Department for
**Environment,
Food & Rural Affairs**

Countryside Information System
Dissemination and Support
(Contract CR0206)
CEH Project C00650

Final Report
(February 1998 - March 2002)

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1. INTRODUCTION

This Final Report is submitted as one of the deliverables associated with the CIS Dissemination and Support contract, which commenced on the 2nd February 1998. It summarizes the activities undertaken over the three years 1998-2001 of the original contract with the then Department of the Environment, Transport and the Regions (DETR), and the extension of the contract until 31 January 2002, further extended to 31 March 2002, during which period the commissioning department became part of the Department for Environment, Food and Rural Affairs (DEFRA).

This Report is broken down by work packages, following the work programme agreed with the Department in 1998. The original work package headings are shown in italics, and the work which was undertaken is reported under each item.

The authors gratefully acknowledged the support of the following past and present members of staff of CEH (formerly ITE): Mr. Geoff Collett, Dr. David Howard, Dr. Timothy Moffat, Ms. Fiona Pugh, Mr. Francis Rowland.

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2   DETR Support and Liaison (Work Package No. 1)

Management, Promotion and Maintenance of CIS

Manage and promote the use of CIS in the Department and maintain the CIS licences for use by the Department. Specifically:

- *Organize annual, 1-day CIS awareness seminars for the Department's staff.*
- *Or participate in one relevant event per annum as required.*
- *Establish and maintain contact with the Department's users.*
- *Assess the training needs of the Department's users.*
- *Maintain 20 CIS licences across the Department's sites.*
- *Provide updates/upgrades to the CIS software and associated data sets.*
- *Assist staff and users in the process of installing CIS software and data sets.*

Awareness-raising events were held as follows. These were either devoted to CIS, or were CIS stands at wider events.

Table 1. CIS awareness-raising events

Date	Location	Event	Content
18-19/02/1998	London	DETR Information Geographic Awareness	Exhibit and demonstration
01-02/10/1998	London	DETR Geographic Information Awareness	Exhibit and demonstration
06/10/1998	Leeds	DETR Geographic Information Awareness	Exhibit and demonstration
06/11/1998	British Library, London	*Sources of Environmental Information*	Lecture and demonstrations to course
05-07/01/1999	Leicester	British Ecology Society Winter Meeting and the Royal Geographical Society's Annual Conference	Exhibit and demonstrations
04/02/1999	British Library, London	*Sources of Environmental Information*	Lecture and demonstrations to course
10/06/1999	London	ECOFACT seminar on *Causes of Change in British Vegetation*	Talk, demonstrations and issue of time-limited CDs
19-21/07/1999	Plymouth	MarLIN Conference on *Using Marine Biological Information in the Electronic Age*	Paper to conference and demonstrations
01/12/1999	London	*Sources of Environmental Information*	Course at the British Library
25/01/2000	London	CIS Awareness Seminar for DETR staff	Presentations and demonstrations
29/11/2000	London	Countryside Survey 2000	Demonstrations

Date	Location	Event	Content
		Launch	
January 2001	London	Environment Agency's Collaborative Forum for Environmental Monitoring	Presentation
31/10/2001	London	Land Cover Map 2000 Launch	Poster and demonstrations
10/12/2001	Cambridge	Countryside Survey 2000 policy review workshop	Demonstrations
06-07/02/2002	London	CIS Awareness Raising for DEFRA staff	Presentations and demonstrations
08/02/2002	Bristol	CIS Awareness Raising for DEFRA staff	Presentations and demonstrations

Support and Training

Provide high quality support and training for the Department's users. Specifically:

- *Support the CIS software and associated CIS data sets.*
- *Operate a telephone/e-mail help desk for the Department's users.*
- *Organize and run at least one training course per annum for the Department's users.*
- *Priority will be given to the Department's users.*

Training provided directly to DETR / DEFRA is listed in Table 2.

During October 1998 using a list of registered users provided by DETR, EIC established contact with twelve of the sixteen Department's users of CIS. Although all those contacted were aware of the CIS, very few of them were using it on a routine basis, and there was only one request for training. With the agreement of the Department, this was substituted by three DETR Information Geographic Awareness events in 1998.

No training event was organised for the Department in 1999/2000. However, feedback from the awareness events was assessed by the Department to ascertain the best ways forward in meeting the training needs of existing and potential users of CIS.

Table 2.   DETR / DEFRA training supplied

Date	Location	Trainer	Trainee(s)
13/04/2000	Eland House, London	Tim Moffat	Hema Pandya
22/03/2001	Tollgate House, Bristol	Francis Rowland	Jane Goodwin & Deborah Jackson
24/09/2001	Temple Quay House, Bristol	David Howard & Francis Rowland	Jane Goodwin & Deborah Jackson

Liaison with Other Initiatives

- *Liaise with the Environment and Heritage Service (NI) over marketing of the CIS Northern Ireland.*

On the 1st May 1998, Dr Moffat attended a meeting of the Northern Ireland Countryside Survey (NICS) Steering Committee at the Environment and Heritage Service (EHS) offices in Belfast to discuss plans for the marketing, distribution and support of the CIS (NI). No plans were made because EHS wanted to view the technical specifications of the CIS before making any commitments. It was agreed, however, that Mike Meharg should be invited to join the CIS Joint Management Team to ensure that the interests of EHS were represented. Dr Moffat also sent an evaluators copy of CIS v5.41 to Mike Meharg.

- *Facilitate the coordination of CIS marketing with the activities of the National Biodiversity Network.*

Coordination with the NBN, and especially the NBN Gateway project, was achieved in 2001 when Dorian Moss, leader of the NBN Gateway project, took over responsibility for the CIS Dissemination and Support contract. As part of scooping studies for the NBN Trust – DEFRA Joint Venture Agreement, a paper "CIS, CS2000, Land Cover Map and NBN Gateway – options for linkage" by Lawrence Way and Dorian Moss was submitted to DEFRA in November 2001. The paper compared the Gateway and the Countryside Information System as dissemination and analysis mechanisms, and suggested exploratory work to see how far the Gateway can complement the Countryside Information System.

3 CIS Product Development (Work Package No.2)

Undertake to develop and maintain a full range of CIS products as part of the dissemination and support services offered in this tender. The products are:

- *CIS Version 5.41 and associated summary data sets.*
- *CIS Version 6.0 and associated summary data sets.*
- *CIS Environmental Catalogue.*
- *CIS Trial Software.*
- *CIS WWW Site.*
- *CIS Data Library.*
- *Countryside Survey 2000 Data Sets.*

CIS v5.41

In 1998/99 EIC continued to supply CIS v5.41, the integral Countryside Survey 1990 data sets and the Environmental Catalogue Release 4 to new CIS users. Additional data sets (e.g. Ordnance Survey, biological records, and critical loads) were also supplied to some users. Standard and bespoke installations (the latter depending on data sets required) were developed using the InstallShield Express v2 software. EIC developed an evaluation version of CIS v5.41. This version allowed potential customers to evaluate the software and associated data sets before purchasing the CIS.

CIS v6.0

The new version of CIS (v6.0) was developed under the CIS Stage Two contract with WS Atkins. EIC took delivery of some updated data sets on 10 May 1999, the final CIS software on 12 July 1999, and the new version of CIS Environmental Catalogue (Release 5) on 16 July 1999.

Using the InstallShield Express v2.12 software, EIC developed a standard CIS v6.0 installation comprising the new CIS source and object programs, a CIS Data Library of updated datasets and others, and the Environmental Catalogue. The installation was copied onto a master Compact Disk (CD) together with a complete file list and a "Getting Started" file. The ITE Publications Office designed the CD jewel case covers and label in consultation with the Department. Some 200 copies of the master CD, and 1,000 jewel case covers were printed. CIS v6.0 was commercially available to issue to users from 21 September 1999.

EIC also created a trial version of CIS v6.0 using InstallShield Express and SoftSentry protection software. Available on CD, this version allowed potential customers to evaluate the software and associated data sets before purchasing the CIS.

CIS v6.11

In 2000 a new version of CIS (v6.11) was developed under subcontract by Dart Computing. This version was produced in readiness for the Countryside Survey 2000 launch and was delivered in October 2000. Demonstration datasets derived from Countryside Survey 2000 results were prepared in CIS format. CIS v6.11 was distributed as a time-limited evaluation version together with the demonstration CS2000 datasets to attendees at the Countryside

Survey 2000 Launch on 29 November 2000.

CIS v7.0

A further new version of CIS (v7.0) was originally planned for release in late 2001. This would be a spin-off from a contract between DEFRA and Dart Computing to produce a CD-ROM to accompany the new Plant Atlas, to be released in May 2002. However due to an over-run in the time required to develop the Plant Atlas CD-ROM, CIS v7.0 was deferred beyond the end of the current contract, and therefore omitted from this contract under a variation agreed between DEFRA and CEH in January 2002.

CIS Environmental Catalogue

The CIS Environmental Catalogue Release 5, developed by WS Atkins, is a free-standing piece of software complete with embedded metadata on all datasets available in CIS format. It was made available for download from the CIS web site on 28 July 1999. This download option remains, but the catalogue itself has remained static, and from 2000 onwards, WS Atkins have been unable to support it further, or provide CEH with any means to update or even access the source data digitally. By early 2001 this had become of concern to CEH and DEFRA, and it was agreed that CEH should establish an alternative Catalogue, accessible over the internet. The tasks for this work were specified in July 2001 and the website was constructed and populated with the entries from the WS Atkins, updated where possible, during autumn 2001. This was delivered online at http://www.cis-envcat.org.uk/ in December 2001. The catalogue has been updated with the addition of new metadata as they have become available, e.g. the Countryside Survey 2000 metadata were added in February 2002.

Data verification

Tim Moffat produced a report in July 2000. DETR asked for the work to take into account the treatment of "missing" and "null" values. The Report summarised the outcomes of work undertaken by CEH to take stock of all the CIS data sets supplied to the Department by WS Atkins as part of the final report on the CIS Stage Two contract.

The starting points for the work were the CIS Data Inventory document (Version 4) produced by WS Atkins and the CIS datasets (in version 5.4 and 6 formats) supplied on a CD which was issued by WS Atkins on 19 January 2000. The purpose of the work was to try and verify the quality of both the data and all the accompanying meta-data, in the data files themselves and in the CIS Environmental Catalogue Release 5 (July 1999).

The CIS data files were checked for three main things: (1) how missing data/nulls were being treated: as zeros, as missing data, or as both; (2) how the spatial coverage of the data related to the new GB definition in v6.0; and (3) what was the year of the source data.

Additional datasets

A new county boundary file containing datasets for counties, unitary authorities, London boroughs and metropolitan districts and an additional dataset amalgamating counties, unitary authorities, London boroughs and metropolitan districts was completed in October 2001 and is downloadable from the CIS website.

BAP species. BRC data for the following species had already been converted to CIS format in 1999, and are available at 1km and 10km resolutions. These became available on request from CEH in November 2001 (BAP species in **bold** font). For details see http://www.brc.ac.uk/cisBAPfiles.shtm.

Mammals: Badger, **Barbastelle Bat**, **Brown Hare**, Common Shrew, Daubentons Bat, **Dormouse**, Field Vole, Fox, **Greater Horseshoe Bat**, Grey Squirrel, Hedgehog, Harvest Mouse, **Lesser Horseshoe Bat**, Mink, Mountain Hare, Muntjac, Natterers Bat, Noctule, **Otter**, Pine Marten, **Pipistrelle**, Polecat, Rabbit, Red Deer, Red Squirrel, Roe Deer, Serotine, Stoat, Water Shrew, Water Vole, Weasel, Wild Cat, Yellow-necked Mouse.
Amphibians: Common Frog, **Great Crested Newt**, **Natterjack Toad.**
Reptiles: Adder, Common Lizard.

Invertebrates: Brown Hairstreak, Chalkhill Blue, Common Green Grasshopper, Dark Bush-cricket, **Freshwater Pearl Mussel** (no 1km data available), Ground Beetle - *Loricera pilicornis*, **Marsh Fritillary**, Small Blue, **Desmoulin's Whorl Snail**, **Stag Beetle**, **White-clawed Crayfish**

CIS Website

One of the major achievements of 1998/99 was the development of the CIS World Wide Web (WWW) Site. The web site provides a cost-effective medium for promoting the CIS software and associated data sets, and for publishing other products such as the CIS News and the CIS case studies. The site was initially established on the ITE Intranet Server at Monks Wood. Since February 1999, the web site has been accessible using the registered URL address http://www.cis-web.org.uk.

In 1999/2000 The CIS Website continued to provide a cost-effective medium for promoting the CIS software and associated data sets and products (e.g. Environmental Catalogue and CIS News). The following enhancements were made to the website:

- The CIS Case Studies, developed by ITE under the CIS Stage Two contract, were downloadable from on the website as PDF (Portable Document Format) files.

- The CIS Environmental Catalogue Release 5, developed by WS Atkins, was made downloadable from the website from 28 July 1999.

- Downloadable CIS data sets were made available from the Web site (at www.cis-web.org.uk/datadownload.asp). Before downloading, users are requested to fill in an online form asking for a name, an organisation and an e-mail address.

In 2000/01 the CIS Website was extensively revised. It continued to provide a cost-effective medium for promoting the CIS software and associated data sets and products (e.g. Environmental Catalogue and CIS News). The following enhancements were made to the website:

- Download facilities established for CIS evaluation version,v6.11 upgrade, bug-fix, CS2000 data files and the Countryside Vegetation System (CVS).

- Downloadable data in CIS format from Land Cover Map 2000 were made available in March 2002.

- The website carried news of latest developments and activities.

In 2001/02 the website enhancement continued, with additional downloads being added. A major development was the creation of a User Manual which is available on-line. It contains several pages, which can be accessed independently or in sequence:

What is the Countryside Information System?
The Quick Start guide to CIS
      Overview
      The Start Up screen explained
      Opening CIS data files
      GB or NI mode?
      Opening a Region file
      Opening a Sample file
      Opening and viewing census files
      Saving and Closing in CIS
      What data types does CIS use?
Refining regions
      Overview
      Using the refining tools
      Refining regions - Example 1
      Refining regions - Example 2
      Refining regions - Example 3
Overlays
      Overview
      Dataset Overlays
      Options for Dataset Overlays
      Applying and Clearing a Dataset Overlay
      Region Overlays
      Options for Region Overlays
      Applying and Clearing a Region Overlay
Using your own data
      Overview
      Creating a new Census file
            Preparing the ASCII source data files
            Importing the ASCII source data files
            Setting the default mapping
            Setting security levels
            Completing the file packaging
      Creating a new Sample file
            Preparing and applying the landclass file
            Preparing the ASCII source files
            Importing the ASCII source data files
            Manual dataset entry
            Setting the default mapping
            Setting security levels
            Completing the final packaging
Working with datasets
      Overview
      Repackaging Datasets
      Combining Datasets
Using maps and data tables
      Overview
      Data presentation
      Viewing grid references and the underlying data
      Setting and clearing magnification

4 Sales, Distribution and Support Services (Work Package No. 3)

Handle all CIS enquiries and requests; administer CIS sales; distribute the CIS package, trial software and appropriate data sets; and provide a help-desk for users. In doing this, we aim to:

- *Deliver a high quality service to CIS users.*

- *Maintain a level of service commensurate with the forecast of revenues from sales detailed in the CIS Business Plan 1998-2000.*

- *Support the appropriate use of CIS and associated data sets.*

IN 1998/99 EIC handled all CIS enquiries and requests, administered CIS sales; distributed the CIS package, trial software, and appropriate data sets, and provided a help-desk for CIS users. In the reporting year, EIC logged 63 written and e-mail enquiries and 12 telephone requests for further information. All enquiries and requests were responded to within five working days in line with ITE's Customers Charter.

The enquiries translated into the CIS and data sales shown in Table 3. The total revenue from sales of CIS v5.41 was £9,860, which was £140 short of the forecast revenue of £10,000. The total revenue from data sales was £740, which was £1,260 short of the forecast revenue of £2,000; the non-availability of the CIS Data Library was the reason for the shortfall.

