

SYSTEM DESIGN FOR AN ISSUE
MANAGEMENT AND TRACKING SYSTEM
FOR NUCLEAR WASTE

Subtask 2. Letter Summary Report
for Task Order 001 of FIN A4167
Programmatic System Studies and Analyses

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1.0 INTRODUCTION

1.1 BACKGROUND

This letter report summarizes the results of Subtask 2 of the Aerospace Task Plan, "Development of an Issue Management System for Nuclear Waste," ATR-84(4812)-1ND, September 1984. This subtask entitled "System Design," is a logical followup to subtask 1, the results of which are discussed in Aerospace report, "Requirements Analysis for an Issue Management System for Nuclear Waste," January 1985.

The system described herein is currently referred to as an "Issue Management and Tracking System" (IMTS), which includes the functional relationships of the staff engaged in the process of issue management, and their interface with the automated data base used to track issues. This new title clearly distinguishes the IMTS from the Information Management System (IMS), which is being developed under a separate task order. The relationship between the IMTS and IMS are briefly discussed in the body of this report.

The contents of this report include a step-by-step flow of the process from issue evolution to resolution, including staff responsibilities and authorities. It also defines the data needed to adequately track an issue, and specifies how those data can uniquely be stored in an automated data base management system so that they can be entered, manipulated, and retrieved in a manner most useful to staff and management.

1.2 APPROACH

The results of subtask 1 were used extensively in the design of the IMTS described in this report.

Based on subtask 1 results, it was determined that there is no need to modify the current information flow that exists within the DWM. This report therefore places a high degree of emphasis on the staff functions that currently exist, because the staff are the primary individuals responsible for identifying issues, conducting work necessary to resolve issues, and ultimately supporting positions taken by the Atomic Safety and Licensing Board (ASLB) at the time of licensing. To assist the staff, two administrative functions have been incorporated into the current information flow. One is the concept of an Issue Review Board (IRB), that satisfies the "peer" review functions discussed in the Subtask 1 report. The other is the concept of an Issue Administrator (IA) who provides liaison between the staff and the IRB and is responsible for maintaining the automated data base. Both the IRB and IA are further discussed in the body of this report.

The Issue Input Form developed during subtask 1 was refined through a number of iterations with Program Planning Section staff, and its latest composition of data fields is presented under the new title of Issue Data Form.

Based on the data fields determined to be necessary, and the manner in which they were determined to aid in the IMTS process, the software architecture discussed herein was developed.

2.0 ISSUE MANAGEMENT PROCESS

The IMTS process is illustrated in Figure 1. The functions shown comprise the entire process, from issue identification and initiation through resolution. The process is intended to operate in synchrony with the existing information and decision-making flow within DWM, as determined in Subtask 1 and subsequently documented.

Figure 1 indicates that there are issues already identified by sources external or internal to DWM, there will be internally generated issues in the future, and new issues will be generated from sources external to DWM. Externally generated issues enter DWM through the DCC, where action items are routed to the DWM Director's Office for ticketing and, with nonaction items, to the staff. The term staff is meant to include all levels of DWM staff and is depicted in Figure 1 with a flow pattern leading from Branch to Section to staff (for delegation) and back again through Section to Branch (for approval). Information, including potential issues, may enter at any one or more levels. However, responsibility for issue identification and issue-oriented thinking and activity is intended to reside at all levels.

The functions of the staff include interpreting available information and filling out an Issue Data Form (IDF) to initiate an issue, reviewing progress and updating the IDFs for issues being tracked, and determining that progress is sufficient to update the appropriate IDF(s) and recommend resolution. At each stage (initiating an issue, updating, or recommending resolution), the appropriately completed IDFs exit the staff at the Branch level and are passed to the IA.

