

Version 1.0

**National Council on Archives (NCA)**  
**Interoperability Protocol**

**Submitted by the**  
***NCA Interoperability Protocol Working Party***<sup>1</sup>  
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## NCA Interoperability Protocol: Introduction and aims

The NCA has advocated the development of a UK Archival Network, comprised of internet resources or strands having a common data structure, which aims ultimately to be searchable through a single interface.<sup>2</sup>

To this end, several resources have been created, and more are proposed. The aim of this protocol is to facilitate interoperability between these strands of the archival network in the UK. The protocol seeks to provide a standard of minimum conformity and full compliance, covering data structure, content and technical matters, to which existing strands of the current archival network have committed themselves and which newly-developed resources should adopt.

This standard promotes a common data structure between different strands/contributors to the UK Archival Network. The common data structure will help the user (who may be in a national or an international context) by providing the same kind of archival information, in the same format, regardless of the resource being searched. Thus although there are advantages to a shared data structure in terms of data management and exchange, the key benefit is ease of use and transparency of results to users, allowing better and more open access to the data.

A common data structure facilitates cross searching through technical interoperability; in the UK Archival Network then, large amounts of archival data can be brought together and searched in a meaningful and efficient way. For the success of the UK Archival Network, the NCA Interoperability Group recommends that the following archival and technical standards be adopted.<sup>3</sup>

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<sup>2</sup> NCA, *Archives On-line: The establishment of a United Kingdom Archival Network*, 1998

<sup>3</sup> Where archival or technical standards are referred to in the protocol, reference to the current version of the standard should be inferred unless otherwise stated. It is, however, understood that in practice there will be a time lag between the publication of a revised standard and the upgrading by all participants to the new version.

## The Protocol

### 1. Archival Standards

#### 1.1 Elements and Levels

**1.1.1** Archival descriptions that are part of the UK Archival Network should conform to the *General International Standard Archival Description ISAD(G)*<sup>4</sup>, which provides a general data structure standard for single upper-level, or collection level, and multilevel descriptions.<sup>5</sup>

The archival community in the UK is working towards multi-level description and consistency with the majority of *ISAD(G)* elements; full compliance with the international standard is the long-term aim. Since full compliance will not occur for some time, this protocol provides for varying structures of elements and levels. The protocol therefore presents required sub-sets of elements to be used for existing 'legacy' catalogues and for new cataloguing. The protocol also provides for varying levels of archival description.

Catalogues considered part of the UK Archival Network shall comprise as a minimum a Collection Level Description. Other levels may be described in accordance with examples at the level element (3.1.4) of *ISAD(G)*.

Date of description is considered mandatory for all descriptions, whether newly-created or legacy descriptions. Where it is not supplied (and particularly for existing descriptions in centralised systems like the Archives Hub or A2A), the date that the description was uploaded to the central server should be used. This latter date can be applied automatically by the software system used to make descriptions available to the UK Archival Network.

#### 1.1.2 Collection Level elements required for legacy data

Those elements of *ISAD(G)* which are 'considered essential for the international exchange of descriptive information' are required. These are:

Reference code (3.1.1)  
Title (3.1.2)  
Dates (3.1.3)  
Level (3.1.4)  
Extent (3.1.5)  
Creator (3.2.1)

Additionally the elements

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<sup>4</sup> [ICA: ISAD\(G\): General International Standard Archival Description, Ottawa 2000](#)

<sup>5</sup> [In terms of the types of finding aids accepted, therefore, this protocol conforms to the Report of the Sub-Committee on Finding Aids Guidelines for the Preparation and Presentation of Finding Aids \(ICA Committee on Descriptive Standards 2002 \(<http://www.hmc.gov.uk/icacds/eng/findingaids.htm>\)\).](#)

Scope content (3.3.1)  
and  
Conditions governing access (3.4.1)

are required as these, together with essential elements referred to above, promote a full and accurate description of the records.

### **1.1.3 Elements for multi-level legacy data**

A collection level description which incorporates the elements mentioned above at 2.1.1.1 and 2.1.1.2 is sufficient to allow entry into the UK Archival Network.

