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MANUAL FOR USE OF THE DEVELOPMENT INFORMATION CENTER DATABASE SYSTEM

Susan G. Weintraub
U. S. Agency for International Development
Documentation and Information Handling Facility

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Chapter 2

Organization of the System

Files, Records, Fields

The bibliographic information which comprises the Development Information Center (DIC) database is stored in a FILE. Files are grouped together in the WANG in a LIBRARY, and one or more libraries make up a VOLUME. A volume can be a magnetic tape, computer disk or even a diskette.

Files are composed of RECORDS, each record being all of the information needed for a citation to one publication. One record represents one book. The DIC system is a bibliographic database which means that it contains only citations to books and reports rather than the full text of each document.

Every record is broken down into fields; a field is each individual element of the bibliographic citation or other information (such as author, year, format) used when cataloguing the publication. The title for each field is called a FIELDNAME. The DIC system uses both short and long forms for each of its fieldnames. Following is a list of fieldnames and their abbreviations:

DATE ON FILE (Date document was entered onto the system)	DT
AID/W DOCUMENT NUMBER	AW
FORMAT (Papercopy, microfiche or both)	DF
DOCUMENT ID (Unique accession number)	ID
SUBJECT (AGRIS subject code used in classifying documents)	SU
SECONDARY (AGRIS secondary or object code used in classifying documents)	OC
COUNTRY CODE (AGRIS geographic code)	GC
LANGUAGE	LA
TITLE1-3	T1-T3
AUTHOR	AU
YEAR (Year published)	YR
PAGIN (Number of pages)	P
NOTES1-3	N1-N3
KEYWORD	KY
CONTRACT (Contract number)	C
CONTRACT TYPE	CT
ARDA ISSUE (Issue of the AID Research and Development Abstracts in which an abstract of the publication appears)	AR
BIBTYPE (Bibliographic type code)	BT
PROJECT NUMBER	J
RECORD STATUS	RS

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For more detailed information on the characteristics of each field, see the Field Display Table in Appendix A.

Assigning specific information to a fieldname is giving that field a value or FIELDVALUE. For example, YEAR is a fieldname which indicates the year in which the document was published, and the actual year (e.g., 79) is the fieldvalue. In each record, most, if not all fields have a corresponding value.

Searching Concepts

In searching a file such as the DIC database to retrieve required citations, one assigns a value to a specific field and instructs the computer to locate all records (representing citations to documents) that contain fields which match up to the desired fieldvalues. For example, to find publications written on Egypt, locate the COUNTRY CODE for Egypt (G232) in the AGRIS geographic index (Appendix D) and ask the computer to identify all records whose value for COUNTRY CODE is G232. For further instructions on how to formulate searches, see the chapter on Inquiry. Inquiry is a specific program created by WANG to perform searches.

The DIC database has been designed for two types of computerized searching within the Inquiry Utility Program. One way is for the computer to look at or <u>scan</u> every record consecutively to see if fieldvalues within certain fields match up to those values named in the search.

The second and faster way is through the use of indexes to special keyed fields. The DIC database has three keyed fields which have corresponding indexes: DOCUMENT ID (the primary key), SUBJECT and COUNTRY CODE (the alternate keys). Separate indexes of the values for these keys are maintained by the computer. When a key is used in a search statement, the computer goes directly to the index for that key, finds the value named, and from there is pointed to only those records whose values match. This type of search is faster because the computer need not check every single record to find a match. When performing a search which includes the use of a keyed field, it is advisable to list that field first in the search statement to ensure faster retrieval.

The primary key is a unique key in that one value represents only one record. When the primary key is used, access to the record it represents is immediate. Alternate keys may have multiple values.

Text searching is also permitted in the system through the Display Utility Program. In text or string searching, one supplies only a value without designating the field in which to search for that value. Thus, the computer looks at every field throughout the file to find a match. Text searching is slow but useful when searching a long string of text such as a title or part of a fieldvalue.

Chapter 3

Getting into the System and the Main Menu

1. Make sure you are at a terminal that is wired directly into the computer--it should not be sitting next to a large black box which is only for word processing.

2. If the terminal is not already on, you will find the switch in back of the unit on the bottom right.

3. When you see a flashing line (the cursor) type in your USERID and PASSWORD which have been provided to you by your computer programmer. The password will not appear on the screen. Press "Enter".

4. The next screen should be the Main Menu, as below:

```
*****************************************************
                WELCOME TO THE USAID/
           DEVELOPMENT INFORMATION CENTER
                        SYSTEM
*****************************************************

TO DISPLAY CONTENTS OF FILE PRESS          PF-KEY (01)

TO SEARCH THE FILE USING INQUIRY PRESS     PF-KEY (02)

TO CREATE REPORTS ON THE FILE PRESS        PF-KEY (03)

TO ADD, MODIFY OR DELETE RECORDS PRESS     PF-KEY (04)

TO RUN DIC REPORTS                         PF-KEY (05)

TO MODIFY THE DOCUMENT ID FIELD            PF-KEY (06)

****************TO EXIT PRESS PF-KEY (16)*************
```


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5. The Main Menu gives you a choice of six functions. The PF-Keys (Program Function Keys) are located at the very top of the keyboard and are numbered from 1 to 16 starting on the left (shown on the bottom row of the numbered strip). In the word processing mode, they also serve as special function keys for text editing, which is why they may be labelled "merge", "copy", etc.

6. To use any of the programs or utilities shown, press the PF-Key listed on the right. If a screen or screens appear indicating discrepancies in volume, file or library names, check with your computer programmer to be sure that the correct information has been entered into the system.

7. The following five chapters give instructions on using the utilities and programs named in the Main Menu. The best way to become familiar with the DIC database is explained in Chapter 9--Hints on Learning the System. It is recommended that you start with that section and then learn Display, Inquiry, and Report.

Chapter 4

Display

Display (PF-Key 1 from the Main Menu) allows you to look at each record on the file as it appears on the computer. Records are in order by DOCUMENT ID (the primary key) and fields are positioned in the sequence maintained by the computer with no spaces in between. Display is useful for viewing and printing an entire record and for conducting string, or text searches.

After pressing PF-Key 1, the following Display menu will appear:

```
      ***WANG VS FILE DISPLAY UTILITY - VERSION 3.05.00***

INDEXED FILE EGYPT001 IN LIBRARY DICDATA ON VOLUME VOL444
CONTAINES     9429 RECORDS OF 1951 BYTES EACH MAXIMUM.
KEY POSITION WITHIN RECORD IS     17 AND KEY SIZE IS     8.
THERE ARE 2 ALTERNATE INDICES.

PRESS ONE OF THE FOLLOWING PROGRAM FUNCTION KEYS TO REQUEST A
DESIRED FUNCTION:

   (1) DISPLAY  - RESUME DISPLAYING THE INPUT FILE
   (2) FIRST    - DISPLAY THE FIRST RECORD(S) IN THE FILE
   (3) INDICES  - DISPLAY THE INDICES AND OPTIONALLY CHANGE THE
                  ACCESS PATH

   (5) NEXT     - DISPLAY THE NEXT RECORD(S) IN THE FILE

   (7) UP       - MOVE THE DISPLAY FORWARD 1 LINE WITHIN THE
                  RECORD
   (8) FIND     - FIND A RECORD IN THE FILE BY KEY VALUE AND
                  ADJUST DISPLAY
   (9) TEXT     - FIND THE NEXT OCCURENCE OF A TEXT STRING
  (10) MODE     - CHANGE DISPLAY MODE BETWEEN ASCII AND HEX

  (15) PRINT    - PRINT A HARD COPY OF ALL OR PART OF THE FILE
  (16) EOJ      - END DISPLAY PROCESSING
```


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Searching on Display

String or text searching is available through Display on PF-Key 9. In a string search, characters are grouped or "strung" together; the string is then compared to <u>every part of every</u> fieldvalue in each record beginning with the record currently on the screen. (If the screen shows the tenth record and you begin a text search at that point, the search will start scanning from there on and go to the end of the file; it will not circle back to the tenth record.) Since searching is carried out on every field, you do not name the field. Again, you are searching merely for the occurrence of a group of characters, letters or numbers, whether they appear in the subject code, author, title, keyword, year, etc.

To do a string search, press PF-Key 9. You are then given a long line of blanks on which to enter your string, enclosed in quotation marks. After typing in the text, press "Enter" and the computer will begin scanning. Scanning in this manner is a time consuming process. At the first occurrence of a match, the cursor will flash at the beginning of the matching text no matter where it appears in the record. To see the rest of the record, you must exit from the "find mode" and use the PF-Keys as shown to move around in the display. To continue the search, press PF-Key 9 again and then press "Enter", and the next occurrence, if there is one, will appear. Press "Enter" whenever you want the search to continue. After the last occurrence is found, you will get a message to that effect at the top of the screen.

Display searching is particularly useful when you have incomplete information. It allows you to search on truncated words or roots of words. Display searching is helpful for finding authors, especially if first names or initials are unknown. In the DIC database, authors always take the form: Last Name, First Initial. Middle Initial. (e.g., Smith, J. S.) If there is no middle initial, the first name is spelled out. Display eliminates the problem of needing the exact information by allowing searches to take place only on last names, or parts of names.

Searching Titles

Title searching is best carried out through Display for two reasons:

1. The title field is broken down into three sections of 67 characters each. If you are trying to search a title in Inquiry, you must have the <u>exact</u> title and be certain you are searching on the correct part, TITLE1, TITLE2, or TITLE3, with the number of characters, including spaces, divided properly.

2. It is very common to have incorrect title information. Any difference in spacing, punctuation, wording, articles, etc. will not produce a match through Inquiry.

The PF-Keys from the above menu tell you how to move around in the file. A shortened listing of these directions appears at the top of each record being displayed. If you are interested in a particular record for which you know the DOCUMENT ID, press PF-Key 8. This places you in the "find mode" and leaves enough blank spaces at the top of the screen to enter the 8-character DOCUMENT ID within quotation marks. After pressing "Enter", the desired record will appear on the screen almost immediately. If there is no record with the ID number entered, the next highest record will be shown. Always be sure to check the KEY at the top left of the record to see that it matches the one you entered. Since the entire record cannot fit on one screen, it is necessary first to exit the "find mode" by pressing PF-Key 1. Then press PF-Key 7 to move the screen up to view the lower portion of the record. PF-Key 6 moves the screen back down again. A sample record is shown below.

```
KEY =  EGAAA060
   0   030381        PCEGAAA060JE3000D000C0EN      EDUCATION SECTOR POL
  64   ICY PAPER, THIRD EDITION
 128
   ,   LINE   192  SAME AS ABOVE
 256                                        HADDAD, W. D.
 320                                           HABTE, AKLILU
 334                                              HULTIN, MATS
 448                                                 WORLD BANK
 512
       LINES  576 THRU  960 SAME AS ABOVE
1024          80144P.
1088
       LINES 1152 THRU 1280 SAME AS ABOVE
1344                                EDUCATION                  EDUCATION
1408   AL FINANCE      PROJECTS                STATISTICS
1472
       LINES 1536 THRU 1792 SAME AS ABOVE
1856                                                  90
1920
```

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Display eliminates these problems by allowing you to search on a group of significant words. Of course, this group must be absolutely correct, but since you can choose any group, any word, or even part of a word, you can reduce the chances of having the wrong information. For example, in checking for the title, A Guide for Field Crops in the Tropics and Subtropics, the following searches are possible:

'FIELD CROPS'
This group is likely to pull out numerous entries for title and keyword.

'TROPICS AND SUBTROPICS'
This is a good choice except if an ampersand (&) were used instead of 'and' in the original title.

'GUIDE FOR FIELD CROPS'
Also a good choice because there are enough words to make it unique.

Searching Project Numbers

The PROJECT NUMBER (J) field allows multiple values, but each value is strung together with the next with no spaces between.

The Project Number field may contain up to five nine-digit project numbers:

263001600263001700263001800263001900263002000

Since most documents deal with only one project, such stringing is unusual and permits easy access to project numbers through Inquiry. However, the best way to search the project field and be sure to pick up any occurrence of a project is to use Display. Entering a number under the "find text" mode ensures that the search will be carried through every part of every field. If the desired project number appears in any part of the field, a match will occur. In the above example, a search for project number 263001800 will yield a match.

263001600263001700<u>263001800</u>263001900263002000

Printing from Display

Any part of the file can be printed from Display by pressing PF-Key 15. The next screen gives you the chance to define a range of records to be printed according to DOCUMENT ID <u>only</u>. In the blank spaces, fill in the group to be printed, e.g., 'EGAAA010' to 'EGAAA031'. A sample screen is shown below and illustrates how to print one record.

```
      ***WANG VS FILE DISPLAY UTILITY - VERSION 3.05.00***

INDEXED FILE EGYPT001 IN LIBRARY DICDATA ON VOLUME VOL444
CONTAINS     9438 RECORDS OF 1951 BYTES EACH MAXIMUM.

                    PRINT FUNCTION REQUEST MENU

      (ENTER) - PRINT THE RANGE OF RECORDS DESCRIBED BELOW
       (1)    - RETURN TO DISPLAYING THE FILE
       (2)    - ALLOW LOWER CASE INPUT

       STARTING KEY VALUE - 'EGAAA055'
       ENDING   KEY VALUE - 'EGAAA055'
(KEY VALUES MUST BE IN QUOTES UNLESS USING "FIRST", "LAST", OR
"ALL")
LINES PER PAGE          - 55
```

When you have finished using Display, press PF-Key 16 to exit. The following screen will appear:

```
                PLEASE SELECT END-OF-JOB OPTION:

              PRESS PFKEY 1 TO DISPLAY ANOTHER FILE

                PRESS PFKEY 16 TO END PROCESSING
```

PF-Key 16 will exit from Display and return you to the Main Menu.

Chapter 5

Inquiry

The Inquiry Utility provides methods for conducting searches. This chapter deals with formulating search statements and gives details on using the Inquiry program. The concept of searching as a means of finding if a database file contains desired information was discussed in Chapter 1.

Formulating Search Statements

1. Search statements are formulated using fieldnames,

   AUTHOR(1)-AUTHOR(7)
   TITLE1
   YEAR, etc.

associated with specific values,

   AUTHOR(1) is "Smith, J. S.'
   TITLE1 is "Handbook of Tropical and Subtropical Horticulture"
   YEAR is "79"

NOTE: <u>For a match to occur, fieldvalues must always be given exactly as they appear in the record</u>. Any variation in spacing between words or letters, any misspelling, will not match and may lead you to believe that the record does not exist.

Some formats for search statements are:

a. WHEN [fieldname] IS ["fieldvalue"] LIST [fieldname] [fieldname]

   WHEN YEAR IS "79" LIST AUTHOR(1) TITLE1

b. WHEN [fieldname] IS ["fieldvalue"] AND [fieldname] IS ["fieldvalue"] LIST [fieldname] [fieldname]

   WHEN SUBJECT IS "JF50" AND COUNTRY CODE IS "G232" LIST TITLE1 DOCUMENT ID

c. WHEN [fieldname] IS ["fieldvalue"] OR [fieldname] IS ["fieldvalue"] LIST [fieldname] [fieldname]

   WHEN SUBJECT IS "AE10" OR SUBJECT IS "AE70" LIST TITLE1 DOCUMENT ID YEAR PAGIN

The "WHEN" clause states fieldnames to be searched and connects them with fieldvalues given by the searcher. The "LIST" clause (other words such as DISPLAY, GIVE, SHOW can also be used) allows you to pick which fields from the record you wish to have displayed on the screen once the search is complete. See more about LIST clauses in Section 6 below. Note that all fieldvalues are enclosed in quotation marks and that the fieldname must be specified every time a fieldvalue is used.

2. Searches can be executed on one field (example a. above) or on a combination of fields (examples b. and c. above). NOTE: If one element of a multi-field search is a keyed field (i.e., DOCUMENT ID, SUBJECT, COUNTRY CODE), name that field and its associated value first in the search statement. When a keyed field is named first, citation retrieval will be faster.

3. Fields in multiple field searches are combined with the use of connectors AND and OR.

AND: All named fieldvalues which have been connected by AND must be contained in a record for a match to occur.

WHEN SUBJECT IS "AE10" <u>AND</u> COUNTRY CODE IS "G232" LIST...
Only those records encoded with <u>both</u> AE10 as the subject and G232 as the country code will be retrieved.

OR: Any one or all of the fieldvalues connected by OR must be present in the record to cause a match.

WHEN SUBJECT IS "AE10" <u>OR</u> SUBJECT IS "AE70" LIST...
All records encoded with either AE10 or AE70 (or both if that were possible) will be retrieved.

The more fields you connect with AND in a single search statement, the more limited, and at the same time, the more relevant your results.

WHEN SUBJECT IS "AE10" <u>AND</u> COUNTRY CODE IS "G232" <u>AND</u> YEAR IS "79" LIST...
This will retrieve only those publications on agricultural economics in Egypt published in 1979.

The more fields you connect with OR in a single search statement, the broader, and at the same time, the more comprehensive your results. Relevancy is likely to decrease.

WHEN SUBJECT IS "DD00" <u>OR</u> SUBJECT IS "DE10" <u>OR</u> SUBJECT IS "DG00" <u>OR</u> SUBJECT IS "DK00" <u>OR</u> SUBJECT IS "DM00" LIST...
This will retrieve a large group of publications on any or all of these subjects.

4. <u>Relational operators</u> show the relationship between the fieldname and the fieldvalue. The relational operator IS has been used in previous examples to mean "equals", e.g., YEAR EQUALS "70" or PAGIN EQUALS "123". EQ and IS EQUAL TO are also

the same as IS. All four terms are interchangeable. Other relational operators can be used (in any of the forms shown below) to define fieldvalues:

GT or GREATER THAN
GE or GREATER THAN OR EQUAL TO
LT or LESS THAN
LE or LESS THAN OR EQUAL TO
NE or NOT EQUAL TO

These operators can be applied to alphabetic as well as numeric characters:

The letter E is greater than B and less than T.
Smith is less than Smithson.
Smythe is greater than Smith.

Relational operators other than EQUALS may be useful when exact information is unknown or a range of values is required:

WHEN AUTHOR(1) IS "World Bank" AND YEAR IS GREATER THAN OR EQUAL TO "76" LIST...
This will retrieve everything listed under World Bank (as the first author) published from 1976 to the most recent year in the file.

WHEN SUBJECT IS GREATER THAN OR EQUAL TO "AA00" AND SUBJECT IS LESS THAN OR EQUAL TO "AE70" LIST...
This will retrieve all records encoded with subjects AA00 to AE70, inclusive. In addition, using GE and LE in this case is easier than formulating the strategy as follows:

WHEN SUBJECT IS "AA00" OR SUBJECT IS "AA50" OR SUBJECT IS "AB50" OR SUBJECT IS "AC00" OR SUBJECT IS "AD10" OR SUBJECT IS "AD50" OR SUBJECT IS "AE10" OR SUBJECT IS "AE30" OR SUBJECT IS "AE40" OR SUBJECT IS "AE50" OR SUBJECT IS "AE70" LIST...

Be sure that when using GT/GE you consider also using a corresponding LT/LE (or vice versa). By themselves, these relational operators are not specific and can produce a list of results far exceeding requirements. For example, in searching for an author, the spelling of which might be Blakely or Blakeley, and whose first initials are unknown, the following strategy in Inquiry would be appropriate:

WHEN AUTHOR(1) IS GREATER THAN "Blake" AND LESS THAN "Blakem" LIST...

The following should be avoided:

WHEN AUTHOR(1) IS GREATER THAN "Blake" LIST...
This strategy will result in a list of every author (1) in the file which is alphabetically larger than Blake, that is, every author (1) from Blake to Zymelman.

(One alternative to this type of search is to use Display.)

Another example of this type of search is:

> WHEN COUNTRY CODE IS "G232" AND SUBJECT GE "JA00" AND COUNTRY CODE IS "G232" AND SUBJECT LE "JM70" LIST...
> This will yield everything from JA00 to JM70 on Country Code G232 which is Egypt. NOTE: You must repeat the Country Code with the corresponding relational operator. There is no parenthetical nesting in Inquiry. You <u>cannot</u> say "When country code is 'G232' and (Subject GE 'JA00' and Subject LE 'JM70')".

It will not be necessary to use a corresponding relational operator when you know that the range of values is already very limited:

> WHEN YEAR GE "82" LIST...
> WHEN AUTHOR(1) GE "Zales" LIST...
> WHEN SUBJECT LT "AD10" LIST...

5. Searching on two of the fields in the DIC database poses additional problems. AUTHOR and KEYWORD are fields which may have multiple values; they are known as occurring or repeating fields. Each value for the field occupies only one position, or one occurrence, of that field. AUTHOR can have up to seven repeats, each one being labeled AUTHOR(1) through AUTHOR(7). The maximum number of KEYWORDS possible is twelve, KEYWORD(1) through KEYWORD(12). In conducting a query on either of these fields, you must specify which occurrence is to be searched; Inquiry does not automatically search every occurrence for the value given. Since it is difficult to be sure that an author is always listed in the first position, for example, it would be best to search every occurrence for that author:

> WHEN AUTHOR(1) IS "Smith, J. S." OR AUTHOR(2) IS "Smith, J. S." OR AUTHOR(3) IS "Smith, J. S." OR AUTHOR(4) IS "Smith, J. S." OR AUTHOR(5) IS "Smith, J. S." OR AUTHOR(6) IS "Smith, J. S." OR AUTHOR(7) IS "Smith, J. S." LIST...

The same strategy should be used with KEYWORD(1) through KEYWORD(12) for the most comprehensive results.

6. As stated in 1. above, the LIST clause allows you to pull certain fields from the records to be displayed. Keep in mind, however, that in all Inquiry searches, the fields which were named in the search will always be shown on the display screen first, before any other fields you might wish to see. The results of the author search in 5. above would appear as follows:

AUTHOR(1)	AUTHOR(2)	AUTHOR(3) to (7)
Smith, J. S.	Smith, J. S.	Jones, B. W.
Jones, B. W.	Smith, J. S.	Price, A. M.
Price, A. W.	Craig, P. T.	Smith, J. S.

Each occurrence of the author (up to 7) as specified in the search statement would appear across the screen before other fields named in the LIST clause.

