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Definition of Terms Used in the Assessment Information Management System (AIMS)

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ENVIRONMENT AGENCY

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CONTENTS

TABLES

1 INTRODUCTION

This report has been prepared for the Environment Agency by WS Atkins Science & Technology under contract CPR2/41/1/185 for the technical support of the Assessment Information Management System (AIMS). This document provides a description of the terms used in AIMS.

AIMS is based on the CAIRS library management system software together with supporting document and correspondence libraries. The procedures used to control incoming and outgoing documentation have been described [1] and the operation of the CAIRS software is explained in the form of a user guide [2]. The keywording of incoming documents is carried out using a thesaurus of keywords [3] and the keywording guidelines are contained in the user guide [2].

The method of AIMS data entry is described in the user guide [2]. In addition the project quality plan [4] provides the framework within which the project is managed. This report does not repeat information contained in these documents.

2 DEFINITIONS

2.1 The Assessment Information Management System (AIMS)

The Assessment Information Management System (AIMS) has been set up to support the Environment Agency (the Agency) in its assessment of the Nirex safety case for deep geologic disposal of radioactive wastes. AIMS is a computerised information system, based upon the CAIRS Library Management System software [5], designed to provide rapid and accurate information retrieval to support the Agency at a future Public Inquiry and during any subsequent authorisation procedure for a radioactive waste repository. A description of the structure and basic operation of AIMS is given in the AIMS Database User Guide [2].

AIMS databases include the following:

Bibliographic database. This database provides bibliographic data (for example; author, title, report number, keywords etc) on the principal documentation required to support the Agency's Assessment work and future participation in a Public Inquiry. The reports and documents recorded in the AIMS Bibliographic Database will generally be held in the supporting Library at the Agency. Location data is recorded for all references included in the bibliographic database to enable retrieval of reports not held in the supporting Library.

Correspondence database. This database includes records of all regulatory correspondence and queries relating to the Nirex assessment project. It also contains briefing notes and proofs of evidence prepared for the Agency's participation in any future Public Inquiry. Documentation recorded on this database is held on appropriate registered files.

General database. This database records bibliographic data on the wide range of external reports and other background material which may not be required at a Public Inquiry but may be of use during the assessment process. The database includes reports on subjects such as site investigation, waste chemistry, and geology/hydrogeology. Risk assessment studies and related program documentation such as programmer and users guides are also included.

BRE database. This database includes information supplied by Building Research Establishment (BRE) from the RADWASTE and BRIX libraries held at BRE premises. The data contains general reports and reports specific to the disposal of radioactive waste. The reports listed in the database are held at BRE, and no documents are held at Agency offices.

A summary of the means of locating individual records on each database is given in Table 1.

2.2 CAIRS Library Management System Software

The CAIRS software is a database programming language created specifically to enable library management systems to be created simply and efficiently. To facilitate efficient development it incorporates many of the library management functions within the software. The main advantage over standard database languages is the sophisticated indexing system which enables very rapid searching of the database.

2.3 Nirex Assessment Documentation

Nirex Assessment Documentation refers to all internal and external reports and correspondence relating to the Disposal Assessment Project. This includes PQs (Parliamentary Questions) and PSOs (Private Secretaries Office questions), published and internal reports, minutes of Nirex meetings, published papers, press articles, and Public Inquiry documents such as proofs of evidence and briefing notes.

2.4 AIMS Document Manager (currently Dr. S.L. Duerden)

The AIMS Document Manager has overall responsibility for receipt and recording of all Nirex assessment documentation, maintaining the AIMS database and its associated library, and issue of reports to Agency staff and external organisations. The AIMS Documentation Manager is identified in the Disposal Assessment Project Structure chart shown in Figure 1.

2.5 The AIMS Library Assistant (currently Mr. P.W. Griffin)

The AIMS Library Assistant has responsibility for the day-to-day running of AIMS, including: entry of data on to the AIMS databases, physical organisation of the AIMS library, assisting users in the retrieval of data and routine management of the CAIRS system.