If descriptions at lower levels are used, then the following elements

Reference (3.1.1)  
Title (3.1.2 ) and/or Scope and content (3.3.1)  
Creation dates (3.1.3)

are required.

### **1.1.4. Archival elements and archival levels for new cataloguing**

All newly-created descriptions destined for the UK Archival Network should be a complete and accurate reflection of the original records, to enable users to decide if they wish to pursue their searches further.

1.1.4.1 Where new cataloguing is undertaken and additional elements of description are used, the examples presented by A2A<sup>6</sup> and AIM 25<sup>7</sup>, may be recommended.

At fonds and sub-fonds level these include:

Reference code (3.1.1)  
Title (3.1.2)  
Dates (3.1.3)  
Level (3.1.4)  
Extent (3.1.5)  
Creator (3.2.1)  
Admin/biog history (3.2.2)  
Scope content (3.3.1)  
Access conditions (3.4.1)

At series level and sub-division:

Reference code (3.1.1)

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<sup>6</sup> See *Access to Archives: A2A - Guidelines for New and Revised Cataloguing* at <http://www.pro.gov.uk/archives/a2a/standards.htm>

<sup>7</sup> AIM25, on line database of archival descriptions and Mss collections in principal colleges and schools of higher education within the M25: See <http://www.aim25.ac.uk/>

Title (3.1.2)  
Dates (3.1.3)  
Level (3.1.4)  
Extent (3.1.5)  
Scope content (3.3.1)  
Access conditions (3.4.1)

At file and item level:

Reference code (3.1.1)  
Title (3.1.2)  
Dates (3.1.3)  
Level (3.1.4)  
Scope content (3.3.1)  
Access conditions (3.4.1)  
Language (3.4.3)  
Physical characteristics (3.4.4.)

## 1.2 Indexing and Authority Files

1.2.1 Names of archive creators and of persons, families and organisations given as index terms should conform to the format presented in the *NCA Rules for the Construction of Person, Place and Corporate Names*<sup>8</sup>.

1.2.2 Where *Anglo-American Cataloguing Rules (AACR2)*<sup>9</sup> have been used to define the form of preferred name, the introduction of a cross reference to the NCA format may be considered.

## 1.3 Subject Indexing

Many archives and collaborative archival projects in the UK have employed subject indexing to provide access points to archival collections based on criteria other than the names of record creators. The use of subject indexing is both a response to, and anticipatory of, users' enquiries: it is known that subject-type queries form the greater number of enquiries in record offices and probably underlie the majority of remote searches.

Subject indexing in an automated environment raises the visibility of subject terms and of the archival finding aids to which they relate. It enables the archivist to summarise the significant concepts and events in archival records, and to present these terms to remote searchers in a national and international context, and in so doing, it generates increased interest in, and searching of, on line archival resources.

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<sup>8</sup> *National Council of Archives., Rules for the construction of Personal, Place and Corporate names*, 1997

<sup>9</sup> *Anglo-American Cataloguing Rules, 2<sup>nd</sup> edition, 1988 Revision*, Ottawa, London and Chicago, 1988

1.3.1 Where subject indexing is carried out, it is recommended that the relevant standards be adhered to. These are *ISO 2788, 1986/BS5723, 1987, British standard guide to establishment and development of monolingual thesauri*<sup>10</sup>, and *BS 6529, 1984, British standard recommendations for examining documents, determining their subjects and selecting indexing terms*<sup>11</sup>.

At present, no single subject standard exists for the archival community. However, the UK Archival Thesaurus project (**UKAT**) promises to provide, by June 2004 an on-line archival subject thesaurus in line with relevant standards and based on the structure and terminology of the *UNESCO Thesaurus*, but with added terms from other word lists/thesauri relevant to the domain, eg: *LCSH, GAAT, SHIC*<sup>12</sup> This will enable subject indexing to develop in repositories in the UK in accordance with a nationally agreed online subject standard and in a manner consistent with high level subject terms used elsewhere in an international context.

1.3.2. Whichever authority standard for subject terms is being used, it is required that systems capture and share the name of the standard for each subject term. When exporting in EAD, use should be made of the source attribute of the <subject> tag: see 3.2.1 below.