To move across, up, or down the screen to view all fields on display, follow instructions shown at the very top of the screen. Only those options available at a given point will be displayed. Options used for moving around the screen and their corresponding PF-Keys are:

PF-Key	Move
2	First. Displays first record at the beginning of the screen.
4	Previous. Shows previous screen.
5	Next. Shows next screen.
6	Down. Each touch of the key moves the screen down one line.
7	Up. Each touch of the key moves the screen up one line.
9	L. Margin. Shifts the screen so that the left margin appears first.
10	R. Margin. Shifts the screen so that the right margin comes into view.
11	Left 15. Shifts the screen to the left 15 spaces.
12	Right 15. Shifts the screen to the right 15 spaces.
13	Left 1. Shifts the screen 1 space to the left.
14	Right 1. Shifts the screen 1 space to the right.
15	Print. Allows you to print all or part of the <u>results</u> of the inquiry (not just the screen).

When the option to print the results of the inquiry (15) does not appear at the top of the screen, the width of the screen exceeds the maximum width of the paper, i.e., approximately 132 spaces. In the author search as shown, there would be no option to print. If you need to have the results of a search printed directly from the screen, you may wish to cut down on the number of fields to be listed in display, or you may exit from Inquiry and then create a Report Definition from the new file (hit list) generated by the query. To create a report, select PF-Key 3 from the menu that appears on the screen after exiting Inquiry. The next screen will ask you to supply a name of your choosing (up to 8 characters) for the new file. Once you know how to create reports using the report utility, you can use the hit list resulting from your search and make a useful report format.

The Inquiry Screen

After pressing PF-Key 2 to get into Inquiry from the Main Menu, the Inquiry screen will appear. A paragraph at the top gives

directions for viewing all of the fieldnames in the file (PF-Key 15), and instructions on formulating searches (PF-Key 14).

Type in the search statement on the highlighted lines being certain to name each field every time a value is given; and place each value within quotation marks. Be sure to type in zeroes rather than capital Os where required, e.g., in subject codes. When typing a long search statement on the screen, press the "New Line" key or "Tab" before the end of each line to avoid splitting words.

After typing in the query, decide whether to give the results a title. The title line is at the bottom of the screen. If no title is provided, "RESULTS OF INQUIRY" will be automatically given on the screen.

Press the "Enter" key. If the search has been stated correctly, the computer will reformulate it, replacing connectors and relational operators with symbols, and show it at the top of the screen, just under the instructions paragraph. If there is an error, a message will appear. Errors usually occur when quotation marks, relational operators, or fieldnames are omitted. The cursor points to the place where the mistake was made.

When the new search statement appears, press PF-Key 16 to run the search.

When the results appear, you may then print the screen (PF-Key 15) if given the option. The screen which appears asks you to name which part of the results file you wish to have printed; ALL is given automatically. If you need only part of the file, specify which record numbers, the first citation being called record number 1, or which page numbers you wish to print.

After finishing the search, press PF-Key 16 to exit. The next screen gives you the chance to formulate another query (PF-Key 1), save the previous query to be used again (PF-Key 2), create a Report Definition File (PF-Key 3), or exit. If you select formulating another query, another screen will appear that gives information on the data file being searched. Press "Enter" and the query screen will reappear.

To save your query should you wish to reuse it, press PF-Key 2. Give a name to the query (up to 8 characters) and place it in a library (DICSAVE). Recalling the query must be accomplished through the main command menu. The name of the query then becomes the name of the program to be run and DICSAVE in the library, (e.g., run KEYQUERY in DICSAVE on VOL001).

Chapter 6

Report

The Report Utility allows you to set up formats for printing out parts of the file defined either within the Report Definition phase or through Inquiry.

A printed or displayed report can have up to three lines for each citation with a maximum of 132 characters per line. Creating a report involves selecting fields to be used, arranging them by line and sequence within the line, and possibly shortening some fields or the spaces between fields to be certain that each line does not exceed 132 characters. (Refer to the Field Display Table for names and length of each field.) Other steps include sorting or ordering the citations by author, title, etc., providing an informative title, clearly understood column headings, and limits (data limits) for defining which part of the file will be used in the report. This last is necessary because unless data limits are set up, the report will be run against the entire file.

To run the Report Utility, which includes creating new Report Definitions, modifying existing reports, and printing reports, press PF-Key 3 from the Main Menu. The following sequence of screen displays will appear. Refer to the section on "Report" in the <u>WANG VS Utilities Reference Manual</u> for additional detailedexplanations.

18

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234456
*****************************************************************************
*
*  ***  MESSAGE 0001 BY REPORT
*
*                      RESPONSE REQUIRED BY  PROGRAM  REPORT
*                              TO SELECT FUNCTION
*
*
*  WANG VS REPORT UTILITY VERSION 3.01.03
*   THIS UTILITY IS USED TO:
*
*                A) CREATE A NEW REPORT DEFINITION
*                B) MODIFY AN EXISTING REPORT DEFINITION
*                C) PRODUCE A REPORT BASED UPON AN EXISTING REPORT DEFINITION
*
*
*                     PFKEY     ACTION
*
*                       2        CREATE A REPORT DEFINITION
*                       3        MODIFY REPORT ATTRIBUTES
*                       4        PRINT A REPORT
*
*
*
*                      16        END JOB
*
*
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234456
*****************************************************************************
```

To create a report, press PF-Key 2.

19

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
*
*
*
*                          DEFINE A REPORT
*
*
*      THE REPORT DEFINITION OPTION OF THE REPORT UTILITY ENABLES THE USER TO
*       DEFINE A REPORT INTERACTIVELY INSTEAD OF BY WRITING A NEW PROGRAM TO
*          ACCOMPLISH THE TASK.  THE FIRST STEP IS TO DEFINE THE REPORT.
*      THE REPORT ID WILL BECOME THE NAME OF A FILE CONTAINING THE INFORMATION
*                    NEEDED TO PRINT THE DESIRED REPORT.
*
*
*              REPORT ID  REPORT5*    (ANY VALID FILE NAME)
*
*                WILL THE REPORT REQUIRE ANOTHER FILE
*              FOR ADDITIONAL INPUT FIELD(S)?  NO*
*
                WILL A USER EXIT PROGRAM BE USED TO ALLOW SPECIAL
              FORMAT CONTROL OF THE PRINTED REPORT ?  NO*

                  PRESS PF16 TO RETURN TO THE REPORT UTILITY MENU
                         **  PRESS ENTER TO CONTINUE  **

*****************************************************************************
          1         2         3         4         5         6         7
 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

Supply any name up to 8 characters. "Report5" is used above as an example. This name will be needed again for printing and/or modifying the report. It will be stored automatically in ___RPT. (The first three characters are taken from your USERID.)

20

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
*
*
*
*
*
*                          PRIMARY_DATA_FILE_SELECTION
*
*
*        SPECIFY THE NAME OF THE PRIMARY FILE TO BE USED IN THE REPORT.
*      THE PRIMARY FILE IS THE ONLY FILE ON WHICH A SORT CAN BE PERFORMED,
*      AND IT MUST CONTAIN THE KEY TO CHAIN TO ANY OTHER FILE USED IN THE
*                                  REPORT.
*
*
*   PRIMARY FILE = EGYPT001     IN LIBRARY = DICDATA*    ON VOLUME = VOL444
*                  DIC001
*
*
*                      **  PRESS ENTER TO CONTINUE  **
*
*
*
*
*
*
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

To create a report, supply the name of the datafile next to "Primary File", the library which contains that file, and the volume.

```
*********************************************************************************
         1         2         3         4         5         6         7
12345673901234567890123456789012345678901234567890123456789012345678901234567 39
*********************************************************************************
```

PRIMARY FILE FIELD SELECTION

INDICATE WITH AN 'X' THE FIELDS THAT ARE TO BE USED FOR THE REPORT.
THE SUM OF THE PRIMARY, SECONDARY, AND NEW FIELDS SELECTED CANNOT EXCEED 80.

FIELD ID		X	FIELD ID		X	FIELD ID		X
AR		*	AU	(01)	X	AU	(02)	*
AU	(03)	*	AU	(04)	*	AU	(05)	*
AU	(06)	*	AU	(07)	*	AW		*
BT		X	C		*	CT		*
DF		*	DT		*	GC		X
ID		X	J		*	KY	(01)	*
KY	(02)	*	KY	(03)	*	KY	(04)	*
KY	(05)	*	KY	(06)	*	KY	(07)	*
KY	(08)	*	KY	(09)	*	KY	(10)	*
KY	(11)	*	KY	(12)	*	LA		*
N1		X	N2		X	N3		*
OC		*	P		*	RS		*
SU		X	T1		X	T2		X
T3		*	YR		X			

** PRESS ENTER TO CONTINUE **

```
*********************************************************************************
         1         2         3         4         5         6         7
?345673901234567890123456789012345678901234567890123456789012345678901234567390
*********************************************************************************
```

Select, by typing "X", the fields you wish to appear in the report, and those which you may need for sorting or defining how the file will be searched. Not all fields chosen need appear in the final report.

```
*****************************************************************************
****          1         2         3         4         5         6         7
**** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
*  *
* 1*
* 2*
* 3*
* 4*
* 5*                          DEFINE NEW FIELDS
* 6*
* 7*
 8*       THIS OPTION ALLOWS THE USER TO DEFINE NEW FIELDS FOR THE PURPOSE OF
 9*          THE REPORT, USING A COMBINATION OF THE FIELDS ALREADY SELECTED.
10*       YOU MAY ADD, SUBTRACT, MULTIPLY, OR DIVIDE NUMERIC FIELDS WITH OTHE
 1*        NUMERIC FIELDS AND/OR LITERAL CONSTANTS.  ALSO YOU MAY CONCATENATE
 2*      (PUT TWO FIELDS TOGETHER SIDE BY SIDE) CHARACTER FIELDS AND/OR LITERA
 3*                                  CONSTANTS.
 4*
 5*
 6*            DO YOU WISH TO DEFINE ANY NEW FIELDS?  YES
 7*
 8*
 9*
20*                     **  PRESS ENTER TO CONTINUE  **
 1*
 2*
 3*
 4*
  *
*****************************************************************************
***          1         2         3         4         5         6         7
*** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
```

If you wish to create a new field from two or more existing fields change the screen value to "YES".

```
*****************************************************************************
**          1         2         3         4         5         6         7
** 12345678901234567890123456789012345678901234567890123456789012345678901234:
*****************************************************************************
 *
1*                                  NEW_FIELDS
2*
3*
4*          SPECIFY ANY NEW FIELDS THAT ARE TO BE CREATED FOR THE REPORT.
5*        THE ALLOWED OPERATORS INCLUDE:  +, -, /, *   (FOR NUMERIC FIELDS),
6*                                        & (CONCATENATION, FOR CHARACTER FIELD
7*
8*          NEW            N=NUMERIC/          LENGTH          DECIMAL_POSITIONS
9*        FIELD_ID          C=CHARACTER    MAX:_N=15,_C=132      (IF_NUMERIC)
0*
1*        CALL****             C                 12*                   *
2*        ********             *                 ***                   *
3*        ********             *                 ***                   *
4*        ********             *                 ***                   *
5*        ********             *                 ***                   *
6*        ********             *                 ***                   *
7*        ********             *                 ***                   *
8*        ********             *                 ***                   *
9*        ********             *                 ***                   *
0*        ********             *                 ***                   *
 *
 *
 *                        **  PRESS ENTER TO CONTINUE  **
 *
 *
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234556
*****************************************************************************
```

The name of the new field must be one word of up to 8 characters. All fields in the DIC system are character fields. The length of the new field is determined by adding the lengths of the original fields. Check the Field Display Table for these values.

The field being created in the example is for call number and will be named "CALL". Its maximum length is 12 characters which is the addition of SUBJECT (4) and DOCUMENT ID (8).

24

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 123456789012345678901234567890123456789012345678901234567890123456789012345
*****************************************************************************
*
*                                NEW FIELDS
*
*
*       PLEASE DEFINE CALL     IN RELATION TO PREVIOUSLY SELECTED FIELDS.
*      THE OPERANDS MAY BE OTHER FIELDS, AND/OR LITERAL CONSTANTS DELIMITED
*              BY DOUBLE QUOTES IF ALPHABETIC.   E.G. "ABCD", 1234.56
*      OPTIONAL OP VALUES INCLUDE:  +, -, /, *   (FOR NUMERIC FIELDS)
*                                   &  (CONCATENATION, FOR CHARACTER FIELDS)
*   (FOR EXAMPLE)
*   NEWFIELD  =    FIELD1                    +     123.00
*
*
*                    FIELD/CONSTANT        OP      FIELD/CONSTANT        OP
*
*   CALL      =    SU******************      &     ID******************     *
*                  *******************      *     *******************     *
*                  *******************      *     *******************     *
*                  *******************      *     *******************     *
*                  *******************      *     *******************     *
*                  *******************      *     *******************
*
*
*          NOTE: THE FIRST BLANK 'OP', DEFINES THE END OF THE EXPRESSION.
*
*                          **  PRESS ENTER TO CONTINUE  **
*
*****************************************************************************
*          1         2         3         4         5         6         7
* 123456789012345678901234567890123456789012345678901234567890123456789012345
*****************************************************************************
```

Type in the original fields in the order they are to be linked together. Always use an ampersand (&) as the operand (OP).

25

```
*****************************************************************************
***          1         2         3         4         5         6         7
*** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
 *
 1*                                   ERROR
 2*
 3*
 4*       YOU HAVE DEFINED A PRINT LINE THAT CONTAINS MORE THAN 132 CHARACTERS.
 5*        (LINE 1 CONTAINS  389, LINE 2 CONTAINS    0, LINE 3 CONTAINS    0)
 6*           SELECT THE APPROPRIATE FUNCTION KEY TO ENABLE YOU TO REDUCE
 7*                   THE NUMBER OF CHARACTERS IN THE PRINT LINE.
 8*
 9*        (REMEMBER:  THE SPACE RESERVED FOR A FIELD ON THE REPORT IS ITS
 0*           EXTERNAL SIZE OR COLUMN HEADING LENGTH, WHICHEVER IS GREATER.)
 1*
 2*
 3*          PFKEY     ACTION
 4*
 5*            1       RESELECT THE FIELDS FOR THE REPORT.  (BEGIN AGAIN)
 6*            2       REDUCE THE EXTERNAL FIELD SIZE OF ONE OR MORE FIELDS.
 7*            3       REDUCE THE SPACING BETWEEN FIELDS.
 8*            4       REDUCE THE LENGTH OF ONE OR MORE COLUMN HEADINGS.
 9*            5       RESELECT PRINT LINE NUMBER FOR FIELDS, OR
 0*                      SPECIFY FIELDS TO BE USED IN REPORT PREPARATION,
 1*                      BUT NOT APPEAR ON THE REPORT.
 2*
 3*           16       RETURN TO THE REPORT UTILITY MENU.
 4*
 *
*****************************************************************************
**           1         2         3         4         5         6         7
** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
```

When selecting the fields to be used for the report, the computer automatically places them all together on the first line. This generates the error message shown above in the first paragraph. The first step in correcting the error is to resequence the fields and suppress those which will not appear in the final report print-out.

Press PF-Key 5.

26

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234456
*****************************************************************************
*
*                              FIELD_SEQUENCE
*
*     FIELDS SELECTED FOR THE REPORT ARE LISTED BELOW.  INDICATE THE SEQUENCE
*   WHICH THE FIELDS ARE TO APPEAR ON THE REPORT BY SPECIFYING THE LINE (1,2,0
*   AND THE POSITION (0-80) ON THAT LINE.  FIELDS WITH '99'SEQUENCE DO NOT APP
*   ON THE REPORT, BUT ARE USED IN THE PREPARATION OF THE REPORT.
*
*  FIELD_ID     SEQ       FIELD_ID    SEQ       FIELD_ID    SEQ       FIELD_ID
*
* AU       (01) 1 01     BT          1 02      GC          1 03      ID
* N1            1 05     N2          1 06      SU          1 07      T1
* T2            1 09     YR          1 10      CALL        1 11
*
*
*
*
*
*
*
*
*                      ** PRESS ENTER TO CONTINUE ** 
*
*
*
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

This is how the computer has sequenced the fields on the report. The first number shows on which line the field will appear, and the second number indicates which position the field will take on that line.

Note that all fields have automatically been placed on Line 1.

```
*********************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567 39
*********************************************************************************
```

FIELD_SEQUENCE

FIELDS SELECTED FOR THE REPORT ARE LISTED BELOW. INDICATE THE SEQUENCE IN WHICH THE FIELDS ARE TO APPEAR ON THE REPORT BY SPECIFYING THE LINE (1,2,OR 3 AND THE POSITION (0-80) ON THAT LINE. FIELDS WITH '99' SEQUENCE DO NOT APPEAR ON THE REPORT, BUT ARE USED IN THE PREPARATION OF THE REPORT.

FIELD_ID	SEQ	FIELD_ID	SEQ	FIELD_ID	SEQ	FIELD_ID	SEQ
AU (01)	1 01	BT	1 99	GC	1 99	ID	1 9
T1	3 03	N2	1 99	SU	1 99	T1	2 0
T2	2 02	YR	3 02	CALL	3 01		

** PRESS ENTER TO CONTINUE **

```
*********************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567 39
*********************************************************************************
```

Resequence the fields by line number and position within lines by deciding exactly how you would like your final report to look. Type in "99" for the fields which you do not wish to appear in the report. They can be used at another time in the report modification phase. Notice that "SU" and "ID" have been assigned a "99" because they are needed for the new "CALL" field. However, there is no reason that one or both of these fields could not appear in the report in addition to "CALL".

In the format shown above, the first report line will consist of the first author in the record, the second report line will be for the two first lines of the title field, and the third report line will be the call number, year, and first line of the notes field.

```
*****************************************************************************
****          1         2         3         4         5         6         7
**** 1234567890123456789012345678901234567890123456789012345678901234567890123
*****************************************************************************
*  *
* 1*                                   ERROR
* 2*
* 3*
* 4*       YOU HAVE DEFINED A PRINT LINE THAT CONTAINS MORE THAN 132 CHARACTER
* 5*        (LINE 1 CONTAINS   67,  LINE 2 CONTAINS  134,  LINE 3 CONTAINS   8
* 6*           SELECT THE APPROPRIATE FUNCTION KEY TO ENABLE YOU TO REDUCE
* 7*                   THE NUMBER OF CHARACTERS IN THE PRINT LINE.
* 8*
* 9*        (REMEMBER:  THE SPACE RESERVED FOR A FIELD ON THE REPORT IS ITS
*10*           EXTERNAL SIZE OR COLUMN HEADING LENGTH, WHICHEVER IS GREATER.)
* 1*
* 2*
* 3*          PFKEY     ACTION
* 4*
* 5*            1       RESELECT THE FIELDS FOR THE REPORT.  (BEGIN AGAIN)
* 6*            2       REDUCE THE EXTERNAL FIELD SIZE OF ONE OR MORE FIELDS.
* 7*            3       REDUCE THE SPACING BETWEEN FIELDS.
* 8*            4       REDUCE THE LENGTH OF ONE OR MORE COLUMN HEADINGS.
* 9*            5       RESELECT PRINT LINE NUMBER FOR FIELDS, OR
*20*                      SPECIFY FIELDS TO BE USED IN REPORT PREPARATION,
* 1*                      BUT NOT APPEAR ON THE REPORT.
* 2*
* 3*           16       RETURN TO THE REPORT UTILITY MENU.
* 4*
*  *
*****************************************************************************
***          1         2         3         4         5         6         7
*** 1234567890123456789012345678901234567890123456789012345678901234567890123
*****************************************************************************
```

After entering the previous sequencing screen, another error message will appear because the second line with Title1 and Title2 is longer than the maximum 132 characters.

At this point, the external field size must be changed. Press PF-Key 2.

29

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

EXTERNAL_FIELD_SIZE

INDICATE THE NUMBER OF CHARACTER POSITIONS THAT THE FIELD IS TO OCCUPY ON TH: REPORT. THIS CAN BE USED TO ADD BLANK CHARACTERS, OR TO TRUNCATE FIELDS. CHARACTER FIELDS ARE LEFT-JUSTIFIED, NUMERIC FIELDS RIGHT JUSTIFIED.

FIELD_ID		SIZE	FIELD_ID	SIZE
AU	(01)	067	T1	067
T2		061	CALL	012
YR		002	N1	067

** PRESS ENTER TO CONTINUE **

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

T2 has been reduced from 67 to 61 characters. On this screen fields can be lengthened or shortened depending on required spacing or appearance.

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

REPORT DEFINITION OPTIONS

SELECT THE APPROPRIATE PROGRAM FUNCTION KEY TO INDICATE THE DESIRED REPORT DEFINITION OPTION.
SELECT PF16 TO EXIT FROM THE REPORT DEFINITION PHASE, AND RETURN TO GENERAL UTILITY MENU.

PFKEY	ACTION	DEFAULT ACTION
1	DISPLAY THE REPORT DEFINITION MENU	
2	REPORT TITLE INFORMATION	'REPORT ID'
3	COLUMN HEADINGS	FIELD ID'S
4	SPACING BETWEEN FIELDS	2 SPACES
5	FIELD SEQUENCE ON REPORT	FILE ORDER
6	EXTERNAL FIELD SIZE	PER CONTROL FIL
7	EDIT OPTIONS	PER CONTROL FIL
8	DATA LIMITS FOR RECORD SELECTION	NONE
9	SORT FIELDS	NONE
10	CONTROL FIELDS	NONE
11	REPORT SUMMARY OPTIONS	NONE
12	PRINT HEADINGS AND DUMMY DETAIL LINES	
16	EXIT REPORT DEFINITION PHASE	

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

All errors having been corrected, the screen now displays the "Report Definitions Options". You can go directly to any option by hitting the appropriate PF-Key, or simply hit "Enter" to progress through the sequence of designing a format. The following screens were obtained by hitting "Enter".

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************

                          REPORT TITLE INFORMATION

REPORT TITLE:          PUBLICATIONS ON BANKING AND FINANCE*****************
               *******       *IN THE USAID/CAIRO***************************
               *******   DEVELOPMENT INFORMATION CENTER******************
     DEFAULT TITLE IS THE REPORT-ID.

PAGE HEADING:  *******       *BANKING AND FINANCE**************************
               ***********************************************************
               ***********************************************************
     PAGE HEADING DEFAULTS TO THE SAME AS TITLE.

CONTROL BREAK DESCRIPTOR:  COLUMN                DESCRIPTOR
               LEVEL 1       001   ****************************************
               LEVEL 2       001   ****************************************
               LEVEL 3       001   ****************************************
               LEVEL 4       001   ****************************************
               LEVEL 5       001   ****************************************


1-MENU  2-TITLES  3-COLUMN HEADINGS  4-SPACING  5-SEQUENCE  6-EXT. FIELD SI
7-EDIT  8-DATA LIMITS  9-SORT  10-CONTROL FIELDS  11-SUMMARY OPTIONS  16-EX

*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

The name of the report definition will automatically appear as the title. If you wish to assign a different title, format it in the section shown above. The page heading title applies to titles for the second and subsequent pages of the report.