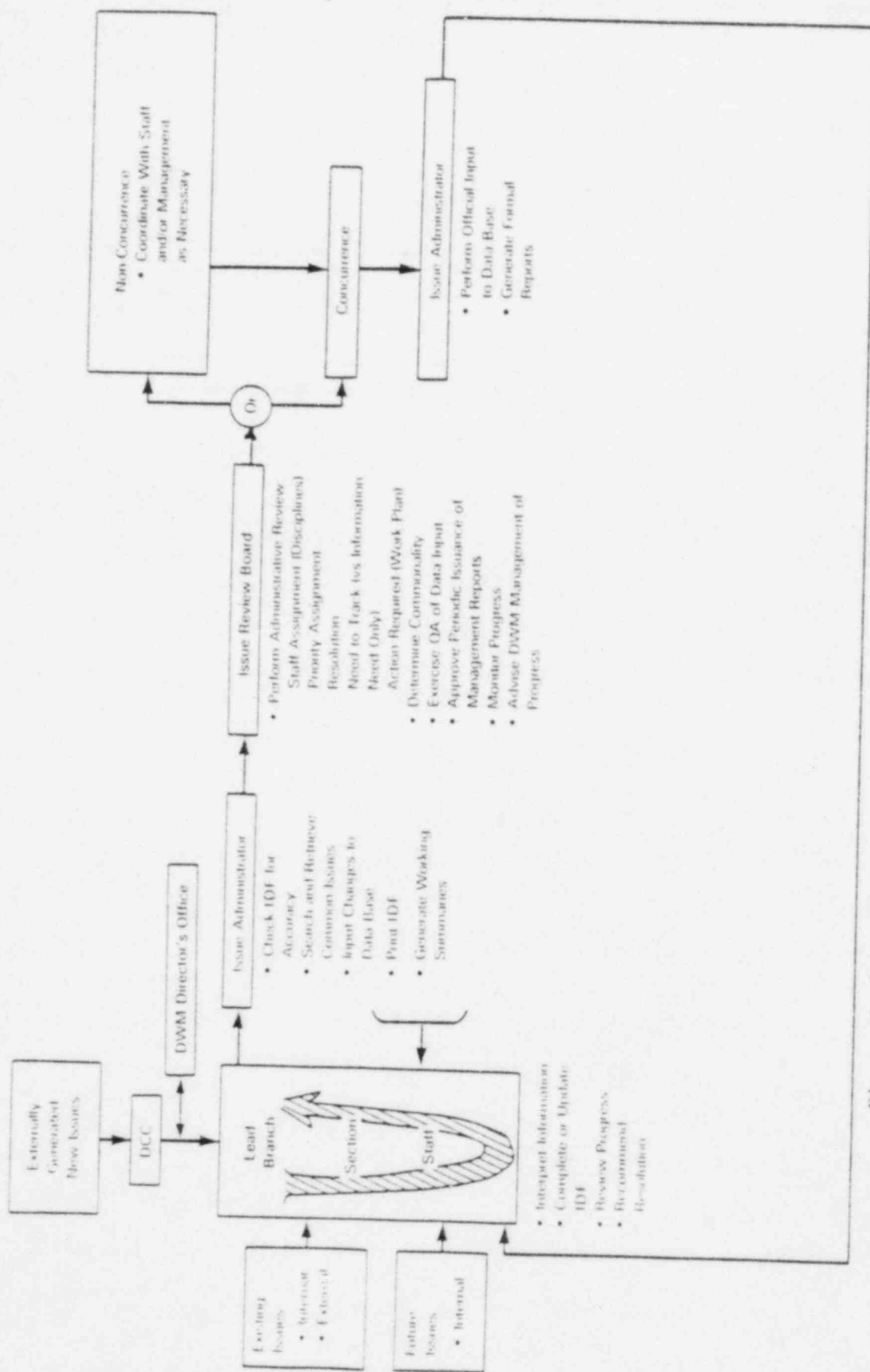


Figure 1. Issue Management and Tracking System Process

The IA will check all IDFs for accuracy and completeness. For new issues, the IA will search the data base for common issues if necessary to determine duplicity. Data entry personnel, under the IA's supervision, will enter new IDF data and modifications or updates to the data base (actually, into a buffer file until approved by the IRB). A printout of the IDFs, along with working summaries (e.g., as necessary to determine duplicity), will be given to the responsible staff, and to members of the IRB before each scheduled IRB meeting.

For new issues, the IRB will evaluate the information provided regarding staff and priority assignments, the need to track, and work plans identified to accomplish resolution. When there is a question regarding common issues, the interdisciplinary nature of the IRB will enhance the decision-making process. In an overview capacity, the IRB will exercise QA over the data input, for instance, the detail provided in statements describing the issues. As issue information is updated, the IRB will monitor progress; and when resolved status is recommended, the IRB will evaluate the substantiating information provided. As appropriate, the IRB will approve issuance of various reports, and will advise DWM management of progress.

At any point in the IMTS process wherein the IRB does not concur with information presented, it will coordinate with staff and/or management as necessary to come to mutual agreement. Only when concurrence is reached does the IRB provide its "stamp of approval" and instruct the IA to make official entry of the information on the IDFs into the data base, and to issue appropriate formal reports for public release. Following official data entry, the IA provides printouts of the approved IDFs to the responsible staff. The staff, then, always has the most recently updated version of all assigned issues that are being tracked, to be used for updating and review activities.