1.3.3 . UNESCO-based thesauri have been adopted by many of the UK Archival Network resources; others have adopted *LCSH* either alongside UNESCO or as the only thesaurus used. Where *LCSH* is used as the sole standard, mapping to the UNESCO Thesaurus may become available through the High Level Thesaurus Project, HILT.

## 1.4 Multilingual subject indexing

2.1.4.1 Where multilingual subject indexing is carried out, *ISO 5964 Documentation - Guidelines for the establishment and development of multilingual thesauri*. should be followed.<sup>13</sup>

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<sup>10</sup> *ISO 2788, 1986/BS5723, 1987, British standard guide to establishment and development of monolingual thesauri*, British Standards Institution. - 1st rev., London, BSI,1987.

<sup>11</sup> *BS 6529, 1984, British standard recommendations for examining documents, determining their subjects and selecting indexing terms*<sup>11</sup>., British Standards Institution. - London : British Standards Institution, 1984

<sup>12</sup> *Library of Congress Subject Headings (LCSH)*. See <http://www.tlcdelivers.com/tlc/crs/shed0014.htm>. *Getty Art and Architecture Thesaurus (GAAT)*. Available online at [http://www.getty.edu/research/conducting\\_research/vocabularies/aat/](http://www.getty.edu/research/conducting_research/vocabularies/aat/). *Social History and Industrial Classification: a subject classification for museum collections, SHIC Working Party. Second edition. Cambridge: mda, 1994.* See <http://www.mda.org.uk/descbib.htm>

<sup>13</sup> *ISO 5964, Documentation - Guidelines for the establishment and development of multilingual thesauri*, See <http://www.nlc-bnc.ca/iso/tc46sc9/standard/5964e.htm>

## 1.5 Authority Records

1.5.1 Where authority records have been developed as part of the UK Archival Network to give context to creator/index terms, they should conform to the *International Standard Archival Authority Record for Corporate names, Persons and Families (ISAAR(CPF))*<sup>14</sup>. New authority records, created after July 2003, should adhere to the draft *ISAAR(CPF)* v.2., which will be adopted as the new international standard following ratification in July 2004. Records which have been created in conformity with *ISAAR(CPF)* v 1 may be mapped to version 2 in due course.

## 1.6 National Name Authority Files (NNAF)

Where authority records have been developed to give context to creator/index terms and *ISAAR(CPF)* is used, archivists may wish to note that in due course they will be able to contribute records to, and to use, the National Name Authority Files (NNAF) See below 3.2.2.

The major source of Name Authority Records in the UK is held currently by the NRA. It is recommended that these become a national resource in due course, by making the full records of the NNAF viewable online and through distribution for local use.

## 2. Cross domain issues

### 2.1. HILT<sup>15</sup>

The High Level Thesaurus Project (HILT) is looking into the feasibility of establishing a High Level Cross Domain subject thesaurus. HILT aims to provide a prototype online High Level Thesaurus based on a mapping of top level subject terms from constituent domains/sectors using relevant thesauri.

### 2.2 UKAT

The UKAT project will supply archival terms added to the UNESCO Thesaurus to the HILT project for addition into the HILT as appropriate.

### 2.3 Open Standards

This protocol requires the use of open standards, such as ISAD(G) and EAD, as this ensures the interoperability of archival data. The mapping of these standards to other open encoding systems such as Dublin Core<sup>16</sup> and the

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<sup>14</sup> *ISAAR(CPF)*, 1997; now in revised 2<sup>nd</sup> edition draft, 2003

<sup>15</sup> High Level Thesaurus project (HILT) : see <http://hilt.cdlr.strath.ac.uk/>

<sup>16</sup> Dublin Core: see <http://dublincore.org/>.

Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)<sup>17</sup> will ensure that archival data can be shared and searched for with metadata relating to other cultural heritage resources.

### 3 Technical standards

#### 3.1 Technical infrastructure

##### 3.1.1 Distributed or Centralised System

Archival data can be brought together and searched in a system which is centralised or which is distributed. A centralised system consists of one huge database into which the data from all participants is copied.

