Geographic Information (AGI) completed publication of its guidance on metadata standards, which was developed to support the Location Strategy. The National Archives expanded the Government Licensing Framework with the Non Commercial Government Licence to support publication of location data. The Local Government Association provided expert analysis of the developing position on local authorities.

I pay tribute to colleagues in Scotland who hosted for the UK the European INSPIRE annual conference in July 2011. The scale of this event is enormous, gathering experts and officials from Europe and the world. It is no overstatement to say that it was a resounding success.

The UK Location Council has a respected voice in UK data policy discussion which was enhanced this year with our contribution to the Government Consultations on policy on open data and a public data corporation. The work of the Business Interoperability

Working Group has started work to identify barriers to sharing data which will have an impact not only on location data but on wider UK data policy, publication and use.

During the year we refreshed and improved the UK Location Programme governance structures to give sharper focus on tasks. As noted above, a discussion on the future role and purpose of the Council itself was started, which exemplifies the dynamic quality of the Council, and its desire to stay relevant and effective.

Achieving the goals of the Location Strategy means we must continue to work successfully in close partnership with colleagues across government. UK Location is led by Defra but relies for its success on colleagues from the Governments of Wales, Scotland and Northern Ireland, and other government departments and agencies, as well as experts from the geographic information industry. Under the Location Strategy, the end we all strive towards is better environmental policy, improved public sector productivity, better public services, and enabling private sector innovation and citizen involvement. The degree of engagement and commitment shown by my colleagues working in both the Programme team and the Council drives the enthusiasm of us all and ensures that we all continue to set and achieve high standards and I would like to thank them for their continued efforts.

Miles Parker

Chair, UK Location Council

INTRODUCTION

UK Location

The UK Location Council was established to act as the strategic adviser to government on location data matters and to steer the UK Location Programme, which has been set up to implement the UK Location Strategy and the EU INSPIRE Directive.

The Chair of the Council is a Defra Senior Civil Servant and the members represent other government departments, the devolved administrations, local government and the GI industry. The Chair of the Location User Group and the representative of the Association for Geographic Information (AGI) provide strong and vital engagement with a wide range of stakeholders beyond government including other data providers, the private sector, academia and voluntary and charitable organisations in the third sector. Membership of the Council in 2011-12 is detailed at Annex B.

Aims and principles

The EC INSPIRE Directive[1] was transposed into UK law in December 2009. Its objectives have an emphasis on access to and interoperability of spatial data to assist in environmental policy. Data sets covered by INSPIRE fall under 34 themes which range from addresses, transport and hydrographic networks to weather, soils and geology. Statutory instruments for the delivery of INSPIRE are in place in England, Wales and Northern Ireland and, separately, in Scotland and Gibraltar.

While the current UK Location Strategy[2] has similar aims to INSPIRE it also encompasses all areas of government policy and extends to location data beyond the INSPIRE annex themes. Together with the strategies and approach developed by the devolved administrations (*'Geographic Information Strategy for Northern Ireland'*[3], *'One Scotland: One Geography'*[4] and *'Location Wales'*[5]), it promotes wider discovery, publication and reuse of all location information for any purpose.

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[1] INSPIRE - INfrastructure for SPatial InfoRmation in the European community

[2] Place Matters: The Location Strategy for the UK, Communities and Local Government, Nov 2008.

[3] www.gistrategyni.gov.uk

[4] www.scotland.gov.uk/Topics/Government/PublicServiceReform/efficientgovernment/OneScotland/GIStrategy

[5] http://www.agi.org.uk/storage/policy/locationwales.pdf

The five aims of the Strategy can be summarised as follows:

- To know what data we have and avoid duplicating it;
- To use common reference data so we know we are talking about the same places;
- To share data more easily – with common technology, standards and business relationships;
- To gain the appropriate skills for using location information effectively; and
- To provide strong governance for implementation of the Strategy.

The key principles guiding the implementation of UK Location are:

- adoption of a collaborative approach, involving the public, third and private sectors;
- minimum market intervention to achieve the sharing and re-use of location information;
- use of open standards and open source software;
- full use of what information and infrastructure already exists or is planned;
- harness the market to provide re-usable products and services;
- establish the basics and achieve benefits early; and
- incremental and agile implementation with an evolving infrastructure.