Table 3. CIS SALES 1 February 1998 to 31 January 1999

DATE	CIS SALES	DATA SALES	ORGANISATION	DATA SET	COMMENTS
16-Feb-98	£1,000.00		Central Science Laboratory	CIS	
16-Feb-98		£80.00	Central Science Laboratory	OS	
16-Feb-98		£80.00	Central Science Laboratory	BRC	
16-Mar-98	£1,000.00		MAFF	CIS	
16-Mar-98		£80.00	MAFF	BRC	
16-Mar-98		£0.00	MAFF	CL	
16-Mar-98	£1,200.00		Countryside Council for Wales	CIS	
16-Mar-98		£80.00	Countryside Council for Wales	OS	
16-Mar-98	£500.00		University of Cambridge	CIS	
27-Mar-98			Ordnance Survey	CIS	Evaluation Copy
20-Apr-98	£500.00		University of Sunderland	CIS	
06-May-98	£1,000.00		Entec UK	CIS	
06-May-98		£80.00	Entec UK	OS	
10-May-98			Environment and Heritage Service (NI)	CIS	Evaluation Copy
02-Jun-98	£1,000.00		Environment Agency	CIS	
17-Jun-98		£100.00	University of Cambridge	CIS	Re-licensing
05-Aug-98			British Geological Survey	CIS	Evaluation Copy
10-Aug-98			University of Nottingham	CIS	Evaluation Copy
10-Aug-98			University of Nottingham	BRC	
10-Aug-98			University of Nottingham	OS	
05-Oct-98			Catalytic Data	CIS	Evaluation Copy
02-Nov-98		£80.00	University of Nottingham	OS	
02-Nov-98	£1,660.00		University of Nottingham	CIS	
02-Nov-98		£80.00	University of Nottingham	BRC	
02-Nov-98		£0.00	University of Nottingham	CL	
18-Nov-98			University of Oxford	CIS	Evaluation Copy
01-Dec-98			ITE Furzebrook	CIS	ITE Copy Upgrade
01-Dec-98			ITE Furzebrook	OS	
17-Dec-98	£500.00		University of Sheffield	CIS	
21-Dec-98	£1,000.00		Environment Information Services	CIS	
21-Dec-98		£80.00	Environment Information Services	OS	
26-Jan-99	£500.00		National Museum of Wales	CIS	
TOTALS	£9,860.00	£740.00			

In 1999/2000 EIC logged 95 written and e-mail enquiries and 22 telephone requests for further information. All enquiries and requests were responded to within five working days in line with the ITE Customers' Charter.

The pricing structure for CIS v6.0 which was maintained for 1999/2000 and 2000/01 is in Table 4.

Table 4.   Pricing structure for CIS v6.0 and CIS v6.11, 1999-2001.

	Concessionary Rate Charitable Organisations and Educational Establishments	**Standard Rate Government Depts, Agencies, Local Authorities and NDPBs, Commercial and Consultants**
Single user	£300	£500
Multiple user- up to 5 copies	£525	£900
Multiple user- up to 10 copies	£680	£1300
Upgrade from CIS v5.4 to CIS v6.0 (per CD)	£125	£250

CIS and data sales in 1999/2000 are shown in the table below. A total of 16 CIS v5.41 licences and 26 CIS v6.0 licences were sold to ten new customers. An additional six copies of CIS v5.41 and 50 copies of CIS v6.0 were supplied free-of-charge (including those supplied to the Department and the CEH Institutes). The total revenue from sales of CIS was £7,655; this was well short of the forecast revenue target of £19,000. The extremely poor uptake of the new version by existing customers and its later-than-expected availability were the main reasons for the shortfall.

Table 5. CIS Sales - 1 February 1999 to 31 January 2000

Customer	Date	Fee	Application
Ms J Pescod, Harper Adams College	Apr-99	£580.00	Land management + countryside development
Mr J Handley, University of Manchester	Apr-99	£950.00	Teaching Planning & Landscape architects
Mr T Turner, University of Greenwich	Jul-99	£1,260.00	Teaching, Earth Sciences - 10 users
Dr P Durr, Vet Labs Agency.	Oct-99	£600.00	V6. Epidemiology
Dr MacFarlane, University of Northumbria	Oct-99	£125.00	V6 Upgrade
Ms P Spoerry, University of Cambridge	Oct-99	£125.00	V6 Upgrade
Dr Pearce, University of Birmingham	Oct-99	£125.00	V6 Upgrade
Mr N Veitch, Environment Agency	Oct-99	£250.00	V6 Upgrade
Mr Ricketts, MAFF	Oct-99	£250.00	V6 Upgrade
Mr A McKenzie, Cumbria CC	Oct-99	£250.00	V6 Upgrade
Mr J Bartlett NEWI	Oct-99	£680.00	V6. Teaching, 10 users
Mr M Weideli	Oct-99	£250.00	Mollusc studies
Mr R McDonald, University of Bristol	Nov-99	£205.00	V6 + BRC data
Mr R. Stansby, AEA Technology	Nov-99	£500.00	V6, commercial
Mr T Pike, Countryside Agency	Nov-99	£400.00	V6 upgrade & extend to 5 users
Prof R Marrs, University of Liverpool	Nov-99	£125.00	V6 upgrade
Dr Alan Cooper, University of Ulster	Dec-99	£680.00	V6, Teaching, 10 users
Mr Johnson University College, Northampton	Dec-99	£300.00	V6, Research etc.
	TOTAL	£7,655.00	
Free of Charge			
Mr D Norris ITE Bangor	Mar-99		New copy for Bangor

Customer	Date	Fee	Application
Mr J Lee Oxford Brookes University	Mar-99		upgrade
Dr E Williams, Seale Hayne University of Plymouth	Mar-99		Marketing and promotion at BES meeting
Prof. Paul Harvey, University of Oxford	Mar-99		Complimentary - Chairman of SMAG
Ms C Percy, People's Trust for Endangered Species	Apr-99		v5.4. Evaluation copy
Mr C Collins, Bucks Community Action	May-99		v5.4Evaluation copy
CIS V6 upgrades	Oct-99		V6. 13 x FOC copies
Mr M Rounsevell, Universitaire de Louvain	Oct-99		V6.Evaluation copy
Dr R Haines-Young	Oct-99		V6. Evaluators copy
CEH - all sites except IVEM	Oct-99		V6. 9 x site network copies
DETR	Oct-99		V6. 16 copies for internal use
DETR	Oct-99		V6. 4 copies for external users
Ms A Walsh, Bat Conservation Trust	Nov-99		V6
Mr D Mitchel Environment. & Heritage Service, NI	Nov-99		V6, evaluator
Dr A Cooper, University of Ulster	Nov-99		V6, evaluator
Ms C Sullivan, Inst. Of Hydrology	Dec-99		V6, CEH copy
Mr D Scott, University of Cambs/ITE CASE	Dec-99		V6, CEH copy
Ms R Roseff, Herefordshire CC	Jan-00		V6 evaluation copy

At the beginning of this contract many enquiries were by paper, and were therefore recorded. By 2000/01 the near-universal migration to electronic methods increased the traffic and greatly improved access for potential users. E-mail was received via the WWW site enquiry address and via external routes. Figures for casual enquiries by email and phone were no longer routinely recorded, most enquirers were referred to the WWW site for further information. All enquiries and requests continued to be responded to within five working days in line with the CEH Customers' Charter.

The enquiries translated into the CIS and data sales shown in the table below. A total of 25 CIS v6.0 licences were sold to 13 new customers. An additional 2 copies of CIS v6.0 and one upgrade were supplied free-of-charge. The total revenue from sales of CIS was £4,250; this was well short of the forecast revenue target of £14,000.

Table 6. CIS Sales, 1 February 2000 to 31 January 2001

Customer	Fee	No of users
Ms Christopher, Isle of Wight College	£525.00	5
Mr J Mitchley, Wye College	£125.00	upgrade
Prof. N Arnell, University of Southampton	£300.00	1
Ms A Mason, Blackwells Distribution Services	£300.00	1
Mr D Gebhard, Multidata, USA	£500.00	1
Dr S Wurthmann, Glasgow Caledonian University	£300.00	1
Mr A Gedded, MLURI	£300.00	1
Mr P Durr, Central Science Lab, sub-contractors licence	£100.00	1
Ms T Oldfield, University of Kent	£300.00	1
Ms H Keefe, University of East Anglia	£300.00	1
Ms A Betterton Sheffield Hallam University	£525.00	5
Mr A Williamson, Environment Agency	£500.00	1
Ms J Burke, University of Wales, Bangor	£525.00	5
Ms N Cocu, Université Catholique de Louvain, Belgium	£300.00	1
TOTAL VALUE, BEFORE VAT	£4,250.00	
NUMBER OF LICENSES SOLD		25
Copies supplied free of charge.		
C Baker, Oxford University Press	for Atlas 2000, DETR request	
Prof. E. Gould (IVEM)	for CEH Oxford's use	

Customer	Fee	No of users
Mr S Gillam, Forestry Commission	upgrade to V6	
Evaluation software and data		
CS2000 Launch, London, November 2000, evaluation CD's		140
Evaluation CIS supplied via WWW download (Nov. 00 - Jan. 31st 01)		31
Downloads from WWW site (software, data, CVS etc)		219

The Joint Management Team discussed the marketing situation at its meeting on 10 January 2001 and agreed that a drastic cut in the licence fee should be made in order to boost the take-up of CIS. Subsequently the Department agreed to cover the full cost of CEH's work in 2001/02, whereas in previous years the Department's contribution to the cost had been reduced by the expected sales revenue.

Table 7.   Revised pricing structure for 2001/02

	All users
Single user	£50
Multiple user- up to 5 copies	£90
Multiple user- up to 10 copies	£130
Upgrade from CIS v5.4 to CIS v6.0 (per CD)	£50

The sales figures for 2001/02, with 95 new users licenced, demonstrate the success of the decision to reduce the fees, resulting in a greatly increased outreach of CIS.

Table 8.   CIS Sales, 1 February 2001 to 31 January 2002.

Customer	Fee	No of users licenced
Mr P Singleton SEPA	£130	10
Ms J Martin Cambs County Council	£50	1
Mr J Laws Scottish Borders Council	£50	1
Mr N Musgrove, University of Wolverhampton	£50	1
Mr J Howe Joint strategic Planning & Transport	£50	1
Dr P Chanin consultant	£50	1
Prof D Briggs Imperial College	£130	10
Prog G Higgs University of Glamorgan	£50	1
Mr J Landrock, Scottish Executive	£50	1
Ms N Hutchinson Plant Life	£50	1
Dr P Bright, Royal Holloway College	£95	5
Mr G Smith (private)	£50	1
Miss K. Stokes, University of East Anglia	£50	1
Mr D Hay, University of York	£50	1
Ms L Fawcett, ENTEC UK Ltd	£50	1
Dr A Lovett, University of East Anglia	£50	1
Mr R Metcalfe, WS Atkins	£50	1
Dr R Atkinson, University of Stirling	£95	5
Dr M Gorman, University of Aberdeen	£50	1
Mr N Thurston, ENTEC UK	£50	1
Mr P James, University of Wales Aberystwyth	£130	10
Dr M Eaton, University of Oxford/RSPB	£50	1
Dr D Bown, University of Oxford	£50	1
Mr K Gilman, private	£50	1
Mr P Bootes, Northumberland National Park	£130	10
Mr P Wright, London School of Economics	£50	1
Mr P Amies	£50	1
Dr J Kirby, Just Ecology	£50	1
Mr D Warner, University of Herts	£50	1
Mr G Smith GRA-RACE Partners Ltd	£50	1
Dr L Richmond University of the South Bank	£50	1
Mr R Nibbet, Bulllen and Co	£50	1
Mr G Williams, Wind Power Co	£50	1

Customer	Fee	No of users licenced
Mr T Cromack English Heritage	£95	5
Mr M Sanford, Ipswich Museum	£50	1
Prof P Ferguson, Imperial College	£90	5
Ms S Cameron, Forest Research	£50	1
Dr A Mitchell, Vererinary Labs Agency	£50	1
Dr D O'Mahoney, Qieens University Belfast	£50	1
Dr J Baker Froglife	£50	1
Mr D Henderson ADAS	£50	1
Prof P Fisher, University of Leicester	£50	1
Dr D Pleydell University of Salford	£50	1
TOTALS	£2,645	95
CIS supplied without charge:		
Dr A Butt DEFRA London		
Mr M Smith Cumbria County Council		Free upgrade to v6.11

Categories of licensees

The Licensees have been categorised into groups, by paying customer.
Use then falls into the categories as follows (figures as percentages rounded to steps of 5%)

	1998-9		1999-2000		2000-01		2001-02	
	No	% approx.	No	% approx	No	% approx	No	% approx
Government and Agencies,	9	50	3	20	2	15	7	15
Local Govt	-	-	1	10		-	2	5
Universities and Education	8	40	11	60	10	70	19	45
Consultants, Commercial and private	3	10	2	10	2	15	11	25
Other[1]	-	-	-	-		-	4	10

The effect of the price reduction in the upsurge of users (see comments preceding Table 7) has fully justified the JMT's decision , and the marketing recommendations from CEH. The Table above shows a shift in the customer profile in 2001-2 towards more 'applied' customers in the commercial and consultancy category.

Evaluation copies were used in the first three years of the contract, (latterly downloadable from the WWW site). Following the major price reduction in Spring 2001, this facility has been little used, as the new price made the full CIS within reach of most potential users.

The near-universal usage of the WWW by potential customers has made the CIS WWW site an ideal marketing tool, both for informing potential users, and for supplying upgrades and additional data files to existing licensees.

As nearly all enquiries are handled electronically, or by referral to the WWW page, user enquiries are no longer logged.

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[1] A National Park Authority, charities, a Museum

Training for external users

A one-day training course was run for the Highways Agency on 9 June 1998.
Training was provided for Cumbria County Council in Carlisle on 11 April 2000, and the Bat
Conservation Trust on 17 May 2000.

5   Marketing and Promotion (Work Package No. 4)

We shall be responsible for all marketing activities and coordinating the production of promotional materials. We aim to:

•   *Create a higher degree of awareness of CIS amongst potential user groups.*

•   *Achieve a high level of market penetration.*

•   *Generate income from CIS sales to cover the costs of marketing and support activities.*

The Environmental Information Centre is responsible for marketing activities associated with the CIS. Much of that marketing activity has been in the form of presentations, exhibits, posters and demonstrations at meetings, workshops and seminars. These events have been listed above (Table 1).

CIS newsletters were published in March 1998 (issue 4), February 1999 (issue 5) and August 1999 (issue 6) (see Appendix 1). These newsletters were then superceded by news pages on the CIS website.

An article on CIS was published in the Countryside Survey newsletter, issue 5, July 2000.

An article on CIS, especially BAP species data in CIS format, was submitted to Biodiversity News in December 2001.

6 Reporting (Work Package No. 5)

CIS Joint Management Team

Provide a secretariat and arrange venues for the Joint Management Team:

- *Agree agendas with the Chairman and circulate them, in advance, to those attending the meetings.*
- *Provide written progress reports on the Dissemination and Support contract.*
- *At the request of the Department, provide and circulate any ad hoc papers in connection with activities of the contract.*
- *Prepare minutes of the meetings.*

Joint Management Team and CIS Advisory Group meetings were held as follows:

Table 9.   Meetings of the Joint Management Team.

