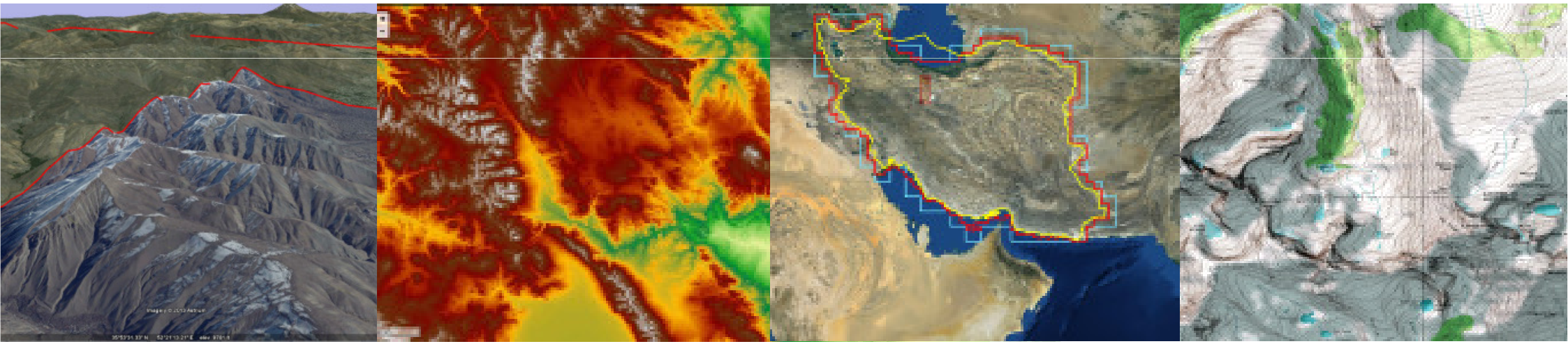
The Future is Now:



Accessing and Managing Geospatial Data in 2015 is Easier Than Ever

Gill Dickson, 26 May 2015

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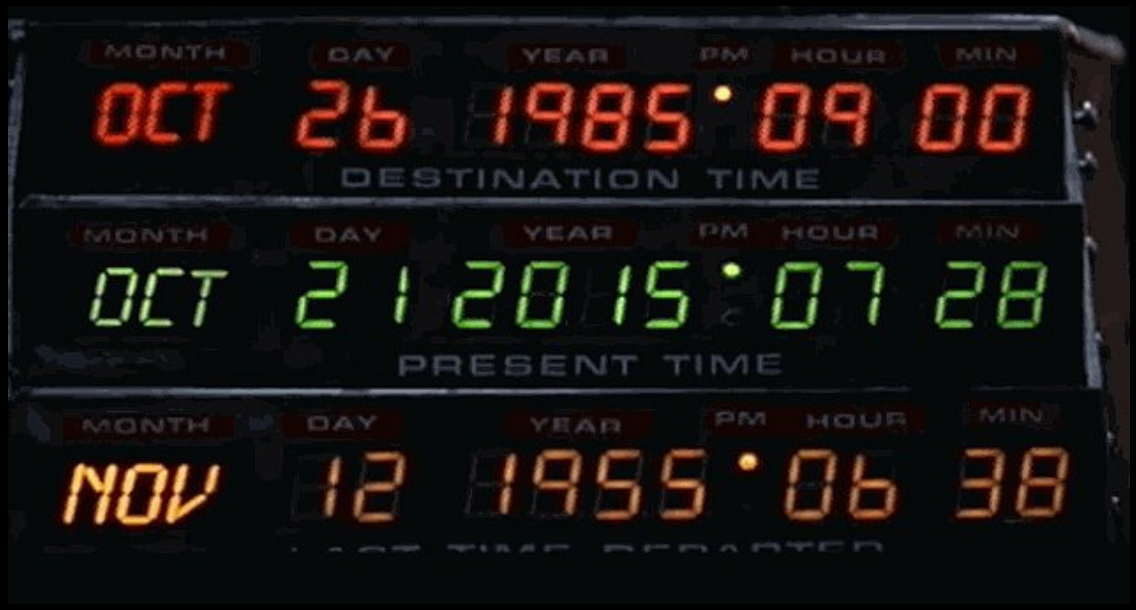

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Data Management Solutions

The cure for geospatial data management headaches

Solutions that enable users to easily access, manage and disseminate all types of geospatial data. All aspects of data management are covered from storage & delivery to analytics & asset tracking to system integration.

- **Data Management Portals & Systems**
- **Fully Customised Solutions**
- **Streaming Services**

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Providing a wide range of Data Management Solutions, both hosted (cloud-based) and deployed (installed on premises), that increase the overall efficiency and profitability of our customers' businesses.