The individual steps of the IMTS process are described in greater detail below.

2.1 ISSUE IDENTIFICATION AND SCREENING

At present, the DCC is the clearing house and distributor of all incoming DWM mail. On all items, except those marked personal, catalogs, and obvious nontechnical information, a determination is made as to whether action is required, who should receive the action, and to whom copies should be sent. A copy of all action items is sent to the Director's office for ticketing and advance copies are sent to the person receiving the action and others. Items not requiring action receive the docket stamp and are copied and sent to the appropriate staff. Further dissemination of information takes place at the discretion of the staff. Figure 1 adapts to this system with regard to issues. The DCC is not expected to determine whether incoming information contains issues, only whether it requires a response. Although Figure 1 depicts externally generated new issues as a recognizable entity, few are expected to be so labelled.

Issues will be identified by DWM staff from numerous resources both internal and external to DWM, including but not limited to

- o Correspondence,
- o Document review,
- o Technical positions,
- o Meetings and workshops,
- o Regulations and legislation, and
- o Public media.

Every question or concern received from a source external to DWM should be treated as a candidate issue. Every document that comes into DWM should be treated as a potential source of issues, whether or not so intended by the originator. However, not every item requires storage in the IMTS. It is likely that some will be requests for information and others will be questions and concerns that are

entirely trivial or totally irrelevant to the licensing process. It will be incumbent upon staff to seriously consider and evaluate all incoming correspondence. None should be discounted out of hand. In evaluating information from any source, the general guideline is to identify situations or conditions that could present undue risk to public health and safety, or in any other way impact negatively on the licensing process.

2.2 INITIAL ISSUE PROCESSING

For each issue identified, an Issue Data Form (IDF) is initiated. The IDF and specifications for all of the data fields contained in the data base are presented in Appendix A. It is intended that the IDF will be completed incrementally by the staff, as information becomes available. Some fields (see Appendix A) will be activated through software internal to the data base. Basic information should be provided during the issue initiation phase including

- o Title,
- o Originator,
- o Source,
- o Source Date,
- o Site,
- o Waste Type,
- o Licensing Stage,
- o Statement, and
- o Descriptors.

The generic site category should be used only for issues for which resolution will be generic for all sites. Although the same issue may be raised for more than one site, if the work or time required to resolve the issue is at all dependent on the site, the issue must be considered site specific. An issue regarding

methodology, for example, could be generic if the methodology is identical for all sites. An issue regarding percolation rate, however, would likely be site specific, because percolation depends on local characteristics.

Additional information may be provided on the IDF during the initial phase including

- o Assignment,
- o Resolution required by,
- o Priority,
- o Date initiated,
- o Associated DOE work elements,
- o Associated NRC work plan number(s),
- o Applicable CFR citation(s),
- o Common issue(s),
- o Pacing issue(s),
- o Issue status, and
- o Action required for resolution.

Several of these data fields will contain suggested (subject to discussion) information during the initial phase, based on the judgment of the initiating staff. Assignment may not be straightforward when an issue crosses over disciplines. The issue initiator should suggest the lead branch, section, and staff that make the best sense. This does not preclude others from sharing responsibility for the issue. Resolution required by and priority are linked and require knowledge of pacing issues. To the extent possible, an evaluation should be made of the importance of this issue relative to others, the anticipated time required to resolve it, whether it is dependent on the completion of actions to resolve other issues, or whether it is crucial to the resolution of other issues. The issue statement, which can be about 130 words, can elaborate on the issue title and provide justification or rationale for the

importance placed on the issue. NRC work plan numbers should be provided only if it is certain that the work plan(s) cited will actually lead to the resolution of the issue. It is important to focus on the fact that issues per se, are not tracked; only the work done to resolve them is tracked. For this to happen, every issue must be addressed by one or more NRC work plans.

It is anticipated that numerous duplicate issues will arise from outside of NRC, because many people and interest groups will have the same concerns regarding health and the environment. To be designated duplicate (D under issue status), issues need not be identical (word-for-word) nor from the same originator. A duplicate issue will be essentially the same as an issue or part of an issue already being tracked. Actions required to resolve a duplicate issue would be exactly those required for another tracked issue. When an issue is designated D on the IDF, the tracked issue that it duplicates must be indicated as a common issue. Likewise, some issues from outside NRC can be expected to be new components or information needs of issues being tracked, such that their resolution could be guaranteed by resolution of the tracked issue. Such a component-part issue must be designated active (A under issue status), until the issue that should include this one can be modified to guarantee its inclusion. Then the component-part issue would become a duplicate, issue status D.