Date	Location	CEH staff attending
03/04/1998	Bristol	Dr Timothy Moffat and Mrs Sue Wallis
10/09/1998	London	Dr Timothy Moffat and Ms Fiona Pugh
22/04/1999	London	Dr Timothy Moffat
26/08/1999	Bristol	Dr Timothy Moffat and Ms Fiona Pugh
22/02/2000	Bristol	Dr Timothy Moffat
29/06/2000	Bristol	Dr Timothy Moffat and Mr Francis Rowland
10/01/2001	Bristol	Dr Dorian Moss and Mrs Sue Wallis
27/06/2001	Bristol	Dr Dorian Moss and Mrs Sue Wallis

CIS Advisory Group

We shall provide a secretariat and arrange venues for the Advisory Group:

- *Agree agendas with the Chairman and circulate them, in advance, to those attending the meetings.*
- *Provide written progress reports on the Dissemination and Support contract.*
- *At the request of the Department, provide and circulate any ad hoc papers in connection with activities of the contract.*
- *Prepare minutes of the meetings.*

Table 10.   Meeting of the CIS Advisory Group

Date	Location	CEH staff attending
24/09/1998	London	Mrs Wallis, Ms Pugh and Mr John Watkins

In 1999 it was agreed by all parties involved to discontinue the Advisory Group.

Annual Reporting

We shall submit annual reports at the end of each calendar years for 1998, 1999 and 2000. The annual report will summarize the activities undertaken in the preceding year, provide

details of sales and income, measures of quality performance standards and efficiency savings achieved. A revised business plan for the forthcoming year, including a target for sales and revenue will be included.

Three annual reports were submitted, the final revision dates being May 1999, June 2000 and March 2001.

Final Report

A draft final report covering all aspects of the project will be submitted to the Department at least three months before the end of the contract.

The draft final report was submitted to DEFRA at the end of January 2002, and comments were received back from the Department on 12 February 2002. These were incorporated into the Final Report early in March 2002.

Appendix 1 Newsletters and Articles

Newsletter Issue 4

| Version 6 | CIS has Character | Available Data |

Access to Open Countryside

For the Government's consultation paper on *Access to Open Countryside*, the Countryside Information System was used by the Department of the Environment, Transport and the Regions (DETR) to indicate those areas in England and Wales which could be defined as 'mountain, moorland, heath', 'downland' and 'common land'. These maps were not intended to be in any way definitive but simply to illustrate the general distribution of land which might be affected by new access legislation.

Welcome to New CIS Users:

Cambridgeshire County Council
English Heritage
Friends of the Earth
Renfrewshire Council
Scottish Environmental Protection Agency
University of Bournemouth
University of Oxford
Wye College
Highways Agency

The data source used to produce Map 1 is the Institute of Terrestrial Ecology's (ITE) Land Cover Map of Great Britain. The land cover categories: dense shrub heath; open shrub heath; heath/moor grass; and bog have been combined using the `Create Data' function. The `region' comprises 1 km squares which have at least 30% cover of the selected categories according to the land cover map.

No single available data source corresponds with the definition of downland (grassland, on thin calcareous soils, on undulating ground). Three datasets have therefore been overlaid to produce Map 2. A habitat potential dataset provided by the Soil Survey and Land Research Centre at Cranfield University has been used to derive a `region' of soils with the potential to support `dry calcareous grassland' habitat. These are thin soils mostly associated with chalk and oolitic limestone in England and, to a much lesser extent, calcareous sand dunes. A topographical dataset provided by the Ordnance Survey has been used to derive a region of `undulating' land, i.e. 1 km squares where the mean slope is 5% or more. The ITE Land Cover Map has been used to derive a region of 1 km squares with at least 25% of `managed grassland'. The overlap of the three maps therefore approximately corresponds with areas of downland.

The data source used in Map 3 is the DETR's Common Land Database produced under contract by the University of Aberystwyth and re-formatted by the Farming and Rural Conservation Agency (FRCA). The data is a compilation of local authority registers of common land mapped at a scale of 1:50,000. The region includes those 1 km squares in which registered common land covers at least 1% of the area. Within the mapped area there are about 360,000 ha of common land in England and 180,000 ha in Wales.

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CIS Update

Version 6 is in the pipeline

A new version of CIS is in the pipeline, with the prototype due to be tested in Sept/Oct. The new version integrates together the two data preparation modules and the viewing and analysis module into a single application with a major revision to the user interface which will not only simplify its use but also include the following new features:

- visual identification of `in sea' squares when loading data

- inclusion of intertidal areas for better analysis of coastal habitats

- major improvement in processing performance and immediate display of analysed data on loading of a data file

- automatic and intelligent allocation of colours to attribute datasets

- user editing of colours in map legend

- multiregion breakdown of data by census attributes within data tables

- compilation of census files containing datasets from a number of suppliers, ie the ability to create a project specific set of datasets drawn from a number of census files.

Philip Maycock of WS Atkins commented, "We are very excited about the new version, it will make CIS much more powerful as an analysis tool and much easier to use. Its a major step forward and from initial comments will be very enthusiastically received by users". The software developments are being funded by DETR as part of the `CIS Stage 2' contract let to WS Atkins and software developer, Dart Computing. Arrangements for the release of Version 6 are expected to be made at the end of 1998.

Release 4 of the Environmental Catalogue will be available soon. Download it free from here.

CIS has character

A CIS version of *The Character of England: Landscape, Wildlife and Natural Features* is now available!

The Countryside Commission and English Nature jointly published a map which reflects *The Character of England: landscape, wildlife and natural features.*

The Character Map identifies areas of cohesive countryside character in England as a framework for planners and managers, ecologists and all those whose decisions will affect the evolution of the landscape. The map expresses a neutral opinion of the countryside: it reflects what is there and takes no view of the quality of the landscape or its wildlife resource. It is a starting point based on a clear understanding of countryside characteristics which can be used to establish value judgements, to develop policy, or to target operational programmes.

The Character Map is supported by a series of jointly published *Summary Statements* (also available via the www). Summary Statements provide a brief overview of the key characteristics of each area. These will be supplemented in forthcoming months by more comprehensive information from the two agencies.

A CIS version of the Character Map is held as a Census file. Boundaries from each character area were defined at 1 km square resolution so no changes were required for conversion to CIS.

The CIS file, alongside a copy of the descriptions for each character area, should allow users to assess the landscape context within which another variable exists. For example, using a dataset of change in hedgerow length, a user could focus on the character areas for which hedgerow features are important, to begin to assess the significance of any change in those areas.

The Commission also intends to release some of the underlying seventeen datasets that created the Character Map in CIS format. These include settlement patterns, field size and archaeological features. The datasets for which the Commission holds copyright will be made available through the web site later in the year.

STOP PRESS

DETR have just announced that they have reached an agreement with the Environmental Information Centre at the Institute of Terrestrial Ecology (see Who's Who) which will extend and develop the current arrangements for the dissemination and support of CIS - up to 2001. The new agreement simplifies the pricing structure and provides support for users, including development of the CIS Web Site, two editions of CIS News per year and a CIS data library. Further details to follow in the

A CIS version of *The Character of England: Landscape, Wildlife and Natural Features* is now available. You can download a copy of this CIS data file from
http://www.countryside.gov.uk/data.htm

(Please note that this page is not accessible from the Commission's main site)

next newsletter.

Available Data

Who's who?
Environmental Information Centre (EIC)

The Environmental Information Centre is one of the Natural Environment Research Council's Designated Data Centres with responsibility for the stewardship of NERC's terrestrial and freshwater ecological data. Located at the Institute of Terrestrial Ecology **(now the Centre for Ecology and Hydrology)**, Monks Wood in Cambridgeshire, EIC handles requests for its discipline's data and software made to NERC, and formally arranges licences for non NERC recipients to control the release, use and further dissemination of data sets and software. EIC manages the marketing, sales, distribution and support of the CIS.

See our Web site for further information http://www.ceh.ac.uk/products_services/data/EIC.htm

Data File	Source	Cover	Cost
Environmental Data			
Critical Loads for Acidity of Soils	ITE	GB	Free
Geographic Reference and Topography	OS(ITE)	GB	£80
Habitat Potential	SSLRC	GB	£450
Major Soil Groups	SSLRC	GB	£270
Run-Off	IH(ITE)	GB	Free
Land Use/Land Cover			
Countryside Survey 1990	ITE	GB	Free
Farm Type	FRCA	E,W	Free
Heather Cover	RSPB	S	Free
Land Cover Map of Scotland	SO	S	£100
Land Use Change Statistics	DETR	E	Free
Satellite Land Cover Map	ITE	GB	Free
Wildlife			
Avian Species	BTO	GB	£150/species
Key Habitats	ITE	GB	Free
Species Distributions (mammal, amphibian, reptile, invertebrate, plant)	ITE	GB	£80
Administrative Areas			
Common Land	DETR(FRCA)	E,W	Free
DETR Regions	DETR	E	Free
Local Authorities Post 1996	DETR, SO	E,W,S	Free
Parliamentary/ Euro Constituencies	DETR, SO	E,W,S	Free
Designated Areas			
Areas of Outstanding Natural Beauty	CCW, CC	E,W	Free
Environmentally Sensitive Areas	FRCA, SO	E,W,S	Free
Heritage Coasts	CCW, CC	E,W	Free
Less- Favoured Areas	FRCA, SO	E,W,S	Free
National Nature Reserves	CCW	W	Free
National Parks	CCW, CC	E,W	Free
National Scenic Areas	SO	S	Free
Nitrate Sensitive Zones	FRCA	E,W	Free
Nitrate Vulnerable Zones	FRCA	E,W	Free
Ramsar	CCW, SO	W,S	Free
Sites of Special Scientific Interest	CCW, EN, SNH	E,W,S	Free
Special Protection Areas	CCW, SO	W,S	Free
Special Areas for Conservation	CCW, SO	W,S	Free
Other Zonations			
Bioclimatic Zones	ITE	GB	Free
Character Map/ Natural Areas	EN	E	Free
Hydrometric Areas	IH(ITE)	GB	Free
ITE Land Classification	ITE	GB	Free

CIS was developed for the Department of the Environment, Transport and the Regions by the Institute of Terrestrial Ecology with Dart Computing and the University of Nottingham. The DETR has commissioned WS Atkins to develop CIS further.

This edition of CIS News was compiled by Gavin Stark with contributions from Peter Ireland, Andy Stott, Chris Moos, Philip Maycock and Tim Moffat. Illustrations were provided by Colin Barr. Design and layout by Karen Goodsir.

CIS News is brought to you by the Centre of Ecology and Hydrology, supported by the DETR.

| CIS News and Publications | Issue 3 | Issue 4 | Issue 5 | Issue 6 |

Newsletter Issue 5

Issue 5

February 1999

| [Version 6](#) | [CIS in Control](#) | [Designated Areas](#) | [CS2000](#) |

"...significant enhancements in functionality"

There is a real sense of excitement surrounding the new version of CIS, which will be available early in 1999. The new version is currently undergoing beta testing, and has undergone major revisions to the user interface, which not only simplifies its use, but also includes many new features (see inside).

CIS Version 6 will soon be available taking full advantage of 32-bit functionality and Windows 95/98/Windows NT user interface features and style. Version 5.4 will remain available for users requiring 16-bit functionality using Windows 3.x.

Welcome to New CIS Users:

Central Science Laboratory
Countryside Commission
Entec UK
National Museums of Wales
University of Cambridge
University of Sunderland
University of Sheffield
Wye College

CIS Update

Exciting new features of Version 6:

- The new application has been generalised to accommodate different grid references and sample stratifications. This means that CIS can now be applied to other areas or survey designs.

- Northern Ireland is included in CIS for the first time.

- The definition of Great Britain's coastline has been updated in line with 1997 Ordnance Survey data to remove a number of minor anomalies and to include inter-tidal areas.

- As a result of significant enhancements in the performance of the analysis and display routines, immediate display of analysed census and sample data is now possible.

- Users can now optimise and customise the ranges of colours to suit their preferences and save default configurations for particular datasets.

- These enhancements have necessitated revisions to all the file formats, however automatic conversion routines eliminate any upgrade issues.

For more details, please contact [Sue Wallis](#) and Monks Wood

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New CIS Web Site under development

The new CIS Web Site (http://www.cis-web.org.uk) is under development and will include up-to-date news and the latest developments for CIS users, such as example maps from Version 6. It will link to other sites of interest, including the Environmental Catalogue, the Department of Environment Transport and Regions and Countryside Survey 2000. A facility to

download new or updated data files will be provided at a later date. Basic information about CIS is already available at http://mwnta.nmw.ac.uk/ite/cisflier.html

New - Northern Ireland data

Countryside Survey 2000: An audit of the British countryside.

Through a partnership between the Department of Environment, Transport and the Regions and the Natural Environmental Research Council, a comprehensive audit of the British countryside is being undertaken to mark the end of the Millennium. Countryside Survey 2000 will provide a major overview of the habitats, plants, landscape features and land types throughout Great Britain, and repeat and extend surveys carried out over the last 20 years. This will provide information concerning the current state of the countryside and indicators describing the changes which have taken place.

The survey has two main components:

- Field survey of broad habitats, linear features including hedgerows and walls, landcover, vegetation and freshwater habitats at over 500 randomly selected 1 km grid squares across Great Britain.

- Map and database derived from satellite images showing land cover across the whole country.

The results of the survey, which will be published in the year 2000, will provide new data and a new land cover map enabling the CIS user to report on biodiversity in the wider countryside, measure progress towards sustainable development and detect the impacts of human activities and global environmental change.

For further information, visit the CS2000 Web Site.

CIS In Control

European and British legislation relating to industrial activities (e.g. the Seveso Directives) increasingly require that environmental issues are considered. Scientists from the Institute of Terrestrial Ecology have helped the Civil Protection Unit of Cambridgeshire assessing the overall environmental quality around industrial installations in the county.
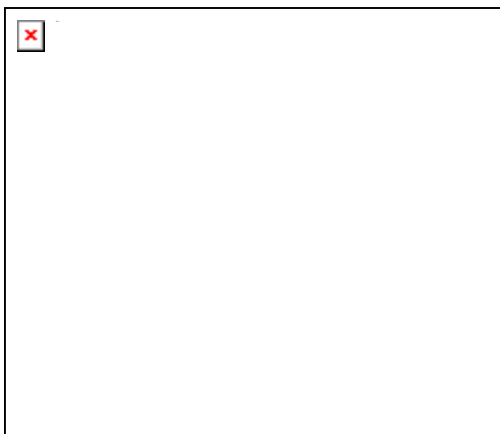
CIS provided the essential environmental information required to determine the extent and quality of the environment that would be affected by an accident at selected CIMAH sites in Cambridgeshire. Datasets on designated areas provided information on National Nature Reserves, Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty and Environmentally Sensitive Areas. The Biological Records Centre also provided data on the distribution of rare and threatened species (Red Data Book species) in a CIS format.

The work done in Cambridgeshire represents an important first step in the strategic assessment of the impact on the environment of major accidents at industrial installations. For more information contact Peter Hankard at the Institute of Terrestrial Ecology at Monks Wood.

County Council to identify environmental information that should be taken into account to comply with the Control of Industrial Major Accident Hazards (CIMAH) regulations. For example, industrial operators are required to produce a safety report which should include information related to the environment of the industrial site. Also, in the event of a major accident, industrial operators are required to provide information pertaining to the circumstances of the accident, the substances involved, together with data for assessing the effects on man and the environment.

Using a methodology developed for the Department of the Environment, Transport and the Regions, a range of

environmental information was used as an aid to

Designated Areas

Data describing designated areas in Great Britain are available in CIS format. Information about these areas is available in the CIS Environmental Catalogue. A full list of designated area data available in CIS format is shown below. A number of these files have been updated (marked * in the list below), these files will be available from data suppliers as listed in the Environmental Catalogue or as part of the CIS data library of data sets that is currently under development. Map to the right shows Special Areas of Conservation in England.

