



Edition 6

# XG NEWS

exeGesIS SDM Ltd

Information Technology and Mapping  
for Countryside & Conservation

## Who are we?

We are a company dedicated to improving countryside and conservation management through the use of geographic and information technologies. Serving the public, private and charitable sectors for over 10 years, our 20 strong staff develop and support software solutions used by several hundred local authority and other clients across the UK.

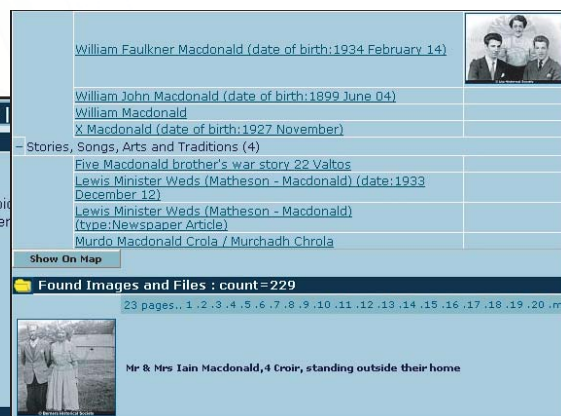
For an IT company, our focus is strongly environmental or if you prefer, for an environmental consultancy our focus is strongly IT. The truth is that many of our staff have professional experience and industry leading skills in both areas and we work exclusively in the cross-over area between IT, GIS and countryside management.

## Hebridean Connections

Local history societies on the Isle of Lewis in the Outer Hebrides approached us to help with their "Hebridean Connections" project.

This Heritage Lottery funded project is recording and digitising material on subjects as diverse as archaeology, genealogy, crofting and local legends, and then publishing this material interactively on the web.

Our first task was to build the on-line content management system, integrating database, GIS and multi-media file management to allow remote users to upload images as well as enter text and spatial data. We used an innovative data structure that emphasises the connections between records, reflecting the complex nature of local history and landscape information.



Images, documents, videos and sound recordings are uploaded, catalogued, and automatically resized, stamped and watermarked for web publication.

The public web site allows worldwide users to search and browse this amazing resource of information using simple "Google-like" searching, structured queries, or using the interactive map. We have also developed a way of finding the connections between any two records, such as two people, or a person and a place – this always gives interesting and surprising results!

The system is easily adapted for similar projects and we would be pleased to discuss your requirements.

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Contact: Crispin Flower on (01874) 713072



Spatial Data Management



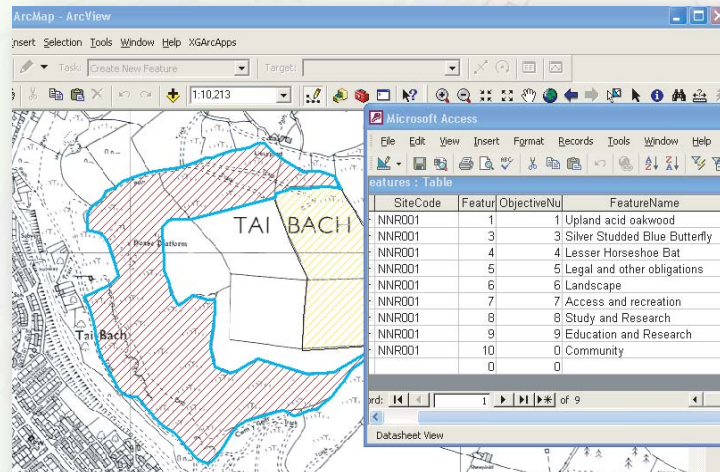
# Current News and Projects

## LANDMAP

Landscape is an important consideration in strategic and local planning. The Countryside Council for Wales LANDMAP project brings together objective data such as geology and landform with more subjective information, such as sensory responses and cultural interpretation. The LANDMAP project has gathered and evaluated landscape data across Wales and our role has been to make this data available over the web.

Our solution deploys web services and provides an interactive mapping interface onto the underlying LANDMAP data. An innovative query engine allows users to interrogate the database directly with results being automatically mapped and reported. Extensive use of remote scripting has allowed us to use dynamically generated pages that are updated without necessitating returns to the server – providing the user with detailed information in the shortest possible time.

## MapLink - now available to the public

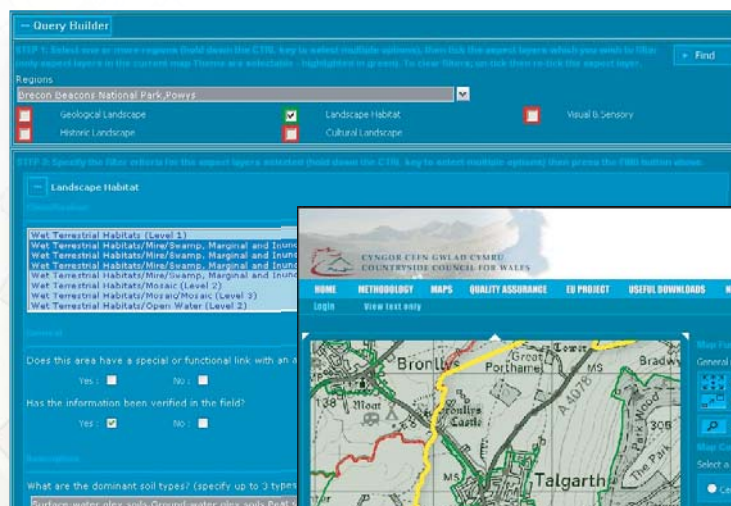


Developed and deployed over many years within our core products, the latest version provides an 'out of the box' solution to add complete mapping functionality to your own database applications and programs.

