

# Geospatial Data as a Service

**SERVICE DEFINITION**



# Data from Landmark –

The benefits of Choosing Landmark  
for your data services



## Landmark Information - THE place for your data requirements

- A service designed for you
- Driven by you
- Delivering the data you want, when you want it
- On demand
- Third party data sets as a service

## Your own data as a service – maintained by us as required

- Cost effective
- One stop shop – supplying the full range of your data needs
- Regular updates – to your own schedule
- High levels of availability mean no concerns about loss of access at critical times

## Service overview

- Provision of a wide range of geospatial data in full range of categories, from Ordnance Survey maps, Historic maps, Points of Interest to Planning and Environmental Data to Aerial Photography
- Managing your own data for you to ensure cleanliness, currency and accuracy
- Merging different data sources to enhance and innovate fresh information sets for your stakeholders
- Facilitating and creating visualisation of geographic and spatial data
- Making available maps, data, and views for your public or specified groups of users
- Managing web map content, users and groups
- We can present your mapping information, via web or in-house, on a range of platforms and devices including standard web browsers, web-based applications, mobile devices and desktop viewers
- Your geospatial data will be presented as interactive displays, allowing stakeholders (or general public in appropriate cases) to select and view, zoom or interrogate as they choose
- We offer full security, which will ensure that only authorised persons can update the information
- Supported by our specialist cloud service data migration and conversion services

Desire to  
Data  
Choice  
Immediately  
Service  
Full support  
Response  
All Range

## An overview of geospatial data as a service

Plug into the geospatial data serving facilities of our on-line GIS platform for real-time access to a wide range of geospatial information to support your operations.

Leave the data update and maintenance to Landmark – allowing you to focus on your key business activities.

High power applications, a secure and resilient platform, and a flexible and scalable service ensure your individual geospatial data requirements are catered for.

This G-cloud service is a Geospatial Data as Service concept provided by Landmark. Part of our PaaS and SaaS Platform, Rest Service engines and Databases, this service provides the ability for clients to receive a wider range of data as a web feed.

We provide a multitude of geographic data sets including:

- Ordnance Survey maps
- Historical mapping
- Points of Interest
- Aerial photography
- Planning-related data
- Environmental data
- Land Use Data

We can also load and deliver your own data sets as a service for you back to your organisation.

We work with over 175 standards – be they vector, raster, 3-D, point cloud or non-spatial. This includes Open Standards such as GML, KML, LandXML, DXF, ESRI, Map-Info and other major suppliers.

The underlying platform comprises a multi-site resilient infrastructure hosted in two geographically separated TIA-942 Tier 3+ secure Data Centres located within the UK. This infrastructure is owned and operated by Landmark and is based on market leading vendors' hardware and software, utilising proven industry standards throughout. Each Data Centre site is linked, using multiple high speed low latency circuits, for both inter-site connectivity and web facing Internet connectivity.

Data stored on the Landmark G-Cloud service is backed up using industry standard backup technologies and processes to ensure that all customer data is fully protected.

All services are delivered in accordance with our ISO9001, ISO27001 and ISO14001 certifications.

## Level of backup/restore and disaster recovery that will be provided

All Servers that make up the Landmark solution are protected with, at least, a daily data backup. In addition Database servers are protected at a transaction level, to ensure key customer information is not lost. Data retention policies vary depending on the type of data involved, but a typical yearly backup will be stored for 7 years. Landmark services operate out of multiple geographically dispersed data centres that provide versatile and scalable Disaster Recovery options. Key services operate a zero data loss service with a seamless failover.

Virtual Guests are backed up using VMware Storage API technologies to provide guest level consistent recover points on the Storage Array, which are asynchronously replicated to the remote DR site.

We achieve recovery by using asynchronous snapping technologies from NetApp which offer Recovery Points ranging from 15 minutes to several years, as required, subject to system capacity and data change rates. We accomplish crash consistent, guest consistent or application consistent backups using a number of software integration options to provide the required level of recovery.

The secondary system is located at a remote site to provide inherent offsite backup, recovery and DR capability.

## On-boarding and Off-boarding processes/scope

Access to the service can be achieved via a simple online user registration process. Account creation takes place subject to the acceptance of the published terms and conditions for use of the service.

Once registered a user may configure their profile to arrange the service to meet their needs. The user will also have access to online help facilities and documentation regarding the service. Optionally, users may create and administer further users for their organisation if desired.