England			Wales		
Description	*Source*	*Units*	*Description*	*Source*	*Units*
Areas of Outstanding Natural Beauty* Common Land Environmentally Sensitive Areas* Heritage Coasts Less Favoured Areas National, Community and New Forest National Nature Reserves National Parks (including Broads) Nitrate Vulnerable Zones Nitrate Sensitive Areas Ramsar Sites Sites of Special Scientific Interest* Special Areas of Conservation Special Protection Areas	CC FRCA FRCA CC FRCA CC EN CC FRCA FRCA EN EN EN EN	presence density presence presence dominant presence density density and presence presence presence density density density density	Areas of Outstanding Natural Beauty Common Land Environmentally Sensitive Areas* Heritage Coasts Less Favoured Areas National Nature Reserves National Parks Nitrate Vulnerable Zones Nitrate Sensitive Areas Ramsar Sites Sites of Special Scientific Interest Special Areas of Conservation Special Protection Areas	CCW DETR FRCA FRCA CCW CCW FRCA FRCA CCW CCW CCW CCW	presence density presence presence dominant presence density density and presence presence presence density density density

Scotland			Key:		
Description	*Source*	*Units*			
Environmentally Sensitive Areas Less Favoured Areas National Nature Reserves National Scenic Areas Ramsar sites Special Areas of Conservation Special Protection Areas Sites of Special Scientific Interest*	SO SO SNH SO SO SO SO SNH	density density density density density density density density	CC- Countryside Commission CCW- Countryside Council for Wales FRCA- Farming and Rural Conservation Agency SO- Scottish Office EN- English Nature SNH- Scottish Natural Heritage *- Updated Files		

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CIS Newsletters

(Printer Friendly)

Issue 6

August 1999

"...Version 6 now available"

On June 10th the new version of CIS was officially launched and demonstrated to an invited audience at the ECOFACT seminar on the Causes of Change in British Vegetation held at the DETR in London.

Dr Andrew Stott of the Department's European Wildlife Division said, "The new version of CIS gives policy advisors and environmental managers even easier access to information about the countryside of Great Britain and Northern Ireland. Its new facilities increase the usefulness and suitability of CIS to an even wider range of applications."

CIS version 6 is Windows-based software for analysing and presenting summary spatial data about biodiversity, the countryside and rural environment of Great Britain and Northern Ireland in a way that is responsive to a wide range of policy questions.

Version 6 includes:

- A number of new powerful features

- A new version of the Environmental Catalogue

- A Data Library of many new and updated data sets

Welcome to New CIS Users:

The circle of CIS users grows ever wider, with several new organisations taking out licences recently. Both the University of Manchester's Dept. of Planning & Landscape Studies and Oxford Brookes' School of Molecular and Biological Sciences are using CIS within their teaching programmes. The new Countryside Development Unit at Harper Adams University College is also using the CIS, in their land management studies.

The People's Trust for Endangered Species are using a short-term evaluation copy to examine the system's usefulness, including importing data on Stag Beetle occurrence and distribution within certain habitat types.

A researcher at the Seale Hayne Faculty of the University of Plymouth received a complimentary copy of the CIS at the January 1999 meeting of the British Ecological Society in Leicester.

New user interface

The new start up screen (left) makes it easier for users to:

- Select whether to run the CIS in Great Britain or Northern Ireland mode.

- Access the new 'Getting started…' help file.

- Open new or existing region, census or sample files.

- Displays file details if recently used files are selected.

Right: CIS v6 start-up screen
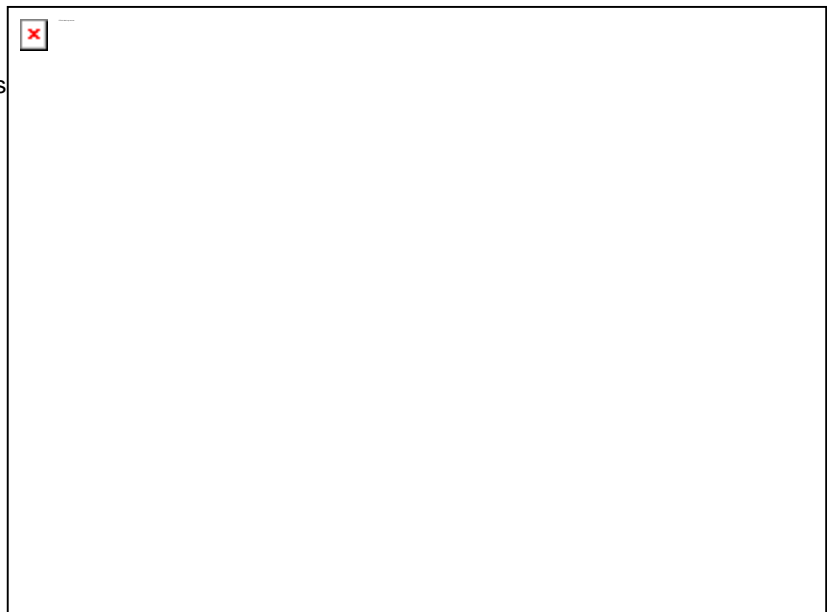
CIS Version 6 essentials

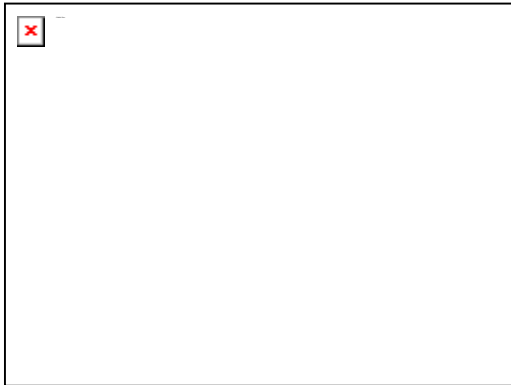The three CIS modules of the previous version have been integrated into one application. The new import data function can be used to create a CIS census file of the locations of 302 Top Tier Control of Industrial Major Accident Hazard (CIMAH) Sites, from data obtained from the Health and Safety Executive.

The analysis and display routines have been significantly enhanced, making immediate display of analysed census and sample data possible.

The new and improved interface allows users to select from `Descriptions', `Mapping' and `File Details' tabs within the data window when viewing census files. The `Descriptions' tab provides data accuracy and copyright information in a highly visible format (see location map of Top Tier CIMAH sites, left).

The map below was created using the map overlay tool and shows the coincidence of SSSIs in Great Britain with the different categories of Top Tier CIMAH Sites. It illustrates the layout of the new `Mapping' window, which provides both a key to the map display and a Venn diagram clearly illustrating the current and overlay regions. The `Data tables' window for the same overlay map shows that some 55 CIMAH squares (or about 18%) are also occupied by SSSIs.

The new version allows users to open and analyse multiple data files simultaneously. The drop down menu on the map to the left shows which files are currently open and can be used as overlays.

Another new facility is the ability to view multiple file and data set overlays at the same time for a given region writes Alison Briggs of DETR. This function enables cross tabulation of datasets against attribute data for given areas of interest.

The new cross tabulation function has most recently been used within DETR to calculate the contribution of different traditional field boundaries to the local character of the four major landscape types used in Countryside Survey 1990, namely; arable lowlands, pastural lowlands, marginal uplands and uplands. These data were presented to the recent Organisation for Economic Co-operation and Development (OECD) workshop on agri-environmental indicators in Paris as an illustration of an indicator of agricultural landscapes.

The maximized `Data tables' window shows the mean density of each field boundary (in 10's of kilometres per kilometre square) by each landscape type.

These data can be easily copied into other software packages for display and interpretation purposes. For example, the graph (left) was generated in Microsoft Excel and shows the relative importance of each linear feature for each landscape type. Similar cross tabulations can be done using other value and attribute data, for example, the area of common land in Areas of Outstanding Natural Beauty (AONB's) or the frequency of bird species in Natural Areas.

The new CIS website

The CIS Web Site is now up and running at http://www.cis-web.org.uk/. The CIS-web provides a new method for promoting the CIS software and datasets and for disseminating other CIS products, such as the newsletter and case studies.

The CIS Web Site includes news items, a general description, example maps and a history of the CIS, allowing users to keep up to date with new developments about the CIS. Links to other sites of interest to the CIS user, including the DETR, National Biodiversity Network and Countryside Survey 2000 are also provided.

Plans for the future development of the web site will include a facility for users to download CIS data files over the internet.

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CIS was developed for the Department of the Environment, Transport and the Regions by the Institute of Terrestrial Ecology with Dart Computing and the University of Nottingham.

CIS News was produced and designed by the Institute of Terrestrial Ecology, supported by the DETR.

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# ACCESS TO CS2000 DATA USING THE COUNTRYSIDE INFORMATION SYSTEM V6.0

Reporting and understanding the status and changes in the British countryside, and developing national policies to manage these changes requires two essential elements. First, good quality data and scientific research on which to base decisions; and second, information systems that can provide easy access to data and research results for policy development purposes. CS2000 is providing a major update to information on the habitats, plants, landscape features and land types of Great Britain, and is repeating and extending surveys carried out over the last 20 years. The Countryside Information System (CIS) is one of the main means of delivering the results of CS2000 to policy advisors, planners and researchers within the DETR, other government departments and agencies, and outside.

The CIS is a Microsoft Windows based system that enables joint analysis of a wide range of environmental and administrative information at national and regional scales, with the 1 km cells of

the national grid being used as its basic spatial unit. The CIS holds sample-based information derived from Countryside Survey 1990 (CS1990) and two previous surveys in 1978 and 1984. All three surveys were conducted using the ITE Land Classification, and the CIS uses this sampling framework to produce estimations for any geographical region. The sample data will be extended when the results of the CS2000 are made available in CIS format. The new release of CIS, version 6.0, already includes a number of enhancements to accommodate improved access to the results of CS2000. Examples are the inclusion of revised ITE Land Classes, the ability to produce cross-tabulations of the data and separate reporting for England, Scotland, Wales, Northern Ireland and other administrative regions.

Although originally developed to provide access to Countryside Survey data, the CIS makes a wide range of other environmental data available. The CIS includes many census-based datasets at national scales, such as the ITE Land Cover Map of Great Britain, the distribution of 1 km grid squares under different statutory designations (e.g. Sites of Special Scientific Interest, National Parks, Environmentally Sensitive Areas), species distributions, Natural Areas, soils, topography, farm types, local authorities and Parliamentary Constituencies. As part of CS2000, Land Cover Map 2000 (LCM2000) will be made available in CIS format. LCM2000 uses the Broad Habitat framework developed in the UK Biodiversity Action Plan, and CIS will provide information on the Broad Habitat composition of each 1 km square in the UK. CIS v6.0 has been developed to include Northern Ireland data, employing the different land class and grid reference systems used in Northern Ireland.

CIS v6.0 has many other enhancements. For example, the definition of the Great Britain map has been updated using 1997 Ordnance Survey data to remove a number of minor anomalies and to include intertidal areas. The analysis and display routines of CIS have been improved to allow for the immediate display of analysed census and sample data when the files are opened. Users can now customise the ranges and colours of the datasets displayed by CIS to suit
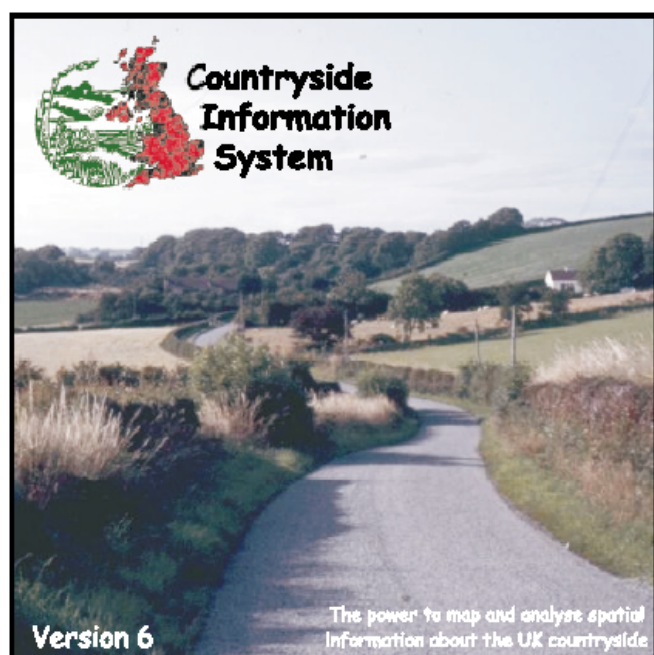
their preferences and save these settings as default configurations for the datasets. These enhancements have necessitated revisions to all the CIS file formats, but automatic conversion routines have been provided to eliminate any upgrade issues.

The CIS provides a relatively simple system for the integration of a broad range of environmental data and in terms of CS2000 it is a very easy and useful way for linking CS2000 data with other datasets. The CIS allows users to quickly combine, analyse and explore these data. In particular, it can be used to define and combine the environmental characteristics of different areas, or the geographical patterns exhibited by one or more environmental parameters. In terms of informing policy, the CIS has applications in many strategic environmental and countryside issues. The Centre for Ecology and Hydrology (CEH) has produced four case studies investigating the application of CIS in (i) informing woodland policy, (ii) comparing alternate landscape classifications, (iii) the strategic ecological assessment of COMAH (Control of Major Accident Hazards) sites, and (iv) the strategic ecological assessment of road development. The case studies can be downloaded from the CIS web site (address given below).

CIS has been used on a regular basis by DETR to provide access to results of CS1990. For example, CIS has been used to support policy development on Access to Open Countryside by mapping the distribution of mountain, moorland, heath, down and common land. Recently, DETR have demonstrated how CIS can be used to help assess the changing ecological characteristics of the Countryside Agency/English Nature Character/Natural Areas using data from CS1990.

The CIS is a commercial product available under a separate licence. The dissemination and support of CIS is the responsibility of CEH at Monks Woods (formerly ITE Monks Wood), under contract to DETR. Information about the CIS software and associated datasets, software updates and data downloads is available at the CIS web site, www.cis-web.org.uk. Alternatively, for any enquiries please contact Countryside Information System Support, CEH Monks Wood, Abbots Ripton, Huntingdon,

Cambs. PE28 2LS. Tel: 01487 772400. Fax: 01487 773467. E-mail: cis@ceh.ac.uk.

Tim Moffat
Countryside Information System
CEH Monks Wood

Article for Biodiversity News

BAP species data available on CIS - by Dorian Moss, CEH Monks Wood

The **Countryside Information System (CIS)** is a Microsoft Windows-based program developed to give policy advisers, planners and researchers easy access to spatial information about the United Kingdom countryside.

Information that can be linked to one kilometre resolution grid references can be stored, manipulated and presented in graphical and tabular format. Because the Ordnance Survey of GB and Ordnance Survey of Northern Ireland use different grid reference systems, CIS runs in two modes, one to describe Great Britain (GB), the other Northern Ireland (NI), both modes being components of the standard system.

CIS is built around a grid of kilometre squares that can have information attached to them. In GB, the basic grid consists of 244,000 squares covering all land and most intertidal areas. The system works in an identical manner for Northern Ireland, which has over 14,000 squares in its grid.

The unique feature of the CIS is its ability to handle sample information using a stratification. The system is supplied with data collected using the ITE Land Classification and the NI Land Classification, but can be used with any classification that divides the kilometre cells into different strata. The stratifications need not be complete, but only cover the region of interest, so for example a classification for Wales can be derived and used in the system.

CIS allows users to:
- Produce maps, tables and charts
- Combine, analyse and present a comprehensive range of environmental data
- Characterise geographical regions in terms of a range of environmental parameters
- Define and select geographical areas with different environmental features
- Export and import data to and from file

Some CIS datasets contain values for each of the squares in UK (census-based data), for example:
- the presence (or absence) of a National Park or Natterjack Toad
- the density of woodland (derived from the CIS version of the Land Cover Map of GB, 1990)

Other datasets, estimated from Countryside Survey 2000 field sampling, are averages for common land types (sample-based data), for example:
- the area of dwarf shrub heath in 1998
- the change in length of boundary features 1990-1998

CIS was originally developed in the early 1990s by the Institute of Terrestrial Ecology (now the Centre for Ecology and Hydrology), the University of Nottingham and Dart Computing for the Department of the Environment (now DEFRA). The current version (v. 6.11) is available under single-user licence for £50 + VAT, and includes a wide range of datasets supplied with the software or available for download from the website, http://www.cis-web.org.uk/.