32

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 123456789012345678901234567890123456789012345678901234567890123456789012345678
*****************************************************************************
*
*                              COLUMN HEADINGS
*
*
*     THE FIELD ID IS THE FIELD'S COLUMN HEADING UNLESS A DIFFERENT HEADING IS
*     SPECIFIED BELOW.  THE SPACE ALLOCATED FOR THE FIELD ON THE REPORT IS THE
*       COLUMN HEADING LENGTH, OR EDITED FIELD LENGTH, WHICHEVER IS GREATER.
*
*  FIELD SIZE    FIELD ID          COLUMN HEADING                SUB HEADING

     067        AU        (01)  AU************************   ************************
     067        T1              T1************************   ************************
     061        T2              T2************************   ************************
     012        CALL            CALL*********************   ************************
     002        YR              YR************************   ************************
     067        N1              N1************************   ************************

                          **. PRESS ENTER TO CONTINUE **

  1-MENU  2-TITLES  3-COLUMN HEADINGS  4-SPACING  5-SEQUENCE  6-EXT. FIELD SIZ
  7-EDIT  8-DATA LIMITS  9-SORT  10-CONTROL FIELDS  11-SUMMARY OPTIONS  16-EXI

*****************************************************************************
          1         2         3         4         5         6         7
 123456789012345678901234567890123456789012345678901234567890123456789012345678
*****************************************************************************
```

Each field selected for the report will have a column heading. The computer automatically assigns the abbreviated fieldname as the heading.

```
*********************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456789
*********************************************************************************
```

COLUMN HEADINGS

THE FIELD ID IS THE FIELD'S COLUMN HEADING UNLESS A DIFFERENT HEADING IS SPECIFIED BELOW. THE SPACE ALLOCATED FOR THE FIELD ON THE REPORT IS THE COLUMN HEADING LENGTH, OR EDITED FIELD LENGTH, WHICHEVER IS GREATER.

FIELD SIZE	FIELD ID		COLUMN HEADING	SUB HEADING
067	AU	(01)	AUTHOR**********	**********
067	T1		TITLE**********	**********
061	T2		**********	**********
012	CALL		CALL*NUMBER**********	**********
002	YR		YEAR**********	**********
067	N1		NOTE**********	**********

** PRESS ENTER TO CONTINUE **

1-MENU 2-TITLES 3-COLUMN HEADINGS 4-SPACING 5-SEQUENCE 6-EXT. FIELD SIZE
7-EDIT 8-DATA LIMITS 9-SORT 10-CONTROL FIELDS 11-SUMMARY OPTIONS 16-EXIT

```
*********************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456789
*********************************************************************************
```

Rewrite the headings as you wish them to appear on the report. Note that T2 has been suppressed as a heading in the example since it is a continuation of the title field.

```
*****************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

SPACES_BETWEEN_FIELDS

TWO SPACES ARE NOMINALLY GENERATED BETWEEN FIELDS ON THE REPORT. THIS OPTION PROVIDES THE USER WITH THE CAPABILITY TO CHANGE THE NUMBER OF SPACES THAT ARE TO PRECEDE THE FIRST CHARACTER OF THE FIELD AND HEADING

FIELD_ID		SPACES	FIELD_ID	SPACES
AU	(01)	02	T1	02
T2		00	CALL	02
YR		04	N1	05

** PRESS ENTER TO CONTINUE **

1-MENU 2-TITLES 3-COLUMN HEADINGS 4-SPACING 5-SEQUENCE 6-EXT. FIELD SIZE
7-EDIT 8-DATA LIMITS 9-SORT 10-CONTROL FIELDS 11-SUMMARY OPTIONS 16-EXIT

```
*****************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

Adjust the number of spaces that precede each field if desired. For fields such as Title1-3 and Notes1-3 which are really one long field broken into separate lines, eliminate spaces in front of the second and third parts so that the lines can run together continuously.

You may also wish to separate smaller fields with more than the two spaces automatically generated by the program.

35

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456789
*****************************************************************************
```

DATA LIMITS

THIS OPTION ALLOWS THE USER TO SELECT THE RECORDS TO BE PRINTED BY DEFINING LIMITS ON THE VALUES OF CERTAIN FIELDS IN THE RECORDS. THE ALLOWED 'OP' VALUES ARE:

GT = GREATER THAN GE = GREATER THAN OR EQUAL TO
LT = LESS THAN LE = LESS THAN OR EQUAL TO
EQ = EQUAL TO NE = NOT EQUAL TO

FIELD ID	OP	FIELD/CONSTANT	AND/OR	OP	FIELD/CONSTANT	AND/O
SU**********	EQ	"DE10"**********	***	**	**********	***
	**	**********	***	**	**********	***
	**	**********	***	**	**********	***
	**	**********	***	**	**********	***
	**	**********	***	**	**********	

THE LOGICAL CONNECTOR TO THE NEXT SET OF LIMITS = AND (AND/OR)

NOTES: THE FIRST BLANK 'AND/OR' DEFINES THE END OF THE EXPRESSION.
PRESS ENTER TO DEFINE ANOTHER SET OF LIMITS. (MAXIMUM IS TEN)
PRESS PFKEY 13 TO DELETE THIS SET OF LIMITS.

1-MENU 2-TITLES 3-COLUMN HEADINGS 4-SPACING 5-SEQUENCE 6-EXT. FIELD SIZE
7-EDIT 8-DATA LIMITS 9-SORT 10-CONTROL FIELDS 11-SUMMARY OPTIONS 16-EXIT

*****

"Data Limits" define the portion of the file on which the report will created. If, for example, you are creating a new report to print out citations from your large datafile, the program will use the entire file to generate the report unless data limits are used to define the contents of the report. Data limits are really another way to define a search to be run on the file, much as in Inquiry, but not as flexible.

Each screen allows you to choose one field and supply a value or values through the use of the relational operators GT, LT, EQ, GE, LE, or NE. You can only specify one field per screen, and if necessary, connect it to additional screens (10 screens total) through the use of the conectors AND or OR. AND is automatically assigned as the connector to the next screen so you must change that value to OR if needed. Only those fields chosen on the field selection screen can be used for defining data limits. If you wish to add fields you must exit the report creation mode and go into report modification.

```
*****************************************************************************
         1         2         3         4         5         6         7
 1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************

                                DATA LIMITS

      THIS OPTION ALLOWS THE USER TO SELECT THE RECORDS TO BE PRINTED BY
       DEFINING LIMITS ON THE VALUES OF CERTAIN FIELDS IN THE RECORDS.
       THE ALLOWED 'OP' VALUES ARE:
             GT = GREATER THAN        GE = GREATER THAN OR EQUAL TO
             LT = LESS THAN           LE = LESS THAN OR EQUAL TO
             EQ = EQUAL TO            NE = NOT EQUAL TO

  FIELD ID     OP     FIELD/CONSTANT    AND/OR  OP     FIELD/CONSTANT    AND/
ID**********   GE  "EGAAA001"**********   AND   LE  "EGAAA999"**********   **
               **  ********************   ***   **  ********************   **
               **  ********************   ***   **  ********************   **
               **  ********************   ***   **  ********************   **
               **  ********************   ***   **  ********************
    THE LOGICAL CONNECTOR TO THE NEXT SET OF LIMITS = AND  (AND/OR)

    NOTES:  THE FIRST BLANK 'AND/OR' DEFINES THE END OF THE EXPRESSION.
            PRESS ENTER TO DEFINE ANOTHER SET OF LIMITS.  (MAXIMUM IS TEN)
            PRESS PFKEY 13 TO DELETE THIS SET OF LIMITS.

 1-MENU  2-TITLES  3-COLUMN HEADINGS  4-SPACING  5-SEQUENCE  6-EXT. FIELD SIZ
 7-EDIT  8-DATA LIMITS  9-SORT  10-CONTROL FIELDS  11-SUMMARY OPTIONS  16-EXI

*****************************************************************************
         1         2         3         4         5         6         7
 1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

This is the second set of data limits for the sample report definition. It is connected to the prevous screen by the connector AND, which means that documents in the report will have to satisfy the limits set by <u>both</u> screens, that is, they must be classed DE10 (Banking and Finance) and must have an ID number from EGAAA001 to EGAAA999.

Pressing "Enter" again will produce another blank data limits screen. If there are no more data limits to be added, press "Enter" to get to the next option.

```
*********************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567890
*********************************************************************************
```

FILE SORT

THIS OPTION ALLOWS THE USER TO DEFINE THE ORDER OF RECORDS PRINTED ON THE REPORT. SPECIFY THE FIELD IDS (FROM THE PRIMARY FILE ONLY), ON WHICH THE FILE IS TO BE SORTED, AND THEIR ORDER OF IMPORTANCE. (1: HIGHEST LEVEL, THRU 8: LOWEST LEVEL)

FIELD_ID	LEVEL	ASCENDING/DESCENDING
AU(1)*******	1	A
**********	*	*
**********	*	*
**********	*	*
**********	*	*
**********	*	*
**********	*	*
**********	*	*

1-MENU 2-TITLES 3-COLUMN HEADINGS 4-SPACING 5-SEQUENCE 6-EXT. FIELD SIZE
7-EDIT 8-DATA LIMITS 9-SORT 10-CONTROL FIELDS 11-SUMMARY OPTIONS 16-EXIT

```
*********************************************************************************
         1         2         3         4         5         6         7
23456789012345678901234567890123456789012345678901234567890123456789012345678901
*********************************************************************************
```

For sorting, select any field already chosen for the report definition whether it is to appear on the report or not.

38

```
*********************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567890123
*********************************************************************************
```

REPORT DEFINITION OPTIONS

SELECT THE APPROPRIATE PROGRAM FUNCTION KEY TO INDICATE THE DESIRED REPORT DEFINITION OPTION.
SELECT PF16 TO EXIT FROM THE REPORT DEFINITION PHASE, AND RETURN TO GENERAL UTILITY MENU.

PFKEY	ACTION	DEFAULT ACTION
1	DISPLAY THE REPORT DEFINITION MENU	
2	REPORT TITLE INFORMATION	'REPORT ID'
3	COLUMN HEADINGS	FIELD ID'S
4	SPACING BETWEEN FIELDS	2 SPACES
5	FIELD SEQUENCE ON REPORT	FILE ORDER
6	EXTERNAL FIELD SIZE	PER CONTROL FILE
7	EDIT OPTIONS	PER CONTROL FILE
8	DATA LIMITS FOR RECORD SELECTION	NONE
9	SORT FIELDS	NONE
10	CONTROL FIELDS	NONE
11	REPORT SUMMARY OPTIONS	NONE
12	PRINT HEADINGS AND DUMMY DETAIL LINES	
16	EXIT REPORT DEFINITION PHASE	

```
*********************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567890123
*********************************************************************************
```

When all options have been reviewed, the "Report Definitions Options" menu reappears. It may be a good idea to quickly run through your definitions by pressing "Enter".

When the report definition is complete, press PF-Key 16.

```
*****************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567890
*****************************************************************************

 ***  MESSAGE 0001 BY REPORT

                    RESPONSE REQUIRED BY  PROGRAM  REPORT
                            TO SELECT FUNCTION


 WANG VS REPORT UTILITY VERSION 3.01.03
  THIS UTILITY IS USED TO:

            A) CREATE A NEW REPORT DEFINITION
            B) MODIFY AN EXISTING REPORT DEFINITION
            C) PRODUCE A REPORT BASED UPON AN EXISTING REPORT DEFINITION

                 PFKEY    ACTION

                   2       CREATE A REPORT DEFINITION
                   3       MODIFY REPORT ATTRIBUTES
                   4       PRINT A REPORT


                  16       END JOB

*****************************************************************************
         1         2         3         4         5         6         7
23456789012345678901234567890123456789012345678901234567890123456789012345678901
*****************************************************************************


          Press PF-Key 4 to print the report.
```

40

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************

 ***  MESSAGE 0002 BY REPORT

                 INFORMATION REQUIRED BY  PROGRAM  REPORT
                              TO DEFINE OPTIONS


    SELECT THE OPTIONS TO PRINT A REPORT

    THIS OPTION IS USED TO PRINT A REPORT THAT HAS BEEN PREVIOUSLY DEFINED
                     BY THE REPORT DEFINITION OPTION.
            PRESS PF14 FOR AN EXPLANATION OF THE PRINT OPTIONS.

        REPORT ID        = REPORT5*
        REPORT DATE      = 03/18/81        (ANY DATE, PLUS EDIT CHARACTERS)
        OUTPUT DEVICE    = DISPLAY         (PRINTER/DISPLAY)
   CHANGE DATA FILES     = NO*             (YES OR NO)
         COUNT OPTION    = YES             (YES, NO, OR 001 - 999)
           SUM ONLY      = NO*             (YES OR NO)
     LINES PER PAGE      = 55              (05 - 99)
        SELECT LINES     = 123             (COMBINATION OF 1 2 AND 3)
    PRINT LINE SPACING   = 002             (COMBINATION OF NUMBERS 0-5)

         **  PRESS PF16 TO RETURN TO THE REPORT UTILITY MENU  **
                   **  PRESS ENTER TO CONTINUE  **

*****************************************************************************
```

Supply the report ID. If you wish to see the report on the screen before printing, change the "Output Device" to Display. Change "Count Option" to "Yes" if you would like to see a total for the number of citations retrieved. "Print Line Spacing" refers to the number of lines between each citation; 2 or 3 is usually adequate. Press "Enter". If you have chosen the display option, your report will appear on the screen. The length of time required to produce the report often depends upon the size of the file being searched, the number of sort options used, and the number of people using the computer.

Press PF-Key 15 to initiate a printed copy. If you specified printer as the "Output Device", the print request may need to be released in the print queue; check with your programmer concerning print procedures.

41

```
*****************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************

 ***  MESSAGE 0001 BY REPORT

                    RESPONSE REQUIRED BY  PROGRAM  REPORT
                            TO SELECT FUNCTION


 WANG VS REPORT UTILITY VERSION 3.01.03
  THIS UTILITY IS USED TO:

            A) CREATE A NEW REPORT DEFINITION
            B) MODIFY AN EXISTING REPORT DEFINITION
            C) PRODUCE A REPORT BASED UPON AN EXISTING REPORT DEFINITION


                PFKEY      ACTION

                  2        CREATE A REPORT DEFINITION
                  3        MODIFY REPORT ATTRIBUTES
                  4        PRINT A REPORT


                 16        END JOB

*****************************************************************************
         1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

To modify an existing report definition, press PF-Key 3.

42

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234456
*****************************************************************************
*
*
*
*
*
*
*                          MODIFY A REPORT
*
*
*
          THE REPORT MODIFICATION OPTION ALLOWS THE USER TO MODIFY
                              AN EXISTING REPORT.
      PLEASE ENTER THE REPORT ID (THE NAME OF THE REPORT DEFINITION FILE).


                          REPORT ID:  REPORT5*


          ** PRESS PF16 TO RETURN TO THE REPORT UTILITY MENU  **
             **  PRESS PF8 TO CHANGE DATA AND CONTROL FILES  **
                     **  PRESS ENTER TO CONTINUE  **
```

```
*****************************************************************************
          1         2         3         4         5         6         7
 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

Supply the Report ID number of the report to be modified.

To create a report from the results of an Inquiry search, use the name of the "hit list" given at the time of the search.

```
***************************************************************************************
*         1         2         3         4         5         6         7
* 1234567890123456789012345678901234567890123456789012345678901234567
***************************************************************************************
*
*
*
*
*
*                              ADD_MORE_FIELDS
*
*
*          THIS OPTION ALLOWS THE USER TO ADD MORE FIELDS TO THE REPORT.
*        THESE FIELDS MAY COME FROM THE DATA FILE(S) OR MAY BE NEW FIELDS
*
*
*
*                    DO YOU WISH TO ADD ANY NEW FIELDS ?  YES
*
*
*
*                     ** PLEASE PRESS ENTER TO CONTINUE **

***************************************************************************************
          1         2         3         4         5         6         7
 1234567890123456789012345678901234567890123456789012345678901234567
***************************************************************************************
```

To add fields not included previously, change the answer to "Yes".

```
**************************************************************************************
*         1         2         3         4         5         6         7
* 1234567890123456789012345678901234567890123456789012345678901234567890123456
**************************************************************************************
*
*                           PRIMARY_FILE_FIELD_SELECTION
*
*
*      INDICATE WITH AN 'X' THE FIELDS THAT ARE TO BE ADDED TO THE REPORT.
*   THE SUM OF THE PRIMARY, SECONDARY, AND NEW FIELDS SELECTED CANNOT EXCEED
*
*    FIELD_ID       X              FIELD_ID       X               FIELD_ID     X
*   AR              *             AU      (02)    *              AU     (03)   *
*   AU      (04)    *             AU      (05)    *              AU     (06)   *
*   AU      (07)    *             AW              *              C             *
*   CT              *             DF              *              DT            *
*   J               *             KY      (01)    *              KY     (02)   *
*   KY      (03)    *             KY      (04)    *              KY     (05)   *
*   KY      (06)    *             KY      (07)    *              KY     (08)   *
*   KY      (09)    *             KY      (10)    *              KY     (11)   *
*   KY      (12)    *             LA              *              N3            *
*   OC              *             P               *              RS            *
*   T3              *
*
*
*
*
*
*                    **  PRESS ENTER TO CONTINUE  **
*
**************************************************************************************
          1         2         3         4         5         6         7
 1234567890123456789012345678901234567890123456789012345678901234567890123456
**************************************************************************************
```

Mark the field(s) to be added.

45

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

ADD NEW FIELDS

THIS OPTION ALLOWS THE USER TO DEFINE NEW FIELDS FOR THE PURPOSE OF THE REPORT, USING A COMBINATION OF THE FIELDS ALREADY SELECTED. YOU MAY ADD, SUBTRACT, MULTIPLY, OR DIVIDE NUMERIC FIELDS WITH OTHER NUMERIC FIELDS AND/OR LITERAL CONSTANTS. ALSO YOU MAY CONCATENATE (PUT TWO FIELDS TOGETHER SIDE BY SIDE) CHARACTER FIELDS AND/OR LITERAL CONSTANTS.

DO YOU WISH TO ADD ANY NEW FIELDS? NO

** PRESS ENTER TO CONTINUE **

```
*****************************************************************************
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
*****************************************************************************
```

To create new fields by combining existing ones, change the answer to "Yes" and continue as in the create phase.

```
*****************************************************************************
**          1         2         3         4         5         6         7
** 123456789012345678901234567890123456789012345678901234567890123456789012345
*****************************************************************************
 *
1*
2*
3*
4*
5*
6*                    MODIFY NEW FIELD DEFINITIONS
7*
8*
9*          THIS OPTION ALLOWS THE USER TO MODIFY THE NEW FIELD
0*                    DEFINITIONS OF THE REPORT.
1*
2*
3*
4*          DO YOU WISH TO MODIFY YOUR NEW FIELD DEFINITIONS?  YES
5*
 *
 *
 *                  **  PRESS ENTER TO CONTINUE  **
 *
 *
 *
 *
 *
 *
 *
*****************************************************************************
*          1         2         3         4         5         6         7
* 123456789012345678901234567890123456789012345678901234567890123456789012345
*****************************************************************************
```

To modify the new fields you may have created when formatting the report (e.g., CALL) change the answer to "Yes".

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```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
*
*                                  NEW FIELDS
*
*
*        PLEASE DEFINE CALL     IN RELATION TO PREVIOUSLY SELECTED FIELDS.
*      THE OPERANDS MAY BE OTHER FIELDS, AND/OR LITERAL CONSTANTS DELIMITED
*             BY DOUBLE QUOTES IF ALPHABETIC.   E.G. "ABCD", 1234.56
*      OPTIONAL OP VALUES INCLUDE:  +, -, /, *   (FOR NUMERIC FIELDS)
*                                   &  (CONCATENATION, FOR CHARACTER FIELDS)
*   (FOR EXAMPLE)
*   NEWFIELD  =    FIELD1                    +     123.00
*
*
*                    FIELD/CONSTANT        OP     FIELD/CONSTANT        OP

   CALL      =    SU******************      &    ID******************      *
*               ********************      *    ********************      *
                ********************      *    ********************      *
                ********************      *    ********************      *
                ********************      *    ********************
                                                

        NOTE: THE FIRST BLANK 'OP', DEFINES THE END OF THE EXPRESSION.

                        **  PRESS ENTER TO CONTINUE  **

*****************************************************************************
          1         2         3         4         5         6         7
 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

Make any changes to the new field.