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Portfolio

Portals

- Data Search & Delivery
- Advanced Geoprocessing
- User Access Control

Systems

- Software and hardware packages
- Installed on premises or delivered on a mobile device
- 2D and 3D interfaces available

Fully Customised Solutions

- Complete consultation and system design
- Secure & easy-to-use
- Built around a customer's business practices

Streaming Services

- Managed geospatial data streaming services
- OGC WMS & WMTS, Esri SOAP & Rest, Google KML
- Stream Airbus DS, third party and proprietary data

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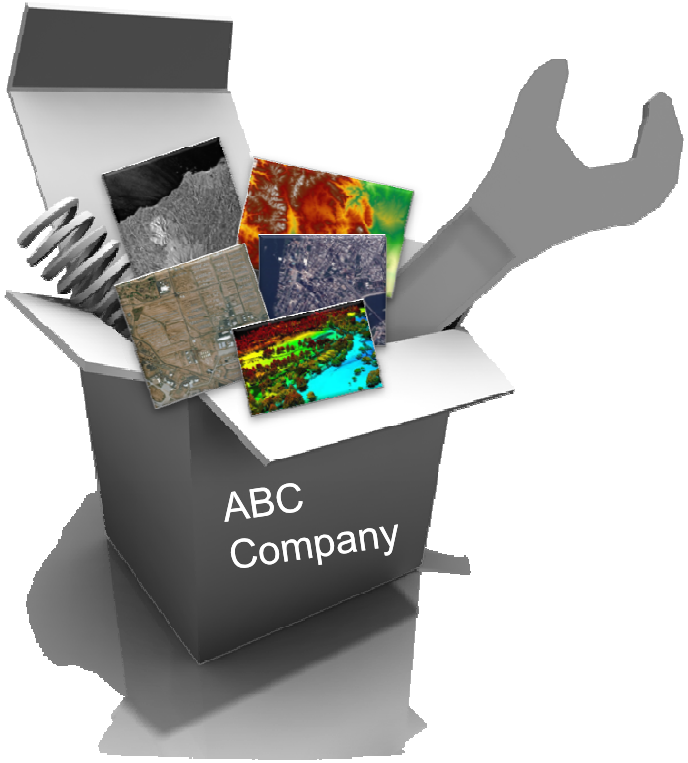
Data Management Portals

Think of Airbus DS Data Management Portals as monogrammed data management tool boxes that are hosted in the very secure Airbus DS cloud and accessed anywhere an internet connection is available. Each customer receives a turnkey solution with all the tools that come in the standard box plus some customisation to make it their own.



Products

- **DataDoors Portals**
- **GetGeo Portals**

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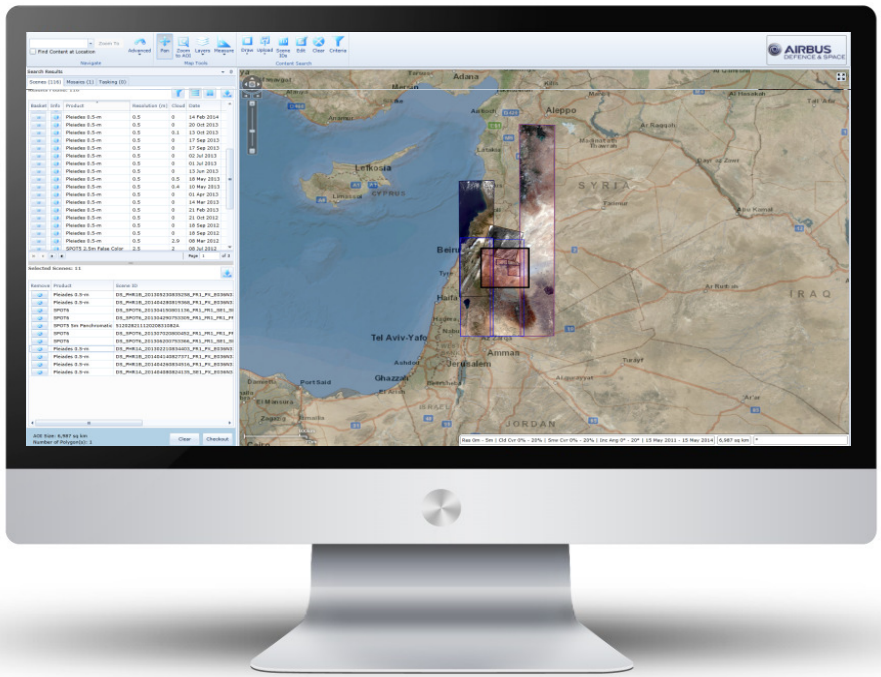
Data Management Portals: DataDoors™



Geospatial Data Management Made Easy

- Secure, single-point access to all your geospatial data
- Integrates with and improves existing workflows
- Detailed reports provided to track which data sets are being used and by whom
- Reduces on-site data management cost and duplication of data purchases and projects

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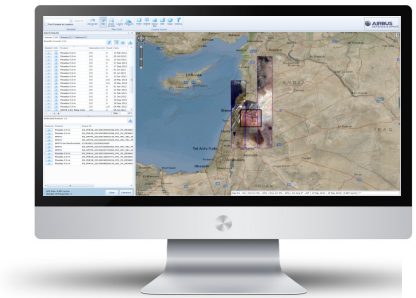
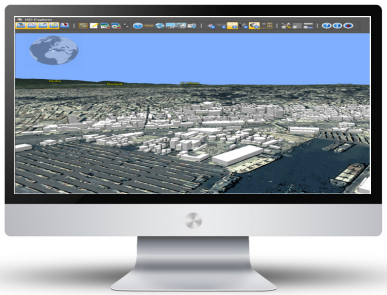
Data Management Systems

Airbus DS Data Management Systems are software and hardware packages installed on premises at a customer's facility or in the field on a mobile device.