Data which have been collated by the Biological Records Centre at CEH Monks Wood on a number of BAP species have recently become available for use in CIS - for full details please see http://www.brc.ac.uk/cisBAPfiles.shtm. Otter, Dormouse, both Horseshoe Bats, Great Crested Newt, Marsh Fritillary are just some of the species available. Distributions of these species can be overlaid with other datasets such as county boundaries, broad habitats, SSSIs.

Early in 2002 the Land Cover Map 2000 dataset will be available for use at 1-km square resolution within CIS, and updated CIS software (v 7) will also be released.. Existing licence holders will be given the update and Land Cover Map 2000 (CIS format) free of charge.

References

Arnold, H. R. 1993 Atlas of mammals in Britain. HMSO London.

Fuller, R.M., Groom, G.B. & Jones, A.R. 1994. The Land Cover Map of Great Britain: an automated classification of Landsat Thematic Mapper data. *Photogrammetric Engineering & Remote Sensing.* **60**, 553-562.

Figure 1. Distribution of Common Dormouse (*Muscardinus avellanarius*) records
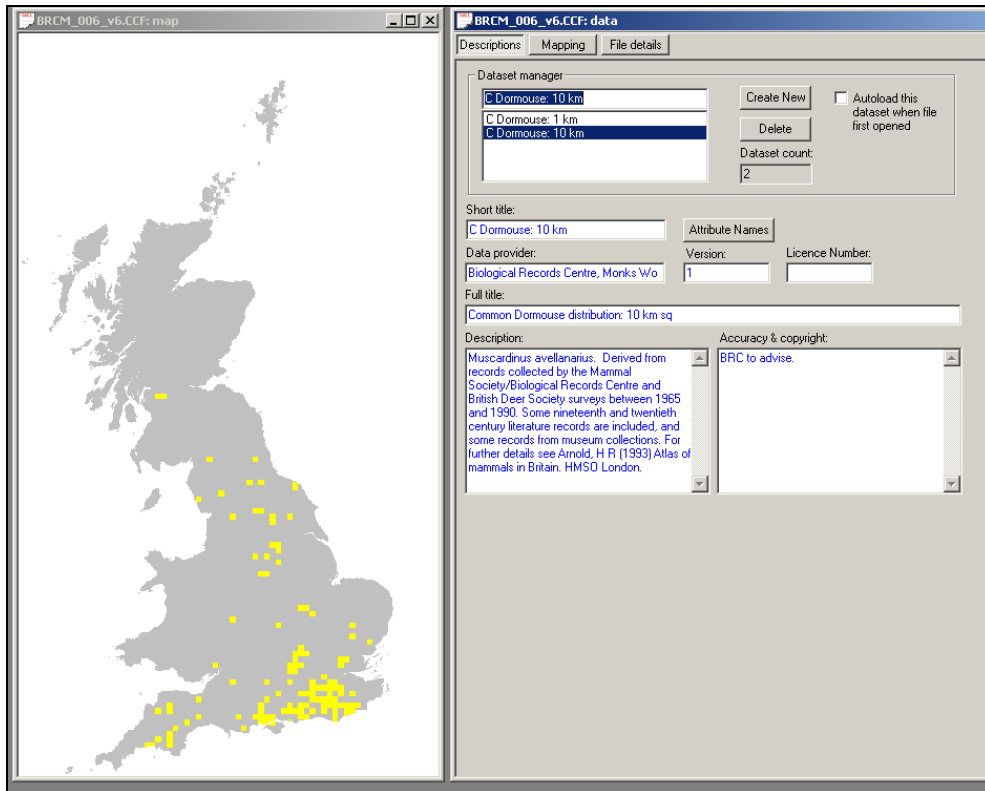
Figure 2. Greater Horseshoe Bat (*Rhinolophus ferrumequinum*) records in SW England and Wales in squares which are predominantly grassland.
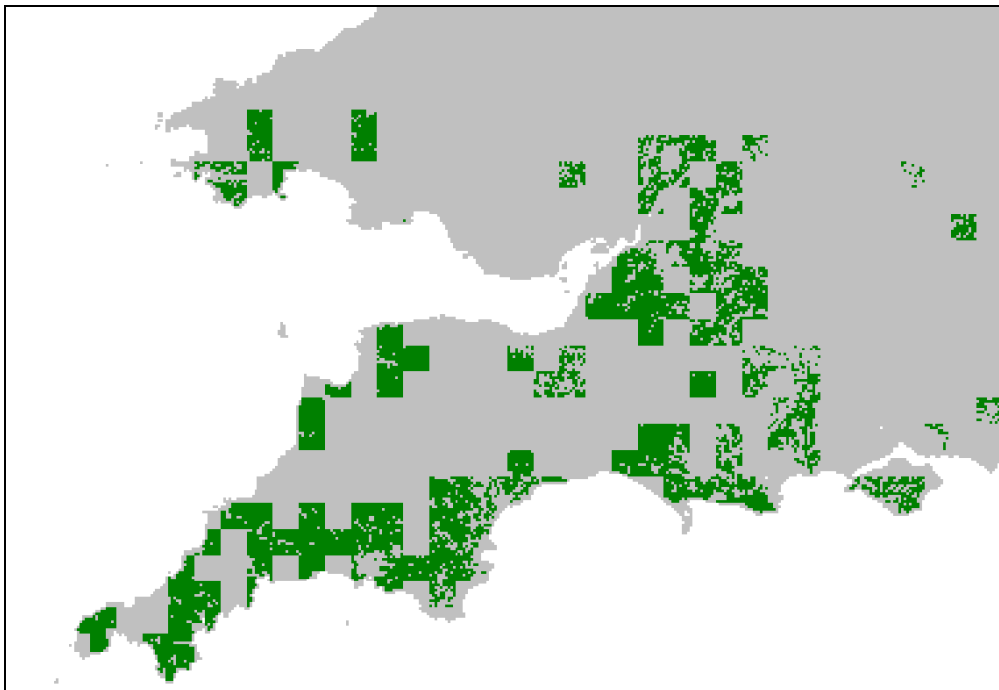
**Department of the Environment, Transport
and the Regions**

**Countryside Information System
Dissemination and Support
(Contract CR0206)**

Annual Report
(February 1998 - January 1999)

Proposed Business Plan Revisions
(February 1999 - January 2000)

May 1999

Institute of Terrestrial Ecology
Monks Wood
Huntingdon
Cambs. PE17 2LS

1.   INTRODUCTION

The first Annual Report is submitted as one of the deliverables associated with the CIS Dissemination and Support contract which commenced on the 2nd February 1998. It summarizes the activities undertaken, by work package, for the year to the end of January 1999 and provides details of sales and income over the same period. As the result of suggestions made at the CIS Advisory Group meeting of the 24th September 1998 and a CIS Management meeting between DETR and ITE on the 22nd April 1999, some plans and proposals are outlined for taking forward the DETR support and liaison work and revisions to the 1998-2000 CIS Business Plan.

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2.   ANNUAL REPORT

2.1   **DETR Support and Liaison** (Work Package No. 1)

As part of raising awareness of the CIS in the Department, the Environmental Information Centre (EIC) participated in three major Geographic Information Awareness events organised by the Department's PLUS Division in 1998. CIS exhibits were prepared by ITE on behalf of the European Wildlife Division (EWD) for the two-day events held in London between the 18th and 19th February and the 1st and 2nd October, and the one day event in Leeds on the 6th October. Posters were also prepared for the event held in Bristol on the 29th September. EIC reported on the events in its Progress Reports of March 1998 and February 1999.

During October 1998 and using a list of registered users provided by EWD, EIC established contact with twelve of the sixteen Department's users of CIS. Although all those contacted were aware of the CIS, very few of them were using it on a routine basis, and there was only one request for training. An updated list of users is shown below:

Name	Division	S/N	Phone	Fax	Address	Notes
Bob Davies	OCE	1000	0171 890 3620		4/25b Great Minster House	
Mark Faulkner	IMD	1001	0171 890 6126		1/F8 Eland House	
Sarah Webster	EWD	1002	0117 987 8159		903 Tollgate House	
Cameron Easton	SO	1003	0131 244 5270		St. Andrew's House, Edinburgh	
Peter Saunders	OCS	1004	0171 890 5980	0171 676 2356	4/26b Great Minster House	
John Custance	EPSIM	1005	0171 890 6514	0171 890 6489	5/H14 Ashdown House	
Andrew Stott	EWD	1009	0117 987 8445		901 Tollgate House	
Mary Edmead	RDD	1043	0171 890 5604		3/A6 Eland House	Interested in training
Lindsay Roberts/Jeff Phillips	WO	1044	01222 825111		Cathays Park, Cardiff	
Huw Thomas	CYD	1045	0117 987 8006	0117 987 8969	818 Tollgate House	
Mark Taylor	EWD	1054	0117 987 8542		902c Tollgate House	
Unable to contact:						
Toby Cumming			0171 890 3000			Not known
Penny Bramwell	GA1	1007	0171 890 5228		3/F3 Ashdown House	Never answers phone
Bob Garland	PLUS	1008	0171 890 5533		3/H10 Eland House	Left message
Linda Smith	WAP		0171 890 5241			

On the 1st May 1998, Dr Moffat attended a meeting of the Northern Ireland Countryside Survey (NICS) Steering Committee at the Environment and Heritage Service (EHS) offices in Belfast to discuss plans for the marketing, distribution and support of the CIS (NI). No plans were made because EHS wanted to view the technical specifications of the CIS before making any commitments. It was agreed, however, that Mike Meharg should be invited to join the CIS Joint Management Team to ensure that the interests of EHS were represented. Dr Moffat also sent an evaluators copy of CIS v5.41 to Mike Meharg.

2.2   **CIS Product Development** (Work Package No.2)

EIC has continued to supply CIS v5.41, the integral Countryside Survey 1990 data sets and the Environmental Catalogue Release 4 to new CIS users. Additional data sets (e.g. Ordnance Survey, biological records, and critical loads) have also been supplied to some users. Standard and bespoke installations (the latter depending on data sets required) have been developed using the InstallShield Express v2 software. As described in the Progress Report of March 1998, EIC has also developed a trial version of CIS v5.41. This version allows potential customers to evaluate the software and associated data sets before purchasing the CIS. A summary of sales and income is given in §2.3.

The new version of CIS (v6.0) is being developed under the CIS Stage Two contract with WS Atkins, and was originally planned to be released at the end of 1998. Owing to delays in the software development, the Stage Two contract has been extended and the final release version of the software is expected at the end of May 1999. Consequently, no substantial progress has been made in packaging CIS v6.0 for its commercial release. Assuming that the new software and associated data sets are delivered on schedule, then EIC will endeavour to package CIS v6.0 for commercial release in July 1999.

As reported in the Progress Report of February 1999, one of the major achievements of the reporting year has been the development of the CIS World Wide Web (WWW) Site. The web site provides a cost-effective medium for promoting the CIS software and associated data sets, and for publishing other products such as the CIS News and the CIS case studies. The site has been established on the ITE Intranet Server at Monks Wood. Following an upgrade of this server planned for the last week of February 1999, the web site will be accessible using the registered URL address http://www.cis-web.org.uk. In light of comments made at the CIS Advisory Group meeting of the 24th September 1998, some suggestions (and costs) for the further development of the web site are given in the proposed revisions to the Business Plan (§4.1)

Additional data sets are being acquired in CIS format from data providers under the CIS Stage Two contract with WS Atkins. In order to facilitate easier access to these data, a CIS Data Library of free data sets was planned. No substantial progress has been made in developing the Library because the final versions of the data sets will not be delivered to the Department until the end of May 1999. In light of concerns raised at the CIS Advisory Group meeting of the 24th September 1998 about charges for distributing the Library, some suggestions (and costs) regarding the dissemination of the Data Library are given in the proposed revisions to the Business Plan (§4.1).

2.3 Sales, Distribution and Support Services (Work Package No. 3)

EIC handles all CIS enquiries and requests, administers CIS sales; distributes the CIS package, trial software, and appropriate data sets, and provides a help-desk for CIS users. In the reporting year, EIC logged 63 written and e-mail enquiries and 12 telephone requests for further information. All enquiries and requests were responded to within five working days in line with ITE's Customers Charter. There were no bugs reported and a one day training course was run for the Highways Agency on the 9th June 1998.

The enquiries translated into the CIS and data sales shown in the table below. The total revenue from sales of CIS v5.41 is £9,860, which is £140 short of the forecast revenue of £10,000. The total revenue from data sales is £740, which is £1,260 short of the forecast revenue of £2,000; the non-availability of the CIS Data Library is the reason for the shortfall.

CIS SALES FEB-98 TO JAN-99

S/N	DISPATCHED	CIS SALES	DATA SALES	ORGANISATION	DATA	COMMENTS
1133	16-Feb-98	£1,000.00		Central Science Laboratory	CIS	
1133	16-Feb-98		£80.00	Central Science Laboratory	OS	
1133	16-Feb-98		£80.00	Central Science Laboratory	BRC	
1135	16-Mar-98	£1,000.00		MAFF	CIS	
1135	16-Mar-98		£80.00	MAFF	BRC	
1135	16-Mar-98		£0.00	MAFF	CL	
1136	16-Mar-98	£1,200.00		Countryside Council for Wales	CIS	
1136	16-Mar-98		£80.00	Countryside Council for Wales	OS	
1137	16-Mar-98	£500.00		University of Cambridge	CIS	
1138	27-Mar-98			Ordnance Survey	CIS	Evaluation Copy
1139	20-Apr-98	£500.00		University of Sunderland	CIS	
1140	6-May-98	£1,000.00		Entec UK	CIS	
1140	6-May-98		£80.00	Entec UK	OS	
1141	10-May-98			Environment and Heritage Service (NI)	CIS	Evaluation Copy
1142	2-Jun-98	£1,000.00		Environment Agency	CIS	
1137	17-Jun-98		£100.00	University of Cambridge	CIS	Re-licensing
1118	5-Aug-98			British Geological Survey	CIS	Evaluation Copy
1143	10-Aug-98			University of Nottingham	CIS	Evaluation Copy
1143	10-Aug-98			University of Nottingham	BRC	
1143	10-Aug-98			University of Nottingham	OS	
1134	5-Oct-98			Catalytic Data	CIS	Evaluation Copy
1144	2-Nov-98		£80.00	University of Nottingham	OS	
1144	2-Nov-98	£1,660.00		University of Nottingham	CIS	
1144	2-Nov-98		£80.00	University of Nottingham	BRC	
1144	2-Nov-98		£0.00	University of Nottingham	CL	
1146	18-Nov-98			University of Oxford	CIS	Evaluation Copy
1147	1-Dec-98			ITE Furzebrook	CIS	ITE Copy Upgrade
1147	1-Dec-98			ITE Furzebrook	OS	
1148	17-Dec-98	£500.00		University of Sheffield	CIS	
1149	21-Dec-98	£1,000.00		Environment Information Services	CIS	
1149	21-Dec-98		£80.00	Environment Information Services	OS	
1150	26-Jan-99	£500.00		National Museum of Wales	CIS	
	TOTALS	£9,860.00	£740.00			

2.4   Marketing and Promotion (Work Package No. 4)

EIC is responsible for all the marketing activities associated with the CIS. In the reporting year, and in addition to the three Geographic Information Awareness events described in §2.1, EIC undertook the following two major demonstrations/exhibitions:

·   Sources of Environmental Information Course at the British Library in London on the 6th November 1998.

This one day course is designed to introduce environmental workers, researchers and information professionals to the rapidly expanding area of environmental information (e.g. traditional printed material, grey literature, online and CD-ROM sources and the Internet). Dr Tim Moffat gave a half-hour talk on "Sources of Environmental Data" including the National Biodiversity Network and the Countryside Information System. Dr Moffat also demonstrated the CIS to interested parties.

·   British Ecology Society Winter Meeting and the Royal Geographical Society's Annual Conference at the University of Leicester between the 5th and 7th January 1999.