INSPIRE

The principal aim of the INSPIRE Directive is to improve environmental policy making in Europe. Under INSPIRE, Member States must make available in a consistent format spatial datasets within the scope of the Directive, and create services for accessing these datasets. This will enable datasets to be more easily shared and the expectation is that they will be combined to benefit the development and monitoring of environmental policy and practice in all Member States and across the European Union.

Under INSPIRE public authorities and third parties which publish INSPIRE datasets must establish and operate five services, collectively described as 'Network Services'. In addition, public authorities are required to take specific action to enable data and service sharing between public authorities (and with bodies of the EU).

The five Network Services are:

- Discovery Services – this will enable users to search and display the contents of metadata, which is required for spatial datasets and services.
- View Services – this services must make it possible, as a minimum, to display, navigate, zoom in and out, pan or overlay viewable spatial datasets and to display legend information and any relevant content of metadata.
- Download Services – enabling users to download copies of whole datasets or parts of datasets and, where practicable, accessed directly.
- Transform Services – enabling users to transform INSPIRE compliant spatial datasets to achieve interoperability.
- Invocable Services – this Service has not yet been defined but will be through the development of the appropriate implementing rule by the Commission, which the UK will be involved in. UK Location will publicise the definition when it is made.

Successful implementation of these Network Services will enable the delivery of data which is conformant to INSPIRE specifications.

Progress in 2011-12

The 2010-11 annual report set out 10 key actions to be carried out during 2011-12. All of these were addressed and, where applicable, completed. Some, such as the introduction of an amending Statutory Instrument to continue the transposition of INSPIRE into UK law and the publication of a benefits strategy, were not completed in year. In the both of these cases the delay was mainly down to the need to ensure that the voices of all our partners and stakeholders were heard and acted on. Neither case affected the strategic direction of the Programme. Details on activities are set out in the next section.

This report covers UK Location activities from April 2011 to March 2012, unless specifically stated. The body of the report sets out achievements against key activities in the year. It shows how the UK Location Programme has made progress towards implementing the strategic actions set out in the Location Strategy. The annexes to the report include a summary of the cost of the Programme during the financial year 2011-12 and a summary of the key points of the 2011 Monitoring Return to the European Commission.

REPORT ON ACTIVITIES 2011-12

The key focus of the activities planned for 2011-12 was in establishing location information as a core component of public sector information, which followed naturally from the introduction of initial INSPIRE network services in May 2011. Work continued on development of the central IT infrastructure. Further and increased engagement by the Programme team took place to ensure data providers were able to meet INSPIRE deadlines. There was also an increase in the making sure user needs were understood and so they could be addressed in the work of the Programme. The Programme team have sought to ensure that early benefits could be gained from the increased accessibility of location information.

Metadata, Discovery and View Services

There was good progress in 2011-12 across the UK in meeting the INSPIRE deadline to publish metadata, discovery and view services for existing Annex I and Annex II datasets by November 2011.

- By December 2011 216 out of 234 expected datasets were published in a Discovery Service, and of those

- 74% were published with view services from 31 organisations.

This activity ensured we met the INSPIRE initial operating capacity deadline to publish compliant metadata, discovery and view services for existing Annex I and II datasets. An additional 657 location datasets were published to data.gov.uk using the INSPIRE technical standards. A significant number of these datasets came from The British Geological Survey (BGS), The Centre for Ecology and Hydrography (CEH) and Barrow Borough Council.

Engagement with the EC and within the EU

During the year we engaged with the European Commission together and other Member States to negotiate improvements to the proposed Annex III data specifications. At the INSPIRE Committee meeting in December 2011, the Commission agreed to conduct a closer consultation with Member States before the specifications were finalised.

The Commission tested the UK's (and all other Member States') metadata and services. Initial testing appeared to indicate a large number of validation failures. However detailed analysis in the UK and consequent dialogue with the Commission resulted in their acknowledgement that a significant number of these were issues with the Commission's implementation of the validation. This resulted in changes to the validation being applied by EU, including an acceptance that the UK's metadata implementation was a valid interpretation of the INSPIRE Implementing Rules.

The Commission indicated that it would not be undertaking further work on the technical guidance for Member States on how to manage schema transformation. This was prompted in part by the Commission's acceptance of the UK position vis-à-vis Transformation Services, which was that it was the end result of transformation (data being published to conformant specifications) that was important, and not the implementation of network Transformation Services. Transformation will be provided via. existing services, or as part of a Data Publishers internal publication workflow.