DataDoors



I4D

GATOR

Products

- **DataDoors**
- **I4D** (*Intelligence for Defence*)
- **GATOR** (*Geospatial Appliance Targeted for Operational Response*)

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Data Management Systems: GATOR

Access Geospatial Data
When and Where You Need It

- Quickly upload packages of geo-content on short notice before your mission and add new content at any time.
- Easily access large amounts of data in the field without an internet connection.
- Content delivered for use in multiple platforms – ArcGIS, Google Earth, GAIA and web browsers

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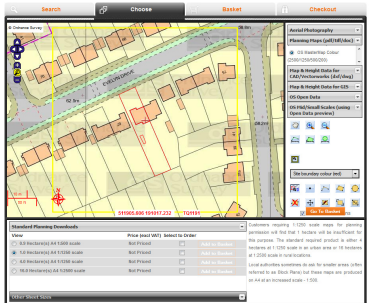
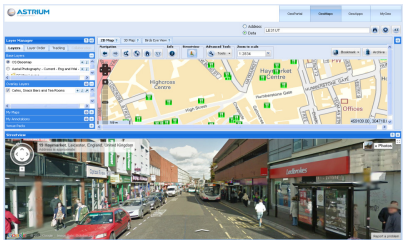
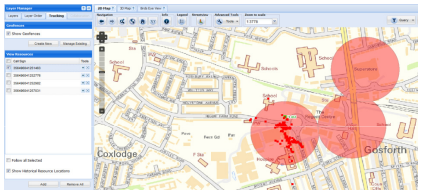
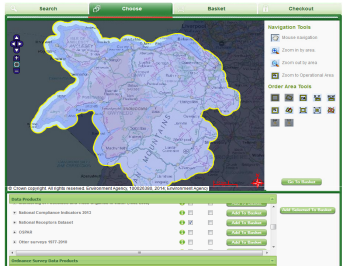
Fully Customised Solutions

Airbus DS combines our products and capabilities with other products and services to provide fully customised location intelligence solutions for large organisations that analyse links between people, objects, locations and events to empower a customer's business.









Products

- Engineered for customer-specific needs
- Components from proprietary and open source modules
- Hosted/cloud-based or deployed/installed on premises
- Any combination of storage & delivery, data analytics, collaboration and/or geo-fencing/tracking.

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Streaming Services

Geospatial data is delivered and viewed online in order to be accessed anywhere, anytime, and on any device for use as a basemap and/or creation of derivative works.

Products

- **OPTION 1:**
  Customer purchases or creates data and pays Airbus DS to host and deliver it as a streaming service

- **OPTION 2:**
  Customer subscribes to access Airbus DS data via a streaming service

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Markets & Applications

Markets: Government & Commercial

- Defence
- Public Safety
- Environmental Agencies
- Insurance
- Energy
- Transportation
- Geospatial Data Providers
- Disaster Response & Humanitarian Relief

Applications:

- Manage Operational Business using Geodata
- Store, Supply and Sell Geospatial Content
- Geoprocessing
- Risk Assessments
- Monitor Static and Mobile Assets & Resources
- User Community Collaboration
- Provide a Common Operating Picture
- Manage Data in Disconnected Environments

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Case Studies

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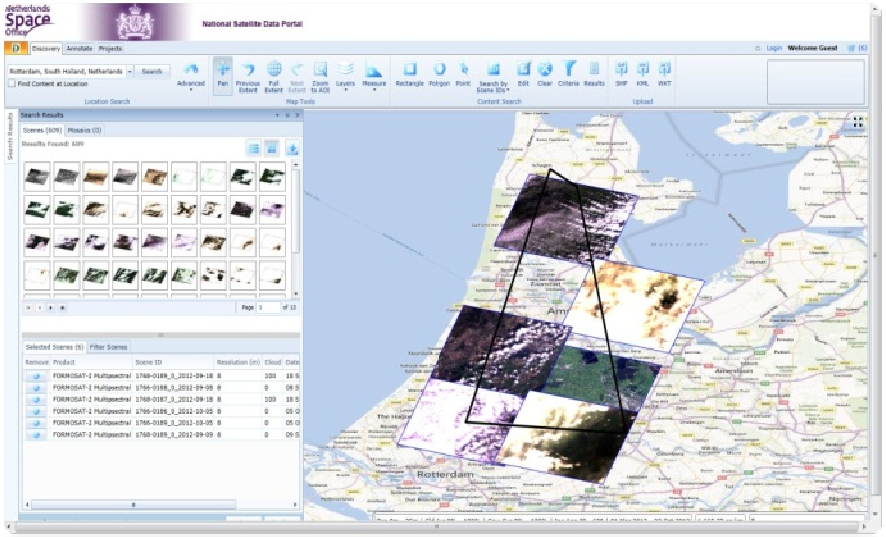
Data Management Portal: DataDoors

Dutch Satellite Data Portal

Provided by the Netherlands Space Office (NSO)

- INSPIRE compliant web portal
- Broad access to data over The Netherlands territory
- Data free for registered Dutch end-users
- Daily imagery updates
- Data available within 24 hours after acquisition