Issues that are generated internally, resulting from technical report review, for instance, are not likely to be duplicates of issues already being tracked, except in the sense just discussed (as a component part) or when more than one staff member identifies the same new issue at about the same time. Most internally generated issues and new issues generated outside of NRC will be designated active (A under issue status). There is no circumstance under which an issue can initially be designated resolved (issue status R).

When the IDF has been completed to the extent possible, it should be transmitted through standard pathways of information and work flow within the Branch. Any suggested modifications to other tracked issues, as discussed above, would be included with the new IDF. The Branch Chief or his designee will forward it to the IA, who will check the IDFs for completeness and accuracy. If it is not certain that an issue is a duplicate, the IA will search the data base for common issues, using the descriptors provided. This information and a printout of the IDF following initial data entry will be returned to the issue initiator. The IA will forward IDFs to the IRB, prior to their next meeting. Included with IDFs of new issues would be the latest revised IDF of any issue having to be modified to include a component-part (or information need) issue.

The IRB is expected to be an interdisciplinary administrative review body, nominally consisting of the four HLW Branch Chiefs or their designees, and chaired by an appointee of the Director, DWM. Members of the IRB will receive copies of IDFs that are new and modified, prior to their regular meeting (probably monthly). It is expected that they will call on other staff within and outside of DWM as necessary to serve as ad hoc IRB members, when they perceive the need for specialized disciplines to be present. The functions of the IRB with regard to new issues will be to review suggested assignments, priorities, resolution requirements, need to track, action required, and other data fields that require interdisciplinary, total-picture, knowledge. Where there is a question about whether a new issue substantially duplicates another tracked issue, the IRB will review suggested common issues and come to a determination regarding commonality.

The IRB will exercise a measure of quality control over data input, such that the breadth and depth of tracked issues are maintained at a workable level. The IRB will be in the position to evaluate the need to establish new DWM work plans to effectively

address issues. At any point wherein the IRB does not concur with the staff recommendations indicated on an IDF, coordination with staff and management must take place until concurrence is reached. It is not in the realm of IRB authority to simply override staff recommendations and change the IDF without prior staff consultation. When concurrence has been reached, the IRB chair will sign off on the IDF and the IA will perform official input into the data base. The IRB will authorize formal reports for public release, as determined appropriate.

2.3 UPDATING ISSUES

Staff will be provided a copy of the most recently updated IDF (as contained in the database) for each issue for which they are assigned staff responsibility. The staff so assigned are those individuals responsible for the appropriate NRC work plans with which the issues have been correlated. These are the staff most intimately familiar with the activities that must lead to issue resolution. For the IMTS to succeed, work plan activities must be issue oriented, and it must be possible to identify those actions that represent progress toward resolution of individual issues. This information must be entered in the current status and referenced document fields of the IDF. Field entry modifications may be indicated when appropriate, and additions may be made to text fields. Actions required for resolution may be added to as information becomes available, or as new, component-part issues are raised and other information needs are discovered. There is no upper limit to the number of actions required, current status statements, or referenced documents that can be added to the data base.

When new information is available, the updated IDF is transmitted through standard pathways of information flow, and the Branch Chief forwards it to the IA. As in issue initialization, the IA will ensure accuracy and completeness, enter the new information into the data base, pass a copy of the revised IDF to the

assigned staff, and present the revised and next previous IDF to the IRB for concurrence. This process will be iterative until the issue is recommended for resolved status.

As with new issues, the IRB functions in an administrative review capacity. In addition, the IRB needs to evaluate the progress being made toward resolution, and the extent to which work is on track with milestones. The IRB is expected to approve issuance of management reports, and it will be the IRB's responsibility to advise DWM upper management of overall progress regarding issues and the extent to which issues are being handled in accordance with the Morgan-Davis Agreement.

Again, in instances where the IRB does not agree with information provided on updated IDFs, coordination with the responsible staff must proceed until concurrence is reached. Upon concurrence, the IRB chair signs off on the revised IDF such that the new information can be made an official part of the IMTS data base. Formal reports for public release will be recommended by the IRB.