This union database is itself indexed and queried and provides the main access point to the amalgamated data. A distributed system provides a central interface which gives access to all participating networks/databases, but which provides central services (eg search engine and indexes), which enable access to those specifically indexed sections of the data or metadata.

The latter allows participants to maintain their own data in their own databases or systems. It also allows the data to be re-used in other portals, giving a wider visibility to the information.

3.1.1.1 For reasons of bulk, ease of searching, maintenance, version control and ownership, it is recommended that the system to be adopted for the UK Archival Network be **distributed** rather than centralised. It is further recommended that it provide at its centre a search mechanism which will enable the cross searching and cross target browsing of harvested metadata, in the form of indexes of names of eg. persons, places, corporate bodies and subjects, and free text searching of contributing archival resources. The methodology of the **Distributed Archives Hub** is recommended as a model.<sup>18</sup>

##### 3.1.2 Portals

3.1.2.1 It is recommended that the distributed archival system present to users one central focal point or initial portal for user access to the UK Archival Network.

It is further recommended that the distributed archival system be capable of presenting the archival data within it to a variety of harvesting systems and user portals. Other portals may wish to present information in ways that suit their particular target communities, and/or user and impact studies<sup>19</sup> may

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<sup>17</sup> Open Archives Initiative: see <http://www.openarchives.org/OAI/openarchivesprotocol.html>

<sup>18</sup> See <http://www.archiveshub.ac.uk/>

<sup>19</sup> Being carried out by Resource and the NCA

suggest the need for other portals to be supported as part of the UK Archives Network.

The principle of using open methods to share information which is itself represented in open formats encourages the development of portals and search facilities by any participant in the network making it easier to develop a variety of approaches to information presentation and access.

In addition, data may be provided to other relevant initiatives for re-use within those portals. These portals may operate on an institutional, thematic or geographical basis, and may then take relevant sub-sets of data. Data may also be supplied to other national or international portals.<sup>20</sup>

Other portals may want to use much simpler searching eg: the who, what, where and when approach; the archival community may, in future, wish to address this need.

3.1.2.2 **ARCHON**, currently hosted and maintained by the National Archives: HMC, provides a model for projects available at a portal.

## **3.2 Standards for Data Exchange**

### **3.2.1. Standards for Mark up Languages: SGML, HTML and XML**

Almost all documents displayed on the internet have been tagged for presentation in either Standard Generalised Mark Up Language (SGML) or Hypertext Mark Up Language (HTML).

More recently, a more flexible form of mark up language has been developed from SGML; this is known as Extensible Mark up Language (XML)

The international standard format for encoding descriptive archival catalogue data is the SGML DTD known as **Encoded Archival Description (EAD)** which can itself be converted to XML and HTML for online delivery.

### **3.2.1 Encoded Archival Description (EAD)**

3.2.1.1 The standard for the exchange of archival data is Encoded Archival Description (EAD). EAD is a data format standard for the electronic capture and transfer of archive catalogues, whether collection or multi-level in nature. EAD is fully compatible with ISAD(G). It is maintained jointly by The Society of American Archivists and the Library of Congress.

3.2.1.2. The 2<sup>nd</sup> version of EAD, EAD 2002, is recommended here, though many archive repositories and/or collaborative initiatives may have used

version 1. Where this is the case, future upgrade to EAD 2002 is recommended. EAD 2002 is, in any case, backward compatible with version 1.

3.2.1.3 Whilst the optimum mark up language for EAD 2002 is XML; data in SGML can be mapped to XML.

### 3.2.2. Encoded Archival Context (EAC)

Encoded Archival Context (EAC) is an XML Schema for the automation of **archival authority records**. EAC is intended to be fully compatible with the 2<sup>nd</sup> edition of *ISAAR(CPF)*<sup>21</sup>.

3.2.2.1. Work to present NNAF-format records in EAC in the UK is in hand. It is recommended that participating archival network and institutions contribute to, and utilise, the NNAF through EAC as soon as it becomes available<sup>22</sup>.