http://nso.datadoors.net/dd3

2014 Geospatial World Technology Innovation Award Winner!!

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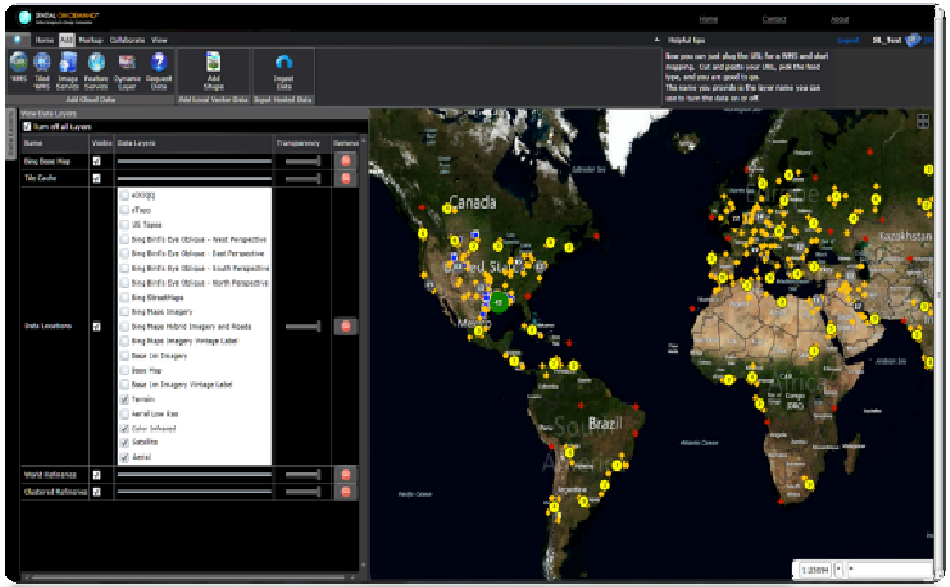
Data Management Portal: DataDoors

Spatial On Demand

Provided by Spatial Energy

- Provided as a subscription service which includes hosting of customer purchased data and subscriptions to COTS layers of data
- A trusted data management solution used by over 70 of the largest Energy Companies in the world
- Hosts, manages and integrates the largest energy-specific online database of geospatial data
- Enterprise-wide solution that allows users to quickly and easily find and access data directly in their workflows



www.spatialondemand.com

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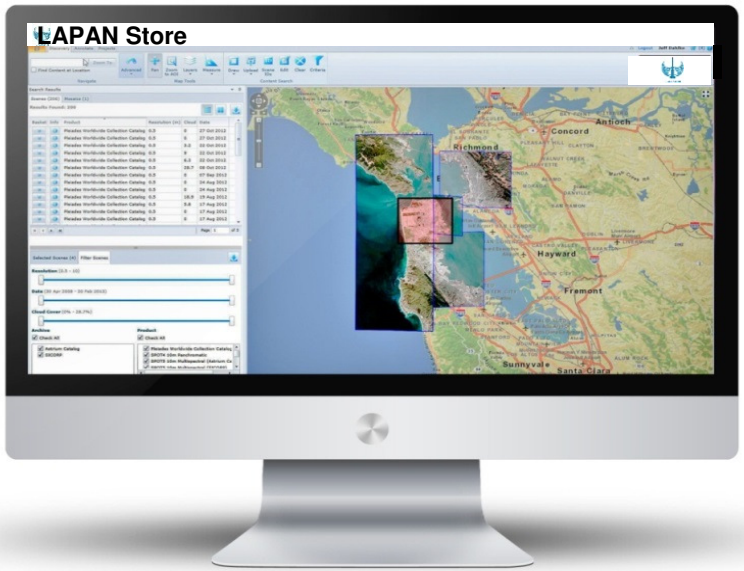
Data Management System: DD Appliance

LAPAN Store

- *Lembaga Penerbangan dan Antariksa Nasional* (**LAPAN**) is the Indonesian government space agency
- LAPAN needed an easy-to-use web portal to
  - Host & catalogue data from various sensors (SPOT, Landsat8, Modis, Pléiades, QB, etc)
  - Host their own proprietary data content (eg: LAPAN's basemap, value-added products, etc.)
  - An e-commence setup for archive ordering and new collection ordering (thru email)
- After comparing all of their options, and utilising Airbus DS's own DataDoors solution, GeoStore.com, they decided the DataDoors Appliance was the right solution for LAPAN Store



LAPAN

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Data Management System: I4D

GeoSpatial Intelligence Center for MoD

Need:

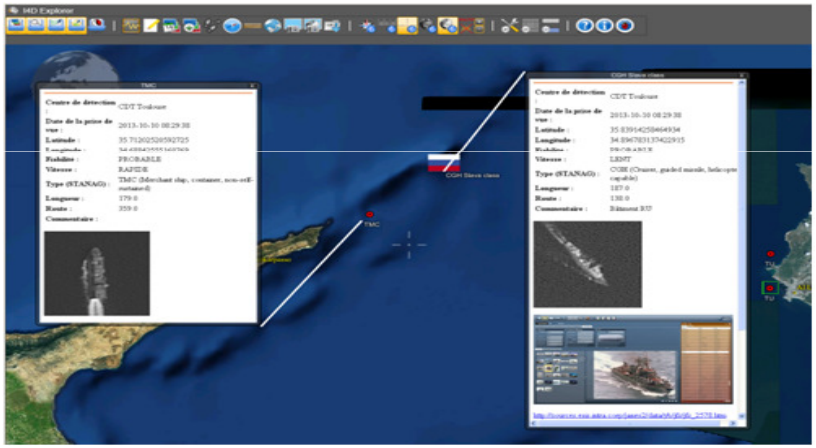
- Multi-resolution “foundation layers” shared as common geographical referential
- On top of this, management & access to multi-source intelligence data (vector) for information fusion & decision-making