2.6 The AIMS Support Staff

Currently WS Atkins hold the contract for AIMS support, and the nominated AIMS Support Staff are:

M.P. Griffiths (project management)   Tel 01372 726140 ext 4535

WS Atkins Science & Technology,
Woodcote Grove,
Ashley Road,
Epsom,
Surrey, KT18 5BW.

Tel: 01372 726140 (main switchboard)
Fax: 01372 740055
E-mail: mpgriffiths@wsatkins.co.uk

P.W. Griffin (AIMS Library Assistant)   Tel 0171 664 6819

Environment Agency,
Steel House,
11 Tothill Street,
London, SW1H 9NF.

Tel: 0171 664 6700 (main switchboard)
Fax: 0171 664 6836
E-mail: peter.griffin@environment-agency.gov.uk

2.7   Unique Numbers

Unique Numbers have been agreed for correspondence between the Agency, UK
Nirex, the Ministry of Agriculture, Fisheries and Food (MAFF) and Her Majesty's
Nuclear Installations Inspectorate (HMNII).   All incoming and outgoing
correspondence, including Faxes, from/to these organisations will have an associated
Unique Number. Unique Numbers are allocated to correspondence only; reports do
not have Unique Numbers.   The Unique Number system applies only to Nirex
assessment correspondence. Other Agency correspondence with HMNII and MAFF,
such as the review of the Sellafield discharges, are not included.

The Unique Numbering system employed in this library has the form: ABCxxxxxR
or ABCxxxxxN where the preface (ABC) identifies the sender and receiver, the
number (xxxxx) is taken sequentially from an agreed series, and the letter R or N
indicates whether a reply is required (R) or not (N).

The Unique Number sequences that have been agreed are shown in Table 2.

Unique Numbers for Agency outgoing correspondence are allocated sequentially
from the appropriate range by the AIMS Document Manager or, in their absence,
by the Branch Head's Secretary - see Figure 1.

Allocation of a Unique Number will not affect the use of HMIP registered file
references.

2.8   Internally Assigned Unique Number

An internal Unique Number system is used to identify correspondence with other
external organisations.   Nirex assessment-related correspondence is allocated an
internal Unique Number of the same format as in Section 2.7, using identifiers
defined in Table 3 with an (I or O) appended to the number to indicate incoming or
outgoing correspondence respectively. This system of Unique Numbers is used only
for internal recording and cross referencing of correspondence.

2.9 Post Book

All incoming and outgoing correspondence related to the Nirex Assessment is recorded by the AIMS Library Assistant in the post book. Entries are colour coded to simplify identification of particular items of correspondence.

2.10 AIMS Working Files

An AIMS working file is an unregistered Agency file for holding documentation on a temporary basis, prior to entry on the AIMS database. Working files are held by the AIMS Library Assistant to record database input, issue and return of loaned documents, and transmittal sheets [1].

2.11 Registered Files

Registered files are used for holding all incoming and outgoing correspondence related to the Disposal Assessment Project. Registered files are held by the AIMS Documentation Manager who is responsible for opening new registered files. The current list of registered files is given in Table 4.

2.12 CAIRS Accession Numbers

The CAIRS system automatically assigns a unique accession number to each document when it is entered onto the database. This number can be of use in locating specific documents in the database.

2.13 Library Numbers

This is a number allocated by the AIMS Library Assistant to any document that is to be entered on to the AIMS bibliographic database (Figure 2). This number consists of two parts. The first part of the number is an organisation identifier. Organisation identifiers are shown in Table 5. The second part of the number is a five digit serial number. Serial numbers for each organisation begin at 00001 and increase up to 99999. A typical Library Number would be RAS00345. Allocation and use of these numbers is defined in Reference 2.

2.14 Database Accession Number Log

This is a working file to record Library Numbers which has separate sections for each organisation identifier. Extra sections are added when new organisation identifiers are used.