```
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
*
*                        REPORT MODIFICATION OPTIONS
*
*
*      SELECT THE APPROPRIATE PROGRAM FUNCTION KEY TO INDICATE THE DESIRED
*                          REPORT MODIFICATION OPTION.
*      SELECT PF16 TO EXIT FROM THE REPORT MODIFICATION PHASE, AND RETURN TO
*                            GENERAL UTILITY MENU.
*
*            PFKEY        ACTION
*              1         DISPLAY THE REPORT MODIFICATION MENU
*              2         MODIFY THE REPORT TITLE INFORMATION
*              3         MODIFY THE COLUMN HEADINGS
*              4         MODIFY THE SPACING BETWEEN FIELDS
*              5         MODIFY THE FIELD SEQUENCE ON REPORT
*              6         MODIFY THE EXTERNAL FIELD SIZE
*              7         MODIFY THE EDIT OPTIONS
*              8         MODIFY THE DATA LIMITS FOR RECORD SELECTION
*              9         MODIFY THE SORT FIELDS
*             10         MODIFY THE CONTROL FIELDS
*             11         MODIFY THE REPORT SUMMARY OPTIONS
*             12         PRINT HEADINGS AND DUMMY DETAIL LINES
*
*             14         EXIT (WITHOUT MODIFICATION)
*             16         EXIT REPORT MODIFICATION PHASE
*
*****************************************************************************
*          1         2         3         4         5         6         7
* 12345678901234567890123456789012345678901234567890123456789012345678901234567
*****************************************************************************
```

To modify the existing report, work through each option and make desired changes.

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Chapter 7

Maintaining the File

The File Maintenance program is used to add new records to the database, modify or update existing records, and delete records. All functions are carried out through the File Maintenance Menu.

Another important part of modifying records is changing the Document ID number. Since this is not permitted within the ordinary Update function of File Maintenance, a special program, accessible from the Main Menu, is used.

This chapter covers functions of the File Maintenance program and the Document ID modification feature.

Adding New Records

From the Main Menu, press PF-Key 4. The next menu will be:

FILE MAINTENANCE PROGRAM FOR FILE EGYPT

SELECT THE APPROPRIATE PFKEY FOR THE FUNCTION DESIRED.

PFKEY	FUNCTION
PF3	ADD ENTRIES TO THE FILE
PF4	UPDATE THE ENTRIES IN THE FILE
PF5	DELETE ENTRIES IN THE FILE
PF16	EXIT FROM THE PROGRAM

Select PF-Key 3 to add a new entry to the datafile. A blank input screen appears:

```
DT  ******  ID  ********  DF  **  AU  ********  SU  ****  OC  ****  GC  ****
T1  ************************************************************************
T2  ************************************************************************
T3  ************************************************************************
AU  ************************************************************************
    ************************************************************************
    ************************************************************************
    ************************************************************************
    ************************************************************************
    ************************************************************************
    ************************************************************************
N1  ************************************************************************
N2  ************************************************************************
N3  ************************************************************************
ENTER UP TO 12 DESCRIPTOR WORDS BELOW:
************************* ************************* *************************
************************* ************************* *************************
************************* ************************* *************************
************************* ************************* *************************
P  ******  YR  **    C  ******************  CT  *  AR  *******  BT  **
J  ************************************************  LA  ********  RS  *
```

General Rules for Adding Records

1. Using a prepared input sheet (see Sample Input Sheet), type in the information for the appropriate fields. (See "Rules for Entering Data on Individual Fields" below.)

2. There is no lowercase input, every letter will automatically be entered in uppercase; shifting is necessary only for characters on a typewriter keyboard that normally require it. Be sure to enter zeroes (0) rather than the letter O when appropriate. Dates, document identification numbers, and classification codes (SU, OC, GC) require zeroes.

3. The space bar types in a character representing a space. If the space bar is used to move across a line of type, it replaces each typed character with a typed blank.

4. At the end of one field, the screen automatically tabs over to the next.

5. To move from one part of the screen to another, use "Tab", "New Line" or the directional arrows located to the right of the keyboard. DO NOT USE THE "RETURN/ENTER" KEY.

6. After keying in the record, check it over and be very careful that the ID field is correct. If it is not correct, you can still change it before entering the record onto the file.

7. After keying is complete, press "Enter". A new blank screen will appear for the next addition.

Hitting "Enter" Before Completing Input

If in moving from one field to another you hit the "Enter" key, the record will be added to the file, as is, and a new screen will appear. If this happens, exit from the Add Entry mode (PF-Key 16) and press PF-Key 4, "Update the entries in the file". Type in the ID number of the incomplete record, hit "Enter" and finish typing. After entering the record, you will be prompted for another ID. To return to the Add Entry mode, exit from Update (PF-Key 16) and reselect Add Entry (PF-Key 3).

Correcting the ID Field in a Record that has already been Entered; Deleting Records

Once a record has been entered onto the file, the ID field cannot be corrected through Update. You will notice that its value is dimmer than all of the other fieldvalues. There are two ways to change the ID. One way is to use the special program through the Main Menu for modifying the DOCUMENT ID (next section). Another method is through the "Delete entries in the file" function from the File Maintenance Menu. Press PF-Key 5 from the menu and then supply the incorrect ID number; press "Enter". The record will

appear. Press PF-Key 3 to delete the record and then press PF-Key 16 to exit the Delete mode. Go back to Add Entry and re-key the entire record being careful to input the ID number correctly.

To delete a number of records, supply additional Document IDs after completing deletions following the PF-Key 3 step as stated above.

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Sample Input Sheet

BIBLIOGRAPHIC INPUT SHEET

CALL NUMBER:
(This is not keyed into the record.)

1. DATE PROCESSED (DT):
2. DOCUMENT ID (ID):
3. FORMAT:

4. AID/W CONTROL NO. (AW):

5. SUBJECT CLASS (SU-OC-GC):

6. TITLE AND SUBTITLE
T1
T2
T3

7. AUTHORS, PERSONAL AND CORPORATE (A1 X 7)

8. NOTES
N1
N2
N3

9. DESCRIPTORS (KY). ENTER UP TO 12 DESCRIPTOR WORDS BELOW:

10. NO. OF PAGES (P):

11. DOCUMENT DATE (YR):

12. CONTRACT NUMBER (C):

13. CONTRACT TYPE (CT):

14. ABSTRACT--ARDA ISSUE (AR):

15. DOCUMENT TYPE (BT):

16. PROJECT NUMBERS (J):

17. LANGUAGE (LA):

18. RECORD STATUS:

Modifying AID/W Records for Mission Use

The Mission DIC depends heavily on information about documents that has already been gathered by AID/W. This means that the cataloguing work for many of the publications in the DIC and for those regularly received at the Mission has previously been completed and input into the database. The DIC needs only to modify these records rather than perform original cataloguing.

Fields Which Need Modification

1. DOCUMENT ID: A DIC ID number (e.g., EG-AAA-002, HN-AAB-222) must be assigned to those AID/W publications which are in the DIC collection. The first two characters of the ID indicate the country in which the Mission is located. The remaining characters form the rest of the randomly assigned sequential accession number which starts from AAA-001 to AAA-999, to AAB-001 to 999, through AAC, AAD, etc. Documents from AID/W have an ID beginning with PN, PD, or TN.

2. SUBJECT: The classification number must be reviewed since the DIC may use some codes which differ from AID/W.

3. FORMAT: The format for the publication in the DIC should be added.

4. CONTRACT/PROJECT NUMBER: Publications processed by AID/W may be missing contract and project number information for which the Mission may have records. This information should be added.

5. KEYWORD: Keywords may be added or deleted according to the requirements of the DIC. For example, local geographic descriptors should be established on a Mission's descriptor list since they may be a valuable accession point for the Mission. Other locally established descriptors should be included.

Modifying the DOCUMENT ID--the Primary Key

The DOCUMENT ID field functions as the system's primary key - the database filing sequence and fastest means of access to any record. The first two characters of the ID also indicate whether the document belongs to the Mission collection, or is part of the AID/W-produced database. The most important modification made to any document within the Mission's collection is changing the DOCUMENT ID to indicate local ownership.

Since the Update function within the File Maintenance program does not allow the ID field to be modified, a special procedure has been written to permit modification of the ID field by moving the existing value of ID into AW, and at the same time inserting a new value for ID supplied by the Mission. That is, moving the PN# from ID into AW and replacing with the local ID number (e.g, one beginning with EG, HN, etc.).

Sample Record from AID/Washington:

```
ID: PNAAA001        AW:--------
TITLE: FIELD CROPS...
AUTHOR: SMITH, J. S.
ETC.
```

Program to change ID field does the following:

```
ID:--------         AW: PNAAA001
```

1. Moves AID/W-assigned ID value from ID field into blank AW field.

```
ID: HNAAB126        AW: PNAAA001
```

2. Inserts newly assigned local ID number into ID field.

Keep in mind that:

1. The program is designed to move the value of ID into AW, and thus AW must be blank to receive that value.

2. A new value must be supplied to replace the one that is being moved.

3. Any modifications made to the AW field must be accomplished through the ordinary Update program, discussed in the next section. The program will not change an existing AW value.

4. If you are using the program to correct a value in the ID field (perhaps you entered an incorrect number), it will function as if you are replacing the ID and move the old value into AW. If a value for AW already exists, the new value for ID will be replaced and the old AW value will remain as is since the program will not change values in AW. However, if AW is blank, you will be moving an incorrect ID into the AW field. Be sure to return to Update to erase that number from AW.

Instructions

To modify ID, press PF-Key 6 from the Main Menu ("To Modify the Document ID Field") and follow the steps illustrated by these sample screens:

```
*****************************************************************
                DEVELOPMENT INFORMATION CENTER
                   UPDATING DOCUMENT ID'S

OLD DOCUMENT ID:  PNAAA002          NEW DOCUMENT ID:  HNAAA001

OLD AID/WASH. ID:                   NEW AID/WASH ID:



ENTER=RETRIEVE BY KEY, PF2=FIRST ENTRY, PF3=NEXT ENTRY, PF16=EXIT
*****************************************************************
```

With the document, input sheet, or other working sheet in hand which indicates the AID/Washington-assigned DOCUMENT ID (beginning with PN, PD, TN), type that number in the space next to "Old Document ID:". In the screen above, PNAAA002 is the document ID to be changed. In the space next to "New Document ID:" the new local number, HNAAA001, has been typed in.

Press "Enter" and see the next screen.

Note: By pressing PF-Key 2 as indicated at the bottom of the screen, you will gain access to the first DOCUMENT ID of the datafile. Next entry refers to the record after the DOCUMENT ID currently on your screen.

```
*****************************************************************
                DEVELOPMENT INFORMATION CENTER
                  UPDATING DOCUMENT ID'S

OLD DOCUMENT ID:  PNAAA002          NEW DOCUMENT ID:  HNAAA001

OLD AID/WASH. ID:  NONE             NEW AID/WASH. ID:  PNAAA002

PRESS ENTER TO PROCESS THE CHANGE
OR PRESS PFKEY 16 TO RESTART
*****************************************************************
```

This screen allows you to check the changed ID numbers before completing the modification. Note that the Old Document ID number is now displayed next to "New AID/Wash. ID:", directly under the New Document ID. This shows that the Old ID has been moved into a new field, "New AID/Wash. Document No.". Check to see that all numbers are correct and make changes by typing over incorrect characters.

Press "Enter" to complete the modification. If you must begin again, press PF-Key 16.

After completing the modification, the new primary key has become HNAAA001 on the above screen. The record will now be listed in the file under the new ID, and fast access will be made with the new value.

59

```
*****************************************************************
                DEVELOPMENT INFORMATION CENTER
                    UPDATING DOCUMENT ID'S

OLD DOCUMENT ID:  EGAAA005          NEW DOCUMENT ID:  HNAAA001

OLD AID/WASH. ID:  NONE             NEW AID/WASH. ID:  EGAAA005

ENTRY ALREADY EXISTS;  CORRECT BLINKING FIELD
PRESS PFKEY 16 TO RESTART
*****************************************************************
```

In the above screen, HNAAA001 has been typed in as the New Document ID. However, HNAAA001 is already in the file as an existing Document ID. If the program were to accept this change using an ID in the current file, there would be two records with the same Document ID.

When a duplicate ID is entered, the message "Entry already exists" appears on the lower left-hand corner of the screen. The New Document ID field will be blinking and must be corrected.

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```
*****************************************************************
                 DEVELOPMENT INFORMATION CENTER
                     UPDATING DOCUMENT ID'S

OLD DOCUMENT ID:  PNAAB123          NEW DOCUMENT ID:  HNAAA111

OLD AID/WASH. ID:                   NEW AID/WASH. ID:

ENTRY NOT FOUND; CORRECT ENTRY OR
PRESS PFKEY 16 TO RESTART
*****************************************************************
```

If an ID number which is not part of the current file is keyed under the old Document ID, the displayed message indicates that the entry does not exist. Either correct the entry by typing over it, or press PF-Key 16 to begin again.

```
*****************************************************************
                DEVELOPMENT INFORMATION CENTER
                   UPDATING DOCUMENT ID'S

OLD DOCUMENT ID:  HNAAA001        NEW DOCUMENT ID:  HNAAA002


OLD AID/WASH. ID:  PNAAA002       NEW AID/WASH. ID:  PNAAA002

            WARNING:   THE OLD WASH/ID WILL NOT BE CHANGED!



PRESS ENTER TO PROCESS THE CHANGE
OR PRESS PFKEY 16 TO RESTART
*****************************************************************
```

In this case, the user has commanded that the computer move the Old Document ID HNAAA001 into an AID/Washington ID field which already has a value of PNAAA002. Since the Program will only move an Old Document ID into a blank AID/Wash. field and will not change any value already in that AID/Wash. field, the following message flashes on the screen: "Warning: The Old Wash/ID will not be changed!" To change an AID/Wash. field value, use the file maintenance program from the Main Menu.

Additional Modifications through "Update Entries in the File"

Update is used to modify any field within a record except for the DOCUMENT ID. When changing AID/W records for local Mission collections, use Update <u>after</u> changing DOCUMENT ID.

1. To update or modify records, press PF-Key 4 from the File Maintenance menu.

2. Enter the ID number of the record to be updated.

3. When the record appears on the screen make modifications or additions by typing over the existing entry or blanks, or by using the "Insert", "Delete" or "Erase" keys to the right of the keyboard. The space bar cannot be used to move across a line unless the line is already blank because each touch of the bar types in a character which represents a space.

4. Change the Record Status (RS) to C if you have added information to complete the record.

5. When you have finished updating, press "Enter" to place the corrected record on the file.

6. The next screen will give you the option to enter another ID number, go directly to the first entry in the datafile (PF-Key 2), go to the record that follows the one just updated, or exit the Update mode (PF-Key 16).

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Rules for Entering Data on Individual Fields

This section provides a field by field breakdown of records in the database. Each description contains the short and long forms of the field, a brief definition, statement of field format, information on entering data onto the field, and examples and other useful notes.

DT Date on File

Date a new record is added to the file, or the date a record is replaced.
6 numeric characters.
Entered in the form, mmddyy (2 character month, 2 character day, year) with no spaces or other punctuation in between.
Example: January 3, 1981 is entered 010381.

ID Document ID

Unique sequential identification number assigned to every document.
8 characters, the first five of which are alphabetic, the last three numeric.
Entered without hyphens.
Examples: EGAAA003; PDAAD235; HNAAC667; PNAAG962; TNAAA020.
Input sheet may have the following form for ID: EG-AAA-003.
This is the primary key to the file and cannot be modified through the File Maintenance utility once it is entered onto the system. If you make a mistake and have entered the record, you will have to delete the entire record, or use the program "To Modify the DOCUMENT ID" from the Main Menu.

DF Format

Physical format of the full text for each publication.
2 alphabetic characters.
PC for papercopy; MF for microfiche; PM for both.

AW AID/W Document Number

Document ID number assigned by AID/Washington. Usually begins with PN, PD, or TN.
8 characters, the first five of which are alphabetic, the last three numeric.
Entered without hyphens.
Examples: PDAAD235; PNAAG966; TNAAA005.
When a record with one of these numbers in the ID field is modified using the DOCUMENT ID modification program, the number is moved into AW.

SU Subject

FAO AGRIS subject code used for classifying publications.
4 characters, the first two of which are alphabetic, the second two numeric.
Codes are listed in the subject code table in Appendix B.
Examples: AE10; DD00; JF50; TC30.
When entering be sure to type in zeroes (not capital O) when required.
From an input sheet, SU is the first group of characters under "Subject Class" (AE10-0000-G304).

OC Secondary

FAO AGRIS object code used for classifying publications. Represents crops, trees, animals, etc.
4 numeric characters.
Codes are listed in AGRIS: Subject Categories, Appendix D.
When entering, be sure that all zeroes are entered as zero and not capital O.
Example: 0430
From an input sheet, OC is the second group of characters under "Subject Class" (AF00-0430-G232).

GC Country Code

FAO AGRIS country or region code, not the AID geographic code.
4 characters, the first of which is alphabetic, the second alphabetic or numeric, the last two numeric.
Codes are listed in AGRIS: Subject Categories, Appendix D.
Examples: GG10; G232; G100
From an input sheet, GC is the third group of characters under "Subject Class" (AF00-0430-G232).

T1 Title1
T2 Title2
T3 Title3

Title of publication.
3 lines of 67 characters each.
Enter the title without breaking at the end of the first two lines. Let words split from one line to another. If a word ends at the end of a line, be sure to type a space at the beginning of the next line.
Example:

```
T1  ENVIRONMENTAL*AND*NATURAL*RESOURCE*MANAGEMENT*IN*DEVELOPING*COUNTRI
T2  ES;*A*REPORT*TO*CONGRESS.*VOL.*I:*REPORT***************************
T3  ******************************************************************
```

If the title runs longer than three lines, check for possible abbreviations, although titles should be transcribed as they appear on a title page. If you do run out of room, the end of the title will have to be discarded or indicated in the notes if it

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is significant. These decisions should be made by the cataloguer.

AU Author

Personal and/or corporate author of the publication.
7 lines of 67 characters each.
Up to seven different authors can be entered, <u>each on a separate line</u>.
Authors do not continue from one line to another as do Titles.
Form is last name followed by first and second (or more) initials with a period after each initial and spaces between periods. The first name (if known) is spelled out when there is no second initial.
Example:

```
AU  ABOUKHALED,*A.*************************************************************
    ARAR,*A.***************************************************************
    BALBA,*A.*M.***********************************************************
    BISHAY,*B.*G.**********************************************************
    KADRY,*L.*T.***********************************************************
    RUTEMA,*P.*E.**********************************************************
    FAO.**NEAR*EAST*REGIONAL*OFFICE****************************************
```

Established authors should be entered exactly as entered previously. Check print-outs or other records on-line. Standard abbreviations should be used. (See Table of Major Abbreviations on pages vii-viii in Volume II of the <u>Catalogue of Research Literature for Development</u>.) If there are more than seven authors, be sure that all of the most important personal and corporate authors are included. The others will have to be discarded. If there are problems with names of conferences, use as many abbreviations as possible to fit the most important information on one line. Remember, authors cannot continue on the next line.

N1 Notes1
N2 Notes2
N3 Notes3

Series, publishing, or other notes about a publication.
3 lines of 67 characters each.
Each note is entered within parentheses and should be keyed in without breaking at the end of the first two lines. Let words split from one line to another. If a word ends at the end of a line, be sure to type a space at the beginning of the next line. When there is more than one note, close the first, skip one space and begin the next note. Do not intentionally start separate notes on different lines.
Example:

```
N1  (NEW*YORK:**PRAEGER)*(PRAEGER*SPECIAL*STUDIES*IN*INTERNATIONAL*ECON
N2  OMICS*AND*DEVELOPMENT)*****************************************
N3  *****************************************************************
```

KY Keyword (This field is found after: "Enter up to 12 descriptor words below:)

Keywords describe various subject areas in a publication.
Maximum of 12 descriptors of up to 25 characters each.
Enter alphabetically across, three per line.
Example:

```
ENTER UP TO 12 DESCRIPTOR WORDS BELOW:
DEVELOPING*COUNTRIES***** ECONOMIC*DEVELOPMENT***** ENERGY****************
FOOD*SUPPLY************** POLICIES***************** **********************
```

If there are more than 12 descriptors on the input sheet, try to discard terms which are similar to others in the field or those which seem vague. This decision should be made by the cataloguer. See Appendix E for guidelines on indexing.

P Pagin

The number of pages in a publication.
1 to 4 numeric characters followed by "P.".
There are no spaces between the number of pages and "P.". Use no commas.
Examples: 7P.; 23P.; 235P.; 1089P.

YR Year

Year in which document was published.
2 numeric characters.
Enter the last two digits of the year.
Example: 1980 is entered as 80.

C Contract

Contract number associated with the publication.
Maximum of 19 characters.
Enter the contract number for the input sheet exactly as it is shown using as many of the 19 characters allotted.
Examples: AID/TA-C-1221; PA/ZA/DSB-000-01-79
If the complete number will not fit, include it as a note.

CT Contract Type

Type of contract, Research, Technical Services, 211(d) Grant.
1 character code: E--Res.; F--Tech. Services; Z--211(d).

AR ARDA Issue

Issue of the <u>AID Research and Development Abstracts</u> in which an abstract of the publication appears.
7 numeric characters, the first four of which represent month and

year of publication of ARDA, the last three the citation number within that issue.
Example: Citation number 150 in issue of January, 1979 would be entered 0179150.
This field generally applies only to publications that are sent from AID/W.

BT Bibtype

Code which indicates type of publication described by the record, i.e., book, journal article, project paper.
2 numeric character code.
For correct code, see table on Bibliographic Types in Appendix B.
Examples: Monograph--66; Conference Proceedings/Paper--21.

J Project Number

AID project number(s) associated with the publication.
Maximum of 5, 9-digit project numbers.
Entered without hyphens; project numbers are strung together with no spaces between numbers.
Examples: One project number--263001600; two numbers--263001900263002000.
The last two digits of the 9-digit number represent subprojects.
If there is no subproject, enter two zeroes.

LA Language

Language or languages of document.
Maximum of 4, 2-character codes: Arabic--AR; English--EN; French--FR; Portuguese--PY; Spanish--QB.
In the case of two or more languages, enter one after another with no spaces.
Examples: Arabic and English--AREN.

RS Record Status

Code which indicates whether all information is supplied in the record or not, or if there are any problems in the record that need to be resolved.
1 character code: C for complete; I for incomplete.
If I is entered, mark the field that is missing information or needs further work.

Chapter 8

Special Reports

Special report formats have been added to the system through PF-Key 5 from the Main Menu--To Run DIC Reports. Reports can be run sorted by call number, author, or title; or a single citation can be printed in an easy to read format. The listings resulting from the sorted reports may be used as a printed catalogue to the collection instead of maintaining cards or input sheets in notebooks.

When using PF-Keys 2, 3, and 4 from the DIC Reports menu (see below), the entire file will be sorted and printed by call number (Subject Code + ID), author, or the Title1 field, respectively.

PF-Key 1 from the Reports menu prints a single record which expands the input screen format to make the fields easier to understand. To use this function, press PF-Key 1. On the screen that follows, type in the required Document ID in the space provided and press "Enter". The screen will then indicate that processing has been completed. Enter additional Document IDs as needed and press PF-Key 16 to exit.

If your computer specialist has set usage constants to print for you, reports will be printed automatically. If not, please check with him/her on how to release reports for printing.

The following menu appears after pressing PF-Key 5 from the Main Menu:

```
                    DEVELOPMENT INFORMATION CENTER
                                USAID/
 ------------------------------------------------------------------
         PLEASE PRESS THE APPROPRIATE PF-KEY FOR REPORT:

      - PRINT SPECIFIC RECORD              PF-KY (01)

      - PRINT SHELF LIST REPORT            PF-KY (02)

      - PRINT AUTHORS LIST REPORT          PF-KY (03)

      - PRINT TITLES LIST REPORT           PF-KY (04)


* * * * * * * *  PRESS PF-KY (16) TO EXIT  * * * * * * * * *
```


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Chapter 9

Hints for Learning the System

The best way to familiarize yourself with the DIC system is through the File Maintenance Program, PF-Key 4 from the Main Menu labelled, "To Add, Modify or Delete Records", described in Chapter 7, Maintaining the File. After you have reached the secondary menu in File Maintenance, select PF-Key 4, "Update the Entries in the File."