The two meetings/conferences were run in parallel, and EIC organised a CIS exhibit for the Joint Trade Exhibition held in the Sports Hall of the University. The exhibit included two posters and the CIS software, v5.41 and an "alpha" copy of v6.0, which were demonstrated on two notebook computers and a large screen monitor. Dr Timothy Moffat (two days), Mrs Sue Wallis (two days) and Ms Fiona Pugh (two days) were in attendance. Some useful contacts were made and 45 visitors registered an interest in the CIS. This contacts will be followed up in due course.

EIC also promoted and demonstrated CIS to a number of visitors to ITE Monks Wood (e.g. representatives from Catalytic Data, Entec UK and the Environment Agency) and at various other meetings or fora, including the NERC Data Strategy Group, and the NERC Partnership and Innovation Directorate.

The establishment of the new CIS Web Site provides the main mechanism for promoting the CIS. It is too early to quantify whether the site has created a higher degree of awareness of CIS amongst potential user groups and achieved a higher level of market penetration; however, the indicators are looking good. For example, the CIS Environmental Catalogue has been downloadable from the ITE Web Server at Merlewood since September 1997 and the 299 downloads to date would indicate that there are a large number of people searching for countryside information. Indeed, about 75% of all e-mail enquiries have followed on from downloads of the Catalogue. In future all CIS requests for further information will be directed to the CIS Web Site.

The CIS News acts as a noticeboard for CIS developments and data set availability, and includes articles written by CIS users. As reported in the Progress report of February 1999, CIS News No. 5 will be published by the end of February 1999, and issued to all CIS users (along with promotional and upgrade information about CIS v6.0) and the Department. Two further issues are planned for the calendar year.

2.5   **Reporting** (Work Package No. 5)

Dr Timothy Moffat and Mrs Sue Wallis attended a meeting of the Joint Management Team (JMT) on the 3rd April 1998 at DETR Tollgate House, Bristol. Dr Moffat and Ms Fiona Pugh attended a meeting of the JMT on the 10th September 1998 at DETR Eland House, London. Progress reports on the CIS Dissemination and Support Contract were provided and minutes of the meetings prepared.

Mrs Wallis, Ms Pugh and Mr John Watkins (ITE Merlewood) attended a meeting of the CIS Advisory Group on the 24th September at DETR Eland House, London. Mrs Wallis provided an overview of the new CIS Dissemination and Support contract by describing the relevant elements of the 1998-2000 CIS Business Plan. Mr Watkins gave an overview of the Countryside Survey 2000 Module 13, including the CS2000 Data Access Policy. Salient points and concerns were noted for action.

Dr Moffat prepared two written progress reports on the deliverables for Staged Payments M1 [March 1998], and M2 and M3 [February 1999].

3.   Plans for DETR Support and Liaison

During the second year of the CIS Dissemination and Support contract, the major work will involve the deployment and support of CIS Version 6.0 and associated data sets in the Department. However, owing to the somewhat disappointing response from DETR users regarding the day-to-day use of CIS (§2.1), some more effort will be required to raise awareness of not only the new version of CIS but also its potential applications in the Department's work.

Specifically, EIC will:

(a)   officially launch the new version of the CIS at the third ECOFACT seminar: Causes of change in British vegetation to be held on the 10th June 1999 at the DETR, Great Minster House in London. This event will help to both raise awareness of CIS in the Department, other government departments and agencies, and organisations attending the seminar, and also provide a marketing opportunity which should lead to new CIS sales.

        As part of the launch, EIC will produce sixty CD's containing a beta-version of the CIS (Beta 10) which will "self-destruct" on the 30th September 1999, together with a set of updated CIS data sets for Great Britain and Northern Ireland, and a draft version of the new Environmental Catalogue (Release 5). The CD will be handed out to attendees of the seminar, together with a copy of the next release of CIS News (No.6) which will focus on some of the new CIS functionality and the CIS Web Site. The additional costs of producing the CD (some £500) will be recouped from CIS sales.

(2)   in association with the EWD, create a new list of registered and potential users to include all the relevant divisions in the Department. A package of targeted material, entitled "Applications of CIS in DETR", will be prepared and based around the four case studies written by ITE under the CIS Stage Two contract. This package will be sent out with a covering letter from the Department to the new list of users, and other interested parties and divisions.

(3)   organise a training event later on in the calendar year to introduce existing and potential users within the Department to the new version of CIS.

4.   Proposed Revisions to the Business Plan

As part of annual reporting of the CIS Dissemination and Support contract to the Department, EIC is required to include a revised business plan for the forthcoming year of February 1999 to January 2000. Rather than reproduce the plan in its entirety, this report only covers the proposed revisions to the 1998-2000 CIS Business Plan. Once these have been discussed with the Department, the full business plan incorporating the agreed revisions can be published separately, if required. For convenience, the revisions have been grouped under Work Packages No. 2 to No. 4. A revised pricing structure is included under Work Package No. 3, and revised sales and revenue targets are provided under Work Package No. 4.

The Department is asked review these revisions and consider a variation in the contract to cover the additional costs.

4.1   **CIS Product Development** (Work Package No. 2)

CIS Data Library

Some members of the CIS Advisory Group argued that if the data provided on the proposed Data Library are free, then the Library should not incur a £50 administrative charge. A way of providing data that was completely free-of-charge would be by downloading it from the Web, either directly from the data suppliers (e.g. Joint Character Map from English Nature) or via the CIS Web Site. Alternatively, the Data Library could be issued on the same CD as the CIS software.

Both the suggested mechanisms have their merits. It would be possible to package the free and fully documented (e.g. completed meta-data) data sets delivered by WS Atkins under CIS Stage Two on the same CD as the new CIS v6.0 software. However, once the CDs are printed, any new (e.g. CS2000 and LCM2000) or updated data sets cannot be added without another print run. EIC is planning on only having one print run of 200 copies. Therefore, the Web offers the best mechanism for providing new and updated CIS data sets. Having downloadable data sets and hyperlinks to data providers' web pages from the CIS Web Site will help to foster an active and well-informed community of CIS users and data providers. In this way, a role for CIS could be developed in relation to other initiatives like the National Biodiversity Network (NBN).

EIC proposes to package a Data Library of free GB (and NI) data sets (mostly designated and administrative areas) on the same CD as the CIS v6.0 software, the core Countryside Survey data sets and the Environmental Catalogue Release 5. This can be done within the present budget allocated to the CIS Data Library work. Proposals for the utilization of the Web are described next.

<u>CIS WWW Site</u>

The CIS Web Site is the cornerstone of the CIS marketing, sales, distribution and support activities, and provides links to other information sources and appropriate organizations. The original WWW specification described in the Offer of Services (February 1998) included the following two items which were not funded:

·   Down-loadable CIS Trial Software (either as a single compressed file or as a set of disk images). Users will be required to enter their personal details on a HTML form and be prompted to agree to the displayed licence agreement before downloading the software. The personal details will be automatically e-mailed to EIC for registration purposes.

·   Down-loadable CIS Data Library and CS2000 Data Sets (either as a single compressed file or as a set of disk images). These products may be password protected, so that users will have to contact EIC by telephone for a valid password. Personal details will be registered in the same ways as above.

EIC proposes to develop the necessary technical infrastructure (e.g. HTML pages and forms, cgi-scripts, hyperlinks and security features) to permit the download of the CIS Data Library, the CS2000 data sets and any other new or updated data sets.

With the CIS Data Library and the CIS Environmental Catalogue available for downloading, the next step is to have the CIS software, any patches or updates downloadable from the Web as well. This is now a well-established way of delivering software to users. Therefore, EIC further proposes to utilize the same technical infrastructure and have downloadable versions of the CIS trial software. This software could be made fully functional after the trial period has expired by entering an appropriate password.

The development of the technical infrastructure will benefit both the marketing and user-base of the CIS. These benefits are described under Work Package No. 4. However, additional start-up and maintenance costs will be incurred and these are estimated in the table below. If the proposal is approved, then much of the development work could be completed by July/August 1999 to coincide with the commercial release of Version 6.0.

Category of Expenditure	Total Days	1998/ 99	1999/ 00	2000/ 01	Total
Staff					
Grade HSO	35		3,720	635	4,355
Grade SO					
Overheads			4,530	775	5,305
Travel and Subsistence					
Consumables (for software)			1,000		1,000
Capital Items					
Subcontract					
Report Reproduction and Printing					

Seminar					
TOTAL					**10,66 0**

4.2 Sales, Distribution and Support Services (Work Package No.3)

As described in §2.3, the total revenue from CIS and data sales was some £1,400 short of the revenue forecast for the reporting year, owing principally to the non-availability of the CIS Data Library. However, the Department will not be asked to make good the shortfall because EIC has not delivered the CIS News No. 6 as planned.

In parallel with the new CIS Web Site developments, EIC proposes to reduce the price of the CIS software for new customers by half, and keep the price for upgrading from v5.41 to v6.0 the same. The CIS Data Library will be free-of-charge and the price for the CS2000 data sets (including the Land Cover Map 2000) will remain unchanged. The benefits and impacts on forecast sales and revenues are described under Marketing and Promotion (Work Package No. 4). The new pricing structure is shown in the table below:

CIS v6.0 (New Customers)

CIS Product	Concessionary Rate	Standard Rate
	Charitable Organisations & Educational Institutions	Government Departments, Agencies, Local Authorities & NDPBs, Commercial & Consultants
Single User	£250	£500
Multiple User (up to five copies)	£475	£900
Multiple User (up to 10 users)	£630	£1,300

Upgrade from CIS v5.4 to CIS v6.0 (per disk set)

	£125	£250

CIS Data Library

	Free	Free

CS 2000 Data Sets (including Land Cover Map 2000)

	£50	£50

4.3 Marketing and Promotion (Work Package No. 4)

As described in §4.1, the CIS Web Site is the cornerstone of the CIS marketing, sales, distribution and support activities. The proposed new web site developments will require additional funding by the Department. However, such an investment coupled with the CIS price reductions proposed by EIC will have some significant benefits:

(a)   A key objective of the Business Plan is to create a higher degree of awareness of CIS amongst potential users groups. The Web offers the best way of promoting and raising awareness of CIS to the widest possible (global) audience. The proposed development of the CIS Web Site should help to achieve a higher level of market penetration and a larger community of users.

(b)   The Web is now a well-established way of searching for information, data and software. However, more discerning "surfers" of the Web now expect what can be termed as "downloadable freebies", and in the case of CIS, the large number of CIS Environmental Catalogue downloads provides evidence of this. Downloadable trial versions of the CIS and some data sets will provide an effective and efficient means by which potential users can evaluate the CIS. This will again help to raise the awareness of the CIS, leading to an increase in the user-base.

(3)   It is anticipated that the price reductions coupled with the new Web developments will generate the same levels of forecast sales revenue by selling more copies of the CIS more cheaply. This will meet two objectives: (1) to maximize the number of CIS users and (2) to generate sufficient income to cover the costs of marketing and support activities.

(4)   The new Web developments will also provide much of the preparation work required for disseminating the results of the Countryside Survey 2000 in CIS format via the Web.

With respect to revenue from CIS software and data sales, the original forecast for the second year of the contract assumed that the commercial release of CIS v6.0 would take place at the end of 1998. Given that the packaged, final release version of CIS will be not be available until July 1999, some 5-6 months later than expected, then it is reasonable to question whether the targets set for this reporting year are attainable. EIC is confident that the combination of the new Web developments, the price reductions and the longer than expected period of selling v5.41 (at the higher price) will achieve enough CIS software (about 50 units) and data sales to meet the original targets.

EIC has revised the forecast revenue figures for CIS and data sales, and these are shown in the table below. The actual revenue for 1998/9 have been included.

CIS Product	Customer Type	1998/99	1999/00	2000/01	Total
CIS v5.41	New	9,860			
CIS Data Sales	Current & New	740	1,000	1,000	
CIS v5.41/v6.0	New		15,000	15,000	
Upgrades to CIS v6.0*	Current		4,000		
CIS Data Library	New		0	0	
CS2000 Data Sets	Current & New			2,500	
TOTAL		10,600	19,000	18,500	**48,100**

*about £4,000 worth of free upgrades will be issued to customers who purchased CIS
under the original licence agreement (up to February 1996). It is also assumed that all
other paying customers will upgrade to the new version.

The total forecast revenue over the three-year period of the CIS Dissemination and Support contract has come down from £50,000 to £48,100 owing to the loss of revenue from the CIS Data Library, which will be free-of-charge. The equivalent marketing, sales and support activities planned by EIC over the same period come to about £50,000; this represents a forecast shortfall of about £2,000. EIC has no plans to reduce its activities in line with these new figures. However, it is one area that will need revisiting and discussion with the Department towards the end of the second year of the contract.

5.   Staged Payments

As described in the Progress Report of February 1999, the deliverables involving the new version of CIS (v6.0) and completed data sets depended on the completion of the CIS Stage Two contract with WS Atkins. This contract has been extended, with the final versions of the software and data expected at the end of May 1999. As shown in the table below, the date, deliverables and payment associated with Stage Payment M3, have been amended to take account of the extended contract and plans for the launch of CIS v6.0.

The proposed new web site developments are included in Stage Payment M4 with an additional payment shown in brackets. The payments associated with Stage Payments M4 to M6 have been evened out, but the dates have not changed.

Stage	Date	Deliverable(s) and Milestone(s)	Payment (£)
M1	Paid in March 1998	Participate in awareness seminar at Department Deliver CIS v5.41Trial Software Agree specification for CIS WWW Site Publish CIS News No.4	10,000
M2	Paid in March 1999	Organize two JMT meetings Publish CIS News No. 5 Organize an awareness seminar at Department Deliver WWW Site to specification and launch Deliver prototype WWW Site	25,000
M3	26th July 1999	Deliver Annual Report and revised Business Plan. Deliver CIS v6.0 Trial Software Package CIS v6.0 Publish Data Library Publish CIS News No. 6 Organize one JMT Meeting Launch CIS v6.0 by special event	30,000
M4	30th November 1999	Run training course for Department users Organize two JMT and one Advisory Group meetings Publish Environmental Catalogue (Release 6) Publish CIS News No. 7	10,000
		Deliver WWW Site new developments	(10,660)
M5	25th February 2000	Deliver Annual Report and revised Business Plan Run an awareness seminar in Department Publish CIS News No. 8 Organize one JMT meeting	10,000
M6	22nd September 2000	Package CS2000 Data Sets Publish Environmental Catalogue (Release 7) Publish Revised Data Library Publish CIS News No. 9 Organize two JMT and one Advisory Group meetings Run training course for Department users	10,000
M7	26th January 2001	Deliver Draft Final Report Organize one JMT meeting Deliver Final Report	5,092
		TOTAL	100,092 (110,752)

**Department of the Environment, Transport
and the Regions**

**Countryside Information System
Dissemination and Support
(Contract CR0206)**

Annual Report
(February 1999 - January 2000)

Proposed Business Plan Revisions
(February 2000 – January 2001)

June 2000

Centre for Ecology and Hydrology
Monks Wood
Huntingdon
Cambs. PE28 2LS

1. INTRODUCTION

The second Annual Report is submitted as one of the deliverables associated with the CIS Dissemination and Support contract, which commenced on the 2nd February 1998. It summarizes the activities undertaken, by work package, for the year to the end of January 2000 and provides details of sales and income over the same period. Some proposals for revisions to the 1998-2000 CIS Business Plan are also outlined.

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NB. The NERC Institutes of Terrestrial Ecology (ITE), Freshwater Ecology (IFE), Hydrology (IH), and Virology and Environmental Microbiology (IVEM) have been amalgamated into a single institute known as the Centre for Ecology and Hydrology (CEH). The administrative headquarters is located at Monks Wood in Cambridgeshire. These changes took effect from the 1st April 2000.