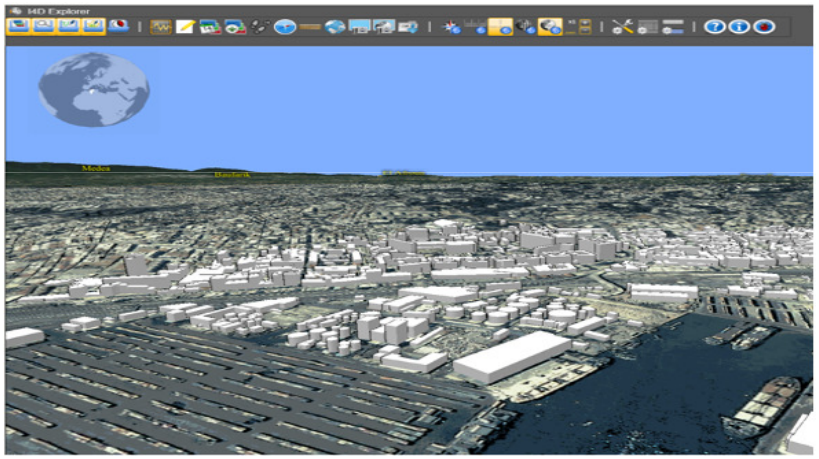
Solution:

- Multi-layer referential: SRTM (ww), WorldMap (ww), TPC (ww), OSM (ww), SPOTMaps (10 M km²), Pleiades (175 sites)
- “Data centre” for capitalisation & indexing of intell data
- Product and object querying through space& time criteria, information analysis, fusion, and reporting

Benefits:

- Multi-INT data fusion
- Ease of use





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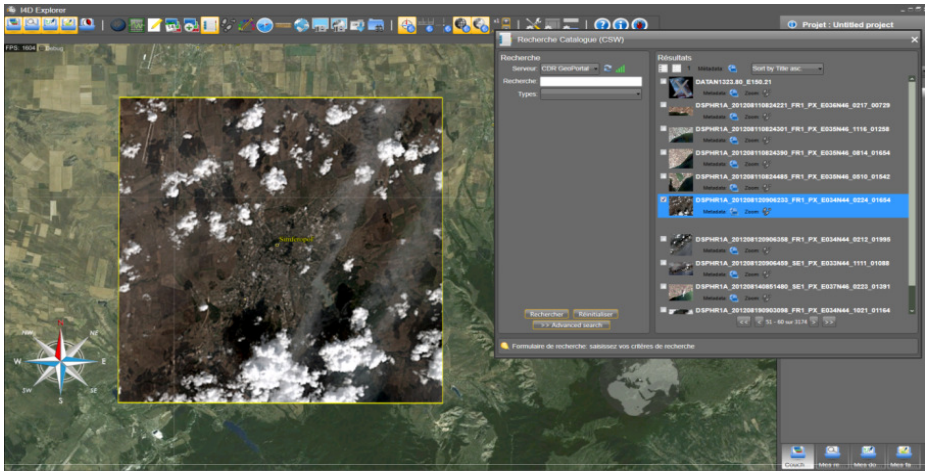
Data Management System: I4D

Information management for a large geographical production project - GEOSOCLE support system

Need:

- Information & product management and sharing across actors of the GEOSOCLE production chain : ~10 actors / sites interconnected
- 6 M km² produced per year – raw images to mosaic
- Decision support for project management (eg: production time estimate)



Solution:

- Multi-layer referential initiated by French MOD available geo data + enriched by GEOSOCLE productions
- “Data centre” for capitalisation & indexing of products and associated data (quality reports, studies, etc…)
- Search, view and download/upload access

Benefits:

- Management of GEOSOCLE products
- Speeds up production cycles

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Multiple Use Cases

Humanitarian & Peacekeeping
Navigation
Reconnaissance
Inspections

Natural Disasters
Informed, coordinated response
Infrastructure damage

Environmental Response
Remote locations

First Responders
Search and rescue

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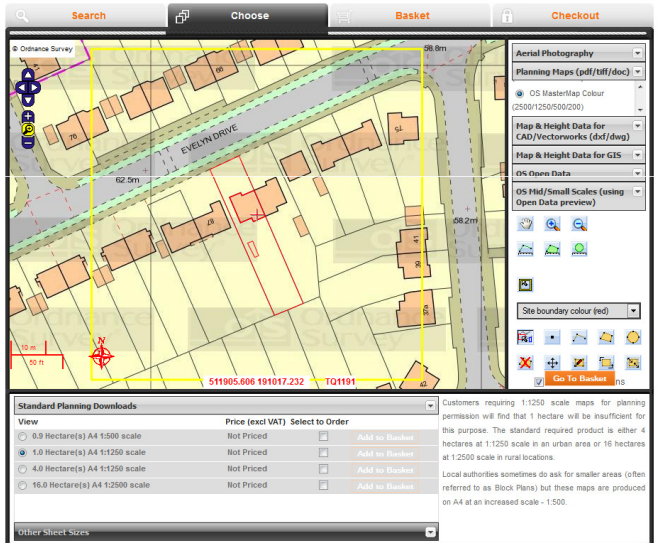
Fully Customised Solution