The next screen will contain a space to enter a Document ID, and also gives you the option to select PF-Key 2 which calls up the first listed record in the file by PN Number. Either type in any PN Number or press PF-Key 2. Now you will see the input screen format with all fields labelled. Take some time to look at each field and any values shown. At this point, you may modify the AID/W record to conform to your local standards by typing over, adding or deleting characters on the screen. Refer to the section in Chapter 7 entitled "Rules for Entering Data on Individual Fields" for a thorough explanation of each field. The only value which cannot be altered is ID which is the second field on the top line of the input screen. Notice that the PN Number is not highlighted. This most important modification can only be accomplished with the special program for changing the Document ID, PF-Key 6 from the Main Menu. Notice also that the value for the field AW or AID/W Document No. (fourth field on the top line) is empty. The concept of changing the ID field to a local number rests in moving the existing ID (beginning with PN) into the empty AW space, and replacing it with a local number (e.g., HN or EG) in ID.

If you wish to make any modifications to the screen, do so. Press "Enter" only after all changes are completed. If no changes are made, press "Enter" as well. The first screen reappears giving you the option to type in your own Document ID, select the first entry in the file, select the next entry following the record just modified, or exit the Update process.

When you are ready to exit the Update phase, press PF-Key 16 and you will return to the File Maintenance menu. Select PF-Key 3, "Add Entries to the File". A blank screen will appear.

Using the section entitled "Adding New Records" and "Rules for Entering Data on Individual Fields" from Chapter 7, enter some sample documents according to the instructions. Write down ID numbers to delete the records later on if necessary. Inputting documents will help you learn names of the fields and their characteristics. Knowledge of entry format for each field is required for searching Inquiry. Once you have entered some records, you will better understand the screen in Display, and how to manipulate fields to create Reports.

Chapter 10

Converting the Manual Collection to an Automated One

Adapting the Collection

The most important addition to your documents is the Document ID field (ID) which functions as the PRIMARY KEY and the fastest means of access to any record. Document ID serves as the filing sequence in the database file. It must be eight characters long and should be in the following format:

--AAA001 to --AAA999, subsequently --AAB001 to --AAB999 to AAC, AAD, AAE, etc.

The blank spaces preceding the number are to be filled in with a two character code for the country in which your Mission is located. This should be assigned from AID/Washington. Documents in USAID/Egypt begin with "EG"; those in USAID/Honduras begin with "HN".

The ID number conforms to the AID/W-assigned Document ID which appears on all RANDD records, and begins with PN, PD, or TN.

Creating a Call Number

The call number for each document consists of the first four-characters of the classification number (SUBJECT) plus the entire USAID DOCUMENT ID. Example: If the classification number is LA00-0000-G232 and the ID is EG-AAA-123, the call number becomes

LA00
EG-AAA-123

As a result of creating the call number in this fashion, books are shelved by subject area, and each book has a unique identifying number which facilitates shelving and retrieval.

Step-by-Step Conversion

Following are suggestions on beginning the process of converting a collection for use on the WANG VS version of the RANDD database. It is assumed that you already have on-line access to some version of the RANDD database supplied by AID/Washington. You should also have received printed title and author lists from AID/W's version of RANDD.

1. Start at some part of the collection:
   a. the beginning;
   b. the most important section;
   c. your backlog of documents.

2. Starting with one book, determine if it is AID-funded or AID-produced.

3. If it appears to be an AID publication, look up its title in the RANDD title list provided by DIU. If it is not there, check the author list. (Contact DIU if you do not have these print-outs.)

4. If the document is not AID-funded, you may need to perform original cataloguing to process it. Mark it for cataloguing and leave it on the shelf or segregate it in an area for future cataloguing. Since you may not wish to consider original cataloguing a priority function, it might be best to leave the publication on the shelf.

5. If you have positively identified a publication through the AID listings (matching dates, approximate number of pages, etc.), record the PN Number on the book and remove it from the shelf to an in-process section.

[If you cannot find a PN Number on a book which has definitely been published by AID, and the title is relatively current, it will probably appear on the next RANDD title listing you receive. You might wish to:

   a. Mark the book to signify that it should be processed in the future and leave it on the shelf; <u>or</u>
   b. Remove it to an in-process secton; <u>and/or</u>;
   c. Write to AID/W to request they send you cataloguing information on the book, providing they have already processed it; <u>or</u>
   d. Sent a copy to AID/W to ensure it is processed.

If you cannot find the PN Number on an AID document which is not current, you may wish to catalogue it yourself, or ask AID/W whether they have any bibliographic information on the document which would help you. If they have no record at all, they may request you lend it to them for cataloguing.]

6. After you have worked for a set amount of time (e.g., one-half hour to one hour) or identified a set number of books (e.g., 15 to 30), or completed a particular section or shelf, stop and note your place.

7. You have now identified a group of PN Numbers to be converted in the database for your collection. Each of these titles must be provided with a local Mission Document ID Number, as described above in "Adapting the Collection".

8. To assign the local ID Number, you must always know which ID was last used. This is best accomplished by keeping a list. After assigning a group of numbers during your work period, jot down only the last number used. At the next session, start with the number following the ID written on your list. Be sure to cross off the last number written and note the current last ID used.

9. After checking your ID number list, take your stack of in-process books and record the ID next to the PN Number on the book.

SUGGESTION:

If you are processing a series of books which carry the same subject code and you wish for them to be together sequentially on the shelves, process them all at the same time so that they will have successive ID Numbers.

For example: The "Spring Review of Small Farmer Credit" is a completed series classed under one subject area (AE10, Agricultural Economics). Each title could be assigned successive ID Numbers (e.g., HN-AAA-100 to HN-AAA119) so that all titles would appear together on the shelf in the correct series order. The call numbers might be:

<u>Small Farmer Credit in Mexico and Central America</u> (Vol 1)
AE10 HN-AAA-100
<u>Small Farmer Credit in Costa Rica</u> (Vol. 2)
AE10 HN-AAA-101
<u>Small Farmer Credit in South America</u> (Vol. 3)
AE10 HN-AAA-102, etc.

However, since access to all books is available either on-line through the WANG or from printed indexes you generate from your database, sequential shelving of series titles is not essential.

Now you are ready for the automated conversion process.

10. If you are maintaining your own records on a separate datafile, you will first need to move all of the PN Numbers previously identified from the RANDD file to your local file. Once that step is completed, or if you are maintaining your records within the RANDD file, proceed with with following sequence:

11. From the Main Menu, press PF-Key 6--To Modify the Document ID Field. With your stack of books in hand, type in the PN Number in the space for OLD DOCUMENT ID, and the local ID which you have already assigned, next to the NEW DOCUMENT ID. Process the change according to the instructions in Chapter 7. Complete all changes for the stack.

12. If, after completing your stack of Document ID conversions, you wish to review the records and make further changes, do this

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through PF-Key 4 from the Main Menu--To Add, Modify or Delete Records, and then PF-Key 4--Update the Entries in the File.

13. You may wish to see what each record looks like on paper. Either switch to Display (PF-Key 1 from the Main Menu) and print according to the instructions; or go to PF-Key 5 from the Main Menu--To Run DIC Reports (Chapter 8)--and print each specific record by typing in the new ID number as requested on the sequence of screens. This will give you "proofs" of each record which you can check on paper for corrections. It also lets you note the new call numbers (see next section) for each document.

14. Once you know the new call number, label each book and return it to the shelf.

15. Make any on-line modifications to your records which you have already marked on the printed copy.

The conversion process is complete.

For books which require original cataloguing, use the Sample Input Sheet shown in Chapter 7, or one like it tailored to your new input screen, and fill in the required information for each publication. From the input sheets, you can then sit down at a terminal and add new records using PF-Key 4 from the Main Menu--To Add, Modify or Delete Records. Refer to "Rules for Entering Data on Individual Fields" in Chapter 7 for information on entry format, and see also Appendix C for information on classifying documents.

Labelling Suggestions

Use labels with a colored stripe on them for any books that have the host country name or any geographic areas within the host country as a descriptor term, and/or are encoded with the appropriate country code number in the GC field.

For any books not related to the host country, use an all-white label.

If possible, place labels on the spine of the book close to, but not touching the bottom. The typed format for the call number placed on the spine should be:

```
LA00
EG-AAA
-123
```

unless the book is thick enough to accommodate the entire call number in this format:

```
LA00 EG-AAA-123
```

If the book is not wide enough for a spine label, place it on the upper left hand corner of the outside cover.

Place tape over the label to be sure it does not peel off.

Field Display Table

The following table lists each field in the DIC database and gives major characteristics. Starting positon refers to actual location in the computer record; this positioning is evident when viewing a record in Display. All fields are character fields rather than numeric eventhough some values contain numerals. Length is number of spaces each field occupies on the record no matter how much room the actual value takes up. Number of occurrences indicates the maximum number of values each field can have in any one record. The keyed fields are those which are indexed.

FIELD NAME (Abbrev.)	STARTING POSITION	TYPE OF FIELD	LENGTH	NUMBER OCCUR.	KEYED?
DT--Date on file	1	C	6	1	No
AW--AID/W Doc. No.	7	C	8	1	No
DF--Format	15	C	2	1	No
ID--Doc. ID	17	C	8	1	Yes
SU--Subject	25	C	4	1	Yes
OC--Secondary	29	C	4	1	No
GC--Country Code	33	C	4	1	Yes
LA--Language	37	C	8	1	No
T1--Title1	45	C	67	1	No
T2--Title2	112	C	67	1	No
T3--Title3	179	C	67	1	No
AU--Author (1-7)	295	C	67	7	No
YR--Year	1032	C	2	1	No
P--Pagin	1034	C	6	1	No
N1--Notes1	1040	C	67	1	No
N2--Notes2	1107	C	67	1	No
N3--Notes3	1174	C	67	1	No
KY--Keyword (1-12)	1375	C	25	12	No
C--Contract	1875	C	19	1	No
CT--Contract Type	1896	C	1	1	No
AR--ARDA Issue	1897	C	7	1	No
BT--Bibtype	1904	C	2	1	No
J--Project Number	1906	C	45	1	No
RS--Record Status	1951	C	1	1	No

Tables for Fields Which Require Special Values

The following tables are to be used when entering data in the fields Format, Subject, Contract Type, Bibtype, and Language.

FORMAT (DF)

Format in which the document is kept in the Mission DIC.

Code	Format
PC	Papercopy
MF	Microfiche
PM	Papercopy and microfiche

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SUBJECT CODES (SU) Listing by Code.

This listing is a revised version of the subject codes found in Volume II of the Catalogue of Research Literature for Development. For more detailed explanations of agricultural topics only (Class A), see Appendix D, AGRIS: Subject Categories. Notes which have been added to Classes C through T were provided as indications for placement of certain specific subject areas not evident from the subject name; they do not attempt to define the subject in its entirety.

Note: Zeroes (0) are used in these codes, not capital O's. Zeroes must be entered when searching the database for matches to occur.

Code	Subject Name
Class A: Agriculture	
AA00	Agriculture--General
AA50	Agricultural Research
AB50	History of Agriculture
AC00	Agricultural Education, Extension and Advisory Work
AD10	Administration of Agriculture
AD50	Agricultural Legislation
AE10	Agricultural Economics
AE30	Agricultural Development
AE40	Rural Development
AE50	Rural Sociology
AE70	Distribution and Marketing
AF00	Plant Production
AF10	Meteorology and Climatology
AF20	Soil Science
AF22	Soil Chemistry
AF23	Soil Classification and Genesis
AF24	Soil Surveys and Mapping
AF25	Soil Fertility, Fertilizes, and Plant Nutrition
AF26	Soil Resources
AF28	Soil Erosion and Reclamation
AF30	Plant Breeding
AF60	Plant Physiology and Biochemistry
AH00	Plant Protection
AH10	Pests of Plants
AH20	Plant Diseases
AH60	Weeds

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AK00	Forestry
AK10	Forestry Production
AK50	Wood Technology and Industries
AL00	Animal Production
AL30	Animal Nutrition
AL50	Animal Physiology and Biochemistry
AL72	Pests of Animals
AL73	Animal Diseases
AM00	Fisheries
AM40	Aquatic Biology
AN00	Agricultural Machinery and Buildings
AN10	Agricultural Engineering and Structures
AN20	Farm Equipment
AP00	Natural Resources
AP10	Water Resources and Management
AP12	Drainage and Irrigation
AP20	Land Resources
AQ00	Food Science
AQ10	Food Processing
AQ20	Food Microbiology and Toxicology
AR00	Home Economics
AS00	Human Nutrition
AS10	Food Composition
AS20	Physiology of Nutrition
AS30	Feeding

Class C: Communications

CA00	Communications--General
CC00	Communications--Applications

Class D: Development and Economics

DA00	Development and Economics--General Includes income.
DC00	Development Assistance Includes PL480, disaster relief programs.
DC30	Project Management Includes project design, implementation, and evaluation.
DD00	Public Administration

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DE10	Banking and Finance
DG00	Labor Economics Includes non-agricultural employment.
DK00	Trade and Commerce
DM00	Industries and Industrialization Includes free zone development, small-scale industries.
DP00	Transportation All forms of transportation including rural roads.

Class J: Education

JA00	Education--General
JA50	Education Research
JC00	Teaching and Learning
JC30	Instructional Materials
JC36	Audio-visual Materials
JC70	Testing and Measurements
JD10	Administration
JE10	Educational Economics and Finance
JE30	Education and Developmet
JE50	Educational Sociology
JF00	Pre-school, Elementary, Secondary and Vocational Education
JF20	Elementary Education
JF30	Secondary Education
JF50	Technical and Vocational Education
JG00	Higher and Professional Education Includes participant training, management training.
JG55	Teacher Education
JK00	Adult Education and Literacy
JL00	Non-formal Education
JM00	Technologies Used in Education
JM10	Educational Radio
JM20	Educational Television
JM50	Satellite and Telecommunications
JM70	Automation

Class L: Urban Development and Housing

LA00	Urban Development and Housing--General
LD00	Housing
LN00	Shelter Construction

Class M: Libraries and Information Sciences

MA00	Libraries and Information Sciences--General
MC00	Library Science/Documentation

Class N: Health

NA00	Health--General
NC00	Education and Manpower
ND00	Delivery Systems
NH00	Maternal and Child Health Care
NS00	Tropical Diseases

Class P: Population

PA00	Population--General Includes demography, population education.
PC00	Family Planning. Includes contraceptives, sterilization, abortion, family planning education.

Class S: Social Sciences

SA00	Social Sciences--General
SB00	Anthropology
SD00	Political Science Includes political aspects of development.
SE00	Sociology Includes women in development

when specific sectors are not the primary focus.

SG00 Area Studies
Includes works concerning a country, countries, or region, without a specific subject area of primary importance.

Class T: Science and Technology

TA00 Science and Technology--General

TC00 Science and Technology--Applications
Includes remote sensing, water treatment.

TC30 Appropriate Technology
Also intermediate technology.

TC50 Energy
Includes all forms of new, conventional, renewable energy--solar, biogas, wind, electric power, oil, hydropower.

TC70 Environment
Man and environment. Includes pollution of all types; environmental impact when not related to a specific topic.

CONTRACT TYPE (CT)

Code	Contract Type Name
E	Research contracts (Res.)
F	Technical Services to AID (other than training) (GTS)
Z	211(d) Grant

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BIBLIOGRAPHIC TYPE CODES (BT)

The following list is a December 1982 revision of bibliographic type codes used by the Office of Development Information and Utilization (DIU). Obsolete bibtypes are shown below the current list for information/identification purposes only should you receive database records which include an outdated code, or should you be cataloguing an old AID document such as a PAR or PER which would require specific codes. Use only the first list for cataloguing current publications.

Code	Bibliographic Type
01	Project Identification Document (PID)
02	Proposal
15	Project Evaluation Summary (PES)
16	Sector Assessment
17	Special Evaluation
18	Audit Report
19	Non-AID Audit Report
21	Conference Proceedings/Paper
23	Non-AID Periodical Article
36	Development/Extended Risk Guaranty Paper (DEV/EXT)
37	Loan Agreement
38	Grant Agreement (PROAG)
39	Congressional Presentation
41	Feasibility Study
42	Project Paper
46	Housing Guaranty Program Document (HGPD)
47	Program Assistance Approval Document (PAAD)
49	Not Elsewhere Classified Design Document
50	Action Memorandum
52	Annual Report
53	Progress/Interim Report
54	Thesis/Dissertation
58	Bibliography Index
59	End of Tour Report
60	Cable
62	AID Supported Study
66	Monograph
67	Reference Work
68	Final Report
70	AID Discussion Paper
72	Airgram
81	AID Contract/Grant
90	Summary Data (statistical reports)
92	Trip Report (TDY)
95	Country Development Strategy Statement (CDSS)
96	Annual Budget (ABS)
99	Miscellaneous Project Documents

Obsolete Codes. Do not use except for old documents. "Use" notes refer to new list above.

10	Project Appraisal Report (PAR)
14	Project Evaluation Report (PER)
20	Economic Analysis Abstracts
22	Conference Proceedings (Use 21)
25	Project Review Paper
31	Knowledgeable AID Individual
32	Knowledgeable non-AID Individual
33	Knowledgeable Undifferentiated Individual
34	Knowledgeable Group
35	Knowledgeable Institution
40	Miscellaneous Grant/Cooperative Agreement
43	Non-Capital Assistance Project Proposal (PROP)
44	Operational Program Grant (OPG)
45	Development Grant Program (DGP)
48	Title XII Project Document
51	Undifferentiated Report
55	Periodical (Use 23)
56	Yearbook (Use 67)
57	Loan Paper/Capital Assistance Paper (CAP)
61	Outgoing Cable (Use 60)
63	Research Study (Use 62)
64	Task Force Report
65	Working Paper
71	Sector Analysis/Study (Use 16)
73	Outgoing Airgram (Use 72)
74	Development Studies Program Tutorial Paper
75	Quick Response
76	Tailored Response
77	Simple Response
78	Directory of Development Resources
79	Technicians on Call for Development
80	World Bank (IBRD) Project Performance Audit Report

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LANGUAGE (LA)

Code	Full name
AR	Arabic
EN	English
FR	French
PY	Portuguese
QB	Spanish

Information on Classification Schemes and Notes on How to Classify Documents Using the AID Codes

The Classification Schemes

All of the classification schemes used for the Catalogue of Research Literature for Development, the AID Research and Development Abstracts and the RANDD database in AID/Washington and Cairo are based on the FAO AGRIS: SUBJECT CATEGORIES (Appendix D).

When the AGRIS codes were adapted for use in the Catalogue, an "A" was added as a prefix to each of the codes to signify the class "Agriculture" and allow for the inclusion of other classes later on. Thus, C00 in AGRIS--Education, Extension and Advisory Work--became AC00 for AID. Most of the original AGRIS categories were used, but some were omitted because they were considered too specific or inappropriate to AID's needs. The AGRIS code list should be referred to for scope notes on categories in agriculture.

Volume I of the Catalogue lists publications on agriculture alone, and thus the classification scheme in its table of contents reflects only the adapted AGRIS codes on that subject. In Volume II, all subjects in development of concern to AID were to be included and consequently, DIU had to create an expansion of the codes (new classes) to deal with:

Communication--C
Development and Economics--D
Education--J
Urban Development and Housing--L
Libraries and Information Sciences--M
Health--N
Population--P
Social Sciences--S
Science and Technology--T

The classification scheme as used for the AID/W version of RANDD is contained in the table of contents of Volume II.

As other information centers began working with the scheme, it became necessary for them to make some refinements. One version used in Cairo contains several additions and also includes some explanatory notes to help classify publications on certain topics appropriate to the Mission. Some of the notes also indicate placement of frequently used Agency subject areas. This scheme is located in Appendix B under Subject Codes.

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Classifying Documents

In any cataloguing exercise, one of the first steps is to check to see whether the document to be treated has already been processed. This is where you will find the RANDD database and its author and title print-outs useful. Once you have identified a work in one of the print-outs, it should automatically be contained in your local DIC system under the AID/W PN Number. To make the publication part of your on-line file, modify the DOCUMENT ID and review the rest of the record to be sure it conforms to local standards. (See Chapter 7 on Maintaining the File and Chapter 10 on Collection Conversion.)

Even if a particular document has not been processed or is not AID-produced, RANDD still serves as an excellent guide to classifying. This time check through the database using a descriptor word, unique title words or phrases, or subject code which you think may be appropriate. In addition, check the author listing for another work by the same author or institution in case the subjects match. Chances are good that you will locate a similar publication which will give you an idea of which classification number to assign.

Problems in Classifying using the AID Codes

If the RANDD database does not contain the required document, or provides no clues for a similar publication, you have reached the level of original cataloguing in which you must assign codes based on your perception of the document's subject. Consequently, you may encounter some of the following problems in determining codes:

1. The publication addresses more than one subject and treats them all equally.

As in indexing, a basic rule in assigning classification codes is to use the most specific code which accurately describes the subject of the publication.

> Examples: For a book on malaria, use NS00--Tropical Diseases, rather than NA00--Health.
>
> For an article on marketing vegetables, use AE70--Distribution and Marketing, rather than AE10--Agricultural Economics.

However, when a publication is concerned equally with two subjectsrepresenting two different classes or codes, you, as the expert on your user's needs, your Mission's areas of concentration and your collection, will simply have to choose one code based on your special knowledge.

Appendix D

AGRIS

International Information System for the Agricultural Sciences and Technology

Système international d'information pour les sciences et la technologie agricoles

Sistema Internacional de Información sobre Ciencias y Tecnología Agrícolas

FAO/AGRIS 3 (Rev.1)

Mar. 1974

A G R I S : SUBJECT CATEGORIES

(Includes Amendments Nos.1 & 2)

prepared by Donald LEATHERDALE
(International Development
Research Centre, Ottawa, Canada)

AGRIS Coordinating Centre
Centre de Coordination AGRIS
Centro de Coordinación AGRIS

III/E7939

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TC30--Appropriate Technology
TC50--Energy
TC70--Environment

Anyone familiar with the Agency and its recent areas of concentration would recognize these subjects as important ones; subjects which have generated a substantial body of literature, and consequently, for which retrieval should be facilitated.

In creating a new code, be sure to place it where it would logically occur within a subject area. If you are creating codes for an entirely new subject never addressed in the existing system, a new class may have to be formed. This is a major undertaking, and you should be certain that the subject could not be placed anywhere else in the current scheme.

3. One subject appears to be able to be classed under more than one code.

Some subjects of importance to AID span several areas of development. One of these topics, "women in development", may seem difficult to place within a single code, or one might be tempted to create a separate classification number. Further evaluation of documents pertaining to women may lead to a different conclusion. Many publications address women within a specific area such as economics, employment, agriculture, education, health, family planning, etc. Try to class documents according to these sectors with appropriate indexing for "women". If a publication deals with "women" without reference to a specific sector, it may fit better in one of the more general Social Sciences class codes, or Development and Economics.