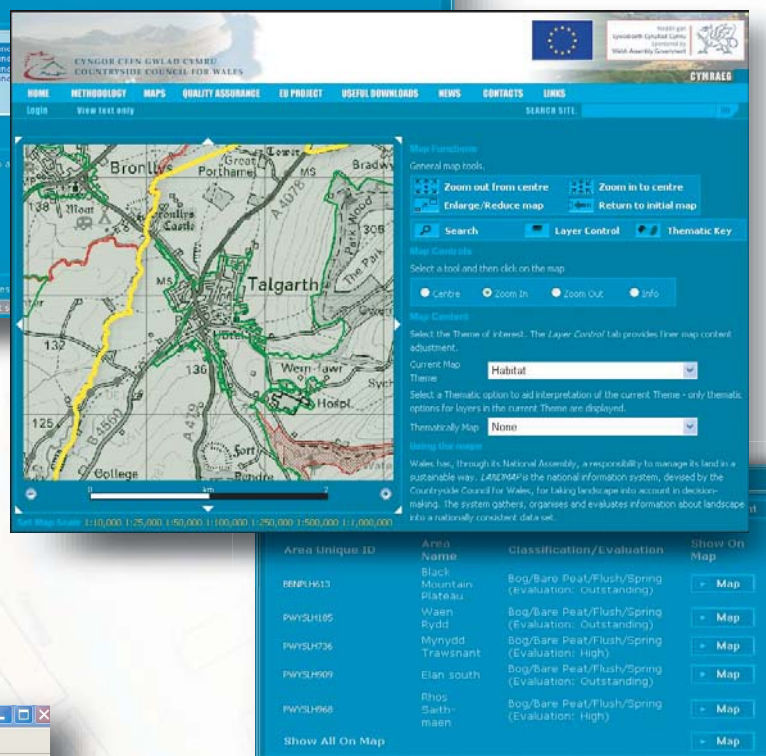
MapLink is available for MapInfo and ArcGIS and can be quickly configured by IT staff to map-enable almost any in-house or third party application.

### Features include:

- Goto map object from database record and vice versa
- Multi-user editing of data and map objects
- Instant synchronisation of up to 22 fields
- Multiple object selects and spatial selections
- Inbuilt gazetteer and map templates
- Full integration with Address Finder & LibraryLink



Users can interrogate one or more of the aspect layers via the map or the highly functional query interface, resulting in a list of matching areas or a detailed printed report.



WebLink: <http://landmap.ccw.gov.uk>  
Contact: Tony Pettitt on (01874) 713061

## Web services for sharing & publishing data

Integration of data is becoming more and more important in the way we work and data needs to be shared both within and outside of organisations.

Several of our key products already have sophisticated web interfaces allowing complex querying of the data using just a web browser and we are now adding SOAP (Simple Object Access Protocol) enabled 'web services'. Web services allow data to be integrated with 3rd party systems and datasets, or to simply be displayed on a web page.

The web services include functionality that makes use of 'style sheets' and additional components that make it simple for clients to customise the display of data as required.

The use of web services provides users with a flexible generic querying option when conducting searches. This is a bit like Google, where users no longer have to be concerned about categorising their search – they just type in what they are interested in and the web services will submit the search criteria to all relevant datasets.

WebLink: [www.esdm.co.uk/maplink.asp](http://www.esdm.co.uk/maplink.asp)  
Contact: Crispin Flower on (01874) 713072

Contact: James Perrins on (01874) 711145





# CAMS for countryside and trail access management

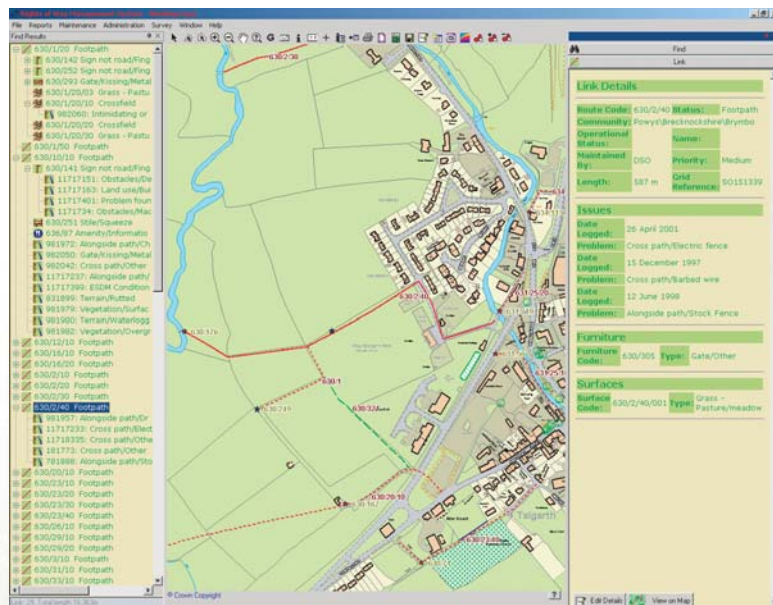
## The Countryside Access Management System