Store & Supply – Stanfords Planning Portal

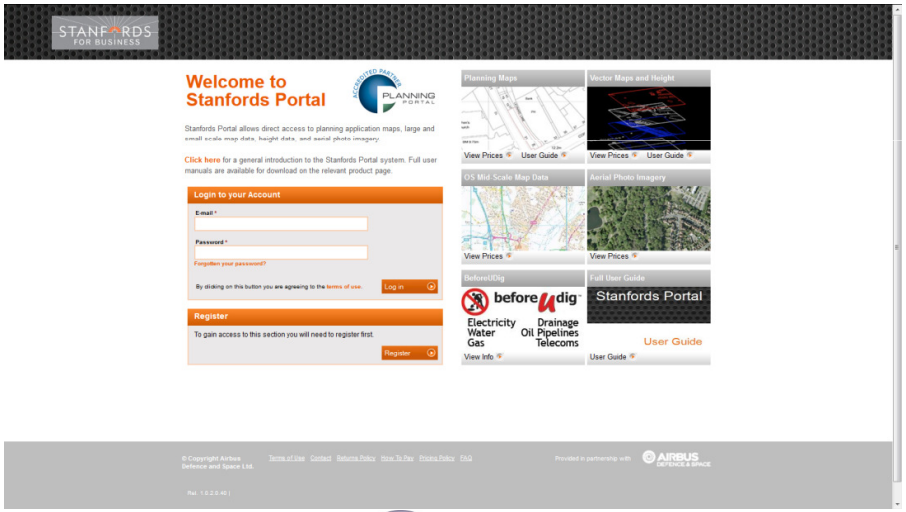
Application

- Store, manage and supply vector & raster data
- Complex royalty calculations for data suppliers
- National data updated every six weeks
- Discover, order, download



Reference

- Stanfords data distribution portal for planning applications
- Ability to annotate maps
- Multiple formats to cater for CAD users
- Approx £1m pa revenue for customer, av transaction value £24 => 42,000 transactions pa, most delivered within minutes



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Fully Customised Solution

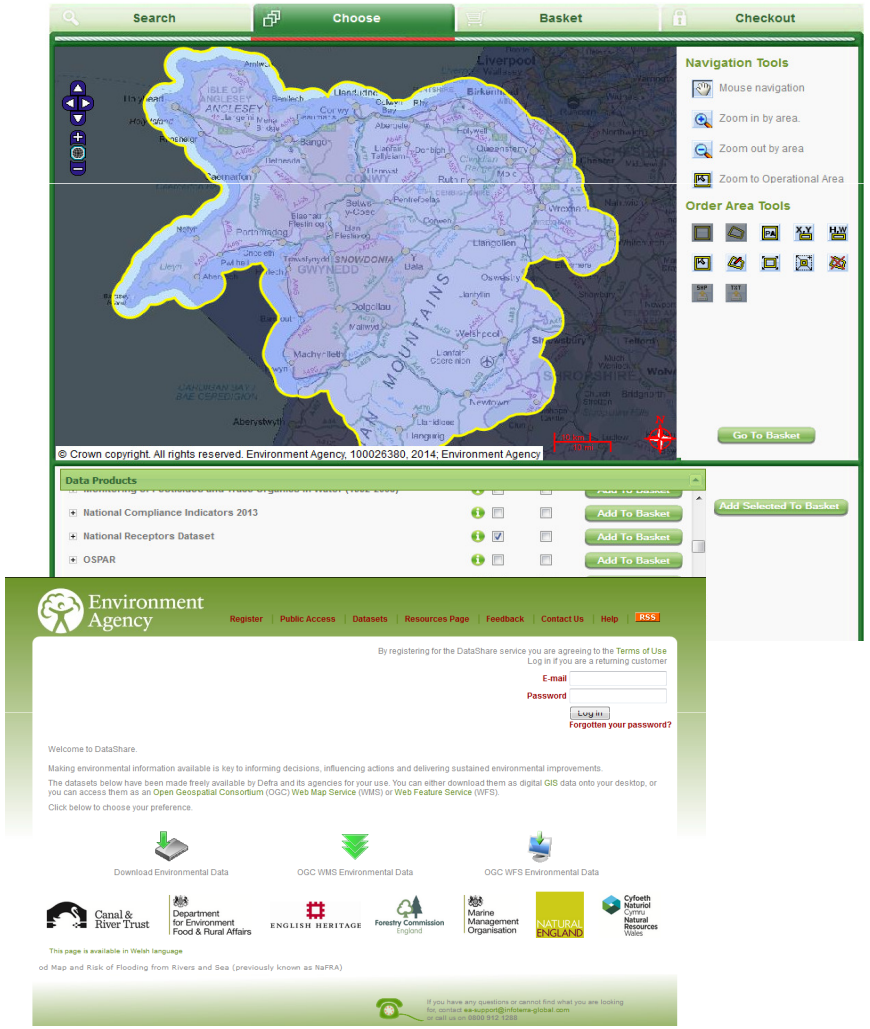
Store & Supply – Environment Agency Portal

Application

- We store, manage and supply data how you want
- Your business data, open data, national data
- Discover, order, download, stream, print, export

Reference

- Data distribution portal for environmental data
- Over 500 different datasets which can be ordered for download, delivery on media, WMS feed, WFS feed
- Order selection defines geographic area , data format, frequency of update required
- Over 6,000 active users



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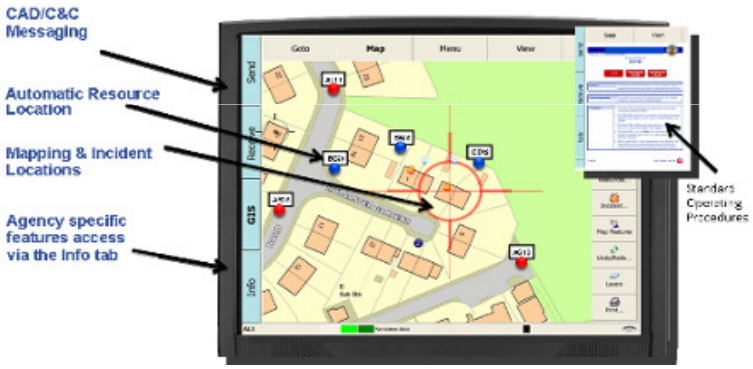
Fully Customised Solution