REMEMBER: While the subject codes confine documents to a single field, descriptor words cross-cut the codes in searching and allow for greater specificity in subject description. Thus, it is not important to have a code for every specific subject as long as descriptor terms are used. See Appendix E for information on assigning descriptors.

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INTRODUCTION

This, the third presentation of AGRIS categories, embodies recommendations made by the Implementation Advisory Group at its Fourth Meeting in October 1973. Consequently, the system differs radically from that given in the earlier presentations, including that used for the 1973 experimental issue of AGRINDEX.

Content

Access terms are presented in three major groupings. Group 1 contains the subject areas, to be recorded in Tag 008 of the AGRIS Input Sheet. They have been defined and cross-referenced to provide at the same time a scope document for AGRIS. The actual scope accepted was that presented in the first published draft*, and it is included here for the benefit of AGRIS users and workers. Modifications in the current presentation have naturally led to changes of wording and of grouping, but the field covered is essentially the same as that originally defined.

Group 2, entitled Object Codes, contains listings of plants and animals utilized by man and of foods. Their use, at Tag 620 of the Input Sheet, will subdivide material grouped under the subject areas. Further specification, by geographical terms and groupings, is possible by using the Group 3 vocabulary; these also occur at Tag 620.

For the preparation of input sheets, those involved will be required to familiarize themselves with the vocabularies contained herein; but an aid is provided in the form of two indexes, one to the proper geographical names and the other to the combined terminologies of Groups 1 and 2 and physical geography from Group 3.

Categorization of documentary units

a) Tag 008

The user is first referred to paragraph 1.21 of the AGRIS Guidelines**, the sample Input Sheet here given at p.vi, and to the further examples presented in the Guidelines at p. 3.4. From the headings of Group 1, the code of the one considered most applicable is written in the first box of Tag 008, marked 'Subject categories (primary)'. This entry will determine the heading under which the citation of the documentary unit will be printed in AGRINDEX. The codes for Group 1 consist of one character followed by two digits. In the example here, 'P12' is used to cover 'irrigation'.

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* D. Leatherdale 1972 Draft AGRIS subject categories and scope description. FAO/DC/AGRIS 3. FAO Documentation Centre.

** Martinelli, M.T. 1973 AGRIS: Guidelines for bibliographic description. FAO/AGRIS 4 (Rev.1). FAO AGRIS Coordinating Centre.

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The final two boxes in Tag 620 are prefixed 'G', and are to be used for geographical terms listed in the Group 3 vocabularies. Separate listings are given for political geography, marine areas, intergovernmental organizations, other geographic groupings, and physical geography. The terms of physical geography (prefixed GZ) are included in the Subject Index. The names in the other geographical listings, which are presented for convenience in a thesaurus-type manner, are combined alphabetically in the Geographical Index at p.69.

It should perhaps be emphasized that the geographical codes are to be applied to the content of the documentary unit, and not to place of publication or any other context. In the example, G512 is used from the political listing to cover 'Bolivia' and GZ11 is used from the physical geography listing to cover 'arid zone'.

Advice and example has been taken from many individuals and organizations during the preparation of these categories. To all of them I am grateful.

If such single categorization is considered insufficient, then a second or third code may be entered in the secondary boxes (E70 in the example, covering 'transportation costs'). Cross references only will refer to the citation from secondary categories, and whenever possible the primary category should be used alone in Tag 008.

In selecting the appropriate codes, refer frequently to the subject index (p.79), which is not only a guide to the words used in the vocabularies but includes many additional terms intended to assist in the completion of Input Sheets, including the pertinent words from the Macrothesaurus *** and the draft of the Broad System of Ordering being prepared by FID for UNISIST****. The subject breakdown accords well with the categorization suggested for CARIS (Current Agricultural Research Information System), and I am grateful to Mr. A. Thévenin for much assistance in that connection.

b) Tag 620

The completion of these data is referred to in paragraph 1.22 of the Guidelines. The first three boxes are to be used for the appropriate products or commodities, and the same strictures on the use of more than one entry apply with as much force here as in Tag 008. In the example, one only needs completion (0230, covering sugar-cane). Codes for the first three boxes must be selected from the Group 2 vocabulary only; they consist of four digits. Group 2 words are arranged in three sequences: plants utilized by man, animals utilized by man, and foods. Their display is arranged in related groups. Most of these groupings start with a general entry followed by specific entries and concluded by an 'other' entry to accommodate items not previously specified. Let us take Cereals as an example:

0100 Cereals - general
0110 Barley
0120 Maize
0130 Millets
Oats, Rice, Rye, Sorghums, and Wheat are also specified
0190 Cereals - other

If the documentary unit is concerned with 'Barley', then code 0110 is applied in Tag 620 with no problems. If it is concerned with 'Corn', then the Subject Index will refer to code 0120, thus equating it directly with 'Maize' in Group 2. But let us presume that the documentary unit is concerned with a cereal that is not specified in Group 2, such as 'Triticale'. If one knows it to be a cereal, then the 'other' entry with code 0190 is used; but if one does not know that it is a cereal, then recourse is made to the Subject Index, where 'Triticale' is referred directly to 0190. A broad range of items has been included in the Subject Index, but it is obviously not feasible to include all possibilities. Those working on AGRIS input are invited to supplement the index with terms that they find useful, and to notify the AGRIS Coordinating Center of terms which they consider should be included in the index.

*** OECD 1972 Macrothesaurus. A basic list of economic and social development terms. (English edn.) OECD.

**** FID 1973 Progress report on a Broad System of Ordering. Project of Working Groups FID/SRC 'Subject-field Reference Code' under Unesco Contract 600.089.

GROUP 1

SUBJECT CATEGORIES AND SCOPE DESCRIPTIONS

(Tag 008 of AGRIS Input Sheet)

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A00 AGRICULTURE - general

General considerations of agriculture in its wide sense, i.e. including fisheries, food and forestry when these are not considered separately

For specific concepts, use subjects as appropriate (see Subject Index)

A50 Research

Research programmes, administration, and techniques

B00 GEOGRAPHY AND HISTORY

B10 Geography

Geographies, travels, general maps, applicable within the scope

For geography in relation to animal distribution, use L60
geography in relation to plant distribution, use F70
names of geographical areas, see Geographical Codes, p.27
physical geography in marine habitats, use M20
physical geography in freshwater habitats, use M30
physical geography in relation to climate and meteorology, use F10
physical geography of site situations, use F10

B50 History

History of agriculture in its wide sense
Biography

C00 EDUCATION, EXTENSION, AND ADVISORY WORK

Teaching, extension courses, demonstration, and advisory work and services in the wide sense of agriculture
Educational programmes
Agricultural journalism; public relations activities

For veterinary education, use L70

D00 ADMINISTRATION AND LEGISLATION

D10 Administration

Organization and administration of general agriculture

For development, use E30
fisheries management, use M00
forestry management, use K00

D50 Legislation

General and specific legislation in agriculture, fisheries and forestry

F00 PLANT PRODUCTION

Production and culture of crops and other plants utilized by man, except forest trees and aquatic plants; crop husbandry
Yields
General plant science or botany

For production of forest trees, use K10
production of aquatic plants, use M10

F10 Meteorology and climatology

Air and atmosphere; agrometeorology, including weather forecasting
Solar radiation
Humidity and evaporation; precipitation (excluding surface-water aspects); induced rainfall
Agroclimatology, including bioclimate, microclimate, climatic types, zones and changes; hydroclimatology
Physical situation in relation to agriculture or forestry; latitude and longitude, altitude, gradient, and aspect
Non-biotic environmental factors

For applications in pollution, use T00
plant injury by atmospheric factors, use H50
surface-water hydrology, use P10
weathering in relation to soils, use F23
wind and rain in relation to soil erosion, use F28
plant hardiness, use F60
applications in sea fisheries, use M20

F20 Soil science

General aspects of soils

For soil conservation, use F28
soil resources, use F26
soil cultivation, use F27

F21 Soil biology

Soil fauna, flora, and microbiology (including bionitrification, but excluding soil-borne plant pathogens)
Rhizosphere
Soil biochemistry

For soil-borne plant pathogens, use H20

F22 Soil chemistry and physics

Organic and inorganic chemistry of soils (but not biochemistry); soil analysis; soil solution
Physico-chemical aspects of soils; soil reactions
Soil mechanics, structure and texture (but not classification); soil atmosphere; permeability, absorption, and adsorption; moisture content and water-retaining capacity
Soil temperature; electrical and other physical aspects in relation to soils

For applications in irrigation requirements, use P12
biochemistry of soils, use F21
classification of soils, use F23
other hydrological aspects of soils, use P10
soil erosion, use F28

E00 ECONOMICS, DEVELOPMENT, AND RURAL SOCIOLOGY

E10 Economics

General economics, policies, and relations with industry
Enterprises; rural industries
Economics of land development and utilization; land capability
Agrarian structure and reform; land ownership and tenure; land rents and taxation
Manpower and labour demands; employment; migratory and contract labour
Production costs and returns; credit; insurance
Rural aspects of town and country planning

For economic development, use E30
soil capability as opposed to land capability, use F26
marketing and distribution, use E70

E30 Development

Development aims, policies, and programmes
Development aid; relief and reconstruction; technical assistance programmes

For community development, use E50
land development, use E10

E50 Rural sociology

Rural populations, communities and institutions; community development and problems of urbanization
Welfare, housing, social services, and other aspects of rural life and living conditions; human ecology
Rural sociology and sociography; social psychology in man

For rural development, use E30
labour and manpower, use E10
rural marketing, use E70
social aspects of feeding, use S00
town and country, use E10

E70 Distribution and marketing

Commerce and trade in products of agriculture, fisheries, and forestry at domestic, national, and international levels
Trade agreements and tariffs; balance of trade and payments
Price fixing and maintenance
Merchandising: wholesaling, retailing, auctioning, and other methods of selling. Marketing cooperatives
Distribution policies, costs, and methods; transportation
Trade promotion: advertising and propaganda
Distribution and marketing of processed foods

For forest transportation, use K10
customs regulations, use D50

F40 Plant ecology

Ecology, environmental biology, and external influences on biological processes in plants; indicator plants
Conservation of plants and vegetation; botanical gardens; wildlife (plant) management

For plant hardiness, use F60
pollination by insects, use F60
applications in rhizosphere, use F21

F50 Plant structure and cytology

Cytology, histology, anatomy and habit of plants of economic interest

F60 Plant physiology and biochemistry

Physiology and biochemistry, including metabolism, development, and growth, of plants of economic interest, including weeds
Plant hardiness
Pollination

For effects of environment on biological processes, use F40
plant nutrition, use F25

F70 Plant taxonomy and geography

Classification, nomenclature, and phylogeny of plants of economic interest
Natural distribution of plants; flora

For plant genetics, use F30

H00 PLANT PROTECTION

General factors injurious to plants and their products, and measures for their control or alleviation
General consideration of pesticides; toxicity and other side-effects of pesticides to man, beneficial organisms, and wildlife
Wood preservation

For phytotoxicity of pesticides, use H50
toxicity of pesticides to domestic animals, use L74

H10 Pests of plants

Animals (including man and other mammals, birds, insects, mites, nematodes, and molluscs) injurious to plants and plant products, and the damage they cause
Animals as vectors of plant pathogens
Pest control materials, methods, and programmes
Pest resistance to pesticides

For quarantine regulations, use D50

H20 Plant diseases

Plant pathology; bacterial, fungal, viral, and mycoplasmal diseases and their causal organisms
Materials, methods, and programmes for plant-disease control
Microbiology of stored products

For animals as vectors of pathogens, use H10
quarantine regulations, use D50
physiological disorders, use H50
plant diseases associated with insects or nematodes, use H10

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F23 Soil classification and genesis

Spatial distribution of soils; genetic (zonal) and textural classifications
Soil profiles; horizons and soil depth
Soil formation
Geological and mineralogical considerations in relation to soils

F24 Soil surveys and mapping

Soil surveying and cartography; methods and results of soil surveys

For surveys of land use and capabilities, use E10
surveys of soil resources, use F26

F25 Soil fertility, fertilizers, and plant nutrition

Determination of soil fertility; soil depletion, exhaustion, and toxicity
Availability of plant nutrients; plant nutrition
Fertilizer and manurial requirements; fertilizer application
Physical improvement of soils; soil conditioners

For biological input to soil fertility, use F21
mineral deficiencies in plants, use H50
erosion control and soil reclamation, use F28
soil cultivation, use F27

F26 Soil resources and management

Resource potentialities of soils; possibilities of reclamation for agricultural and forestry use
Soil resources planning and development
Earth moving; landscaping

For applications in the use of land, use P20
losses of soils, use F28
soil and land reclamation, use F28

F27 Soil cultivation

Tillage; harrowing; rolling; ploughing

For soil improvement, use F25
weed control, use H60

F28 Soil erosion and reclamation

Coastal and inland movements and losses of soil; erosion by water or wind
Soil conservation; control of erosion by agricultural practices, soil or sand fixation, shelterbelts, and other methods (except drainage or maintenance of water channels)
Soil and land reclamation

For drainage and maintenance of water channels, use P12

F30 Plant breeding

Strains and cultivars of plants of economic interest; breeding techniques and programmes
Plant exploration, introduction, and selection
Genetics; cytogenetics

For hereditary disorders, use H50
applications of breeding in resistance to diseases and pests, use H20 and H10, respectively

L00 ANIMAL PRODUCTION

General animal husbandry
Production and care of domestic animals and other non-aquatic animals utilized by man

For fisheries production, use M00

L10 Animal breeding

Breeds and varieties; their fertility and reproductive physiology; breeding techniques; breeding programmes
Genetics; pedigrees
Parturition

For hereditary disorders, use L74
surgical intervention in parturition, use L74

L20 Animal ecology

Ecology, environmental biology, and effects of external influences on biological processes in domestic animals and other non-aquatic animals of economic interest
Conservation of animals; wildlife (animal) management; game reserves and surveys; game hunting and sport fishing

For aquatic ecology, use M40

L30 Animal nutrition

Feeding requirements and regimes of domestic animals; nutritive value of feeds; feed formulae and supplements; effects of feeding

For human nutrition, use S20
nutritional disorders, use L74
physiology and biochemistry of nutrition, use L50

L40 Animal structure and cytology

Cytology, histology and anatomy of animals of economic interest

L50 Animal physiology and biochemistry

Physiology and biochemistry of animals of economic interest

For nutritional physiology of man, use S20
reproductive physiology, use L10

L60 Animal taxonomy and geography

Taxonomy, systematics, nomenclature, phylogeny, and geographic distribution of animals of interest to man

L70 Veterinary medicine and hygiene

Veterinary profession; training; ancillary professions
General aspects of veterinary medicine and pathology
Domestic animals in relation to their health or that of man
Meat inspection

For animal quarantine regulations, use D50

H50 Miscellaneous plant disorders

Physiological diseases and nutritional disorders; their biology, prevention, and control
Injuries caused by weather, fire, equipment, and other physical or non-biogenic agencies; their prevention and control
Phytotoxicity

For plant diseases associated with insects or nematodes, use H10
plant hardiness, use F60

H60 Weeds

Weeds and parasitic and poisonous plants; their deleterious effects and control

For toxicity of herbicides to crops, use H50
physiology and biochemistry of weeds, use F60
plants toxic to livestock, use L74

K00 FORESTRY

General considerations of forestry; forest influences; watershed management
Forest resources and conservation
Forestry in relation to agricultural and rural life; pastured forests; forest lands as recreational resources

K10 Forestry production

Wood production; forest valuation; forest management
Forest and timber mensuration; increment and yield
Site quality; forest surveys and reconnaissance
Logging and other forms of harvesting; forest transportation; forest engineering; site clearing
Silviculture - care of forest and ornamental trees; silvicultural systems; regeneration; propagation; composition of stands

For diseases of forest trees, see H20
pests of forest trees, see H10
forest ecology, use F40
forest fires, use H50
physiology and biochemistry of forest trees, use F60
structure of forest trees, use F50
taxonomy, nomenclature, and biogeography of forest trees, use F70
tree breeding and genetics, use F30

K50 Wood technology and industries

Timber and lumber; wood conversion; seasoning and timberyard practices; timber manufacturing industries and other users of wood, industrial waste wood
Pulpwood and chips; paper- and board-making; composite materials
Fuelwood
Chemical utilization of wood; wood chemistry; cellulose textiles and other derivatives; wood extracts
Bark products and other primary products from forest trees, such as resins, oils, waxes, gums, sugar, dyestuffs
Indirect products, such as osiers, canes, construction materials, and products from other forest plants

For wood preservation, use H00
wood structure, use F50

M20 Oceanography

Chemical and physical aspects of marine science; submarine topography, including marine contour surveys
Sea-water

For marine biology, use M40
marine pollution, use T00
desalination, use P10

M30 Limnology

Chemical and physical aspects of fresh-waters (but not water resource aspects or water quality and chemistry) and their subaquatic topography

For freshwater biology, use M40
applications in hydrology, use P10
water pollution, use T00
water resources, use P10
water chemistry and quality, use P10

M40 Aquatic biology

General biology and ecology of fish and other animal and plant life of economic interest in fresh, brackish, and marine waters; littoral life
Behaviour: migrations, movements, rhythms
Food and feeding; plankton
Productivity and population dynamics

For diseases of fish and other aquatic animals, use L73
pests of fish and other aquatic animals, use L72
effects of water pollution, use T00

N00 MACHINERY AND BUILDINGS

General equipment and engineering in relation to agriculture, forestry and fisheries

N10 Agricultural engineering and structures

Design, materials, construction, and maintenance of such structures as farm-houses, barns, silos, glasshouses
Structural equipment; hoisting and conveying equipment
Safety engineering; safety devices, fire detection and control (but not forest fires), accident prevention
Power sources and applications
Rural electrification; electrical and electronic engineering

For drainage and irrigation structures, use P12
earth-moving equipment, use F26
forest fires, use H50
similar subject areas in fisheries, use M10

N20 Farm equipment

Hand and power equipment and machines for field cultivation, crop and livestock handling
Livestock and dairying equipment

For plant disease control equipment, use H20
plant pest control equipment, use H10
drainage and irrigation equipment, use P12
animal pest control equipment, use L72

L72 Pests of animals

Animals as predators or ectoparasites of animals of interest to man; arthropod pests of man; vectors of pathogens; their prevention and control
Etiology, pathology, therapeutics, and prevention of diseases caused by protozoa, and parasitic worms in animals of interest to man
Biology of the parasites; resistance to infection

L73 Animal diseases

Bacterial, fungal, viral, and mycoplasmal diseases and their causal organisms in relation to animals of interest to man
Materials, methods, and programmes for the prevention and control of animal diseases

For diseases of protozoan or other animal origin, use L72
quarantine regulations, use D50
physiological disorders, use L74

L74 Miscellaneous disorders of animals

Physiological diseases and nutritional disorders; their biology, prevention, and control
Congenital defects; injuries and other conditions caused by physical or non-biogenic agencies; their prevention and control; veterinary surgery
Allergies; poisoning

M00 FISHERIES

Economic policies, planning, and development of fisheries and other enterprises concerning aquatic resources
Manpower and employment
Fisheries management and production
Fisheries finance: costs and returns; cost factors: capital, materials, labour; taxation; insurance
Credit, interest rates, investment return
Evaluation of stocks; over-fishing

For marketing, use E70

M10 Fishing methods, techniques, and equipment

Methods, organization, and equipment (including fishing vessels) for deep-sea fishing, inshore and coastal fishing, fishing of inland waters; harbours and ports
Whaling and catching of other marine mammals
Rearing and collecting aquatic invertebrates of economic interest, such as molluscs and crustaceans
Culture and harvesting of seaweeds and other aquatic plants of economic interest
Unloading and other quayside operations
Pisciculture, including ornamental fish; storage and transport of live fish

For sport fishing, use L20

Q10 Food processing

Equipment and processes of food and drink manufacture
Planning and development of industries for the processing of food products
Preservation, drying, and storage of food, raw and processed foods

For food preparation and storage in the home, use R00

Q20 Food microbiology and toxicology

Food micro-organisms, beneficial and deleterious
Food toxicology and spoilage
Public health aspects of foodstuffs

Q30 Food packaging

For marketing and distribution, use E70

Q40 Food additives

For public health aspects, use Q20

R00 HOME ECONOMICS

Programmes for the development of home economics
Food in the home; preparation of meals and cooking of food; home food storage
Houses and household equipment; basic requirements for houses, their furnishing and equipment
Housekeeping
Care of children in the home

For diets, use S00
welfare, use E50

S00 HUMAN NUTRITION

Characters of mankind in relation to foods and feeding, including behavioural, psychological, and social aspects
Hunger and appetite; thirst
Food consumption

For toxicology and public health aspects of food, use Q20

S10 Food composition

Constituents and composition of foods; vitamins
Nutritive values

S20 Physiology of nutrition

Nutritional physiology in man
Nutritional requirements

For animal nutrition, use L30

S30 Feeding

Human diet in relation to health and disease; nutritional and metabolic diseases and disorders
Feeding régimes; diets

For home preparation of food and meals, use R00

P00 NATURAL RESOURCES

General aspects of natural resources
Natural resources (other than forest, labour, soil and water) in relation to agriculture, fisheries, or forestry, including biotic and energy resources

For applications in pollution, use T00
forest resources, use K00
manpower and labour resources, use E10
soil resources, use F26
water resources, use P10
conservation of animal and plant wildlife, use L20 and F40, respectively
economics and development of fisheries resources, use M00

P10 Water resources and management

Resource potentialities and assessment of water for use in agriculture, fisheries, or forestry (including water requirements for man)
Water resources planning and development; integrated development of surface and groundwater; water surveys
Water conservation; waste waters
Water quality; water chemistry; desalination
Hydrology; flood and river control; hydrogeology

For limnological applications, use M30
oceanographical applications, use M20
water pollution, use T00
drainage and irrigation, use P12
erosion by water, use F28
induced rainfall, use F10

P12 Drainage and irrigation

Agricultural hydraulics
Construction and operation of wells, dams, reservoirs
Water conveyance and distribution; irrigation
Drainage; maintenance of water channels

For flood and river control, use P10
water in soils, use F22

P20 Land resources

Land resources in general

For economics of land development, use E10
land capability, use E10

Q00 FOOD SCIENCE

Food science and the food industry in general
Basic technologies applied to the conversion of primary products into food for man

For food constituents and composition, use S10
food toxicology and microbiology, use Q20
food for domestic animals, use L30
human nutrition, use S00
marketing, use E70