Guidance from the Commission on Download Services was delayed from its planned publication data of December 2011 and had not been published at the end of the March 2012. The Programme assessed this as a significant risk to data publishers meeting the June 2012 initial operating capability deadline and a potential risk to meeting the December 2012 deadline, as data publishers cannot finalise their approach until the guidelines are issued and guidance for the UK written. A formal approach was made to the Commission which has acknowledged the delay may cause issues for publishers.

An Impact Assessment was commissioned by UKLP from The Local Government Association to understand the extent to which local authorities in England are ready and able to meet INSPIRE Annex III requirements. This is a key document and will be used as an evidence base for the cost of any new burden which may arise.

UKLP hosted a visit from Geonovum, the organisation responsible for INSPIRE implementation in the Netherlands, in February 2012. The visit gave a useful insight and opened two avenues of potential collaboration: a cross border linked data pilot and a potential technical collaboration workshop. Other discussions with Geonuvum which took place at this time were developed into the 'Powered by INSPIRE' conference which is due to take place in March 2013 and will be hosted by the UK in partnership with Netherlands, Belgium and Germany. The conference is being held to promote awareness and user potential of the INSPIRE data-infrastructure across the EU.

Infrastructure

A key strand of the work of the Programme is to establish the necessary IT capabilities to support data providers and users and enable the UK to achieve INSPIRE compliance. UKLP has ensured that the initial IT capabilities on data.gov.uk for metadata registration and discovery and evaluation of data meet the requirements of data providers and users.

Over the course of 2011-12 map-based Search and Preview functions were introduced successfully on data.gov.uk. These were developed in partnership with Cabinet Office and Ordnance Survey. These functions have significantly enhanced the usability of data.gov.uk for location-based data. Users are now able to search for datasets by location (using a map-based interface), and to view and compare the content of these datasets ('preview') in a mapping-based application.

Development and delivery of these services has been a truly collaborative effort, with a number of significant benefits being delivered over and above the basic data.gov.uk functionality. The UK-wide nature of the initiative has resulted in the creation of a UK-wide (Great Britain and Northern Ireland) base map, which has the potential to be re-used in many other services. The development has, in line with Government ICT Strategy, been fully open-source, allowing the benefit delivered by these service to be re-used and further developed by others.

Additional functionality and enhancements are planned, focusing on improving the experience for users, and making location data even easier to find and use.

Establishing common reference data

Consolidated address data exists for each administration within the UK. Mapping Agreements ensure efficiencies are gained for all UK public sector organisations.

The Public Sector Mapping Agreement (PSMA) for England and Wales, modelled on the One Scotland Mapping Agreement, came into effect on 1 April 2011. It is designed to enable the more than 10,000 organisations in the public sector to access a wide range of Ordnance Survey products under a simple licence. At the time of writing, PSMA membership had reached over 2600 organisations. With similar arrangements in place in Scotland and Northern Ireland there is now a common standard for base mapping data across the UK.

Ordnance Survey, a key partner organisation in the delivery of the Location Strategy, has created GeoPlace LLP in joint ownership with the Improvement and Development Agency for Local Government. GeoPlace brings together local authorities gazetteer information with Ordnance Survey products to create a National Address Gazetteer for England and Wales.

In 2011-12 Linked Data became a key part of the UK Location approach. Linked Data is data in which real world things are given addresses on the web (URIs), and data is published about them in machine-readable formats. The Council recognised that there was a skills gap on Linked Data, and planned work with Cabinet Office to improve this. The Programme promoted the use of linked data in building new applications and will increasingly contribute to the wider adoption of Linked Data techniques as part of the government strategy on data publication. A series of events were held in 2011 to make the business case for Linked Data, and a Linked Data Working Group was established within the Programme's wider governance framework.

Sharing data easily to common standards

In 2011-12 UKLP provided a range of open source software products to deliver INSPIRE metadata and services (GeoNetwork and GeoServer) as a reference architecture for data publishers and more importantly – since it is an INSPIRE requirement – we delivered the data.gov.uk metadata catalogue and publishing facility. A new version of the open source metadata editor and INSPIRE-conformant web mapping software were made available. The on-line metadata editor is fully supported with comprehensive guidance. All of this was achieved in partnership with Ordnance Survey.