### CAMSV5 – .Net & completely new

CAMS is the comprehensive solution for managing public rights of way, trails, green space and in fact almost anything to do with public access land. An expanding client base already over 70 strong, confirms its position as the UK market leader.

#### Upgrade features include

- Map and text data may be viewed at the same time in re-sizeable frames
- May be operated across remote offices via a web browser and data may be published to the web for public access
- Integrates with your corporate database engine - SQL Server, Oracle etc - also MSDE, if required - for smaller installations
- Supplied with standalone GIS or integrates with your existing corporate GIS solution (MapInfo or ArcGIS)
- Completely new legal module – inc Scottish version
- Updated and improved field survey solution
- Written using the latest VisualBasic .Net technology



### Path survey – 27,000 km and still going

Our path survey teams have completed 27,000 km of survey in recent years. That's London to Hong Kong – and back! Most of this has been undertaken using our CAMS linked Path Surveyor application, that runs on low cost PDAs (hand held computers) and offers integrated GPS (global positioning system) and camera. A complete PDA, with survey software, GPS and camera costs less than £900.

#### The Cornwall experience

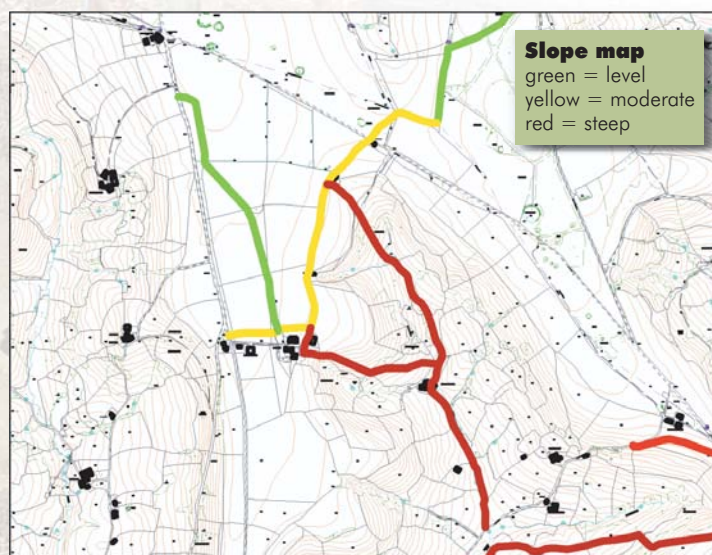
Our latest large scale survey was a 100% survey of 4,300km of paths for Cornwall County Council. Completed on time by a team of 5 surveyors, we recorded and mapped 47,000 furniture and maintenance items and captured over 30,000 photos.

On completion the entire dataset was migrated into the council's CAMS and we then went on to prepare a funding strategy that generated a £2 million budget to fund network improvements.

### Improvement plans and accessibility mapping

We have worked closely with a number of authorities to help in the preparation of improvement plans and in providing access management consultancy services.

In addition to survey work and strategy development, we can offer cost-effective data analysis services to help with use and demand profiling and accessibility issues.



Our gradient mapping service provides you with a complete thematically mapped dataset of your path network, with maximum and average gradients for each link calculated and several other useful outputs. A fantastic starting point for strategic accessibility work that is offered for a fixed price of £650.



Weblink: [www.esdm.co.uk/cams.asp](http://www.esdm.co.uk/cams.asp)  
Contact: Richard Bowen on (01874) 713067  
James Hargreave on (01874) 713069  
Neil Lockett on (01874) 713065





# HBSMR for archaeology and listed buildings

## The Historic Buildings Sites & Monument Record

### New release: HBSMR v3.2

HBSMR is the industry leading data management solution for managers of Historic Environment Records (HER). Developed in partnership with English Heritage, the system is used to manage heritage data across most of the UK's authority areas.

### Key upgrade features include

#### New Themes module

The Themes module explains and interprets your HER data for outreach and web publication. (See article below)

#### Historic Landscape Character (HLC) module

Allows HLC data to be created and maintained in full integration with other HBSMR data using a rule-based type determination in line with English Heritage methodology guidelines.

#### Designations module/Listed Buildings data import

This module allows users to record and manage legal designations in their own right, cross-referencing them to monuments and sources, and linking them to mapped features in separate GIS layers.

#### LibraryLink integration

Manage images and documents related to the HER using LibraryLink, with powerful cataloguing and image processing tools.