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GROUP 2

OBJECT CODES

(First three boxes of Tag 620 of
AGRIS Input Sheet)

T00 ENVIRONMENTAL POLLUTION

Description and assessment of the degradation or susceptibility to degradation of environmental factors by man's activities in agriculture, fisheries, or forestry
Pollution of the environment required for agriculture, fisheries, and forestry by natural phenomena or man's activities in other spheres
Pollutants
Pollution prevention and control

For consumer protection and public health aspects of food, use Q20
veterinary aspects of public health, use L70
erosion, use F28

U00 AUXILIARY DISCIPLINES

U10 Mathematics and statistics

Mathematics and statistical methods applicable within the scope

For statistical data, use appropriate subject headings

U20 Documentation

Documentation, library work, and information science applicable within the scope

PLANTS UTILIZED BY MAN

0100	Cereals - general
0110	Barley
0120	Maize
0130	Millets
0140	Oats
0150	Rice
0160	Rye
0170	Sorghums
- -	Sugar sorghum, use 0240
0180	Wheat
0185	Pseudocereals
0190	Cereals - other
0200	Sugar and starch crops - general
- -	Arrowroot, use 1510
- -	Cassava, use 1540
0210	Potatoes
0215	Sago palm
0220	Sugar-beets
0230	Sugar-cane
0240	Sugar sorghum
0250	Sugar maples
0260	Sugar palms
0290	Sugar and starch crops - other
0300	Oil crops - general
0310	Oil-producing trees - general
0311	Coconut
0312	Oil palms
0313	Olive
0314	Shea butter tree
0315	Tung oil tree
0329	Oil-producing trees - other
0330	Oil herbs and bushes - general
0331	Castor-oil plant
- -	Cottonseed, use 0430
0332	Groundnut
0333	Linseed
- -	Maize, use 0120
0334	Rape
0335	Sesame
0336	Soybean
0337	Sunflower
0390	Oil herbs and bushes - other
0400	Fibre plants - general
0410	Abaca
0420	Bamboos
- -	Coir, use 0311
0430	Cotton
0440	Flax
- -	for Linseed, use 0333
0450	Hemp
- -	for Hashish, use 2730

1200	Edible nuts - general
1210	Almonds
1215	Brazil nuts
1220	Cashews
1225	Chestnuts
- -	for Horse chestnuts, use 3290
- -	Coconuts, use 0311
1230	Hazels
1235	Macadamias
1240	Pecans
1245	Pistachios
1250	Walnuts
1280	Edible nuts - other
1290	Fruit crops - other
1300	Vegetables - general
1400	Leguminous grains and vegetables - general
- -	for Leguminous forage crops, use 1950
1410	Beans (Phaseolus)
1420	Broad beans (Vicia)
1430	Chick peas
1440	Cowpeas
- -	Groundnut, use 0332
1450	Lablab
1460	Lentils
1470	Peas
1480	Pigeon peas
- -	Soybeans, use 0336
1490	Leguminous grains and vegetables - other
1500	Root vegetables - general
- -	for Feed roots, use 1970
1510	Arrowroots
1520	Beets
- -	for Sugar-beets, use 0220
1530	Carrots
1540	Cassava
- -	Chicory, use 1640
1550	Edible aroids
1560	Jerusalem artichokes
1565	Parsnips
- -	Potatoes, use 0210
1570	Radishes
1575	Swedes
1580	Sweet potatoes
1585	Turnips
1587	Yams
1590	Root vegetables - other
1600	Greens and leafy vegetables - general
1610	Asparagus
1620	Brassicas - general
1621	Brussels sprouts
1622	Cabbages
1623	Cauliflowers and broccolis
1624	Kales
1625	Kohlrabi
1629	Brassicas - other
1630	Celery
1640	Chicory and endive

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0460 Hibiscus fibres
0470 Jute
0480 Kapok trees
0490 Ramie
0500 Rattan
0510 Sisals
0590 Fibre plants - other

0600 Fruit crops - general
0700 Temperate tree fruits - general
0710 Apples
0712 Apricots
0714 Cherries
0716 Peaches
0718 Pears
0720 Plums
0722 Quinces
0790 Temperate tree fruits - other

0800 Cucurbit fruits - general
0810 Melons
0820 Watermelons
- - for Cucurbit vegetables, use 1820
0890 Cucurbit fruits - other

0900 Temperate berry fruits - general
0910 Blackberries
0920 Blueberries
0925 Currants
0930 Figs
0935 Gooseberries
0940 Grapes
0950 Raspberries
0960 Strawberries
0990 Temperate berry fruits - other

1000 Citrus fruits - general
1010 Citrons
1020 Grapefruits
1030 Lemons
1040 Limes
1050 Tangerines
1060 Oranges
1090 Citrus fruits - other

1100 Tropical fruits - general
1110 Avocadoes
1112 Bananas
- - Citrus, see 1000
1114 Date palms
1116 Guavas
1118 Litchis
1120 Mangoes
1122 Papayas
1124 Persimmons
1126 Pineapples
- - Sapodillas, use 2520
1190 Tropical fruits - other

2100	Stimulant crops - general
2110	Cacao
- -	Coco, use 2720
2120	Coffee
- -	Grapes, use 0940
2130	Kola
2140	Maté
2150	Tea
2160	Yoco
2190	Stimulant crops - other
2200	Flavouring and perfume plants
2210	Allspice
2220	Capers
2230	Chillies
2240	Cinnamon
2250	Clove
2255	Fennel
2260	Ginger
2270	Hops
2280	Lemon grass
2290	Mints
2300	Mustards
2310	Nutmeg
2320	Pepper
2330	Rue
- -	Saffron, use 2675
2340	Sarsaparilla
2350	Sassafras
2360	Sweet bay
2370	Turmeric
2380	Umbelliferous herbs
2383	Vanilla
2385	Vetiver
2387	Ylang-ylang
2390	Flavouring and perfume plants - other
2400	Rubber and wax plants - general
2410	Balata
2420	Carnauba palm
2430	Ceara rubber
2440	Copal plants
2450	Gum arabic
2460	Gum tragacanth
2470	Gutta-percha
2480	Hevea rubber
2490	India rubber
2500	Karaya gum
2510	Mastic
2520	Sapodilla
- -	Shellac, use 7200
- -	Turpentine plants, use 3140
2590	Rubber and wax plants - other

- -	Finocchio, use 2255
1650	Globe artichokes
1660	Lettuces
1665	Rhubarb
1670	Spinach
1680	Watercress
1690	Greens and leafy vegetables - other
1700	Bulbous vegetables - general
1710	Chives
1720	Garlic
1730	Leeks
1740	Onions
1750	Shallots
1790	Bulbous vegetables - other
1800	Fruit vegetables - general
- -	Avocadoes, use 1110
- -	Breadfruit, use 1190
1810	Chayote
1820	Cucurbit vegetables - general
1821	Cucumbers and gherkins
1822	Pumpkins
1823	Squashes and marrows
1829	Cucurbit vegetables - other
1830	Eggplants
1840	Okra
1845	Peppers
- -	Plantains, use 1112
- -	Sweetcorn, use 0120
1850	Tomatoes
1880	Fruit vegetables - other
1885	Edible fungi
1890	Vegetables - other
1900	Pastures and feed crops - general
1910	Natural pastures and range
1920	Mixed sown pastures
1930	Feed grasses
1940	Feed cereals (see also 0100)
1950	Feed legumes - general
1951	Clovers
1952	Lespedezas
1953	Lucerne
1954	Stylosanthes
1955	Sweetclovers
1956	Vetches
1959	Feed legumes - other
1960	Feed crucifers (see also 1600)
1970	Feed roots (see also 1500)
1980	Forage trees and shrubs
1990	Pastures and feed crops - other
2000	Cover crops - general
2030	Mulch crops and green manures
2040	Shade plants
2090	Cover crops - other

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ANIMALS UTILIZED BY MAN

5000	Domesticated mammals - general
5100	Equidae - general
5110	Asses
5120	Horses
5130	Mules
5190	Equidae - other
5200	Ruminants - general
5210	Bovidae - general
5212	Bovines - general
5213	Beef cattle
5214	Dairy cattle
5219	Bovidae - other
5220	Camels
5230	Llamas
5240	Sheep
5250	Goats
5290	Ruminants - other
5300	Swine
5400	Dogs
5500	Cats
5600	Rabbits
5900	Domesticated mammals - other
6000	Domesticated birds - general
6100	Chickens
6200	Ducks
6300	Geese
6400	Guinea fowl
6500	Pigeons
6600	Turkeys
6700	Ornamental and plumage birds
6900	Domesticated birds - other
7000	Insects - general
7100	Bees - general
7110	Honey-bees
7200	Lac insects
7300	Insects used for biological control
7400	Insect pollinators (other than bees)
7900	Insects - other
8000	Aquatic animals - general
8100	Fish - general
8110	Carp
8120	Eels
8130	Salmon and trout
8140	Freshwater fish - other
8150	Marine fish - other
8200	Shellfish - general
8300	Crustaceans - general
8310	Shrimps and prawns
8320	Crabs
8330	Lobsters and crayfish
8390	Crustaceans - other

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2600	Tan and dye plants - general
2610	Gamboge
2620	Henna
2630	Indigo
2640	Logwood
2650	Madder
2660	Mangrove
2665	Quebracho
2670	Safflower
2675	Saffron
- -	Turmeric, use 2370
2680	Wattles
2690	Tan and dye plants - other
2700	Drug plants - general
2710	Betel-nut palms
2720	Coco
2730	Hemp, Drug plant (as fibre crop, use 0450)
2740	Opium poppies
2750	Cinchona
2760	Tobacco
2790	Drug plants - other
2800	Pesticide crops - general
2810	Dewis
2820	Pyrethrum
2890	Pesticide crops - other
3000	Forest and ornamental trees - general
3100	Conifers and other gymnosperms - general
3110	Douglas-fir
3120	Firs
3130	Larches
3140	Pines
3150	Spruces
3190	Conifers and other gymnosperms - other
3200	Angiosperm trees - general
3210	African mahogany
3220	Beeches
- -	Chestnuts, use 1225
3230	Elms
3240	Eucalypts
3250	Lignum vitae
3260	Mahoganies
3265	Maples
- -	for Sugar maples, use 0250
3270	Oaks
3275	Poplars
3280	Spanish cedars
3285	Teaks
3290	Angiosperm trees - other
3300	Ornamental plants
- -	Ornamental trees and shrubs, see 3000
3400	Other plants utilized by man - general
3410	Algae
3420	Lichens
3430	Yeasts
3490	Other plants utilized by man - other

9400	Milk products - general
9410	Milk and cream
9420	Butter
9430	Cheeses
9490	Milk products - other
9500	Fats and oils - general
9510	Margarines
9520	Cooking oils
9590	Fats and oils - other
9600	Egg products - general
9610	Fresh eggs
9620	Dried eggs
9630	Processed eggs
9690	Egg products - other
9700	Meat products - general
9710	Fresh meat
9720	Canned or dried meat
9730	Processed meat
9740	Meat extracts
9790	Meat products - other
9800	Fish and marine food products - general
9810	Fresh fish and shellfish
9820	Canned fishery products
9830	Dried fishery products
9850	Fish and marine food products - other
9900	Beverage products - general
9910	Processed coffee and tea
9920	Alcoholic drinks
9930	Fruit-based non-alcoholic drinks
9950	Beverage products - other
9990	Foods - other

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8400 Molluscs - general
8410 Clams
8420 Mussels
8430 Octopus and squids
8440 Oysters
8490 Molluscs - other

8500 Reptiles and batrachions - general
8510 Crocodiles and alligators
8520 Frogs
8530 Turtles
8590 Reptiles and batrachions - other

8600 Other aquatic invertebrates - general
8610 Bryozoa
8620 Coelenterates
8630 Echinoderms
8640 Marine worms
8650 Sponges
8690 Other aquatic invertebrates - other

8700 Other aquatic vertebrates - general
8710 Whales and porpoises
8720 Seals and sealions

8790 Aquatic animals - other

8800 Other animals utilized by man - general
8810 Game animals
8830 Laboratory animals
8860 Pet animals (other than cats, dogs, rabbits)
8890 Other animals utilized by man - other

FOODS

9000 Foods - general
9100 Fruit and vegetable products - general
9110 Fresh fruits and vegetables
9120 Canned or dried fruits and vegetables
9130 Processed fruits and vegetables
9140 Fruit and vegetable juices (see also 9900)
9190 Fruit and vegetable products - other

9200 Cereals and bakery products - general
9210 Flours and semolinas
9220 Pasta
9230 Breads
9240 Biscuits and pastries
9250 Processed cereals
9290 Cereals and bakery products - other

9300 Sugar and starch products - general
9310 Non-cereal flours
9320 Sugar
9330 Sugar confectioneries
9340 Honey
9350 Starches
9390 Sugar and starch products - other

GROUP 3.

GEOGRAPHICAL CODES

(Last two boxes of Tag 620 of
AGRIS Input Sheet)

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POLITICAL GEOGRAPHY

G100 AFRICA
- NT AFRICA SOUTH OF SAHARA
- NORTH AFRICA
- RT ANGLOPHONE AFRICA
- FRANCOPHONE AFRICA
- TROPICAL AFRICA

G102 ANGLOPHONE AFRICA
- UF ENGLISH SPEAKING AFRICA
- RT AFRICA
- BOTSWANA
- GAMBIA
- GHANA
- KENYA
- LESOTHO
- LIBERIA
- MALAWI
- MAURITIUS
- NAMIBIA
- NIGERIA
- RHODESIA
- SIERRA LEONE
- SOUTH AFRICA
- SWAZILAND
- TANZANIA
- UGANDA
- ZAMBIA

G105 FRANCOPHONE AFRICA
- UF FRENCH SPEAKING AFRICA
- RT AFRICA
- ALGERIA
- BURUNDI
- CAMEROON
- CENTRAL AFRICAN REPUBLIC
- CHAD
- COMORO ISLANDS
- CONGO
- DAHOMEY
- GABON
- GUINEA
- IVORY COAST
- MALAGASY REPUBLIC
- MALI
- MAURITANIA
- MOROCCO
- NIGER
- REUNION
- RWANDA
- SENEGAL
- TOGO
- TUNISIA
- UPPER VOLTA
- ZAIRE

G110 AFRICA SOUTH OF SAHARA
- BT AFRICA
- NT CENTRAL AFRICA
- EAST AFRICA
- SOUTHERN AFRICA
- WEST AFRICA

G112 CENTRAL AFRICA
- BT AFRICA SOUTH OF SAHARA
- NT BURUNDI
- CENTRAL AFRICAN REPUBLIC
- CHAD
- CONGO
- EQUATORIAL GUINEA
- GABON
- RWANDA
- SAO THOME AND PRINCIPE
- ZAIRE
- RT TROPICAL AFRICA

G114 BURUNDI
- BT CENTRAL AFRICA
- RT FRANCOPHONE AFRICA
- OAU

G116 CENTRAL AFRICAN REPUBLIC
- BT CENTRAL AFRICA
- RT FRANCOPHONE AFRICA
- OAU
- OCAM

G118 CHAD
- UF TCHAD
- BT CENTRAL AFRICA
- RT FRANCOPHONE AFRICA
- OAU
- OCAM

G120 CONGO
- UF CONGO (BRAZZAVILLE)
- MIDDLE CONGO
- BT CENTRAL AFRICA
- RT FRANCOPHONE AFRICA
- OAU

G122 EQUATORIAL GUINEA
- UF FERNANDO PO
- RIO MUNI
- SPANISH GUINEA
- BT CENTRAL AFRICA
- RT OAU

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G156 ANGOLA
BT SOUTHERN AFRICA
RT PORTUGUESE WEST AFRICA
TROPICAL AFRICA

G158 BOTSWANA
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU
TROPICAL AFRICA

G160 COMORO ISLANDS
UF ANJOUAN
GRANDE COMORE
MAYOTTE
MOHELI
BT SOUTHERN AFRICA
RT FRANCE
FRANCOPHONE AFRICA
TROPICAL AFRICA

G162 LESOTHO
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G164 MALAGASY REPUBLIC
UF MADAGASCAR
BT SOUTHERN AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM
TROPICAL AFRICA

G166 MALAWI
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU
TROPICAL AFRICA

G168 MAURITIUS
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OCAM
TROPICAL AFRICA

G170 NAMIBIA
UF SOUTH WEST AFRICA
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
TROPICAL AFRICA

G172 PORTUGUESE EAST AFRICA
UF MOZAMBIQUE
BT SOUTHERN AFRICA
RT PORTUGAL
TROPICAL AFRICA

G174 REUNION
BT SOUTHERN AFRICA
RT FRANCE
FRANCOPHONE AFRICA
TROPICAL AFRICA

G176 RHODESIA
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
TROPICAL AFRICA

G178 SOUTH AFRICA
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA

G180 ST HELENA
BT SOUTHERN AFRICA
NT ASCENSION
TRISTAN DA CUNHA
RT TROPICAL AFRICA
UNITED KINGDOM

G182 SWAZILAND
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G184 ZAMBIA
BT SOUTHERN AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU
TROPICAL AFRICA

G190 WEST AFRICA
BT AFRICA SOUTH OF SAHARA
NT CAMEROON
CAPE VERDE ISLANDS
DAHOMEY
GAMBIA
GHANA
GUINEA
IVORY COAST
LIBERIA
MALI
MAURITANIA
NIGER
NIGERIA

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G124 GABON
BT CENTRAL AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G126 RWANDA
BT CENTRAL AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G128 SAO TOME AND PRINCIPE
UF PRINCIPE
SAN THOME AND PRINCIPE
BT CENTRAL AFRICA
RT PORTUGUESE WEST AFRICA

G130 ZAIRE
UF BANDUNDA
CONGO (KINSHASA)
CONGO (LEOPOLDVILLE)
CONGO DEMOCRATIC REPUBLIC
CONGO ORIENTALE
EQUATEUR
KASAI
KATANGA
KINSHASA
KIVU
BT CENTRAL AFRICA
RT FRANCOPHONE AFRICA
OAU

G132 EAST AFRICA
BT AFRICA SOUTH OF SAHARA
NT BRITISH INDIAN OCEAN TERRITORY
ETHIOPIA
FRENCH TERRITORY OF AFARS AND ISSAS
KENYA
SEYCHELLES
SOMALI DEMOCRATIC REPUBLIC
SUDAN
TANZANIA
UGANDA
RT TROPICAL AFRICA

G134 BRITISH INDIAN OCEAN TERRITORY
BT EAST AFRICA
NT ALDABRA
CHAGOS ARCHIPELAGO
RT SEYCHELLES
UNITED KINGDOM

G136 ETHIOPIA
UF ABYSSINIA
BT EAST AFRICA
RT OAU

G138 FRENCH TERRITORY OF AFARS AND ISSAS
UF AFARS AND ISSAS TERRITORY
FRENCH SOMALILAND
BT EAST AFRICA
RT FRANCE

G140 KENYA
BT EAST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS

G142 SEYCHELLES
BT EAST AFRICA
RT BRITISH INDIAN OCEAN TERRITORY
UNITED KINGDOM

G144 SOMALI DEMOCRATIC REPUBLIC
UF SOMALIA
BT EAST AFRICA

G146 SUDAN
BT EAST AFRICA
RT ARAB COUNTRIES
OAU

G148 TANZANIA
UF UNITED REPUBLIC OF TANZANIA
BT EAST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G150 UGANDA
BT EAST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G154 SOUTHERN AFRICA
BT AFRICA SOUTH OF SAHARA
NT ANGOLA
BOTSWANA
COMORO ISLANDS
LESOTHO
MALAGASY REPUBLIC
MALAWI
MAURITIUS
NAMIBA
PORTUGUESE EAST AFRICA
REUNION
RHODESIA
SOUTH AFRICA
ST HELENA
SWAZILAND
ZAMBIA

G229 NORTH AFRICA
- BT AFRICA
- NT ALGERIA
  - EGYPT
  - LIBYA
  - MOROCCO
  - SPANISH TERRITORIES OF NORTH AFRICA
  - TUNISIA
- RT ARAB COUNTRIES

G230 ALGERIA
- BT NORTH AFRICA
- RT FRANCOPHONE AFRICA
  - MEDITERRANEAN COUNTRIES
  - OAU

G232 EGYPT
- UF UNITED ARAB REPUBLIC
- BT NORTH AFRICA
- RT MEDITERRANEAN COUNTRIES
  - OAU

G234 LIBYA
- UF LIBYAN ARAB REPUBLIC
- BT NORTH AFRICA
- RT MEDITERRANEAN COUNTRIES
  - OAU

G236 MOROCCO
- BT NORTH AFRICA
- RT FRANCOPHONE AFRICA
  - MEDITERRANEAN COUNTRIES
  - OAU
  - SPANISH TERRITORIES OF NORTH AFRICA

G238 SPANISH TERRITORIES OF NORTH AFRICA
- BT NORTH AFRICA
- RT MOROCCO
  - SPAIN

G240 TUNISIA
- BT NORTH AFRICA
- RT FRANCOPHONE AFRICA
  - MEDITERRANEAN COUNTRIES
  - OAU

G300 AMERICA
- NT CARIBBEAN
  - CENTRAL AMERICA
  - NORTH AMERICA
  - SOUTH AMERICA
- RT LATIN AMERICA
  - TROPICAL AMERICA

G302 LATIN AMERICA
- RT AMERICA
  - CARIBBEAN
  - CENTRAL AMERICA
  - MEXICO
  - SOUTH AMERICA

G310 CARIBBEAN
- BT AMERICA
- NT BAHAMAS
  - BARBADOS
  - CAYMAN ISLANDS
  - CUBA
  - DOMINICAN REPUBLIC
  - GUADELOUPE
  - HAITI
  - JAMAICA
  - MARTINIQUE
  - MONTSERRAT
  - NETHERLANDS ANTILLES
  - PUERTO RICO
  - TORTOLA
  - TRINIDAD AND TOBAGO
  - TURKS AND CAICOS ISLANDS
  - VIRGIN ISLANDS (USA)
  - WEST INDIES ASSOCIATED STATES
- RT CARIBBEAN SEA
  - CARIFTA
  - FRENCH WEST INDIES
  - LATIN AMERICA
  - LESSER ANTILLES
  - TROPICAL AMERICA

G312 BAHAMAS
- BT CARIBBEAN
- RT COMMONWEALTH OF NATIONS

G314 BARBADOS
- BT CARIBBEAN
- RT CARIFTA
  - COMMONWEALTH OF NATIONS
  - INTER-AMERICAN DEVELOPMENT BANK
  - OAS
  - WINDWARD ISLANDS