### 3.3 Standards for Cross searching

3.3.1 The UK Archival Network will present a distributed system with central facilities available to searchers and participants. Z39.50 is *one* recommended protocol which has been tried and tested for searching in the archive domain.<sup>23</sup> Other open mechanisms which enable harvesting of EAD descriptions are expected to form part of the infrastructure.

Any system for intelligent searching should however seek to build on recent technical developments for cross searching. Other possible cross searching solutions (spiders, google type searches, semantic interoperability etc), may become increasingly important in the cultural heritage sphere, and these should be noted.

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<sup>21</sup> See <http://www.library.yale.edu/eac/> .

<sup>22</sup> The Archives Hub has been awarded funding to develop the NNAF in EAC

<sup>23</sup> <http://www.ukoln.ac.uk/dlis/z3950/defin.html>; and see the Archive Network Gateway (ANG), the collaborative initiative between A2A and the Archives Hub:: <http://www.ang.org.uk/ang/index.jsp>

### **3.4. Cross linking**

This refers to linking between on line archival catalogues at upper, and where available, at lower levels.

3.4.1 While much of the data currently making up the UK Archival Network does not support cross linking it is recommended that network systems should support such linking where available<sup>24</sup>.

### **3.5. Standards for Presentation systems**

3.5.1 Presentation systems should be compatible with EGIF guidelines and best practice disability guidelines.

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<sup>24</sup> Current user and impact studies may provide useful information here

## Notes, reference sources and useful definitions

**A2A:** Access to Archives Programme. The National Archives (PRO) in partnership with the National Archives (HMC) and the British Library runs A2A. The Programme is currently in its second 2-year phase, which will end in March 2004. The core work of A2A has been the retroconversion of paper catalogues of archives (at all **archival levels**) from **repositories of archives** in England. Most of the funding for retroconversion has come from the HLF. By the end of the planned third phase planned to run until July 2005 over 850000 pages of catalogue will have been processed. The material is mounted online at and more information can be found at <http://www.a2a.pro.gov.uk/about/programme/index.asp>. A2A led the development of **ANG** in partnership with the **Archives Hub**.

**AACR2:** *Anglo American Cataloguing Rules, 2nd edition, 1988 Revision*, Ottawa, London, Chicago 1988. See <http://www.nlc-bnc.ca/jsc/>

**AIM25:** a JISC funded project, now completed, to create and mount for searching **collection level descriptions** of archives held in higher education institutions and learned societies within the M25 area. The descriptions are held in an MySQL database, which has the ability to export records as **EAD**. The system has been developed for use by **ANW**. There is a proposal to extend the project by means of the **London Signpost** project. See <http://www.aim25.ac.uk/>

**ANG:** Archives National Gateway. A prototype gateway developed by **A2A** that allows the cross searching of **A2A** and the **Archives Hub**. The project was designed to test the utility of the Z39.50 protocol as a means of cross-searching archival catalogues. The two services were chosen as they both hold catalogue data in **EAD**. See <http://www.ang.org.uk/ang/index.jsp>

**ANW:** Archives Network Wales. A project led by Archives Council Wales (ACW) and funded by the HLF to create 4500 **collection level descriptions** of the major archive collections in Wales and mount them on the Internet for searching by December 2005. The descriptions will be held in a MySQL database, based on the system used by the **AIM25** project. See <http://www.archivesnetworkwales.info/index.htm>

**Archival authority records:** A record holding the **authority controlled name** and other contextual details of the people, families and corporate bodies who create the **archives** or whom content show to be otherwise significant.

**Archival levels:** Archive catalogues have a structure reflecting archival arrangement and the principles of provenance and original order. These principles state that it is necessary to describe the context or records and the relationships between them as well as the records themselves. Only in this way will the evidential value inherent in **archives** be preserved. The three

broad levels are given standard names by **ISAD(G)**: fonds (and its parts); series (and its parts); and files and items.

**Archives Hub**: a JISC funded project to create and mount for searching collection level descriptions of archives held in higher education institutions in the UK. Some multi-level catalogues are also now included. Archives Hub was a partner in the development of ANG. While the programme is hosted at MIMAS, software development takes place at the University of Liverpool and the system is based on Z39.50 and EAD. See <http://www.archiveshub.ac.uk/>.