Manage – Fire Operations

Application

- Help manage public safety operations
- People & asset management, event processing
- Information management, dissemination & update
- Access to up-to-date and accurate information
- Improved response times through real-time mobile data communication
- Seamless delivery of critical risk information to mobile resources
- Flexible contingency planning and emergency response solution



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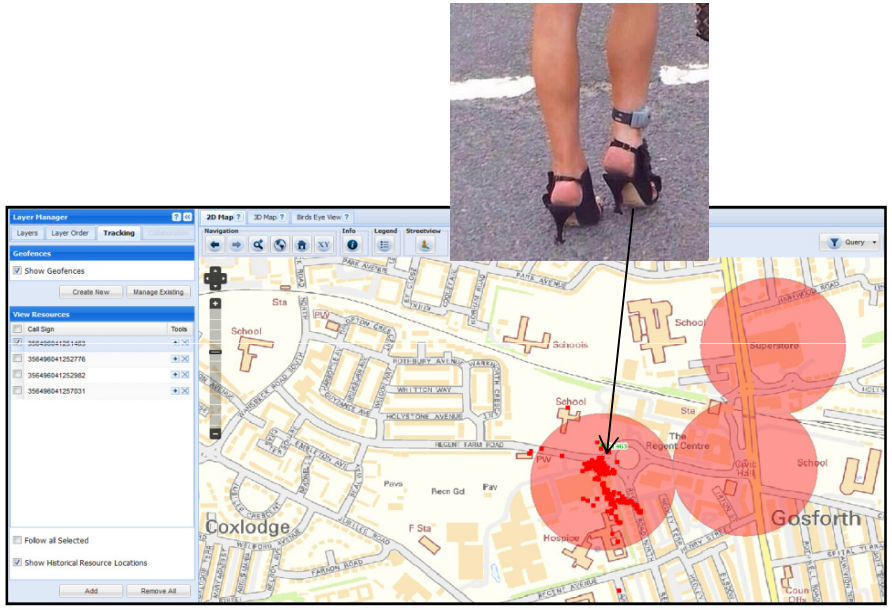
Fully Customised Solution

Monitor – Multiple Examples

Application

- Tracking mobile assets, resources & vehicles
- Monitoring and mapping solutions to enable offender management
  - resilient bi-directional mobile gateway
  - data confidentiality, integrity & availability
  - evidential database & geospatial processing
  - exclusion and inclusion events and alerts
  - map view & data entry web services
  - timeline and breadcrumb views
- Mobile video and CCTV data management & dissemination
- Satellite repeat views for site monitoring and change detection



Reference

- Ministry of Justice Electronic Monitoring Tagging of Offenders
- Metropolitan Police Service – Resource Tracking
- Fire Operations – Automatic Vehicle Location System

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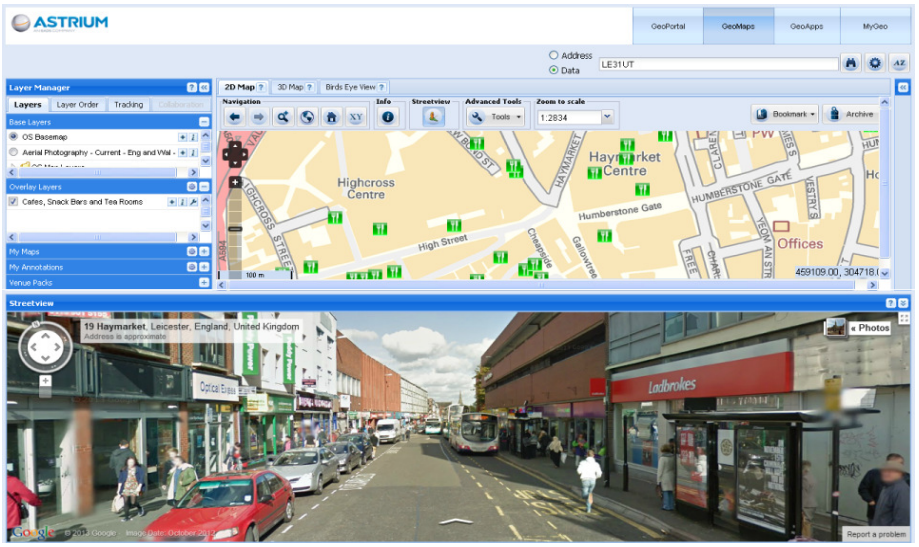
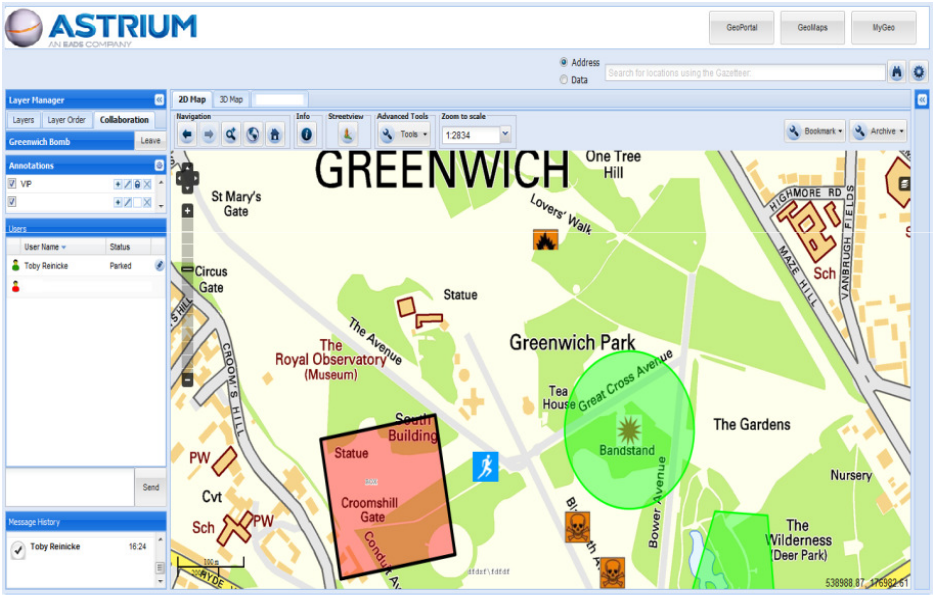
Fully Customised Solution