2.4 RESOLVING ISSUES

Issues may be resolved through identification of data that unquestionably satisfy the issue, or through concurrence between DOE and NRC that everything that can be done to resolve the issue has been done (even if uncertainty remains). When staff considers that adequate data have been gathered to resolve an issue, adequate information must be provided on the IDF to justify such a recommendation. When DOE and NRC concur on resolution, there must be documentation of such concurrence noted on the IDF. In all cases, recommendation for resolution will be forwarded through the Branch Chief and the IA to the IRB for review, discussion, and concurrence. The process of review and concurrence by the IRB is expected to proceed as described for new and updated issues.

2.5 ALTERNATIVE CONSIDERATIONS

2.5.1 Early Involvement of the Issue Administrator

Consideration was given to earlier involvement of the IA in the issue management process. This option would involve having the DCC route everything to the IA, at the same time as to the staff, in order to provide added insurance that no issue escapes the system. However, in order for this alternative to be useful the following must be considered.

1. The IA would have to be qualified to make an assessment of what is, or is not, an issue. This presumes the IA would exercise judgment similar to that which would be made by the staff.
2. Actions required are a function of their complexity and not simply first in first out. Therefore, the IA would need a mini data base tracking system just to check what the staff has input as an issue, against what the IA thought should have been input, within a certain time frame.

Therefore, although this alternative will increase the assurance that all external concerns are properly treated as candidate issues, the IA will need the proper mix of skills and resources to carry out this added function.

2.5.2 Structure and Functions of the IRB

Several alternatives to the recommended structure and functions of the IRB were considered. The inclusion of all DWM Branch Chiefs and a representative from ELD as regular Board members was evaluated. Because most issues will relate, at least initially, to HLW, it was felt that the WMLU Branch Chief might better serve as an ad hoc member. Also, it was felt that a representative of ELD could be utilized more effectively on an ad hoc basis, when a question

having legal ramifications is anticipated. It is the intent of the IMTS, as described earlier, for IRB members to receive copies of IDFs prior to their meetings. This will provide lead time to ask others to attend the meetings, as necessary.

Consideration was given to establishing what would have been called an Issue Control Board, one whose functions would be administrative control rather than review. Extended authority of the Board would call for the Board to determine much of the information in the data base (staff assignments, priority, need to track, actions required, etc.) rather than to receive recommendations from the staff. This was judged to be impractical in terms of the added burden it would place on the Board, and insensitive in terms of not allowing the staff, who are most intimately involved with the work to resolve issues, to have substantial input to the system.

Several suggestions regarding the chairmanship of the IRB were considered, including a rotating Chair from the permanent membership of the IRB, someone external to DWM (from the Office of Research, for instance), and the IA. The recommendation that the DWM Director appoint the Chair recognizes that the decision to establish an IMTS arose from above the Branch level and that the IMTS is intended to serve the needs of upper management as well as those of the staff. It was felt that a rotating Chair would sacrifice continuity of approach; a Chair from outside DWM would add undue burden to that person because that person would not be fully familiar with DWM issues; and the IA, although expected to be present at IRB meetings, should function as support to the IRB rather than as its leader.

2.6 RELATIONSHIP BETWEEN IMTS AND IMS

From the standpoint of issue tracking, the relationship between the IMTS and IMS data bases is such that the search flow, or

process, is from the IMTS to the IMS. The IMTS will store appropriate issue-oriented references which, by their own accession number, can be traced to the IMS for more detailed information. The total sum of individual references in the IMS will undoubtedly exceed the sum of individual (unduplicated) references for all issues. Furthermore, references in the IMS will not be stored according to issues, but according to a different set of indices.

While in the process of framing an issue, an individual will develop descriptors that appropriately characterize that issue. Likewise, in reviewing a document that will be entered into the IMS, whether or not it is a reference for an issue, the reviewer will develop descriptors. The two sets of descriptors should be quite similar, and those used as keywords or phrases to characterize an issue stored in the IMTS will most certainly be found within the thesaurus developed for the IMS data base, either by exact word(s) or by roots thereof. However, extraction of random references from the IMS by descriptor searching would yield more listings than desired, and they could not be sorted by issue.

Finally, it should be noted that the IMTS and IMS files, when implemented, will be resident on the same host ADP system. As stated previously, the IMS data base is expected to be much larger than that of the IMTS; the latter will be a subset of the former. Thus, the search for issue references begins with the IMTS; eventually their recovery from the IMS could be transparent to the user.