A Memorandum of Understanding was agreed between Defra, Ordnance Survey and Northern Ireland Land and Property Services (NILPS) for use of mapping data in data.gov.uk. This enables the use of NILPS data in the map widgets that UKLP has developed and are available on data.gov.uk.

A Business Interoperability Working Group was established, to look at issues relating to barriers to sharing data and services by public authorities in the UK. Around 14 organisations are represented in the group membership, including government departments, executive agencies and representatives from universities and the GI community.

The final section of guidance for UK Gemini 2.1 metadata standard was published in 2011 by the Association for Geographical Information (AGI). UK Location promotes UK

Gemini 2.1 as the standard for INSPIRE. Open Geospatial Consortium Web Mapping Service standards were adopted and guidance was provided to support their adoption.

The UK Government Licensing Framework (UKGLF) is endorsed by UK Location as the preferred licensing framework for spatial data sets where appropriate. UKLP guidance on licensing was refreshed during 2011-12 to include the extended scope of the framework. The UKGLF default position is that public sector information should be licensed for use and re-use free of charge under the Open Government License (OGL).

However, there are specific circumstances where information may only be released for use and re-use for non-commercial purposes. The Non-Commercial Government Licence (NCGL) was developed by The National Archive to meet those situations. The NCGL, like the OGL, is designed to enable public sector information holders to make their information available for use and re-use under its terms.

Engagement

During 2011-12 revised principles for our engagement model were presented and agreed by the Board. The aim is to move engagement to a community led approach and away from one where UKLP leads INSPIRE Annex 'theme groups'. Data providers and publishers as well as the User Group were involved in the development of the new model. The model had reached an advanced stage but had not been finalised at the end of March 2012.

UKLP established a helpdesk facility in 2011, primarily to cover issues arising for data publishers using data.gov.uk but also to cover all aspects of UK Location and INSPIRE. Call volume was steady through the year, and common problems encountered by data publishers were identified, for example the need to be able to delete metadata records where duplicates may have been published. Advice and guidance for data publishers was updated to take account of the issues raised.

Publication of guidance for data publishers has continued. In 2011 the Programme published new guidance on intellectual property matters for data providers which is relevant to all data. New guidance on INSPIRE View Services was published which helped data publishers to build view services to EC specifications. Many other existing guidance documents were updated or refreshed to take in new developments and ensure UK Location guidance was accurate and current.

Within the UK Location community various pieces of guidance were produced by colleagues in Scotland, Northern Ireland, Local Government Association and the Land Registry, as introductions to INSPIRE for specific communities or for specific purposes.

Skills and awareness

The fourth strategic aim of the Location strategy is to ensure that "We have appropriate skills and awareness, both among geographic professionals and among other professional groups who use location information or support its use."

Colleagues in Northern Ireland published a blueprint for delivering and sustaining necessary GI understanding and skills across the Northern Ireland Civil Service. The work was taken forward by the Chief Survey Officer as the Head of GI Profession. Following a GI skills survey to gather information on the current size and shape of the GI profession, the blueprint set out how best to develop the careers of those staff already involved in GI work, and to ensure that the necessary skills are available in the future to

be able to use GI to improve the effectiveness and efficiency of service delivery and policy development.

The programme of communications and awareness raising at conferences continued successfully. In June 2011 Scotland hosted the EU INSPIRE Conference on behalf of the UK. Around 700 delegates from around the world attended this key awareness raising event promoting INSPIRE. UKLP Board and team members were very active over the year at conference events, notably the AGI conference in September 2011, where presentations and workshops were held on different aspects of INSPIRE, UK Location, One Scotland One Geography, PSMA and the UK Location Information Infrastructure. In partnership with AGI in February 2012 UKLP also held a workshop for data providers.

Governance

In 2011 a new operational structure was established to create an Architecture and Interoperability Board (AIB) to report to the Programme Board. The AIB structure created expert working groups to address common business and technical barriers which restrict interoperability and collaboration, and review the Annex II and III data specifications. In some cases these groups were refreshed continuations of previous groups, for example on metadata, but in other cases entirely new groups, some time and topic limited, were created to deal with specific issues. For example, the Business Interoperability Working Group began work to understand what was required to define a coherent approach to Rights Management.

At the end of the year the AIB was working to review existing technical guidance to identify any gaps and to produce a user journey through the guidance (to aid navigation). The group is also working with colleagues from Scotland, Wales and Northern Ireland with the aim of understanding, and where appropriate signposting to other guidance, and only working to fill true gaps.