### Recent HBSMR Projects:

#### Unlocking Buckinghamshire's Past

Buckinghamshire County Council is using the new Themes module to prepare educational and outreach material for the Heritage Lottery funded "Unlocking Buckinghamshire's Past" project. Data, images and interactive GIS mapping will be published using HBSMR-web.

#### Edinburgh City Council – new HBSMR users

We are helping the Edinburgh City Council SMR get off to a fresh start with HBSMR, and have recently completed a start-up data migration using data from Historic Scotland and the National Monuments Record for Scotland.

#### East Lothian now providing SMR services to Mid Lothian

East Lothian are extending their use of HBSMR to manage a record for Mid Lothian Council.

#### Leicestershire County Council Conservation Team

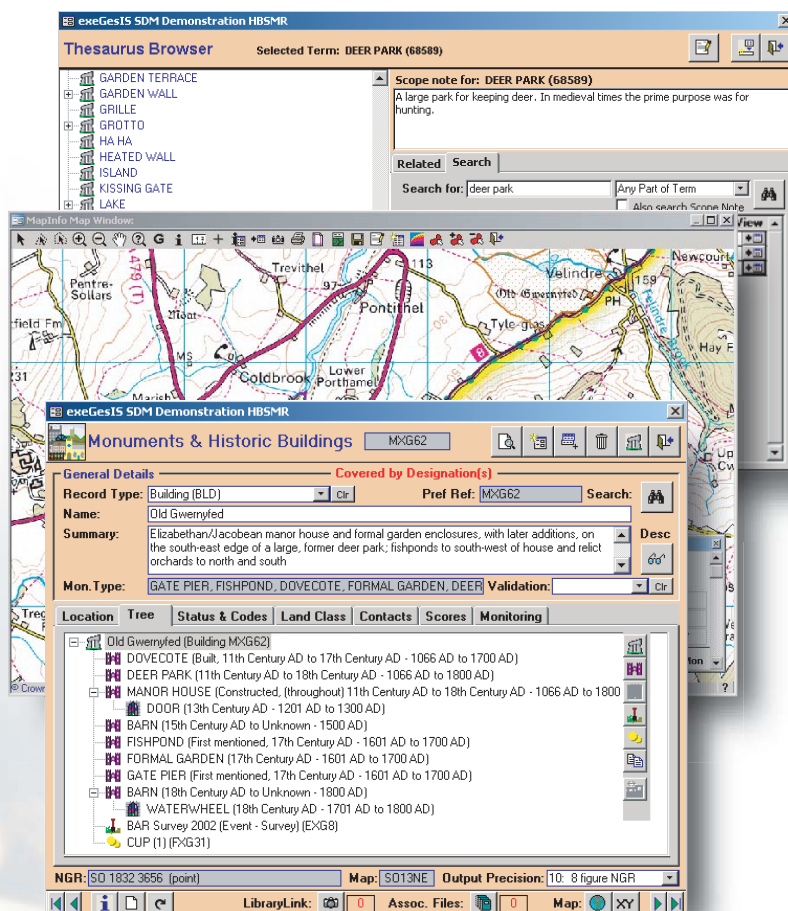
Leicestershire County are using HBSMR to achieve better integration of their archaeology and built heritage conservation teams. This involves extending the use of HBSMR, importing data from legacy systems, and building custom modules in HBSMR.

#### Jersey Heritage Trust

HBSMR has recently been adopted by the Jersey Heritage Trust to start building a digital Historic Environment Record.

#### Peak District National Park

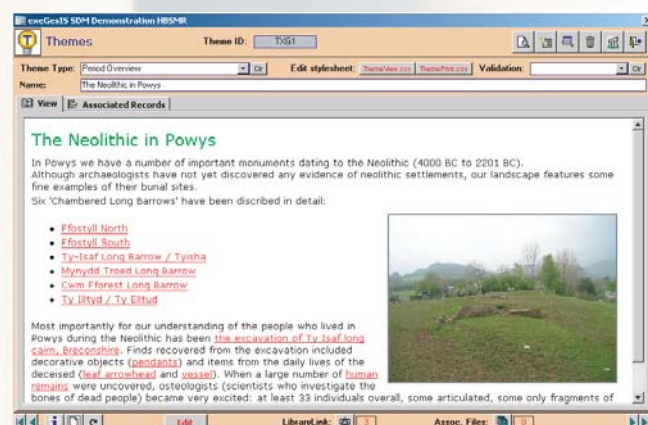
Information about the historic environment of the Peak District National Park (PDNP) is managed by 6 local authority SMRs, 5 of which use HBSMR. We have set up custom tools for PDNP staff to merge and view this data within their corporate GIS, and send updated information back to the record maintainers.