3.0 AUTOMATED DATA BASE SYSTEM DESIGN

The IMTS discussed in the previous section defines the entire process of issue management and tracking. To maintain the volume of paperwork and reduce the repetitive and nontechnical tasks, an automated data base system is recommended. This system would encompass all tasks delineated under the responsibilities of the IA. The IA and staff would have available an automated system that would enable them to introduce the issues into the system, edit existing issues, search and retrieve specific issues, and generate all required reports. With this capability the IA could properly supply to the staff and the IRB all necessary information concerning an issue and all management summary reports.

3.1 GENERAL SPECIFICATIONS

The automated system must be designed so that individuals who are not computer professionals can effectively interact with the system to define an issue, update an issue, generate reports, and conduct searches to determine if there are issues in the system that are of particular interest. This concept, generally referred to as "user friendly," is implemented by presenting to the user menu screens that clearly specify the various options available and prompt the user on how to invoke the desired option. It also involves formatted screens to guide the user, in which all expected input is clearly defined (no acronyms), all field lengths displayed, and specific instructions given where necessary (such as last name first, etc.). The user should also be presented with the fields that can be searched on and then prompted for the search criteria; wherever possible the list of possible search criteria should be displayed and prompts generated to indicate which criterion is desired. For example, if the

user wishes to search on a site, the list of sites (BWIP, NNWSI, SRPO, or GENERIC) should be displayed and the user then selects which one is desired. This method precludes misspellings and free-form input, which would not result in a positive hit. All standard reports should be defined and also invoked by menu selection. The system should perform the necessary sorts and generate preformatted reports. The system also should include an option to allow a user who is familiar with the host system to perform ad hoc operations.

To implement the above conditions, a software system can be written that interfaces with a commercially available Data Base Management System (DBMS). In general, such systems have the same external capabilities; therefore, the selection of the DBMS would be transparent to the user. The discussion of the details of the system must be general enough to enable implementation on whichever system is ultimately chosen.

3.2 DATA BASE SPECIFICATIONS

A data base system is a set of software that interacts with the data base and allows a user to perform given tasks. All methods of collecting, recording, and storing information use some form of filing system to hold the resulting data in an organized way. The information is held in data files, each of which consists of a number of sets of related items called records. Each record contains a single set of like elements that define an entry. A single file, however, may not be adequate to represent all data required for an application; therefore, a data base is required that can link multiple data files by some relational value. Use of a Relational Data Base allows the user to define multiple files, each file dependent on the common relational value, and internally link one file to another based on the common element. The set of files is referred to as a data base.

The Automated Data Base, as described below, can be conceptually viewed as a system that has six main functions interacting with a data base that contains eight separate data files (Figure 2). When the system is invoked, the main menu will be presented to the user. The menu displays the six options available to the user as follows:

- 1> INPUT A NEW ISSUE
- 2> UPDATE AN ISSUE
- 3> SEARCH AN ISSUE
- 4> PRINT AN ISSUE
- 5> GENERATE A REPORT
- Q> DBMS SYSTEM AD HOC QUERIES

These options can be invoked in any order depending on which the user wishes to perform. When a given option is invoked, a set of subordinate menu screens listing the options available within the selected function is displayed. All subordinate menus have an option to return to the main menu.

3.3 DATA FILE SPECIFICATIONS

The data files required for the system are as follows.

Main File: This file contains the unique, single occurrence data for the system. The key element is the accession number. The accession number is assigned by the system and is used as the relational element. It is used to uniquely identify each issue in the system and identify records in the subordinate files that are related to the issue. Each data element in this file is discussed in detail below. The types of data resident in this file are the date of entry, revision date, site, site location, lead branch and section, priority, etc.