Withdrawal from the service is a simple matter of following the online account cancellation process. This will ensure any relevant user information is removed from the service and all user data is deleted. Account termination is conducted in line with the published terms and conditions of the service.

### Thin clients that can be used by the service

The service is designed to be integrated into other applications – for example as a 'map window' pane within a third party application or web service. We use REST and SOAP services to facilitate this

### Other client software that may be used with the service

This service integrates with any client software that supports REST or SOAP, WMS, WFS and KML.

## Service management details

The service operates on a 24x7 basis. Standard core operational hours run from 09:00 to 17:00 on working days and operate to 99.5% availability during those hours and are supported by customer support and help desk teams.

We will accommodate Individual customer requirements exceeding this level by negotiation.

The appropriate platforms and applications delivering the service are monitored by a range of tools to ensure the service is delivering to optimal levels. Service Management processes are aligned to ITIL and certified to ISO9001:2008.

## Management information

Users are able to define the level of management information they wish to receive as part of the service. We use standard web service monitoring tools to measure and audit usage profiles of all users and discrete IP addresses. This can be supplied, as required, as standard monthly management information reports to cover:

- Service constraints (e.g. maintenance windows, level of customisation) capture, store, analyse and display metrics related to online services and / or users
- Page impressions, unique users, downloads, entry and exit pages
- User journey, hot-spots, search term entry, location

Maintenance windows occur outside core operational hours and wherever possible are implemented without impact to live services.

We support customer ring-fencing to facilitate bespoke maintenance and any degree of customer customisation.

## Service levels

The service operates on a 24x7 basis. Minimum core operational hours are from 09:00 to 17:00 on working days and operate to 99.5% availability during those hours and are supported by customer support and help desk teams.

Individual customer requirements exceeding this level can be accommodated by negotiation. We will agree levels of availability, capacity, system performance, resilience, security (IL), support hours, monitoring and reporting, issue management and escalation to suit individual customer requirements

## Support boundaries/interfaces documented

Customer interface and support are bespoke to individual requirements and to suit your needs. We offer standard levels which can be enhanced as required.

## Performance attributes defined and documented

Uptime is 24\*7\*365 except for scheduled out of hours maintenance windows which we publicise in advance.

Performance within our domain is for each on-line server request for a map display to be fulfilled within 5 seconds at the user's site.

## Caching

All map services are globally cached for optimum performance.

## Support service provided

We operate full customer support and helpdesk facilities supported by on-line resources and service desk functions. First and Second line telephone support is available 08.00 to 18.00 business days or longer by negotiation.

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## Financial recompense model for not meeting service levels

If required, meaningful and measurable SLAs are agreed with each client requirement and aligned with an appropriate service credit regime.

## Training

Training can be provided as part of the overall customer support package and be tailored to meet individual customer requirements. Here are some of the training options we offer:

- Training courses
- User documentation and on-line help
- Courseware
- Programmers reference
- Installation guide
- Maintenance information
- Systems guide
- Systems architecture
- Applications notes
- Integration methodology

## Ordering and invoicing process

Customers should place orders to Landmark using our pro-forma via email, post or fax.

We will agree invoicing terms with you, dependant on the agreed provision of specific services and include:

- monthly in arrears
- annual in advance (a pre-condition of some data suppliers in relation to licensing)

Any setting up or other start up fees agreed in advance with customers will be payable with the first invoice. Similarly any termination fees agreed in advance with customers will be payable with the last invoice.

Payment terms – 30 days or, if an organisation is signed up to the Government 'prompt payment' initiative, then it is 10 days.

## Termination terms

Service termination and exit procedures will be agreed as part of the service management agreement. This will cover termination by the customer and termination by the supplier

## Data restoration/service migration

Client data is maintained rigorously to the highest standards of quality and timeliness. We have a full version control system in place. We make full details available to all clients, and encourage discussion and review in order that the system can be configured to specific needs as required. This means that, at any point, we are able to inform clients of the state of their data, including full versioning details, which updates have been incorporated (and which, if any, have not) as well as user and format details and other information necessary for them to manage their data upon return, or migration to another service provider. We are committed to full customer support and meticulous in ensuring smooth transition and seamless service migration.

Data standards include Open Standards and standard proprietary standards – including standards specific to any applications running on the platform. We can convert geospatial data from over 175 formats.

All customer data is fully documented, catalogued and audited on the platform. This forms the basis by which data is returned to our customer and then securely destroyed on the platform at termination of contract.

Data can be extracted in any formats or standards including XML, database dumps, formatted outputs (e.g. CSV) and simple file transfer. Data can be transferred by secure SFTP or by encrypted media.