### Themes Module

Launched at the User Group meeting in Huntingdon, and designed in partnership with Buckinghamshire County Council, the Themes module is an exciting new addition to HBSMR. Use Themes to:

- Describe and explain your HBSMR data
- Prepare clean HTML data for web publishing
- Generate thematic overviews reliably and fast
- Link HBSMR data into outreach and educational articles
- Extend the HER to include historical events and processes
- Create an illustrated glossary of technical terms
- Document recording and casework policies and procedures
- Write and manage research agendas within HBSMR







# TMS for woodland and tree management

## The Tree Management System

### TMS - A web-based approach

TMS is a new web-based solution for managing:

- Street trees
- Woodland
- Trees in parks & public spaces
- Veteran trees and ancient woodland
- Protected trees (TPOs)

### Meeting a new demand

In response to numerous requests from authorities using our other products, we launched TMS-Web last autumn. This is the first of a new generation of web-based database and mapping products.

The system is designed for woodland and tree managers needing an 'off the shelf' solution that can be extensively customised to match their own approach to management. To meet the need we looked to the new ASP.NET technologies to produce a web based product that is easy to maintain, will run on any PC without locally installed software and is fully scalable from a laptop through to an internet web server.

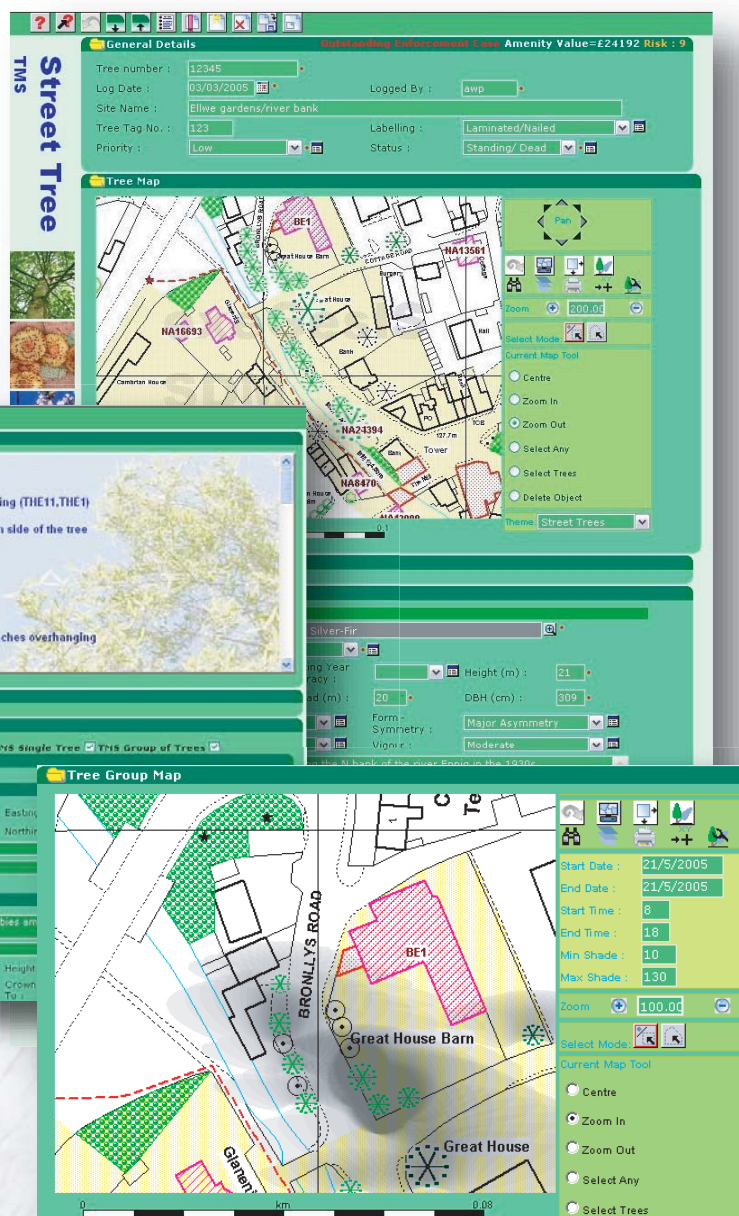
The resulting product has a data driven interface (making customisation child's play!), yet still maintaining a relational database behind the scenes which makes data import, export and reporting straight forward.

#### Features include:

- Configure it yourself to match your work and approach
- Add and edit fields and also the 'look and feel'
- High quality reporting with embedded map options
- Feature rich interface with client side data validation
- Automated Risk and Amenity Value calculation
- Shade modelling taking into account tree height, spread, crown diameter, etc
- LibraryLink for associating digital media, documents, etc

#### Technologies employed:

- Browser based product – no client installs
- Developed in ASP.NET
- SQL Server/MSDE data engine
- All mapping served using web services
- XML import and export
- Integrated mapping based on MapXtreme or MapServer



Tree shading over a period of time can be shown on the maps using the automatic shade calculator.

### New Technology - SMS Web Engine

Our development team have been working on a completely new web database and mapping development kit for the past two years. This engine has been employed in the Tree and Woodland Management System and is now being used to build web versions of some of our other products.