Collaborate – Met Police

Application

- common operating picture with real time updates
- geospatial collaboration portal with operational data and web feeds
- secure yet accessible by disparate authorised users
- scalable mapping, located imagery, CCTV and video feeds
- collaboration tools, annotation & messaging
- gazetteer searching and location based analysis





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Fully Customised Solution

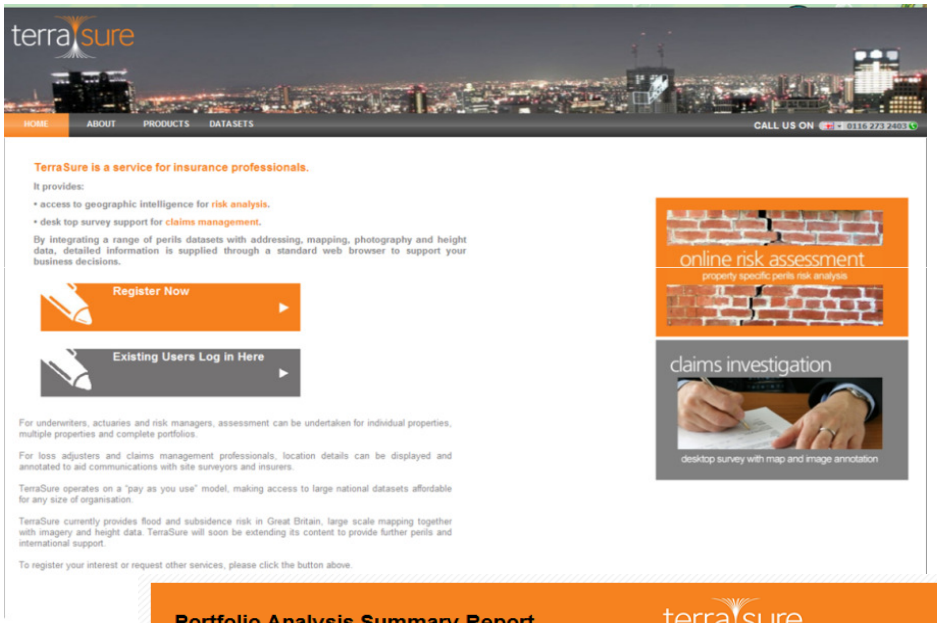
Analyse – Terrasure Portal

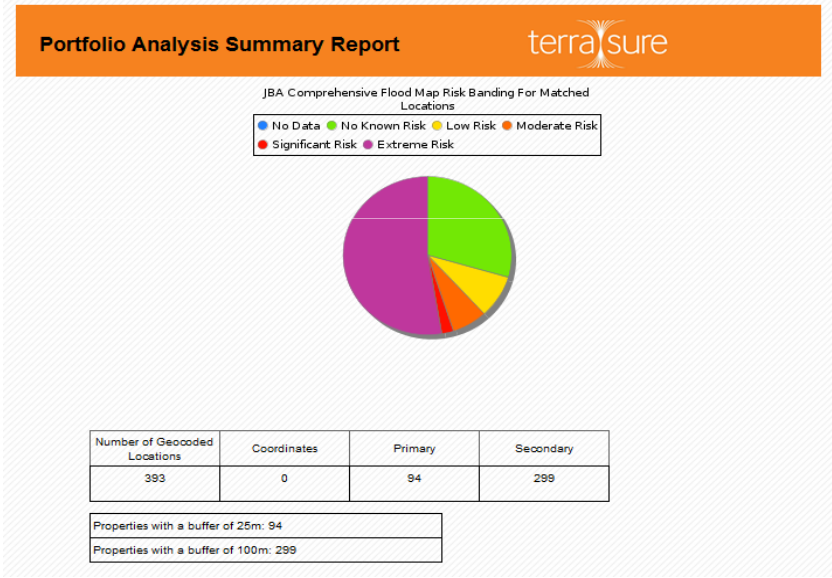
Application

- We provide applications that provide answers
- Data management, augmentation & analysis
- Spatial analysis, hot-spotting, geo-fencing

Reference

- Online risk assessment for insurance industry
- Online site illustration and annotation for claims management
- Transaction based charging
- Bulk portfolio analysis and single location query
- Address matching
- Flood risk/subsidence risk
- Great Britain coverage maps/aerial imagery/height data
- Geospatial visualisation
- Risk extents





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Streaming Service: OPTION 1

Imagery Streaming Service for W. Australia provided by Landgate

Need:

- Supply data across government
- Minimize the duplication of resources by collecting location data once and sharing

Solution:

- Multi-year SPOTMaps hosting & streaming service provided with a 99.5% online service guarantee, which is critical when supporting emergency services operations.

Benefits:

- Reduced infrastructures costs and maintenance for location information
- More efficient utilization of funding across the government

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Thank You!

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