2.15 Shelfmark

A report's shelfmark consists of its Library Number plus its copy number, e.g. a report with Database Accession Number RAS00345 and copy number 2 would have a shelfmark RAS/345-2.

2.16 Security Code

Security code is used to restrict access to certain documents. Security codes used are shown in Table 6.

2.17 Status Code

Status code indicates where a report is: S is for on the shelf; L is for on Loan and O is for reports held elsewhere (e.g. DOE main library). Initially, all reports have status O. The status code is important since only reports with Status Code S (on the shelf) can be loaned.

2.18 Author

The author(s) of a document are indexed within AIMS and should be entered into the Author field. A document with multiple authors should include all the authors (surname followed by initials) separate by semi-colons. For example, a report by H Smith and J Jones should be entered in the following format:

SMITH H; JONES J

A report with an author given as H Smith et al should be entered with all the authors of the document and omitting the "et al".

2.19 Title

The title of the document is indexed within AIMS and should be entered in its entirety to the Title field.

2.20 Report series

The report series of a document is indexed with AIMS and should be entered whenever possible into the Series field. A document may be allocated one or more series, all series numbers should be entered, separated by semi-colons. For example, a report with series of DOE/RW/89.011 and NSS 133 should be entered in the following format:

DOE/RW/89.911; NSS 133

2.21 Keywords

Keywords enable the efficient retrieval of reports according to their subject matter. The keywording of documents is carried out using a thesaurus of keywords [3] and the following keywording guidelines.

In general, up to five keywords will be selected to describe the subject areas covered by each document. In the case of reports covering a whole research programme it

may be necessary to allocate more than five keywords. The CAIRS software will allow up to 108 keywords.

Searches of the database can be carried out using keywords. Broad based searches using "general terms" can be used to extract general information. Searches can also be carried out using general terms and broader terms to include all "narrower terms" associated with the general or broader term. Searches on the narrower term can be used to extract more specific information. The thesaurus contains search aids which advise on the use of a term or keyword.

2.22 The Thesaurus

AIMS uses a controlled vocabulary for its keywords (also called terms). The thesaurus [3] is a list of all the words or phrases which may be used as keywords. CAIRS checks when records are entered that only words or phrases which appear in the thesaurus have been used as keywords. The thesaurus is important in ensuring that items are keyworded in a defined and consistent style. Using a controlled vocabulary makes searching for records on related topics more reliable as only a limited number of keywords may be used. The primary subject matter covered by the thesaurus is related to the Agency's regulatory role in assessing the UK Nirex proposals for deep disposal of radioactive waste, and assessment of BNFL's Drigg post-closure safety case.

In order to aid searching, the thesaurus is more than just a simple list, it is structured to express relationships between keywords. There are five possible relationships between terms in CAIRS:

(a) Preferred terms. Typically preferred terms are used when synonyms exist. If a non-preferred term is entered the user will be prompted with the preferred term which should be used.

(b) Related terms. Related terms are used to handle terms with similar but not identical meanings.

(c) Broader terms. Broader terms are used to handle terms which are encompassed by other terms.

(d) Narrower terms. Narrower terms are used to handle terms which encompass other terms in their meaning.

(e) General terms. General terms are terms for which no broader terms exist.

When searching these terms relationships can be used to create more efficient searches.

2.23 The Corporate Author List

AIMS requires entry of a corporate author into the bibliographic database to identify which organisation has issued the report. During the course of the past ten years

many organisations have changed their name, it is therefore necessary to clearly identify which are the same (or related) organisations. The corporate author list [6] is used to control the identification of organisations by providing a consistent naming convention. In order to aid the retrieval of information corporate authors names are structured in three parts, primary reference; secondary reference and optional reference. Within AIMS each of the references may be searched for independently.

Primary references are used for the names of companies and parent organisations e.g. AERE Harwell. Secondary references are used, in addition to primary references, to further define the organisation mainly in terms of Divisions, institutes or subsidiaries of the main organisation e.g. Chemical Technology Division. Optional References are added for small but important groups within organisations e.g. Separation Processes Group.