Using our SMS engine we can quickly build bespoke web-based solutions providing you with:

- Low development costs
- High functionality
- Integration with corporate systems
- Embedded mapping and associated document handling
- Full administrator-designer interfaces





# CMS for managing your countryside sites & species

## The Conservation Site Management System

### CMS V7 - under new management

CMS is a tool that helps you to rationally plan your site management and then goes on to provide all the recording and data management you need to manage, monitor and report on your sites. Supported by a consortium of leading conservation organisations CMS was first developed in 1988 and now has an expanding client base of over 240 organisations across the UK and overseas.

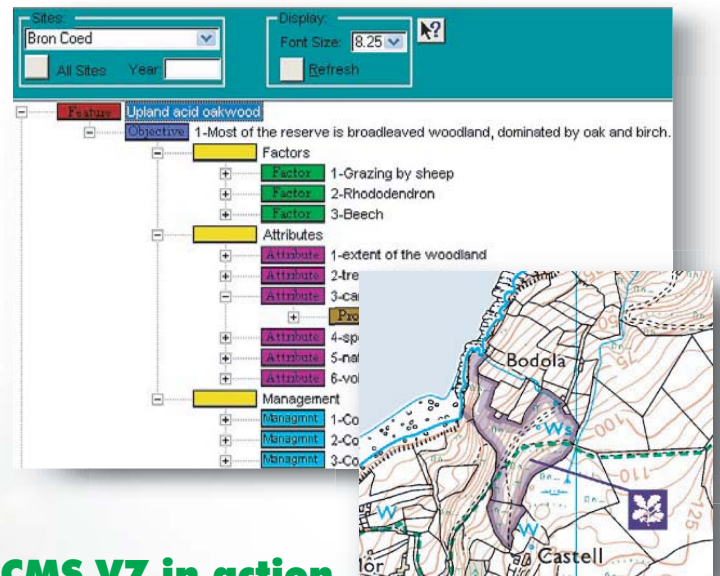
CMS Web for multi site organisations and community use is now being developed as well as 'CMS-NaturaPlan' for European management planning.

### CMS V7 - new release

CMSv7 allows your management plan to become truly dynamic. You can alter your plan at any time to reflect lessons learnt from experience and then print out a new copy of the plan incorporating the latest changes. Reporting on achievements, producing staff work plans or annual reports becomes an easy task. Your management plan is no longer a dusty document on the top shelf!

#### Features include:

- Make CMS v7 simple or sophisticated to reflect your own approach to management planning -
- A wizard style interface making data entry and other routine operations faster
- Improved reporting facilities and the ability to link projects to organisational or Biodiversity Action Plan targets
- Links to the biological recording database, Recorder
- Highly functional link to corporate GIS (MapInfo and ArcGIS)
- Integrated image handling / document management



### CMS V7 in action

CMS is used in a wide range of scenarios which demonstrate its flexibility. Whilst its traditional use has been for nature reserve management, it is also used for country park plans, urban green spaces, national parks and species plans. Users extend from Bulgaria and St. Lucia to Oldham and the Isle of Eigg.

One of the huge strengths of CMS lies in its corporate reporting facilities. Organisations like the Scottish and Lincolnshire Wildlife Trusts use it to report to HLF and English Nature respectively on their project outputs and targets. Instant reports provide all the information needed at the site level, or for corporate management across many sites.

Weblink: [www.esdm.co.uk/cms.asp](http://www.esdm.co.uk/cms.asp)  
Contact: David Mitchell on (01874) 713077

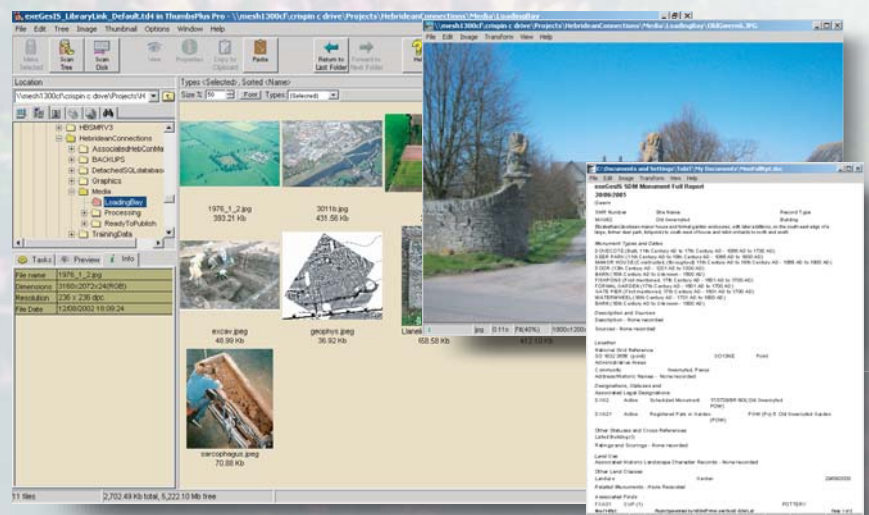


## LibraryLink

### Impressive document management – inside your applications

Digital images, documents, spreadsheets, databases and digital mapping applications need to inter-relate to inform day-to-day business processes. Digital assets must be readily accessible within the working environment, fully linked into desktop applications so that they are just a click away.