**ARCHON**: the ARCHON directory is an online gazetteer giving information about archive **repositories** within the UK (and in a few cases elsewhere). It is maintained by the National Archives (HMC) and has links to the **NRA**. See <http://www.hmc.gov.uk/archon/archondirectory.htm>.

**Authority controlled names**: The names of people, families and corporate bodies who are archive creators or otherwise significant in a group of **archives** in the form authorised by the **NCA Rules for the construction of personal, place and corporate names** (1997) (<http://www.hmc.gov.uk/nca/title.htm>). These names may be used as access points, with other **index terms**, to archival catalogues (as in the **NRA**) and will form the authorised name in **archival authority records**.

**BS 6529**, 1984, *British standard recommendations for examining documents, determining their subjects and selecting indexing terms*, British Standards Institution. - London : British Standards Institution, 1984

**Collection Level Description**: Descriptions of groups of **archives** as a whole at a single **archival level**, usually the contextual or fonds level.

**Dublin Core**: *A generic metadata standard for cultural resources*. See <http://dublincore.org/>.

**e-GIF**: e- Government Interoperability Framework. See <http://www.govtalk.gov.uk/interoperability/eqif.asp?order=title>.

**EAC**: Encoded Archival Context. A developing data format standard for the automation of **archival authority records**. It is intended to be fully compatible with the 2<sup>nd</sup> edition of **ISAAR(CPF)**. See <http://www.library.yale.edu/eac/> .

**EAD:** Encoded Archival Description. A data format standard for the automation of archive catalogues, whether collection or multi-level in nature. It is fully compatible with ISAD(G). EAD is an SGML DTD and compatible with XML and related technologies, although no official schema yet exists. The Society of American Archivists and the Library of Congress jointly maintain it. EAD is extensively used in A2A and the Archives Hub and is a common import/export format in archive catalogue databases, such as CALM and PROCAT. See <http://www.loc.gov/ead/>.

**GAAT:** *Getty Art and Architecture Thesaurus*. A comprehensive vocabulary of nearly 120,000 terms for describing objects, textural materials, images, architecture and material culture from antiquity to the present. Available online at [http://www.getty.edu/research/conducting\\_research/vocabularies/aat/](http://www.getty.edu/research/conducting_research/vocabularies/aat/)

**Government Standards for Websites:** See <http://www.e-envoy.gov.uk/Resources/WebGuidelines/fs/en>.

**ICA:** International Council on Archives. A non-governmental body based in Paris and 'dedicated to the advancement of archives worldwide'. In pursuance of this aim it has developed standards for archival description such as **ISAD(G)** and **ISAAR(CPF)**. See <http://www.ica.org/>

**Index terms:** Terms used as access points to archival catalogues relating to the content of the archives. They may include the authority controlled names of people, families, corporate bodies and places in a format authorized by the NCA Rules for the construction of personal, place and corporate names (1997) (<http://www.hmc.gov.uk/nca/title.htm>). Subjects may also be included, format being based on thesauri such as UNESCO Thesaurus or Library of Congress Subject Headings (LCSH).

**ISAAR(CPF):** International Standard Archival Authority Record for Corporate bodies, Persons and Families. The **ICA** standard for **Archival Authority Records**. A second edition, which is radically different from the first is in the final consultation phase and is due for final publication in August 2004. An exposure draft is available at <http://www.hmc.gov.uk/icacds/eng/standardsISAAR2.htm>

**ISAD(G):** General International Standard for Archival Description. The **ICA** standard for archival catalogue records, which is now in its second edition: <http://www.ica.org/biblio.php?pbodycode=CDS&ppubtype=pub&plangue=eng>

**ISO 2788, 1986/BS5723, 1987, British standard guide to establishment and development of monolingual thesauri**, British Standards Institution. - 1st rev., London, BSI, 1987. See <http://www.nlc-bnc.ca/iso/tc46sc9/standard/2788e.htm>

**ISO 5964**, 1985 *Guide to the establishment and development of multilingual thesauri*, ISO 1985.

See <http://www.nlc-bnc.ca/iso/tc46sc9/standard/5964e.htm>

**LCSH** *Library of Congress Subject Headings (LCSH)*. See <http://www.tlcdelivers.com/tlc/crs/shed0014.htm>

**METS**: Metadata Encoding and Transmission Standard: METS is a standard for encoding descriptive, administrative, and structural metadata regarding digital objects. It is expressed as an XML schema and maintained by the Library of Congress. See <http://www.loc.gov/standards/mets/>.