The full corporate author reference for a document always has a primary reference. It may then have a secondary reference and if so it may also have an optional reference. Primary, secondary and optional references form a list separated by semicolons. For example: (a) AERE Harwell; Chemical Technology Division. (b) UKAEA; Risley; CTS; (c) BAeSEMA; YARD; (d) Dames and Moore.

2.24 Database Backup

There are two main types of backup used; incremental and complete. An incremental backup makes copies of only those files which have changed since the last backup. A complete backup makes copies of all files. The purpose of the backup is to ensure that in the event of a network failure only a minimal amount of effort is required to restore the AIMS database.

3   REFERENCES

1.   Davison, S, Duerden, S.L.   BSD Disposal Assessment Procedure, HMIP
      Procedure BSD.003.   December 1994.

2.   Griffiths, M.P.   AIMS Database User Guide.   WS Atkins Report No.M1779-
      R1, Issue 5, May 1995.

3.   Burholt, G.D. and Hughes, T.S.   Thesaurus of Keywords, WS Atkins
      Technical Note No. M1779-TN2, Issue 4, August 1994.

4.   Davison, S. and Coventry, M.J.   AIMS Project Quality Plan, Issue 3,
      WS Atkins Science & Technology, 25th August 1993.

5.   CAIRS Library Management System: Volume 1, Leatherhead Food R.A.,
      July 1991.

6.   Griffiths, M.P.   AIMS Corporate Author List, WS Atkins Technical Note
      No. M1779-TN5, Issue 3, May 1995.

		Unique Identification	Keywords	Additional Information	Shelfmarks
Bibliographic	(a)	Library numbers derived from organisation followed by sequence number.	All documents - taken from the full list of keywords in the thesaurus.	On some of the more important documents abstracts are included in the document record. Most of the important documents are also retained on the shelves at the Agency.	Library number with copy number added. Note: this can also be used as a unique document identifier.
	(b)	CAIRS accession numbers.			
Correspondence	(a)	Based on Unique numbers given in Tables 2 & 3.	All correspondence - from full list of keywords in the thesaurus.	The correspondence is retained in the appropriate Agency registered files.	None
	(b)	CAIRS accession numbers.			
General	(a)	Sequence number derived from shelf position.	None	Some of the documents, but not all, are retained at the Agency.	E followed by unique sequence number
	(b)	CAIRS accession number.			
BRE	(a)	CAIRS accession number	None	Database of documents held at Building Research Establishment RADWASTE and BRIX libraries	None

TABLE 1

MEANS OF IDENTIFYING INFORMATION IN AIMS

TABLE 2

UNIQUE NUMBER SEQUENCES

Direction of Correspondence	Identifier	Unique Number Sequence
Nirex to Agency	UKM	90000-99999
Agency to Nirex	UKM	20000-29999
HMNII to Agency	HMP	10000-19999
Agency to HMNII	HMP	70000-79999
MAFF to Agency	MAF	60000-69999 (1)
Agency to MAFF	MAF	40000-49999
BNFL to Agency	BNF	90000-99999
Agency to BNFL	BNF	20000-29999

Note:

1.   MAFF do not use the unique number consistently.

TABLE 3

INTERNAL UNIQUE NUMBER SEQUENCES

Correspondence To/From:	Identifier	Number Sequence
Local Authorities, Eire and IoM	LCS	20000-29999
DoE/RAS, OGD's, PSO's/PQ's	OGD	30000-39999
Nuclear Industry	NNN	40000-49999
Non-registered Nirex to Agency correspondence	UKM	9N000-9N999
Non-registered Agency to Nirex correspondence	UKM	2N000-2N999
Others (Pressure Groups, Public etc.)	PGP	50000-59999