LibraryLink achieves this, providing seamless integration with your data management or digital mapping systems. From any mapped GIS feature, or database record, a single click will show all linked resources as thumbnails in the viewer. Clicking a thumbnail will open the original document in the appropriate application (e.g. a .doc file will open in Word, a video file will open in a media viewer, etc).



Weblink: [www.esdm.co.uk/librarylink.asp](http://www.esdm.co.uk/librarylink.asp)  
Contact: Crispin Flower on (01874) 713072





# PACS for development control and planning

## The Planning Application Control System

### PACS

The Planning Application Control System is a low cost, text data and map management system for:

- Development & building control
- Enforcement & appeals
- Land charges

Well established and with an active user group, PACS provides a low-cost solution to the management of development control and planning data.

Recent e-Government moves have led to a web-based planning solution - The Planning Portal.

### PACS and the Planning Portal

The Planning Portal is a one stop shop for the public and planning agents to:

- Submit online planning applications
- Determine if planning permission is required
- Access development plans, maps, regulations, etc

We responded to requests from the PACS User Group to integrate PACS with the new planning portal and have developed a SOAP (Simple Object Access Protocol) compliant web service to achieve this.

Weblink: [www.esdm.co.uk/pacs.asp](http://www.esdm.co.uk/pacs.asp)  
Contact: Carol Bateman on (01874) 713066

The solution has two components:

### The Planning Portal Daemon

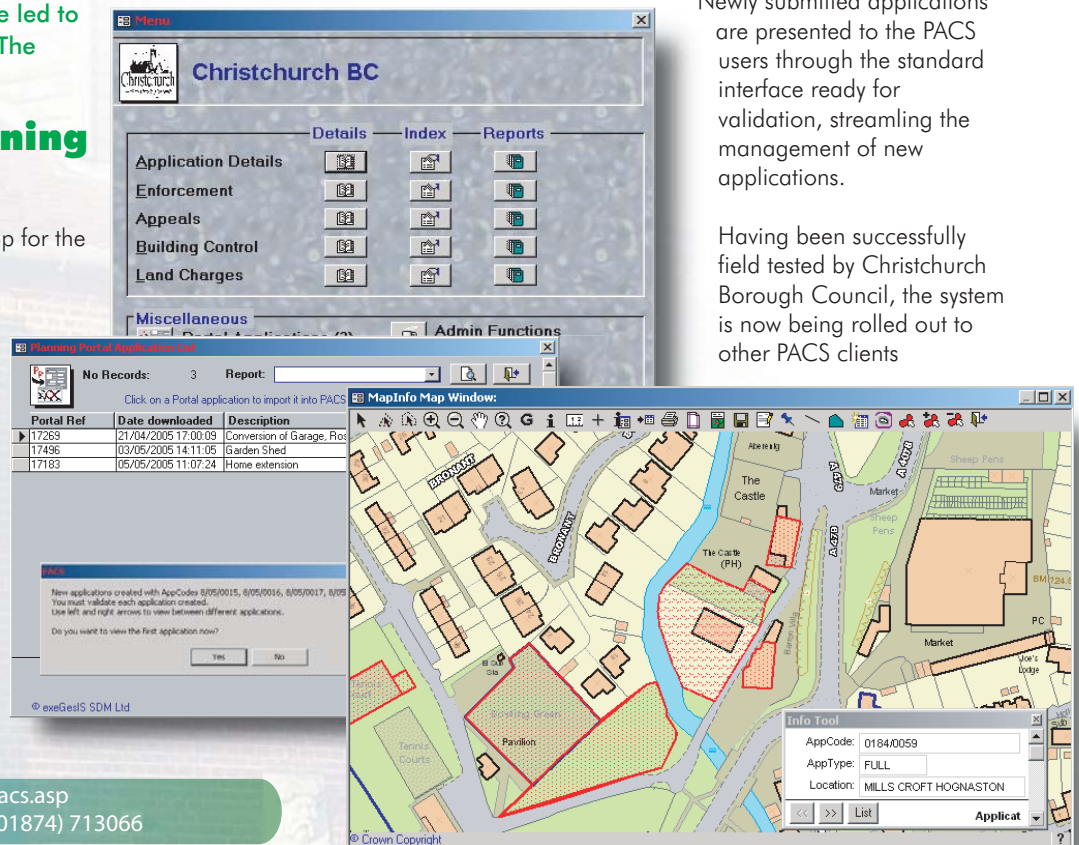
The Daemon invisibly communicates with the Planning Portal, collects newly submitted planning applications and places them on the Local Authority server, as XML documents, ready for loading into PACS.

### The Planning Portal Morpher

The Morpher transforms the XML data collected by the Daemon into valid PACS Planning Application records using an interactive application wizard.

Newly submitted applications are presented to the PACS users through the standard interface ready for validation, streamlining the management of new applications.