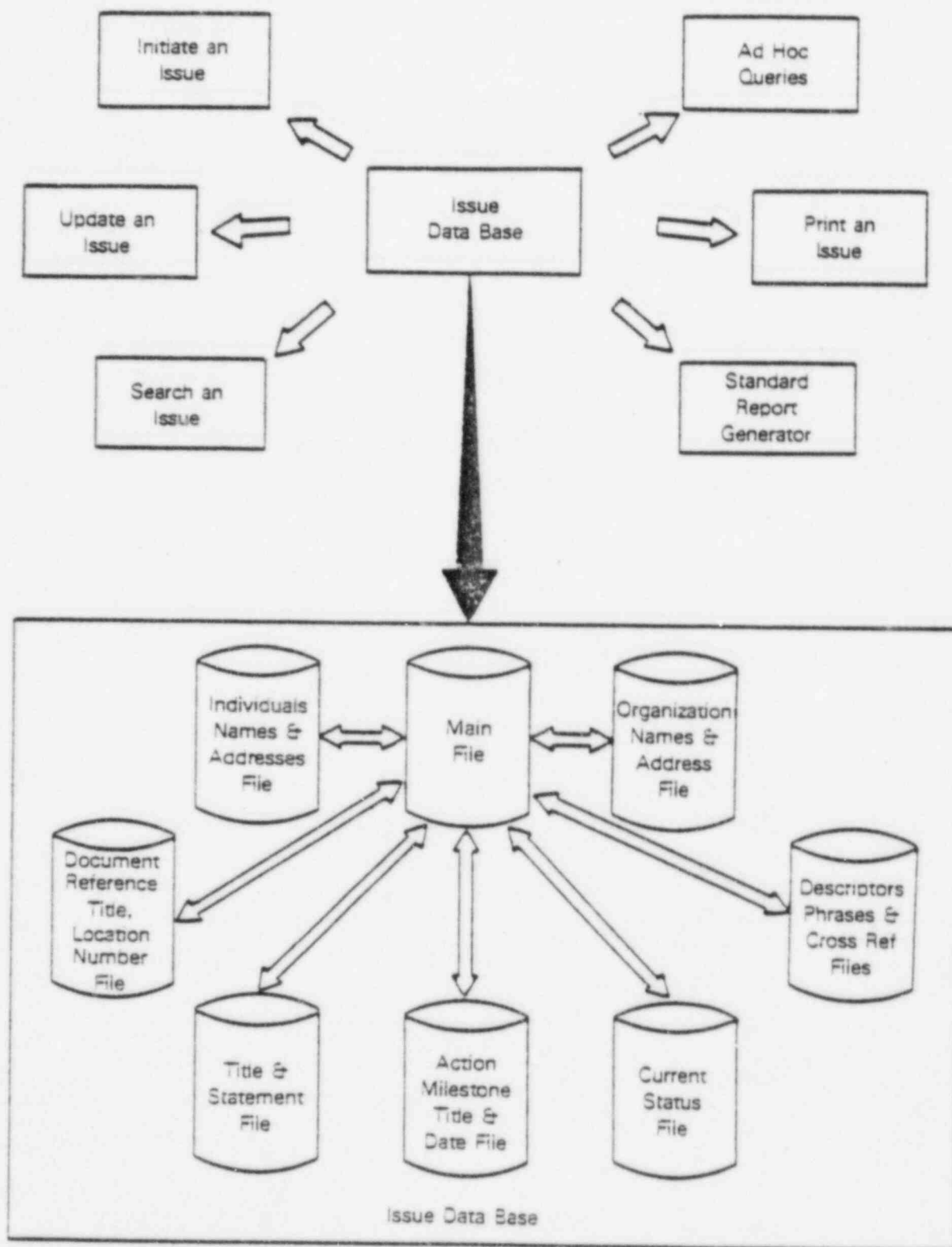


Figure 2. Conceptual System Overview

Originator Files: The originator can be one of three types. The issue may have been submitted by an organization, an individual, or an NRC staff member. The system will request the user to identify the originator type and then, based on the type, query the user for the specific information required for the entry. In all three cases, the user will first be prompted for a key piece of information (individual's name, organization's title, or the NRC staff member's name), and the system will search the existing data files to determine if there is an entry in the system that matches the input. If a match is found, data for the originator will be displayed to the user. If the entry is an exact match, the user need only enter the reference number of the originator; if the originator does not match exactly, the user will then be prompted for all required information to define the new originator.

Title and Statement File: This file contains the title of the issue, the issue statement, the date the issue was originated, and the source of the issue. The title and the statement fields are free text fields, and must be configured so that the system can search these fields for any word contained in them. Currently, the title field is specified for 3 lines or 209 characters and the statement field is specified for 15 lines or 1069 characters.

Action Milestone File: This file contains the titles and associated dates for activities that are required for issue resolution. The title field is 83 characters. There are three date fields: baseline date, current date, and actual date. The baseline date is the initial date of expected completion, the current date is used if there is any change in expected completion date, and the actual date is the date the action is completed.

Current Status File: This file contains the date on which the entry was made, and a text field for the current status of the resolution of the issue. The current definition for this field is 10 lines or 704 characters.

Referenced Document File: This file contains the information required to identify documents the staff member used to resolve the issue. It consists of a document title field (44 characters) and two fields to record the location and accession number of the document. These two fields are intended to record the necessary information so others can retrieve the document.