TABLE 4

CURRENT LIST OF REGISTERED FILES FOR THE
DISPOSAL ASSESSMENT PROJECT

File number	File title
HMIP/TPD2/31/5/001 (parts 1-3)	Nirex to Agency unique numbered correspondence
HMIP/BSD/BDB/31/5/003 (parts 4-5)	
HMIP/RSD2/31/5/002 (part 1)	Agency to Nirex unique numbered correspondence
HMIP/BSD/BDB/31/5/004 (part 2)	
HMIP/RSD2/31/5/003	NII to Agency unique numbered correspondence
HMIP/RSD2/31/5/004	Agency to NII unique numbered correspondence
HMIP/RSD2/31/5/005	MAFF to Agency unique numbered correspondence
HMIP/RSD2/31/5/006	Agency to MAFF unique numbered correspondence
HMIP/RSD2/31/5/007	Nirex related external queries
HMIP/RSD2/31/5/008 (part 1)	Agency internal correspondence related to Nirex
HMIP/BSD/BDB/31/5/007 (part 2)	
HMIP/RSD2/31/5/009	General Nirex correspondence (non-regulatory)
HMIP/RSD2/31/5/0010	Level 3 meetings on assessment issues
HMIP/RSD2/31/5/0011	Nirex/NII/Nirex correspondence
HMIP/TPD2/31/5/002	Nirex/MAFF/Nirex unique numbered correspondence
HMIP/TPD2/31/5/009	Contractor requests for Nirex documentation
HMIP/BSD/BDB/31/5/006	RCF correspondence
HMIP/BSD/BDB/31/5/008	Other Government Departments
HMIP/BSD/BDB/16/13/001	BNFL to Agency unique numbered correspondence
HMIP/BSD/BDB/16/13/002	Agency to BNFL unique numbered correspondence
HMIP/BSD/BDB/16/13/003	MAFF to Agency unique numbered correspondence
HMIP/BSD/BDB/16/13/004	Agency to MAFF unique numbered correspondence
HMIP/BSD/BDB/16/13/005	NII to Agency unique numbered correspondence
HMIP/BSD/BDB/16/13/006	Agency to NII unique numbered correspondence
HMIP/BSD/BDB/16/13/007	General (non-regulatory) unique numbered correspondence
HMIP/BSD/BDB/16/13/008	Pressure groups, public unique numbered correspondence

File number	File title
HMIP/BSD/BDB/16/13/009	DOE/RAS, other Government Depts., Parliamentary Questions
HMIP/BSD/BDB/16/13/0010	Local Authorities, Eire, Isle of Man

List prepared: 17th March 1998

TABLE 5

ORGANISATION IDENTIFIERS

Identifier	Documents
Nirex Documents	
NIR	Nirex published reports including NSARP listed reports and papers
RSD	Regulatory submission documents
DOE/HMIP and Agency Documents	
DOE	DOE/HMIP published reports
MIP	HMIP assessment documents including unpublished expert reviews, internal reports etc.
RAS	DOE/RAS policy documents, RAWMAC reports etc.
EAX	Environmental Agency reports, technical and guidance notes etc.
External Reports and Publications	
AEA	AEA Technology reports other than Nirex/HMIP sponsored work
ACT	Acts and related statutory instruments
ART	Journal reports and technical articles
BIB	Bibliographies
CEC	CEC published reports
EXT	Relevant technical reports such as NAGRA, SKB, BIOMOVS, INTRAVAL etc.
IAE	IAEA reports
LAR	Local authority publications
NEA	NEA reports and papers from PAAG
NII	Nuclear Installations Inspectorate documents
OGD	Other government departments including MAFF
OTH	Miscellaneous documents
PGP	Pressure group publications
PRS	Press cuttings
RAD	NRPB, ICRP publications
USA	US publications including NRC, SNL, LBL, LANL etc

TABLE 6

CAIRS SECURITY CODES FOR DOCUMENTS

Security Code	Access	Description
A	Unlimited Access	Published reports, articles, conference papers and reports by external organisations
B	Agency Staff Only	Internal Agency documents
N	Library Staff	Second copies of documents
S	Disposal Assessment Staff Only	Very limited access, i.e. correspondence and commercial-in-confidence documents