Having been successfully field tested by Christchurch Borough Council, the system is now being rolled out to other PACS clients



## GIS Training

### 99% of trainees report courses as excellent or good

exeGesIS has been delivering GIS courses for over eight years. Our MapInfo courses range from Beginner to Advanced level and can be held in client offices or in our training suite set within the Brecon Beacons National Park.

We can also offer more bespoke training in MapInfo and ArcGIS and often find that we can cost-effectively combine consultancy work with training, working alongside you on your more complex data management tasks.

Our experienced trainers provide hundreds of courses for local authorities, government agencies, environmental organisations and consultancies. We are proud of the feedback we get. All courses are quality assessed by trainees with over three quarters of trainees reporting our trainers and courses as 'excellent'.

*"Course delivery was excellent! Challenging yet interesting and kept my attention for the whole day"*  
Countryside Council for Wales

*"Really enjoyed the course - thanks"*  
Baker Associates

*"A lot to take in, but very well delivered"*  
Environment Agency

We believe our courses are also excellent value for money with prices of £217 per person for a 2 day foundation course in a group of 5 people.

Weblink: [www.esdm.co.uk/training.asp](http://www.esdm.co.uk/training.asp)  
Contact: Carol Bateman on (01874) 713066

# Solutions and Services

<b>CAMS</b>	For rights of way, survey, recreation and public open spaces	(page 3)
<b>HBSMR</b>	For archaeology, historic building, HERs and SMRs	(page 4)
<b>CMS</b>	For planning, managing & monitoring countryside sites and urban green space	(page 6)
<b>PACS</b>	For development control and planning work	(page 7)
<b>TMS</b>	For the survey and management of all woodland & tree data	(page 5)

<b>GIS training</b>	MapInfo foundation & intermediate courses	
	Bespoke MapInfo and ArcGIS training at all levels	(page 7)
<b>GIS sales</b>	Full range of MapInfo and other GIS products offered with free or discounted training and low rates for small, charitable organisations	

<b>Add-ons and productivity solutions</b>	<p><b>MapLink</b> – Creates functionally-rich links between your mapped data and records in your database or other applications. For MapInfo and ArcGIS (page 2)</p> <p><b>LibraryLink</b> – Builds a thumbnail database of your digital assets (images, text documents, video, etc) and links into your database, GIS or other applications for one-click access to the source file (page 6)</p> <p><b>MapInfo add-ons</b> – AddressFinder, Templates, Gazetteers, Constraint Checker – a suite of low-cost and very popular add-ons that do just what they say.</p> <p><b>XgArcApps</b> – Extensions for ArcGIS that provides a range of tools to enhance productivity, including multi-user edit functionality</p>
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<b>Survey &amp; data capture</b>	<p><b>Maps4Site</b> – A low cost and highly customisable system for rapid field data capture and asset management. Full mapping interface and database. Runs on Pocket PC 2000 to 2003.</p> <ul style="list-style-type: none"> <li>Platform independent and flexible PDA-based survey solutions with GIS and GPS functionality for the survey of paths, trees &amp; other countryside data</li> <li>Bureau service for quality controlled digitising, advanced spatial data processing, orthorectification &amp; map production</li> </ul>
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<b>Consultancy &amp; web services</b>	<ul style="list-style-type: none"> <li>Our consultants are highly experienced in the development of solutions for recording, managing &amp; publishing countryside and environmental data including: biological species, habitat, agri-environment, countryside access &amp; rights of way, marine &amp; coastal zone, archaeology, woodland &amp; trees &amp; development control</li> <li>We can rapidly and very economically develop custom web-mapping and database solutions for you to share &amp; publish your data</li> <li>We provide web hosting on our dedicated London-based map server</li> <li>We provide advice based on in-depth experience on how to share and publish data using the best solution for your organisation. Options include web services, web mapping, databases, portals etc</li> <li>Data management and processing of ecological and countryside data</li> </ul>
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## CONTACTS

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<b>HBSMR</b>	<a href="mailto:hbsmr@esdm.co.uk">hbsmr@esdm.co.uk</a> Crispin Flower (01874) 713072	<b>Projects &amp; consultancy</b>	Dr James Perrins (01874) 711145 <a href="mailto:jamesp@esdm.co.uk">jamesp@esdm.co.uk</a> Tony Pettitt (01874) 713061 <a href="mailto:tonyp@esdm.co.uk">tonyp@esdm.co.uk</a> Jon Young (01874) 713068 <a href="mailto:jony@esdm.co.uk">jony@esdm.co.uk</a>
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<b>TMS</b>	<a href="mailto:tms@esdm.co.uk">tms@esdm.co.uk</a> Eirion Lewis (01874) 713076		
<b>Survey</b>	<a href="mailto:neill@esdm.co.uk">neill@esdm.co.uk</a> Dr Neil Lockett (01874) 713065		
<b>Data capture</b>	<a href="mailto:tristanc@esdm.co.uk">tristanc@esdm.co.uk</a> Tristan Craddock (01874) 713064		
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