      SOME NETWORK INFORMATION CENTER POLICIES ON HANDLING DOCUMENTS

INTRODUCTION

   The Network Information Center (NIC) seeks to facilitate the flow of
   information between sites on the Network and to and from other
   stations whose work makes them valuable as participants in the
   Network dialog. The NIC is concerned both with the techniques for
   the flow and with optimizing the content of the information itself.
   Some aspects of the work of the NIC in support of information flow
   are described here, and some suggestions made to Network participants
   of ways they can help this work.

   All information handled by the NIC is available to any Network
   participant. All information generated by the NIC is unclassified
   and is without distribution limitation except as dictated by staff
   and budget size. Any information sent by an originating party to the
   NIC for recording or distribution is presumed to be unclassified and
   without distribution limitations as well. Any statement carried by a
   document thus submitted which seems to imply a limitation on
   distribution, quotation, or citation is presumed not to apply to its
   handling by the Network Information Center.

NIC NUMBER

   One important function of the Network Information Center is to make
   records of the existence of RFC's, formal NIC-related manuals and
   reports, Network memos, other Network informational items, and other
   informational items of interest to Network participants, and to index
   these records so that such items can be recalled when needed.

   To tag the informational items a serial number is assigned by NIC.
   The serial number has no intrinsic meaning, not even necessarily an
   indication of sequence of issue. It is a unique identifier and can
   be used to refer to the item in further communications, to facilitate
   indexing, and to allow numeric filing of documents.

Use of the NIC number has advantages in online dialog which are not
yet demonstrable around the Network, but the cooperation of Network
participants in applying one when a document is originated is
important.

THE NIC CATALOG

Items of information relevant to the Network appear in many forms,
including technical reports, RFC's, brief network memos, journal
articles, and letters. Reference to these is simplified by
assignment of a NIC number to each. To record the item to which the
NIC number refers, a description of each item, using a set of
standard data elements, i.e, author, title, etc., is coded and
entered as an online system (NLS) statement into a machine file.

An example of a statement with typical coded data elements:

        (A5480) *a1 James E. White #2 org *b2 University of California
        at Santa Barbara #3 Computer Research Laboratory #5 Santa
        Barbara, California *c1 An NCP for the ARPA Network #6 142p.
        *d1 21 December 1970 *f1 r *f2 o *rl UCSB CRL 12 *31 ARPA #6 AF
        19628-70-0-0314 *w2 3-11-71 *y1 Describes program designed and
        implemented at Santa Barbara node of ARPA Network, written in
        assembly language and implemented on 360/75. Discusses
        interface with hardware, software, and operator. *y3 Host-
        Interface protocol; Host-IMP protocol; User-NCP protocol;
        Host-Host protocol; Host-IMP messages, IMP-Host messages *z1
        all *z2 NIC *z3 new *

The group of files at ARC containing these statements of data about
NIC items and other informational items is the Master Catalog. The
term NIC Catalog refers to the machine file created by collecting the
statements coded *z2 NIC in the Master Catalog.

The data element *z1 indicates which Stations hold a copy of an item;
not all items related to NIC are sent to Stations, and in the future
it is expected that Stations will submit many documents to NIC for
cataloging which are not held by other Stations.

NIC CATALOG LISTINGS AND INDEXES

   Programs have been written at ARC to collect, sort, analyze and
   format the statements and the data elements in the statements to
   produce catalogs and indexes such as those in the Current Catalog of
   the NIC Collection, NIC (5145,).

   The Current Catalog of the NIC Collection is a functional document,
   as explained in Branch 3 below. It has as its contents, at any time,
   the current issue of a bibliography of items from the NIC Catalog,
   called a NIC Catalog Listing, and author and keyword indexes.

   Examples of entries in the Catalog Listing and in indexes are shown,
   using the statement above:

      Catalog Listing by Author:

         An NCP for the ARPA Network

              James E. White (University of   5480 White
              California at Santa Barbara)

              21 December 1970

              Describes program designed and
              implemented at node of ARPA Network,
              written in assembly language and
              implemented on 360/75.
              Discusses interface with hardware,
              software, and operator.

        Catalog Listing by NIC number:

         An NCP for the ARPA Network   5480

              James E. White (University of
              California at Santa Barbara)

              21 December 1970

              Describes program designed and implemented
              at node of ARPA Network, written in
              assembly language and implemented on
              360/75. Discusses interface with
              hardware, software, and operator.

Author Index:

    Subject: Education Status, memo to 5456 Westlund
    An NCP for the ARPA Network   5480 White
    NWG/RFC 78 (NCP Status Report   5199 White

Titleworld Index:

    Natural Communication with Computers 5639 Natural
    An NCP for the ARPA Network   5480 Network
    Proposal for a Network Interchange   4752 Network

A NIC Catalog Listing will indicate those items held in the Station
Collections either by a separate listing or by a notation with each
reference. A number catalog or index serves as a shelf list of
documents held by a Station. The indexes are not limited to the
Station Collections but lead to the entire Catalog.

DATA ELEMENTS

The data elements for information items include the author, title,
addressee, date, other numbers, keywords, and abstract. When these
elements do not exist in the item, they are supplied by a NIC
cataloger if possible. In online communication around the Network,
"online dialog", several of these elements of data will be recorded
automatically. Lacking online recording, it is important that
originators of reports, memos, and other such items be diligent in
including these data in their transmissions.

    For memos, essential data elements which the originator
    should supply are:.

        author(s)
        address(es) of author(s)
        addressee(s)
        address(es) of addressee(s)
        date of origination
        subject of memo

    A preassigned NIC number is desirable. A number for
    assignment can presently be obtained by calling NIC, and
    soon will be obtainable online.