2.   ANNUAL REPORT

2.1   Staff Changes

In April 1999, Dr Timothy Moffat was promoted to a new post within the Directorate of the Institute of Terrestrial Ecology at Monks Wood. Although Dr Moffat is no longer a staff member of the Environmental Information Centre (EIC), he continues to manage the CIS Dissemination and Support contract with the Department on behalf of EIC.

At the beginning of December 1999, Ms Fiona Pugh left the EIC for pastures new. Ms Pugh was responsible for developing and managing the CIS Website, and producing the CIS News, as well as the day-to-day support of CIS. The EIC is recruiting a replacement and someone should be in post by the early spring 2000.

2.2   DETR Support and Liaison (Work Package No. 1)

As part of raising awareness of the CIS in the Department (and elsewhere in other government departments and agencies), the Environmental Information Centre participated in the ECOFACT seminar on *Causes of Change in British Vegetation* in London on the 10th June 1999. See §2.5.

In September 1999, 20 copies of the CIS v6.0 were issued to the Department. The bugs in the software reported by Dr Andrew Stott were noted, and the first bug fix was issued to the Department in October 1999.

Dr Timothy Moffat also participated in a CIS Awareness Seminar held at DETR Eland House in London on the 25th January 2000. During two sessions, one in the morning and one in the afternoon, Dr Moffat gave a twenty-minute presentation on the CIS, the software, datasets, functionality and marketing arrangements. Dr Alison Dorling (née Briggs) of the Department gave a half-an-hour demonstration of the CIS v6.0. Both sessions generated a lot of interest and questions, particularly about data presentation and availability.

No training event was organised for the Department in the reporting year. However, feedback from the awareness events will be assessed by the Department to ascertain the best ways forward in meeting the training needs of existing and potential users of CIS.

2.3   CIS Product Development (Work Package No.2)

CIS v6.0

The new version of CIS (v6.0) was developed under the CIS Stage Two contract with WS Atkins. EIC took delivery of some updated data sets on the 10th May 1999, the final CIS software on the 12th July 1999, and the new version of CIS Environmental Catalogue (Release 5) on the 16th July 1999.

Using the InstallShield Express v2.12 software, Dr Timothy Moffat developed a standard CIS v6.0 installation comprising the new CIS source and object programs, a CIS Data Library of updated datasets and others, and the Environmental Catalogue. The installation was copied onto a master Compact Disk (CD) together with a complete file list and a "Getting Started" file. The ITE Publications Office designed the CD jewel case covers and label in consultation with the Department. Some 200 copies of the master CD, and 1,000 jewel case covers were printed.

CIS v6.0 was commercially available to issue to users from the 21st September 1999.

Dr Moffat also created a trial version of CIS v6.0 using InstallShield Express and SoftSentry protection software. Available on CD, this version allows potential customers to evaluate the software and associated data sets before purchasing the CIS.

Dr Andrew Stott reported a bug in the CIS v6.0 to EIC on the 13th October 1999. Dart Computing fixed the bug and EIC received the new executable (CIS v6.00a) on the 15th October 1999. The bug fix was mounted on the CIS Website. No other user has reported the bug.

CIS Website

The CIS Website, http://www.cis-org.uk, continues to provide a cost-effective medium for promoting the CIS software and associated data sets and products (e.g. Environmental Catalogue and CIS News). The following enhancements have been made to the website:

- The CIS Case Studies, developed by ITE under the CIS Stage Two contract, are downloadable from on the website as PDF (Portable Document Format) files.

- The CIS Environmental Catalogue Release 5, developed by WS Atkins, is downloadable from the website (since the 28th July 1999).

- Downloadable CIS data sets are now available from the Web site (at www.cis-web.org.uk/datadownload.asp). Before downloading, users are requested to fill in an online form asking for a name, an organisation and an e-mail address. This information is e-mailed to cis@ceh.ac.uk (received by Dr Timothy Moffat).

- A password-protected CIS v6.00a executable file (the first CIS bug-fix) is downloadable from the website (at www.cis-web.org.uk/bugfix.asp). Before downloading, users are requested to fill in an online form asking for a name, an organisation, an e-mail address and a licence number. This information is e-mailed to cis@ceh.ac.uk. The password for unzipping the executable is e-mailed back to the user.

2.4   Sales, Distribution and Support Services (Work Package No. 3)

The EIC handles all CIS enquiries and requests, administers CIS sales; distributes the CIS package, trial software, and appropriate data sets, and provides a help-desk for CIS users. In the reporting year, the EIC logged 95 written and e-mail enquiries and 22 telephone requests for further information. All enquiries and requests were responded to within five working days in line with the ITE Customers' Charter.
The enquiries translated into the CIS and data sales shown in the table below. A total of 16 CIS v5.41 licences and 26 CIS v6.0 licences were sold to ten new customers. An additional

six copies of CIS v5.41 and 50 copies of CIS v6.0 were supplied free-of-charge (including those supplied to the Department and the CEH Institutes). The total revenue from sales of CIS is £7,655; this is well short of the forecast revenue target of £19,000. The extremely poor uptake of the new version by existing customers and its later-than-expected availability are the main reasons for the shortfall.

CIS SALES - 1st February 1999 to January 31st 2000

Customer	Date	Fee	Application
Ms J Pescod, Harper Adams College	Apr-99	£580.00	Land management + countryside development
Mr J Handley, University of Manchester	Apr-99	£950.00	Teaching Planning & Landscape architects
Mr T Turner, University of Greenwich	Jul-99	£1,260.00	Teaching, Earth Sciences - 10 users
Dr P Durr, Vet Labs Agency.	Oct-99	£600.00	V6. Epidemiology
Dr MacFarlane, University of Northumbria	Oct-99	£125.00	V6 Upgrade
Ms P Spoerry, University of Cambridge	Oct-99	£125.00	V6 Upgrade
Dr Pearce, University of Birmingham	Oct-99	£125.00	V6 Upgrade
Mr N Veitch, Environment Agency	Oct-99	£250.00	V6 Upgrade
Mr Ricketts, MAFF	Oct-99	£250.00	V6 Upgrade
Mr A McKenzie, Cumbria CC	Oct-99	£250.00	V6 Upgrade
Mr J Bartlett NEWI	Oct-99	£680.00	V6. Teaching, 10 users
Mr M Weideli	Oct-99	£250.00	Mollusc studies
Mr R McDonald, University of Bristol	Nov-99	£205.00	V6 + BRC data
Mr R. Stansby, AEA Technology	Nov-99	£500.00	V6, commercial
Mr T Pike, Countryside Agency	Nov-99	£400.00	V6 upgrade & extend to 5 users
Prof R Marrs, University of Liverpool	Nov-99	£125.00	V6 upgrade
Dr Alan Cooper, University of Ulster	Dec-99	£680.00	V6, Teaching, 10 users
Mr Johnson University College, Northampton	Dec-99	£300.00	V6, Research etc.
	TOTAL	**£7,655.00**	

Free of Charge

Mr D Norris ITE Bangor	Mar-99	New copy for Bangor
Mr J Lee Oxford Brookes University	Mar-99	upgrade
Dr E Williams, Seale Hayne University of Plymouth	Mar-99	Marketing and promotion at BES meeting
Prof. Paul Harvey, University of Oxford	Mar-99	Complimentary - Chairman of SMAG
Ms C Percy, People's Trust for Endangered Species	Apr-99	v5.4. Evaluation copy
Mr C Collins, Bucks Community Action	May-99	v5.4Evaluation copy
CIS V6 upgrades	Oct-99	V6. 13 x FOC copies
Mr M Rounsevell, Universitaire de Louvain	Oct-99	V6.Evaluation copy
Dr R Haines-Young	Oct-99	V6. Evaluators copy
CEH - all sites except IVEM	Oct-99	V6. 9 x site network copies
DETR	Oct-99	V6. 16 copies for internal use
DETR	Oct-99	V6. 4 copies for external users
Ms A Walsh, Bat Conservation Trust	Nov-99	V6
Mr D Mitchel Environment. & Heritage Service, NI	Nov-99	V6, evaluator
Dr A Cooper, University of Ulster	Nov-99	V6, evaluator
Ms C Sullivan, Inst. Of Hydrology	Dec-99	V6, CEH copy
Mr D Scott, University of Cambs/ITE CASE	Dec-99	V6, CEH copy
Ms R Roseff, Herefordshire CC	Jan-00	V6 evaluation copy

2.5   Marketing and Promotion (Work Package No. 4)

The Environmental Information Centre is responsible for marketing activities associated with the CIS. In the reporting year, CIS was promoted at the following major seminars and conferences:

- The *Sources of Environmental Information* courses at the British Library in London. Dr Timothy Moffat attended on the 4th February 1999 and Mrs Sue Wallis attended on the 1st December 1999.

    This one-day course is designed to introduce environmental workers, researchers and information professionals to the rapidly expanding area of environmental information. A

half-hour talk on *Sources of Environmental Data* was given and included items on the National Biodiversity Network and the CIS. The CIS was also demonstrated to interested parties.

- The third ECOFACT Seminar on *Causes of Change in British Vegetation* at the DETR, Great Minster House in London on the 10th June 1999.

  The event helped to both raise awareness of CIS in the Department, other government departments and agencies, and organisations attending the seminar, and to officially launch the new version of CIS v6.0. Dr Timothy Moffat gave a short talk on the CIS history, new developments and current marketing arrangements. As well as demonstrating a beta-version of the new software to interested parties, the EIC also produced some self-destruct CIS software/data CDs, which were handed out to attendees.

- The Marine Life Information Network for Britain and Ireland (MarLIN) Conference on *Using Marine Biological Information in the Electronic Age* at the University of Plymouth between the 19th and 21st July 1999.

  At the invitation of Dr Keith Hiscock of MarLIN, Dr Timothy Moffat gave a paper on *Models from the terrestrial environment: the Countryside Information System and Habitat Restoration Program.* The CIS was demonstrated in the exhibition accompanying the conference.

The CIS Website provides an effective mechanism for promoting the CIS and there have been 1,905 Homepage hits to date. All general enquiries for further information are now directed to the site. The CIS Environmental Catalogue has been downloadable from the Web since September 1997 and there have been 502 downloads to date.

The CIS News acts as a notice board for CIS developments and data set availability, and includes articles written by CIS users. CIS News No. 5 and CIS News No. 6 were published in February 1999 and August 1999 respectively. Both newsletters were issued to all CIS users and HTML versions mounted on the CIS website.

2.6   Reporting (Work Package No. 5)

Dr Timothy Moffat attended meeting of the Joint Management Team (JMT) on the 22nd April 1999 at DETR Eland House in London, to review the First Annual Report and Proposed Business Plan Revisions. A revised report [dated May 1999] was issued.

Dr Timothy Moffat and Ms Fiona Pugh attended a meeting of the Joint Management Team (JMT) on the 26th August 1999 at DETR Tollgate House in Bristol. Minutes of the meeting were prepared and issued.

Dr Moffat prepared one progress report on the deliverables for Staged Payments M3 to M5 [February 2000].

3.   PLANS FOR DETR SUPPORT AND LIAISON

During the third year of the CIS Dissemination and Support contract, additional effort will be put into the provision of CIS training for DETR users, in the management and quality assurance of the existing CIS datasets and associated meta-data, and the dissemination and use of CS2000 data.

3.1   Training

Following the CIS Awareness Seminar held at DETR Eland House in London on the 25th January 2000, a number of DETR staff expressed an interest in learning more about CIS and receiving training. EIC intends to service this requirement by providing personalised, one-to-one training for any staff whom make a request.

3.2   Data Management

The data management component of the CIS Stage Two Developments delivered a range of new and updated datasets for both CIS v5.41 and v6.00 formats. Some new datasets are in the pipeline, including Countryside Survey 2000, Land Cover Map 2000, and Atlas 2000. Various Divisions of the Department, and other Government Agencies (e.g. the Environment Agency) are very keen to provide some of their data for CIS. Therefore, over the next 18 months or so there will be a lot happening in terms of new data coming on stream.

The Department intends to let a new data management contract in the near future to deal with both ageing and new datasets. As an interim measure, however, EIC will take stock of all the existing CIS datasets, and try and verify the quality of both the data and the accompanying meta-data. This activity forms some the preparatory work for any future data management contract and should highlight problems which will need to be resolved as part of the contract.

3.3   CS2000 Data

The promotion, reproduction and distribution of CS2000 data in CIS format forms part of the CIS Dissemination and Support contract with the Department. The plans for marketing CS2000 data alongside other CIS datasets will be developed in consultation with the DETR and the CS2000 (Modules 13 and 16).

EIC will also contribute to any appropriate workshops/events, including the CS2000 Data Workshop being organised by Module 13. The workshop will raise awareness of the datasets that will be provided in CIS format, discuss the best CIS configuration and functionality for CS2000 data and consider the needs for specific training and user documentation in the use and application of CS2000 data.

4. PROPOSED REVISIONS TO THE BUSINESS PLAN

As part of the annual reporting of the CIS Dissemination and Support contract to the Department, the EIC is required to review the CIS Business Plan for the forthcoming year of February 2000 to January 2001. Rather than reproduce the plan in its entirety, this report deals only with revisions.

4.1 Marketing and Promotion

The CIS sales figures for 1999/2000 are disappointing. The CIS Website has certainly helped to raise awareness of the CIS, since the majority of enquiries come from individuals who have "surfed" the site, but very few of these are translated into sales. Even more disappointing in some respects is the fact that only a small number of CIS Version 5 users have upgraded to the new version. Clearly, price reductions are not enough. The strength of CIS is its data; many users purchase CIS simply to gain access to the data. EIC's future marketing efforts should will concentrate on the data.

Given this year's results, the forecast revenue from CIS software and data sales for the third year of the contract, 2000/2001 has been reduced from £18,500 to £14,000. EIC considers that the new target figure is still quite ambitious but attainable, owing mainly to the interest and sales generated by the launch of CS2000 results in November 2000.

The revised the forecast revenue figures for CIS and data sales are shown in the table below. The actual revenues for 1998/9 and 1999/2000 have been included.

CIS Product	Customer Type	1998/99	1999/00	2000/01	Total
CIS v5.41	New	9,860			
CIS Data Sales	Current & New	740	160	500	
CIS v5.41/v6.0	New		5,845	10,000	
Upgrades to CIS v6.0	Current		1,650	1,000	
CIS Data Library	New				
CS2000 Data Sets	Current & New			2,500	
TOTAL		10,600	7,655	14,000	**32,255**

5.   STAGED PAYMENTS

The staged payments and deliverables have been revised to take account of the plans for training, data management and CS2000 data (see Section 3).

Stage	Date	Deliverable(s) and Milestone(s)	Payment (£)
M1	Paid in March 1998	Participate in awareness seminar at Department Deliver CIS v5.41Trial Software Agree specification for CIS WWW Site Publish CIS News No.4	10,000
M2	Paid in March 1999	Organise two JMT meetings Publish CIS News No. 5 Organise an awareness seminar at Department Deliver WWW Site to specification and launch Deliver prototype WWW Site	25,000
M3	Paid in November 1999	Deliver Annual Report and revised Business Plan. Deliver CIS v6.0 Trial Software Package CIS v6.0 Publish Data Library Publish CIS News No. 6 Organise one JMT Meeting Launch CIS v6.0 by special event	30,000
M4	25th February 2000	Deliver Annual Report and revised Business Plan Run awareness seminar in Department Organise two JMT meetings Deliver CIS WWW Site new developments	20,660
M5	31st July 2000	Run training course for the Department Publish CIS article in CS2000 Newsletter Verify existing CIS datasets Publish Environmental Catalogue (Release 6) Liaise with CS2000 Module 13 about Data Workshop Organise one JMT meeting	10,000
M6	30th November 2000	Package CS2000 Data Sets Publish Environmental Catalogue (Release 7) Publish Revised Data Library Publish CIS News No. 7 Submit proposals for fourth year extension Organise one JMT meeting	10,000
M7	26th January 2001	Run training course for Department users Deliver Draft Final Report Organise one JMT and one Advisory Group meetings Deliver Final Report	5,092
		TOTAL	110,752

**Department of the Environment, Transport
and the Regions**

Countryside Information System
Dissemination and Support
(Contract CR0206)

Annual Report
(February 2000 - January 2001)

March 2001

Dorian Moss
Sue Wallis

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INDEX

1.   INTRODUCTION

The third Annual Report is submitted as one of the deliverables associated with the CIS Dissemination and Support contract, which commenced on the 2nd February 1998. It summarizes the activities undertaken, by work package, for the year to the end of January 2001 and provides details of sales and income over the same period.