The Location User Group was established to ensure that UK Location Programme is driven by user needs and priorities and that the benefits are gained by a wide range of stakeholders across the UK. The User Group continued to be active in the course of 2011-12, notably contributing to benefits mapping work for the Programme. It also established some new sub-groups to take in contributions from the third sector, retail demographics and environmental research.
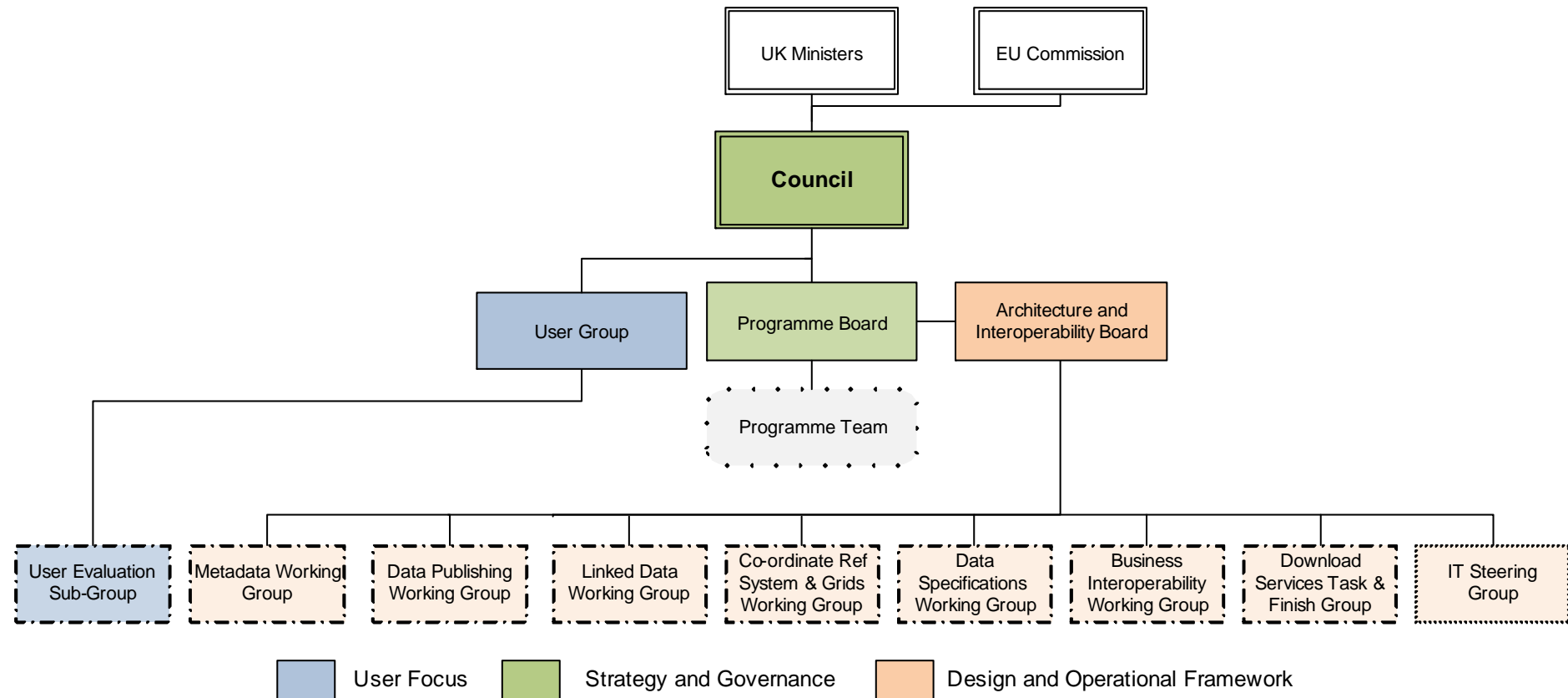
The Location Council responded formally to two Government consultations on Data Policy for a Public Data Corporation and on Making Open Data Real. The UK Location Council took the opportunity to contribute to the debate by submitting a consolidated response to the two consultations. The work of the UK Location Programme is naturally already well aligned with the Government's Transparency Agenda, through its work on INSPIRE and location data but also through, for example, its focus on open standards, having a single access point, promotion of interoperability and its approach to simplified licensing. It is important to note that the UK Location Strategy also goes further by working to make data interoperable and with a common reference base.