    The addressees of a memo can of course be a group, such
    as the Network Working Group, or the Glitch Cleaning
    Committee, in which case the NIC needs a list or
    reference to a list of the people in the group.

For reports and other formal documents, essential data
elements are:

    author(s)
    addresses of author(s)
    title
    date
    abstract
    keywords

A short abstract, 150 to 200 words, giving some of the
substance of the document is of importance in the NIC
record and even for the person about to read the
document. Obviously, a well-written author abstract is
preferable to one produced by the NIC staff.

Keywords supplied by the author, preferably those from a
standard thesaurus, will be used in machine retrieval.
When such author-assigned keywords are lacking, the NIC
will supply some. Recommended sources for keywords are:

    Categories identified by Peggy Karp, Categorization
    and Guide to NWG/RFC's. NIC 5819.

    American National Standard Vocabulary for Information
    Processing, ANSI X3.12-1970. NIC 5827.

    Department of Defense, Thesaurus of Engineering and
    Scientific Terms, 1967, AD 672 000. NIC 5829.

    NASA Thesaurus, December 1967. NASA SP-7030. NIC
    5828.

When a document being issued supercedes an earlier
document, this information is particularly important, and
should be supplied by the author.

SUBCOLLECTIONS

Groups of documents, such as the NWG/RFC's and the replies to Sher's
survey, as well as the Station Collections, are cataloged by NIC as
subcollections. That is, they are retrievable as a subset of the NIC
Catalog, which in turn is a subset of a Master Catalog at ARC. The
capability of making subcollections is provided for Network
participants.

To create a subcollection in the NIC records, a Network
participant will be able to indicate to NIC the records he wishes
to have so grouped, and this information will be entered in the
Master Catalog statement for the document, for later retrieval.

FUNCTIONAL DOCUMENTS

Several documents generated in Network activities are subject to
occasional revision and updating. The NIC Catalog, the Directory of
Network Participants, and the Directory of Network Resources are
examples. These and external documents such as the BBN manuals are
referred to by NIC as "functional documents".

More generally, a functional document is a document whose title
and function remain constant, but whose contents can change. A
functional document contains a single or several documents which
can be added to, deleted, or replaced entirely or selectively.
Thus the functional document, which has a NIC number, can be
referenced in other documents with some assurance that it will be
in existence, even though the subdocuments with their distinctive
NIC numbers may be in flux. In the Catalog, the number of a
functional document in which a specific document may be contained
is listed, and the current contents of each functional document is
indicated.

In preparing a document which is expected to be revised, Network
participants are urged to use a looseleaf format.

The Network Information Center intends to support the distribution
and recording of contents of functional documents. Procedures have
been established, as described below, for fitting the changes to such
documents into the NIC system, and for reproducing and distributing
them to individuals or stations with instructions for their
integration into the existing documents.

PROCEDURES FOR REVISION MATERIAL

Original manuals and other functional document materials are
reproduced and distributed by NIC just as other Network publications.
For all documents obtained through NIC, NIC will attempt to receive
and make distribution of updates.

NIC also wants to make the processes of inserting the revisions and
of recording the changes as easy and foolproof as possible. The user
should not only be given the current materials, but should be able to
determine the version he holds, and to be able to refer to updates
uniquely. The following is copied from the procedure instructions

NIC has written for its own use. These procedures are also
recommended to Network participants for their use in preparing
revision material to be sent to NIC.

Update conventions

   Substantial revision of a bound document, or of more than a few
   pages of a loose leaf document:

      A new document will be published, with a new NIC number,
      and will bear a notation under the number on the title
      page and/or cover, e.g.,

         NIC 5772
         supercedes NIC 5621

      Few pages inserted or revised in a looseleaf or
      corner-stapled document:

         Each new or revised page will bear the original document
         number, with a notice of revision, e.g.,

            NIC 5742
            3-10-71

         Inserted pages will be numbered to fit into the existing
         document, e.g., pages 5.1, 5.2, 5.3, may be inserted
         between pages 5 and 6.

         Deleted pages will be replaced by a single page
         indicating the deletion, e.g.,

            Pages 7-12 deleted, 3-25-71

      A new table of contents and/or title page will be issued
      bearing the revision notice. In addition, at the time of
      each revision a page or pages will be prepared and
      issued which indicates all additions, deletions, and
      revisions which bring the document up to date.

   Revisions will be made only by substitution, addition or deletion
   of a full page or more. NIC will not revise its own publications
   by lists of errata, and strongly recommends against their use by
   others in the Network. However, when NIC receives such lists of
   errata, it will reproduce and distribute them with suggestions to
   Station Agents for recording and inserting them.

Distribution and transmittal procedures

The transmittal letter accompanying a set of revision material and the revision material itself constitute a separate document, a copy of which is filed at NIC, where a new copy can be provided at any time.

The transmittal letter will indicate the appropriate information; document number of the revision material, date, document number of the publication being updated, its date, and, when practicable, information on the changes made in the text.

Revision notation in the printed Catalogs and their indexes

Catalog entry

Supercession

The data element containing "superceded by NIC xxxx" will be formatted to appear at the beginning of the citation of the superceded document.

The data element containing "supercedes NIC xxxx" will be formatted to appear following the abstract in the citation.

Partial revision

The data element containing the note of revision will be formatted to appear following the abstract.

Entries in author, titleworld, or other indexes

Supercession

The data element covering supercession will be the only text in the entry for the superceded document.

Supercession will not be indicated in the entry for the superceding document

Partial revision

Partial revision will not be indicated in the index entry

[This RFC was put into machine readable form for entry]
   [into the online RFC archives by Jay Kominek 2/99]