Prices for extraction of customer data will be agreed as part of the contractual service management conditions

## Consumer Responsibilities

- Users must comply with all terms and conditions of use for the systems
- Users must agree not to use the service in any way that may lead to the encouragement, procurement or carrying out of any criminal or unlawful activity
- Users must agree not to do anything that may cause damage to the systems or our servers, systems or equipment or those of third parties, nor access any users' data or penetrate or circumvent any Website security measures or attempt to do any such acts
- Users are entirely responsible for maintaining the confidentiality of their details when using our systems
- Users are not permitted to share user name or password with any other person nor with multiple users on a network. It is the user's sole responsibility to maintain the confidentiality of passwords and take responsibility for all activity that occurs under their user name and password
- We will not be liable where your password is used by someone else. Users should notify us immediately of any unauthorised use of their password and any breach of security as soon as they become aware of it

## Technical requirements

**Browser support:** Whereas there are no restrictions on which web browser to use, the service provision is geared to the browsers listed below in terms of support and effort to ensure the service performs as expected. This support is on a best endeavour basis.

- Internet Explorer 9 or higher
- Microsoft Edge
- Firefox 3.5 or higher
- Chrome 1.5 or higher
- Safari
- Opera

## Security

To avoid any network security issues with plug-ins and downloads, the service navigation front end is JavaScript.

**Internet connection is required:** Client side Internet connection speed minimum of 2 Mbps.

Video display of 1024x768 minimum with 32 bit colour depth .

All Service update requirements will be scheduled and broadcast to users as to time and duration. With the exception of mitigating circumstances the service update will occur outside the normal operation hours.

## Application lifecycle services

The applications that underpin the service are regularly upgraded in line with their individual product upgrade paths and to allow the integration of new technologies and new functionality.

## Details of any trial service available

Standard services are available on a trial basis for up to one month.

## Exit process for data extraction and removal

### Data Standards

The data standards that are in use within the service will be the ESRI Geodatabase along with capabilities for using WMS/WFS as well as KML. These services will be rendered as REST services.

The standards used for extraction of consumer generated data are ESRI Shape format and/or OGC Standard GML 2.0 format. These formats are popular open standards and easily managed on import/export functions within the common GIS and CAD software systems in the industry. If there is an agreed reason or special circumstances it is possible to establish special arrangements to export to other agreed formats within the capabilities of the service provider.

### **Return of Data**

Landmark confirms full compliance with this requirement. We maintain full version control and stringent security over all data, including client data and consumer generated data as listed here. This will always be returned, securely, to our clients or other stakeholders whenever required. We confirm that, to avoid confusion, data that will not be available for later extraction will also be included.

### **Extraction of Data**

We confirm that we do not normally charge for this service.

### **Data Purging**

Landmark confirms that we will purge and destroy (in accordance with our security standards) all consumer data from any computers, storage devices and storage media that we retain after the expiry of the subscription period and the subsequent extraction of consumer data (if requested by the consumer). We will ensure our clients are completely satisfied with the data returned to them, before completing this operation.

## Pricing

Landmark's Data as a Service is priced on a range of factors including:

- The data set(s) required
- Whether you already have a licence to use the data (for example under PSMA) or whether you need to pay licence fees
- The nature of usage (e.g. Web use only, Internal Business Use, Commercial usage)
- The geographic coverage you require
- The number of users/terminals accessing the data

### **Pricing starts from £250 per year**

We offer pricing intervals based on usage (pay per click by transaction), by area (pay per square km per year) and by data set.

We offer a range of pricing models to suit individual requirements and to provide customers with choice of how they wish to pay.

### **These include:**

- Transactional/Unit payments
- Subscription payment

At the point whereby a framework customer requires a particular geographic data feed service, Landmark will provide a quote/proposal under the terms of the framework. At this point we propose the most appropriate commercial model based on:

- Individual customer requirements
- The model providing best value to the customer
- What volume discounts we can provide
- The scope of the service required (for example a national, regional or local area of interest)
- What (if any) enhanced service levels may be required – for example enhanced DR and resilience capability, enhanced IL-levels, extended operational hours or higher service levels (e.g. 24x365x99.99%)

At the same time we can confirm service levels and KPIs to define and measure the service and an associated set of service credits for non-performance.

We find our customers much prefer this tailored approach to pricing as it allows choice and is tailorable to a very wide range of requirements. Our experience is that no two customers require exactly the same service or pricing mechanism.