**NAS**: National Archives of Scotland. NAS are currently developing a new version of their electronic catalogue using the CALM database (NAS e-Cat), which has the ability to import and export **EAD** records.

**NCA**: National Council on Archives. A non-governmental forum representing the major bodies concerned with the care of archives in the UK. It attempts to gain consensus and represent the interests of archives over a broad range of issues. In the context of the NAN, the report *Archives On-line* (1998) (<http://nca.archives.org.uk/ONLINE01.HTM>) can be seen to have laid a baseline for the work that has followed. An **NCA Interoperability Protocol** is currently under development. See <http://nca.archives.org.uk/index.htm>.

**NCA Interoperability Protocol**: A protocol being developed under the umbrella of the **NCA** and led by the National Archives (PRO). The aim is to provide a baseline agreement of the technical and editorial standards, etc to be followed by the major strands of the NAN.

**NCA Rules**: National Council of Archives, Rules for the construction of Personal, Place and Corporate names, 1997. See <http://www.ncaonline.org.uk/>

**NNAF**: National Name Authority File: A proposed project to collect **archival authority records** that conform to the second edition of **ISAAR(CPF)** on an organizational basis and make them available in **EAC**.

**NNDP**: National Network Demonstrator Project. A project funded by JISC looking at the utility of using Z39.50 to cross search archival catalogues. Partners included the Public Record Office and repositories in higher education. The final report of the project consultant can be found at [www.kcl.ac.uk/projects/srch/reports/ksfinhtmldoc.html](http://www.kcl.ac.uk/projects/srch/reports/ksfinhtmldoc.html).

**NRA**: National Register of Archives. An online database providing users with brief descriptions of archive collections of UK held in the UK and elsewhere. User access is via lists of **authority controlled creator names**. The NRA is managed by the National Archives (HMC) and is currently being upgraded. It is linked to **ARCHON** and also to online versions of catalogues held in **A2A**, **Archives Hub** and **AIM25**, etc. See <http://www.hmc.gov.uk/nra/nra2.htm>.

**OAI** Open Archives Initiative see <http://www.openarchives.org/>

In particular, the Open Archives Initiative Protocol for Metadata Harvesting.  
<http://www.openarchives.org/OAI/openarchivesprotocol.html>

**PROCAT**: The National Archives Public Records Online Catalogue. This is a custom designed SQL server database, allied to the Verity search engine, holding catalogue entries of holdings of the National Archives (PRO) and some other repositories holding Public Records. It also holds **archival authority records** of government bodies and can import and export catalogues as **EAD**. See <http://catalogue.pro.gov.uk/>.

**PRONI**: Public Record Office of Northern Ireland. A project funded by the HLF is currently retroconverting archive catalogues of PRONI's holdings for loading into e-CATNI.

**SCAN**: Scottish Archival Network. A project by led in partnership by the **NAS** and funded by the HLF. Modules giving access to images of Scottish Wills and information about Scottish History are already available. There will also be about 20000 collection level descriptions of archive collections from **repositories** across Scotland.

**SGML**: Standard Generalised Mark Up Language. See <http://www.w3.org/MarkUp/SGML/>

**SHIC**: *Social History and Industrial Classification: a subject classification for museum collections, SHIC Working Party. Second edition. Cambridge: mda, 1994.* See <http://www.mda.org.uk/descbib.htm>

**XML**: Extensible Mark Up Language. See <http://www.ucc.ie:8080/cocoon/xmlfaq>

**Z39.50** protocol. For general information see [http://www.niso.org/standards/resources/Z3950\\_Resources.html](http://www.niso.org/standards/resources/Z3950_Resources.html)