The Location Council began a review of the UK Location Strategy in 2011. It was acknowledged that the strategy was at that point nearly 3 years old. Since its launch there had been many relevant policy developments that have been part of the wider data landscape (for example the PSMA, the Transparency Board and the Data Strategy Board). Decisions on these developments had been taken elsewhere although the Council or its members had been able to provide input. As a result, the Council considered that its political mandate also needed testing, to determine how it fit in relation to these strategic initiatives.

There remains broad support among Council members and the wider stakeholder community for the original objectives of the strategy and its strategic actions and there is recognition that the Council has played a key role in the implementation of the Location Programme and the INSPIRE infrastructure to date. A substantial reorganisation of all public services is underway and there is an appetite among policy makers for better understanding the benefits of geographical information and how GI can help deliver better services. There is a valuable role to be filled in promoting GI in the UK public sector and beyond

Figure 1, overleaf, shows UK Location governance arrangements.

FIGURE 1 – UK LOCATION GOVERNANCE ARRANGEMENTS

ANNEX A: FINANCIAL REPORT

The financial report presents a basic summary of the UK Location Programme accounts at the end of each financial year. Non-financial contributions from members of the UK Location community and the cost of INSPIRE compliance to data providers are not included.

Table 1: Breakdown of UKLP Funding and Expenditure in Financial Year 2011-12

Budget	£1,683(K)
Area of expenditure	**Cost (K)**
Defra funded staff costs	£680
Other costs *	£127
IT development	£775
Total expenditure	**£1,582**

* These relate to a variety of costs, including running costs, marketing and communication costs, consultancy and secondee travel and subsistence expenses.

ANNEX B: UK LOCATION COUNCIL MEMBERS IN 2010-11

Member	Organisation
Andrew Trigg	HM Land Registry
Andy Sutherland	National Health Service
Beth Hogben	Department for Business Innovation and Skills
Brian Collins	Department for Transport
Bruce Callander	Ministry of Defence
Carol Tullo	Office of Public Sector Information, The National Archives
Chris Holcroft	Association for Geographic Information
David Fry	Communities and Local Government
Faith Quigley	Shareholder Executive
Graham Jenkinson	UK Statistics Authority
Iain Greenway	Land and Property Services, Northern Ireland
Kate Chamberlain	Welsh Assembly Government
Katie Davies	Cabinet Office
Mick Cory	UK Location User Group Chair
Miles Parker - Chairman	Department for Environment, Food and Rural Affairs
Ray Boguslawski	UK Location Programme Director, Defra
Richard Hughes	Natural Environment Research Council
Robin Gaulton	Environment Agency
Sheenagh Adams	Registers of Scotland
Stephen Aldridge	Department for Communities and Local Government
Tim Allen	Local Government Association
Vanessa Lawrence	Ordnance Survey GB

ANNEX C: SUMMARY OF THE INSPIRE MONITORING REPORT 2011

In May 2012 the UK Location Programme submitted to the EU the INSPIRE Monitoring Report for the calendar year 2011. This was the third annual report submitted by the UK.

The purpose of the Monitoring Report is to provide consistent information from across the EU on progress towards implementation and use of the INSPIRE infrastructure. The INSPIRE Directive requires Member States to submit an annual INSPIRE monitoring report.

The return was compiled from discovery metadata records published on data.gov.uk in January 2012, verified and augmented with information including use of services, supplied by individual data providers.

Information in the report relating to Annex III data was the best available and gave a general indication of the range of data likely to be in scope. It did not represent a definitive list of Annex III datasets the UK will publish.

A summary of the key information contained in the monitoring return is:

- The UK has identified 210 INSPIRE Annex I and Annex II datasets. This compares with an estimate of 250 in 2010.

- 92% (38% in 2010) of the Annex I and Annex II datasets listed were discoverable.

- 87% (14% in 2010) had a compliant view service.

- 36% (25% in 2010) had some form of download service.

- 190 datasets were listed under Annex III compared with 150 in 2010.

- View services had been accessed over 49 million times[6].

These figures show the significant progress made since 2011 with most Annex I datasets now discoverable and available as a view service.

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[6] Some providers were unable to provide data on use of their services.   No service use data was produced for last year's report.