Descriptor File: This file consists of two linked files. The first file contains the descriptor phrases and a reference number, and the second file contains the accession numbers of the issues to which the descriptor phrase applies, and the reference back to the descriptor file. Each descriptor phrase is entered into the system only once and the cross-reference file records the multiple occurrence of the phrase.

Appendix B contains the structure of a set of files developed using dBASE III. These files were implemented for illustrative purposes and for possible use as an interim system.

3.4 FUNCTIONAL SPECIFICATIONS

The following sections discuss the characteristics and capabilities of each of the options available in the system. There are several types of users implicit in the discussion that follows. The first two options, Figure 3, assume the user to be a data entry clerk responsible for generating and maintaining the data base. This activity is limited to authorized personnel controlled by the IA. The next two options are intended for use by the staff of DWM to support their work on issue resolution. Option 5, report generation, assumes the user to be a support person reporting to the IA, although anyone with access to the system could activate this option.

When the system is invoked, a main menu will be displayed (Figure 3).

```

////////////////////////////////// M A I N M E N U //////////////////////////////////
1> INPUT A NEW ISSUE.
2> UPDATE AN ISSUE.
3> SEARCH AN ISSUE.
4> PRINT AN ISSUE.
5> GENERATE A REPORT.
//////////////////////////////////

INPUT OPTION NUMBER OR Q FOR QUIT ■

```

Figure 3

This menu allows the user to select any of the options available by indicating a choice at the prompt

INPUT OPTION NUMBER OR Q FOR QUIT.

Each option executes software procedures that further prompt the user through the necessary steps to perform the selected options.

3.4.1 Input a New Issue

This software procedure is designed to introduce a new issue into the data base by a data entry clerk. The first process the system performs is to generate an accession number for the issue. The accession number is uniquely defined as a six-digit number. The number is based on the Julian date of input and a sequence number. The construction is as follows: digit 1 is the last digit of the

year; digits 2, 3, and 4 are the day of the year (0 to 365); and the last two digits are sequentially generated for each entry of the day.

The system will then execute a series of screens that prompt the data entry clerk for the required information to initialize an issue. The first series of prompts define the originator. A screen is displayed, Figure 4,

```
THE ACCESSION NUMBER FOR THIS ISSUE IS 811203

IF THE ORIGINATOR IS AN ORGANIZATION INPUT AN 0
IF THE ORIGINATOR IS AN INDIVIDUAL INPUT AN 1
IF THE ORIGINATOR IS AN NRC STAFF INPUT AN S
INPUT AN 1, 0, OR S
```

Figure 4

which prompts for the originator type. There are three options, an ORGANIZATION, an INDIVIDUAL, or an NRC STAFF MEMBER. After the originator type has been entered (i.e., 0, 1, or S), the system queries for the name of the originator (Figure 5).

```
ENTER THE LAST NAME (or staff) OF THE INDIVIDUAL DEART
```

Figure 5

It is not necessary to enter the entire name; a portion of the name is sufficient. The system will then examine the proper file and present all the file entries that match the input (Figure 6).

NUMBER: 1	TITLE: none
NAME: SWARTHOUT, JOHN W.	AFFILIATION: none
ADDRESS: Apartment 5A	PHONE NUMBER: (211) 555-1498
1024 14th ST.	
New York, NY 10006	
NUMBER: 8	TITLE: Consultant
NAME: SWARTSVELD, JEROME K.	AFFILIATION: CETA
ADDRESS: 211 Broadway Blvd.	PHONE NUMBER: (977) 488-6776
Denver, CO 80555	
Alt: 1000 123	
NUMBER: 2	TITLE: Consultant
NAME: SWARTWOOD, WILLIAM J.	AFFILIATION: Indian Affairs
ADDRESS: 9421 Wainfield Rd.	PHONE NUMBER: (301) 977-0225
Saltmarshburg, MD 20879	

Enter the number if Originator is one of those displayed : 0 for new entry.
Then Press <RETURN> #

Figure 6

The number of entries displayed depends on how precisely the name is entered. The intent is to prevent multiple entries into the system, prevent slight variations in the spelling of the names, and alleviate the need to rekey the addresses and other required information. If the originator is not currently in the system, the user is presented a screen that will prompt for the required information pertinent to the originator type. Figure 7

Enter the name and Address of the Originator.

NAME (Last, First MI):	
Title (if any):	
Address:	
Phone Number:	
Affiliation:	

Figure 7