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NB. The NERC Institutes of Terrestrial Ecology (ITE), Freshwater Ecology (IFE), Hydrology (IH), and Virology and Environmental Microbiology (IVEM) have been amalgamated into a single institute known as the Centre for Ecology and Hydrology (CEH). The administrative headquarters is located at Monks Wood in Cambridgeshire. These changes took effect from the 1st April 2000.

2.   ANNUAL REPORT

2.1   Staff Changes

Dr Timothy Moffat managed the CIS Dissemination and Support contract with the Department until he left the Centre for Ecology and Hydrology on 5 January 2001. Management of the contract then passed to Dr Dorian Moss, Head of the Environmental Information Centre (EIC).

Mr. Francis Rowland was appointed to EIC in April 2000 in succession to Ms. Fiona Pugh. Mr. Rowland is responsible for developing and managing the CIS Website, and producing the CIS News, as well as the day-to-day support of CIS.

2.2   DETR Support and Liaison (Work Package No. 1)

Tim Moffat provided CIS training to Hema Pandya of PLUS Division at DETR, Eland House, London on the 13th April 2000. No other requests for training have been received.

As part of the DETR's launch of the Countryside Survey 2000, the Environmental Information Centre demonstrated the CIS at the launch event held in London on 29 November 2000. See §2.5.

2.3   CIS Product Development (Work Package No.2)

CIS v6.0 bugs

A problem was discovered with the data tables display, which appeared to be affected by the order in which data files and regions were opened/created in CIS. Under certain conditions, the data tables for some open data files were not available for selection. This bug was fixed as part of the development of v6.11 (see below).

CIS v6.11

The new version of CIS (v6.11) was developed under subcontract by Dart Computing. This version was produced in readiness for the Countryside Survey 2000 launch and was delivered in October 2000. Demonstration datasets derived from Countryside Survey 2000 results were prepared in CIS format. CIS v6.11 was distributed as a time-limited evaluation version together with the demonstration CS2000 datasets to attendees at the Countryside Survey 2000 Launch on 29 November 2000. This version was due to expire on 2 March 2001.

Data verification

Tim Moffat produced a report in July 2000. DETR asked for the work to take into account the treatment of "missing" and "null" values.The Report summarised the outcomes of work undertaken by CEH to take stock of all the CIS data sets supplied to the Department by WS Atkins as part of the final report on the CIS Stage Two contract.

The starting points for the work were the CIS Data Inventory document (Version 4) produced

by WS Atkins and the CIS datasets (in version 5.4 and 6 formats) supplied on a CD which was issued by WS Atkins on the 19th January 2000. The purpose of the work was to try and verify the quality of both the data and all the accompanying meta-data, in the data files themselves and in the CIS Environmental Catalogue Release 5 (July 1999).

The Report also included a printout of a new version of the original CIS Data Inventory supplied by WS Atkins. All the original content of the Inventory had been put into an MS-Access 97 database, which had been corrected and commented upon by CEH.

The CIS data files were checked for three main things: (1) how missing data/nulls were being treated: as zeros, as missing data, or as both; (2) how the spatial coverage of the data related to the new GB definition in v6.0; and (3) what was the year of the source data. The findings are summarised as follows:

- Squares without values/data are assigned zero densities in all the v6.0 data files containing "density" datasets (e.g. ENSSSI2.CCF).

- Squares without attributes are shown as no/missing data in all the v5.4 and v6.0 data files containing "attribute" datasets (e.g. CCAONB2.CCF).

- The treatment of missing data/nulls is inconsistent in v5.4 data files containing "density" datasets. Squares are either assigned zero densities (e.g. SORAM.CCF), or shown as no data (e.g. CCWSAC.CCF), or shown as both (e.g. SNHSSSI2.CCF).

- At least 16 of the v6.0 data files containing "density" datasets have been created from raw data. In most cases (i.e. designated areas) this means the changes to the GB map definition have been taken into account and the data extends to the new land and inter-tidal squares (e.g. ENNNR2.CCF).

- Most of the v6.0 data files containing "attribute" datasets have been converted from v5.4 files (e.g. CCFOR2.CCF). This means the changes to the GB map definition have not been taken into account and there may be "grey fringes" of missing data along the GB coastline. These files should be recreated/updated using raw data.

- At least 17 of the v5.4 data files were converted from v6.0 files (e.g. ENSAC.CCF).

- The currency of the data used to create the CIS data files is a major concern. Some of the source data dates from as early as 1975 (IHRUNOFF.CCF). A large number of the data files (28 in total) are created using data from 1997. However, the date of the source data for some 26 data files is not explicit.

CIS Website

The CIS Website, http://www.cis-web.org.uk has been extensively revised. It continues to provide a cost-effective medium for promoting the CIS software and associated data sets and products (e.g. Environmental Catalogue and CIS News). The following enhancements have been made to the website:

- Download facilities established for CIS evaluation version,v6.11 upgrade, bug-fix, CS2000 data files and the Countryside Vegetation System (CVS).
- The CIS Case Studies, developed by ITE under the CIS Stage Two contract, are still downloadable from on the website as PDF (Portable Document Format) files.

- The CIS Environmental Catalogue Release 5, developed by WS Atkins, is still downloadable from the website (since the 28th July 1999).

- The website carries news of latest developments and activities.

2.4   Sales, Distribution and Support Services (Work Package No. 3)

The EIC handles all CIS enquiries and requests, administers CIS sales; distributes the CIS package, trial software, and appropriate data sets, and provides a help-desk for CIS users. At the beginning of this contract many enquiries were by paper, and were therefore recorded. The near-universal migration to electronic methods has increased the traffic and greatly improved access for potential users. E-mail is received via the WWW site enquiry address and via external routes. Figures for casual enquiries by email and phone are not routinely recorded, most enquirers are referred to the WWW site for further information. All enquiries and requests were responded to within five working days in line with the CEH Customers' Charter.

The enquiries translated into the CIS and data sales shown in the table below. A total of 25 CIS v6.0 licences were sold to 13 new customers. An additional 2 copies of CIS v6.0 and one upgrade were supplied free-of-charge. The total revenue from sales of CIS is £4,250; this is well short of the forecast revenue target of £14,000.

CIS Sales statement, 1st February 2000 - 31st January 2001

Customer	Fee	No of users
Ms Christopher, Isle of Wight College	£525.00	5
Mr J Mitchley, Wye College	£125.00	upgrade
Prof. N Arnell, University of Southampton	£300.00	1
Ms A Mason, Blackwells Distribution Services	£300.00	1
Mr D Gebhard, Multidata, USA	£500.00	1
Dr S Wurthmann, Glasgow Caledonian University	£300.00	1
Mr A Gedded, MLURI	£300.00	1
Mr P Durr, Central Science Lab, sub-contractors licence	£100.00	1
Ms T Oldfield, University of Kent	£300.00	1
Ms H Keefe, University of East Anglia	£300.00	1
Ms A Betterton Sheffield Hallam University	£525.00	5
Mr A Williamson, Environment Agency	£500.00	1
Ms J Burke, University of Wales, Bangor	£525.00	5
Ms N Cocu, Universitie Catholique de Louvain, Belgium	£300.00	1
TOTAL VALUE, BEFORE VAT	£4,250.00	
NUMBER OF LICENSES SOLD		25

Copies supplied free of charge.

C Baker, Oxford University Press	for Atlas 2000, DETR request
Prof E. Gould (IVEM)	for CEH Oxford's use
Mr S Gillam, Forestry Commission	upgrade to V6

Evaluation software and data

CS2000 Launch, London, November 2000, evaluation CD's   140
Evaluation CIS supplied via WWW download (Nov. 00 - Jan. 31st 01)   31
Downloads from WWW site (software, data, CVS etc)   219

<u>Training</u>

Training was provided for Cumbria County Council in Carlisle on 11 April 2000, and the Bat Conservation Trust (Allyson Walsh), c/o Alana Ecology, Bishop's Castle, Shropshire on 17 May 2000.

2.5   **Marketing and Promotion** (Work Package No. 4)

The Environmental Information Centre is responsible for marketing activities associated with the CIS. In the reporting year, CIS was promoted at the following major seminars and conferences:

- Two presentations were made, by Sue Wallis and Tim Moffat respectively, at the British Library 's 'Sources of Environmental Information' course.

- CIS was demonstrated and promoted by Timothy Moffat at the Countryside Survey 2000 launch in November 2000, when it was used as a platform to present some of the CS2000 results. This event generated several enquiries.

- An article on CIS was published in the Countryside Survey newsletter, issue 5, July 2000.

- A presentation was made by Sue Wallis in collaboration with Roy Haines-Young at the Environment Agency's Collaborative Forum for Environmental Monitoring, London, January 2001. This also generated interest.

No further issues of CIS News were published in 2000/01; however the article in CS2000 News was intended to meet the need to disseminate news about CIS.

2.6   **Reporting** (Work Package No. 5)

Dr Timothy Moffat attended a meeting of the Joint Management Team (JMT) on 22 February 2000 at DETR Tollgate House in Bristol. The meeting discussed the Department's immediate training needs. The JMT discussed some issues relating to the management of existing CIS datasets and and agreed that CEH should take stock of all the existing CIS datasets, and to try and verify the quality of both the data and the accompanying meta-data. It was agreed that this work would be done within the terms of the current CIS Dissemination and Support contract.

Dr Timothy Moffat and Mr Francis Rowland attended a meeting of the Joint Management Team (JMT) on 29 June 2000 at DETR Tollgate House in Bristol. The JMT reviewed plans for CIS training in the third year of the CIS Dissemination and Support contract. The JMT considered that these were strongly linked to CS2000 and made a commitment to having a training event related to CS2000 in early 2001. Tim Moffat tabled a revised Annual Report and Business Plan (dated June 2000). The meeting also discussed proposals for changing the terms and conditions of the CIS software licence agreement.

Dr Dorian Moss and Mrs Sue Wallis attended a meeting of the JMT on 10 January 2001 at DETR Tollgate House in Bristol, immediately following Dr Moss' taking over the

management of the contract from Dr Moffat. The JMT discussed development of CIS functionality for the stand-alone CD-ROM to be published with the Plant Atlas early in 2002. The CD is the subject of a separate contract between CEH and Dart Computing. The meeting discussed options for the future of the CIS environmental data catalogue, and the current sales and marketing situation. The JMT agreed that a drastic cut in the licence fees would be the best way to address the fall in sales. The meeting also discussed CEH's proposal for a fourth year of funding for the dissemination and support project, and agreed revisions which would meet DETR's requirements.

3.   PLANS FOR DETR SUPPORT AND LIAISON

The following plans are included in the work programme for February 2001 - January 2002. During the year, DETR will undertake an external review of CIS so that future options for CIS following February 2002 can be assessed.

3.1   Training

During the fourth year of the CIS Dissemination and Support contract, CIS training will be provided for new DETR users.

3.2   CIS Manual

CIS v6.11 has a comprehensive online help system. However, both the Department and CEH have recognised the merits of having a CIS user manual because there appears to be a significant user demand for such a product. Therefore, CEH will produce a fully illustrated CIS User and Data Manual. The manual will be distributed using appropriate offline and online digital media in Adobe Acrobat format (PDF).

3.3   CIS Version 7

Dart Computing is extending the CIS source code to produce a "data mapper" facility for the Plant Atlas 2000 CD-Rom. Many of the planned developments will benefit CIS, leading to a possible new version of the CIS software. This new version is likely to be released during the period of the contract extension, probably in the Autumn 2001. CEH shall package any new version on CD-Rom, together with the new Countryside Survey data files, and any other new or updated freely available data sets.

3.4   Data Management

Technical difficulties in building the CIS Environmental Catalogue have been investigated, and it appears that the software used is obsolete. CEH therefore propose to transfer the Catalogue's contents to the CIS web site. CEH will also take the opportunity to correct errors (see §2.3 above).

4. PROPOSED REVISIONS TO THE BUSINESS PLAN

The Joint Management Team discussed the marketing situation at its meeting on 10 January 2001 and agreed that a drastic cut in the licence fee should be made in order to boost the take-up of CIS. Subsequently the Department agreed to cover the full cost of CEH's work in 2001/02, whereas in previous years the Department's contribution to the cost had been reduced by the expected sales revenue.

4.1 Marketing and Promotion

The pricing structure in 2000/01 was:

	Concessionary Rate Charitable Organisations and Educational Establishments	Standard Rate Government Depts, Agencies, Local Authorities and NDPBs, Commercial and Consultants
Single user	£300	£500
Multiple user- up to 5 copies	£525	£900
Multiple user- up to 10 copies	£680	£1300
Upgrade from CIS v5.4 to CIS v6.0 (per CD)	£125	£250

All prices are exclusive of VAT.
Prices include 12 months of help desk support.

The revised price structure from 1 February 2001 is:

	All users
Single user	£50
Multiple user- up to 5 copies	£90
Multiple user- up to 10 copies	£130
Upgrade from CIS v5.4 to CIS v6.0 (per CD)	£50

We are unable to forecast the effect of a substantial reduction in the licence charges. The table below indicates receipts in the first three years of the contract.

CIS Product	Customer Type	1998/99	1999/00	2000/01	2001/02	Total
CIS v5.41	New	9,860				
CIS Data Sales	Current & New	740	160	0	0	
CIS v6.0/v7	New		5,845	4,250	?	
Upgrades to CIS v6.0	Current		1,650	0	0	
Upgrades to CIS v7	Current				?	
CS2000 Data Sets	Current & New			0	0	
TOTAL		**10,600***	**7,655***	**4,250***	**?**	**22,505**

* Actual revenues

5.   STAGED PAYMENTS

The anticipated staged payments in the final year have been added to this table.

Stage	Date	Deliverable(s) and Milestone(s)	Payment (£)
M1	Paid in March 1998	Participate in awareness seminar at Department Deliver CIS v5.41Trial Software Agree specification for CIS WWW Site Publish CIS News No.4	10,000
M2	Paid in March 1999	Organise two JMT meetings Publish CIS News No. 5 Organise an awareness seminar at Department Deliver WWW Site to specification and launch Deliver prototype WWW Site	25,000
M3	Paid in July 1999	Deliver Annual Report and revised Business Plan. Deliver CIS v6.0 Trial Software Package CIS v6.0 Publish Data Library Publish CIS News No. 6 Organise one JMT Meeting Launch CIS v6.0 by special event	30,000
M4	Paid in November 1999	Deliver Annual Report and revised Business Plan Run awareness seminar in Department Organise two JMT meetings Deliver CIS WWW Site new developments	20,660
M5	Paid in March 2000	Deliver Annual Report and revised Business Plan Run awareness seminar in Department Organise two JMT meetings Deliver CIS WWW Site new developments	10,000
M6	Paid in September 2000	Run training course for the Department Publish CIS article in CS2000 Newsletter Verify existing CIS datasets Publish Environmental Catalogue (Release 6) Liaise with CS2000 Module 13 about Data Workshop Organise one JMT meeting	10,000
M7	Paid in January 2001	Package CS2000 Data Sets Publish Revised Data Library Submit proposals for fourth year extension Organise one JMT meeting	5,092
M8	21st March 2001	Draft CIS Manual Training for new DETR staff Report for 2000/01	11,910
M9	31st October 2001	Draft Final Report Final version of CIS Manual Data and Metadata Verification and Correction Revised CIS Environmental Catalogue Two Joint Management Team meetings	15,464
M10	31st January 2002	CIS Version 7 Final version of Final Report	5,882
		TOTAL	144,008