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(G190 WEST AFRICA)
(NT) PORTUGUESE GUINEA
SENEGAL
SIERRA LEONE
SPANISH SAHARA
TOGO
UPPER VOLTA
RT TROPICAL AFRICA

G192 CAMEROON
UF CAMEROUN
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G194 CAPE VERDE ISLANDS
BT WEST AFRICA
RT PORTUGAL

G196 DAHOMEY
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G198 GAMBIA
BT WEST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G200 GHANA
BT WEST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G202 GUINEA
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU

G204 IVORY COAST
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G206 LIBERIA
BT WEST AFRICA
RT ANGLOPHONE AFRICA
OAU

G208 MALI
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU

G210 MAURITANIA
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU

G212 NIGER
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G214 NIGERIA
BT WEST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G216 PORTUGUESE GUINEA
BT WEST AFRICA
RT PORTUGUESE WEST AFRICA

G218 SENEGAL
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G220 SIERRA LEONE
BT WEST AFRICA
RT ANGLOPHONE AFRICA
COMMONWEALTH OF NATIONS
OAU

G222 SPANISH SAHARA
UF RIO DE ORO
SPANISH WEST AFRICA
BT WEST AFRICA
RT SPAIN

G224 TOGO
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G226 UPPER VOLTA
BT WEST AFRICA
RT FRANCOPHONE AFRICA
OAU
OCAM

G228 PORTUGUESE WEST AFRICA
RT ANGOLA
PORTUGAL
PORTUGUESE GUINEA
SAO TOME AND PRINCIPE

(G344 WEST INDIES ASSOCIATED STATES)
(NT) ST KITTS-NEVIS-ANGUILLA
ST LUCIA
ST VINCENT
RT CARIFTA
UNITED KINGDOM

G345 ANTIGUA
BT WEST INDIES ASSOCIATED STATES
RT LEEWARD ISLANDS

G346 DOMINICA
BT WEST INDIES ASSOCIATED STATES
RT WINDWARD ISLANDS

G347 GRENADA
BT WEST INDIES ASSOCIATED STATES
RT WINDWARD ISLANDS

G348 ST KITTS-NEVIS-ANGUILLA
UF ANGUILLA
NEVIS
BT WEST INDIES ASSOCIATED STATES
RT LEEWARD ISLANDS

G349 ST LUCIA
BT WEST INDIES ASSOCIATED STATES
RT WINDWARD ISLANDS

G350 ST VINCENT
BT WEST INDIES ASSOCIATED STATES
RT WINDWARD ISLANDS

G351 FRENCH WEST INDIES
UF WEST INDIES (FRENCH)
RT CARIBBEAN
FRANCE
GUADELOUPE
MARTINIQUE

G352 CENTRAL AMERICA
BT AMERICA
NT BRITISH HONDURAS
COSTA RICA
EL SALVADOR
GUATEMALA
HONDURAS
NICARAGUA
PANAMA
PANAMA CANAL ZONE
RT CENTRAL AMERICAN COMMON MARKET
LATIN AMERICA
TROPICAL AMERICA

G353 BRITISH HONDURAS
UF HONDURAS (BRITISH)
BT CENTRAL AMERICA
RT CARIFTA
UNITED KINGDOM

G354 COSTA RICA
BT CENTRAL AMERICA
RT CENTRAL AMERICAN COMMON MARKET
INTER-AMERICAN DEVELOPMENT BANK
OAS
ODECA

G355 EL SALVADOR
UF SALVADOR
BT CENTRAL AMERICA
RT CENTRAL AMERICAN COMMON MARKET
INTER-AMERICAN DEVELOPMENT BANK
OAS
ODECA

G356 GUATEMALA
BT CENTRAL AMERICA
RT CENTRAL AMERICAN COMMON MARKET
INTER-AMERICAN DEVELOPMENT BANK
OAS
ODECA

G358 HONDURAS
BT CENTRAL AMERICA
RT CENTRAL AMERICAN COMMON MARKET
INTER-AMERICAN DEVELOPMENT BANK
OAS
ODECA

G360 NICARAGUA
BT CENTRAL AMERICA
RT CENTRAL AMERICAN COMMON MARKET
INTER-AMERICAN DEVELOPMENT BANK
OAS
ODECA

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G316 CAYMAN ISLANDS
UF GRAND CAYMAN
BT CARIBBEAN
RT UNITED KINGDOM

G318 CUBA
BT CARIBBEAN
RT CMEA
OAS

G320 DOMINICAN REPUBLIC
BT CARIBBEAN
RT INTER-AMERICAN DEVELOPMENT BANK
LATIN AMERICA
OAS

G322 GUADELOUPE
BT CARIBBEAN
RT FRENCH WEST INDIES
WINDWARD ISLANDS

G324 HAITI
BT CARIBBEAN
RT INTER-AMERICAN DEVELOPMENT BANK
OAS

G326 JAMAICA
BT CARIBBEAN
RT CARIFTA
COMMONWEALTH OF NATIONS
INTER-AMERICAN DEVELOPMENT BANK
OAS

G328 MARTINIQUE
BT CARIBBEAN
RT FRENCH WEST INDIES
WINDWARD ISLANDS

G330 MONTSERRAT
BT CARIBBEAN
RT CARIFTA
LEEWARD ISLANDS
UNITED KINGDOM

G332 NETHERLANDS ANTILLES
UF ANTILLES (NETHERLANDS)
BT CARIBBEAN
NT ARUBA
BONAIRE
CURACAO
SABA
ST EUSTATIUS
ST MAARTEN
RT LESSER ANTILLES
NETHERLANDS

G333 ARUBA
BT NETHERLANDS ANTILLES

G334 BONAIRE
BT NETHERLANDS ANTILLES

G335 CURACAO
BT NETHERLANDS ANTILLES

G336 SABA
BT NETHERLANDS ANTILLES
RT LEEWARD ISLANDS

G337 ST EUSTATIUS
BT NETHERLANDS ANTILLES
RT LEEWARD ISLANDS

G338 ST MAARTEN
BT NETHERLANDS ANTILLES
RT LEEWARD ISLANDS

G339 PUERTO RICO
UF PORTO RICO
BT CARIBBEAN
RT USA

G340 TORTOLA
UF BRITISH VIRGIN ISLANDS
VIRGIN ISLANDS (BRITISH)
BT CARIBBEAN
RT LEEWARD ISLANDS

G341 TRINIDAD AND TOBAGO
UF TOBAGO
BT CARIBBEAN
RT CARIFTA
COMMONWEALTH OF NATIONS
INTER-AMERICAN DEVELOPMENT BANK
OAS

G342 TURKS AND CAICOS ISLANDS
UF CAICOS
BT CARIBBEAN
RT UNITED KINGDOM

G343 VIRGIN ISLANDS (USA)
UF AMERICAN VIRGIN ISLANDS
UNITED STATES VIRGIN ISLANDS
BT CARIBBEAN
RT LEEWARD ISLANDS
USA

G344 WEST INDIES ASSOCIATED STATES
BT CARIBBEAN
NT ANTIGUA
DOMINICA
GRENADA

(G430 USA)

(NT) DELAWARE
DISTRICT OF COLUMBIA
FLORIDA
GEORGIA
HAWAII
IDAHO
ILLINOIS
INDIANA
IOWA
KANSAS
KENTUCKY
LOUISIANA
MAINE
MARYLAND
MASSACHUSETTS
MICHIGAN
MINNESOTA
MISSISSIPPI
MISSOURI
MONTANA
NEBRASKA
NEVADA
NEW HAMPSHIRE
NEW JERSEY
NEW MEXICO
NEW YORK
NORTH CAROLINA
NORTH DAKOTA
OHIO
OKLAHOMA
OREGON
PENNSYLVANIA
RHODE ISLAND
SOUTH CAROLINA
SOUTH DAKOTA
TENNESSEE
TEXAS
UTAH
VERMONT
VIRGINIA
WASHINGTON
WEST VIRGINIA
WISCONSIN
WYOMING

RT COLOMBO PLAN
GREAT BASIN AND PACIFIC SLOPE STATES
INTER-AMERICAN DEVELOPMENT BANK
NATO
NORTH CENTRAL STATES (USA)
NORTH EASTERN STATES (USA)
OAS
OECD

(RT) PACIFIC ISLANDS (US)
PUERTO RICO
SEATO
SOUTH CENTRAL STATES (USA)
SOUTH EASTERN STATES (USA)
SOUTH PACIFIC COMMISSION
VIRGIN ISLANDS (USA)
WESTERN STATES (USA)

G432 ALABAMA
BT USA
RT SOUTH CENTRAL STATES (USA)

G433 ALASKA
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G434 ARIZONA
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G435 ARKANSAS
BT USA
RT SOUTH CENTRAL STATES (USA)

G436 CALIFORNIA
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G437 COLORADO
BT USA
RT WESTERN STATES (USA)

G438 CONNECTICUT
BT USA
RT NEW ENGLAND
NORTH EASTERN STATES (USA)

G439 DELAWARE
BT USA
RT SOUTH EASTERN STATES (USA)

G440 DISTRICT OF COLUMBIA
UF DC
WASHINGTON DC
BT USA
RT SOUTH EASTERN STATES (USA)

G441 FLORIDA
BT USA
RT SOUTH EASTERN STATES (USA)

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G362 PANAMA
BT CENTRAL AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
OAS
PANAMA CANAL ZONE

G364 PANAMA CANAL ZONE
BT CENTRAL AMERICA
RT PANAMA

G370 NORTH AMERICA
BT AMERICA
NT BERMUDA
CANADA
GREENLAND
MEXICO
ST PIERRE AND MIQUELON
USA

G372 BERMUDA
BT NORTH AMERICA
RT UNITED KINGDOM

G374 CANADA
BT NORTH AMERICA
NT ALBERTA
BRITISH COLUMBIA
MANITOBA
NEW BRUNSWICK
NEWFOUNDLAND
NORTH WEST TERRITORIES
NOVA SCOTIA
ONTARIO
PRINCE EDWARD ISLAND
QUEBEC
SASKATCHEWAN
YUKON TERRITORY

RT COLOMBO PLAN
COMMONWEALTH OF NATIONS
INTER-AMERICAN DEVELOPMENT BANK
NATO
OECD

G376 ALBERTA
BT CANADA

G378 BRITISH COLUMBIA
BT CANADA

G380 MANITOBA
BT CANADA

G382 NEW BRUNSWICK
BT CANADA

G384 NEWFOUNDLAND
BT CANADA
RT LABRADOR

G386 NORTH WEST TERRITORIES
BT CANADA

G388 NOVA SCOTIA
BT CANADA

G390 ONTARIO
BT CANADA

G392 PRINCE EDWARD ISLAND
BT CANADA

G394 QUEBEC
BT CANADA
RT LABRADOR

G396 SASKATCHEWAN
BT CANADA

G398 YUKON TERRITORY
BT CANADA

G400 LABRADOR
RT NEWFOUNDLAND
QUEBEC

G402 GREENLAND
BT NORTH AMERICA
RT DENMARK

G404 MEXICO
UF UNITED MEXICAN STATES
BT NORTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
LATIN AMERICA
OAS
TROPICAL AMERICA

G420 ST PIERRE AND MIQUELON
BT NORTH AMERICA
RT FRANCE

G430 USA
UF UNITED STATES OF AMERICA
BT NORTH AMERICA
NT ALABAMA
ALASKA
ARIZONA
ARKANSAS
CALIFORNIA
COLORADO
CONNECTICUT

G469 OREGON
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G470 PENNSYLVANIA
BT USA
RT NORTH EASTERN STATES (USA)

G471 RHODE ISLAND
BT USA
RT NEW ENGLAND
NORTH EASTERN STATES (USA)

G472 SOUTH CAROLINA
BT USA
RT SOUTH EASTERN STATES (USA)

G473 SOUTH DAKOTA
BT USA
RT WESTERN STATES (USA)

G474 TENNESSEE
BT USA
RT SOUTH CENTRAL STATES (USA)

G475 TEXAS
BT USA
RT SOUTH CENTRAL STATES (USA)

G476 UTAH
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G477 VERMONT
BT USA
RT NEW ENGLAND
NORTH EASTERN STATES (USA)

G478 VIRGINIA
BT USA
RT SOUTH EASTERN STATES (USA)

G479 WASHINGTON
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G480 WEST VIRGINIA
BT USA
RT SOUTH EASTERN STATES (USA)

G481 WISCONSIN
BT USA
RT NORTH CENTRAL STATES (USA)

G482 WYOMING
BT USA
RT WESTERN STATES (USA)

G485 GREAT BASIN AND PACIFIC SLOPE STATES
UF PACIFIC SLOPE STATES
RT ALASKA
ARIZONA
CALIFORNIA
IDAHO
NEVADA
OREGON
USA
UTAH
WASHINGTON

G487 NORTH CENTRAL STATES (USA)
RT ILLINOIS
INDIANA
IOWA
MICHIGAN
MINNESOTA
MISSOURI
OHIO
USA
WISCONSIN

G489 NORTH EASTERN STATES (USA)
NT NEW ENGLAND
RT CONNECTICUT
MAINE
MASSACHUSETTS
NEW HAMPSHIRE
NEW JERSEY
NEW YORK
PENNSYLVANIA
RHODE ISLAND
USA
VERMONT

G491 NEW ENGLAND
BT NORTH EASTERN STATES (USA)
RT CONNECTICUT
MAINE
MASSACHUSETTS
NEW HAMPSHIRE
RHODE ISLAND
VERMONT

G493 SOUTH CENTRAL STATES (USA)
RT ALABAMA
ARKANSAS
KENTUCKY
LOUISIANA
MISSISSIPPI
OKLAHOMA
TENNESSEE
TEXAS
USA

G442 GEORGIA
BT USA
RT SOUTH EASTERN STATES (USA)

G443 HAWAII
BT USA
RT PACIFIC ISLANDS
PACIFIC ISLANDS (US)
TROPICAL OCEANIA

G444 IDAHO
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G445 ILLINOIS
BT USA
RT NORTH CENTRAL STATES (USA)

G446 INDIANA
BT USA
RT NORTH CENTRAL STATES (USA)

G447 IOWA
BT USA
RT NORTH CENTRAL STATES (USA)

G448 KANSAS
BT USA
RT WESTERN STATES (USA)

G449 KENTUCKY
BT USA
RT SOUTH CENTRAL STATES (USA)

G450 LOUISIANA
BT USA
RT SOUTH CENTRAL STATES (USA)

G451 MAINE
BT USA
RT NEW ENGLAND
NORTH EASTERN STATES (USA)

G452 MARYLAND
BT USA
RT SOUTH EASTERN STATES (USA)

G453 MASSACHUSETTS
BT USA
RT NEW ENGLAND
NORTH EASTERN STATES (USA)

G454 MICHIGAN
BT USA
RT NORTH CENTRAL STATES (USA)

G455 MINNESOTA
BT USA
RT NORTH CENTRAL STATES (USA)

G456 MISSISSIPPI
BT USA
RT SOUTH CENTRAL STATES (USA)

G457 MISSOURI
BT USA
RT NORTH CENTRAL STATES (USA)

G458 MONTANA
BT USA
RT WESTERN STATES (USA)

G459 NEBRASKA
BT USA
RT WESTERN STATES (USA)

G460 NEVADA
BT USA
RT GREAT BASIN AND PACIFIC SLOPE STATES

G461 NEW HAMPSHIRE
BT USA
RT NEW ENGLAND
NORTH EASTERN STATES (USA)

G462 NEW JERSEY
BT USA
RT NORTH EASTERN STATES (USA)

G463 NEW MEXICO
BT USA
RT WESTERN STATES (USA)

G464 NEW YORK
BT USA
RT NORTH EASTERN STATES (USA)

G465 NORTH CAROLINA
BT USA
RT SOUTH EASTERN STATES (USA)

G466 NORTH DAKOTA
BT USA
RT WESTERN STATES (USA)

G467 OHIO
BT USA
RT NORTH CENTRAL STATES (USA)

G468 OKLAHOMA
BT USA
RT SOUTH CENTRAL STATES (USA)

G528 PARAGUAY
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G530 PERU
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G532 SURINAM
BT SOUTH AMERICA
RT GUIANAS
NETHERLANDS
TROPICAL AMERICA

G534 URUGUAY
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS

G536 VENEZUELA
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G540 GUIANAS
RT FRENCH GUIANA
GUYANA
SURINAM

G550 LEEWARD ISLANDS
BT LESSER ANTILLES
RT ANTIGUA
CARIBBEAN
MONTSERRAT
SABA
ST EUSTATIUS
ST KITTS-NEVIS-ANGUILLA
TORTOLA
VIRGIN ISLANDS (USA)

G555 LESSER ANTILLES
UF ANTILLES, LESSER
NT LEEWARD ISLANDS
WINDWARD ISLANDS
RT CARIBBEAN
NETHERLANDS ANTILLES

G560 WINDWARD ISLANDS
BT LESSER ANTILLES
RT BARBADOS
DOMINICA
GRENADA
GUADELOUPE
MARTINIQUE
ST LUCIA
ST VINCENT

G565 ANTARCTICA
SN All Antarctic territories

G570 ASIA
BT EURASIA
NT AFGHANISTAN
BAHRAIN
BANGLADESH
BHUTAN
BRUNEI
BURMA
CHINA PEOPLE'S REPUBLIC
CHRISTMAS ISLAND (INDIAN OCEAN)
COCOS ISLANDS
CYPRUS
HONG KONG
INDIA
INDONESIA
IRAN
IRAQ
ISRAEL
JAPAN
JORDAN
KHMER
KOREA DEMOCRATIC PEOPLE'S REPUBLIC
KOREA REPUBLIC
KUWAIT
LAOS
LEBANON

G495 SOUTH EASTERN STATES (USA)
RT DELAWARE
DISTRICT OF COLUMBIA
FLORIDA
GEORGIA
MARYLAND
NORTH CAROLINA
SOUTH CAROLINA
USA
VIRGINIA
WEST VIRGINIA

G497 WESTERN STATES (USA)
RT COLORADO
KANSAS
MONTANA
NEBRASKA
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
USA
WYOMING

G500 SOUTH AMERICA
BT AMERICA
NT ARGENTINA
BOLIVIA
BRAZIL
CHILE
COLOMBIA
ECUADOR
FALKLAND ISLANDS
FRENCH GUIANA
GUYANA
PARAGUAY
PERU
SURINAM
URUGUAY
VENEZUELA
RT LATIN AMERICA

G510 ARGENTINA
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G512 BOLIVIA
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G514 BRAZIL
UF UNITED STATES OF BRAZIL
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G516 CHILE
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G518 COLOMBIA
BT SOUTH AMERICA
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G520 ECUADOR
BT SOUTH AMERICA
NT GALAPAGOS ISLANDS
RT INTER-AMERICAN DEVELOPMENT BANK
LAFTA
OAS
TROPICAL AMERICA

G521 GALAPAGOS ISLANDS
BT ECUADOR

G522 FALKLAND ISLANDS
UF FALKLAND ISLANDS DEPENDENCIES
SOUTH GEORGIA
SOUTH SANDWICH ISLANDS
BT SOUTH AMERICA
RT UNITED KINGDOM

G524 FRENCH GUIANA
BT SOUTH AMERICA
RT FRANCE
GUIANAS
TROPICAL AMERICA

G526 GUYANA
BT SOUTH AMERICA
RT CARIFTA
COMMONWEALTH OF NATIONS
GUIANAS
TROPICAL AMERICA

G604 INNER MONGOLIA
BT CHINA PEOPLE'S REPUBLIC

G605 KANSU
BT CHINA PEOPLE'S REPUBLIC

G606 KIANGSI
BT CHINA PEOPLE'S REPUBLIC

G607 KIANGSU
BT CHINA PEOPLE'S REPUBLIC

G608 KIRIN
BT CHINA PEOPLE'S REPUBLIC

G609 KWANGSI CHUANG
BT CHINA PEOPLE'S REPUBLIC

G610 KWANGTUNG
BT CHINA PEOPLE'S REPUBLIC

G611 KWEICHOW
BT CHINA PEOPLE'S REPUBLIC

G612 LIAONING
BT CHINA PEOPLE'S REPUBLIC

G613 NINGSIAHUI
BT CHINA PEOPLE'S REPUBLIC

G614 PEKING
BT CHINA PEOPLE'S REPUBLIC

G615 SHANGHAI
BT CHINA PEOPLE'S REPUBLIC

G616 SHANSI
BT CHINA PEOPLE'S REPUBLIC

G617 SHANTUNG
BT CHINA PEOPLE'S REPUBLIC

G618 SINKIANG-UIGUR
BT CHINA PEOPLE'S REPUBLIC

G619 SZECHWAN
BT CHINA PEOPLE'S REPUBLIC

G620 TIBET
BT CHINA PEOPLE'S REPUBLIC

G621 TSINGHAI
BT CHINA PEOPLE'S REPUBLIC

G622 YUNNAN
BT CHINA PEOPLE'S REPUBLIC

G625 CHRISTMAS ISLAND (INDIAN OCEAN)
BT ASIA
RT AUSTRALIA
TROPICAL ASIA

G627 COCOS ISLANDS
UF KEELING ISLANDS
BT ASIA
RT AUSTRALIA
TROPICAL ASIA

G629 CYPRUS
BT ASIA
RT COMMONWEALTH OF NATIONS
COUNCIL OF EUROPE
MEDITERRANEAN COUNTRIES
MIDDLE EAST

G631 HONG KONG
BT ASIA
RT TROPICAL ASIA
UNITED KINGDOM

G635 INDIA
BT ASIA
NT ANDAMAN AND NICOBAR ISLANDS
ANDHRA PRADESH
ASSAM
BIHAR
GOA, DAMAN AND DIU
GUJARAT
HARYANA
HIMACHAL PRADESH
JAMMU AND KASHMIR
KERALA
LACCADIVE, MINICOY AND AMINDIVI ISLANDS
MADHYA PRADESH
MAHARASHTRA
MANIPUR
MYSORE
NAGALAND
ORISSA
PUNJAB
RAJASTHAN
TAMIL NADU
TRIPURA
UTTAR PRADESH
WEST BENGAL
RT COLOMBO PLAN
COMMONWEALTH OF NATIONS
SIKKIM
TROPICAL ASIA

(G570 ASIA)
(NT) MACAO
MALAYSIA
MALDIVES
MONGOLIA PEOPLE'S REPUBLIC
NEPAL
OMAN
PAKISTAN
PHILIPPINES
PORTUGUESE TIMOR
QATAR
SAUDI ARABIA
SIKKIM
SINGAPORE
SRI LANKA
SYRIA
TAIWAN
THAILAND
TURKEY-IN-ASIA
UNITED ARAB EMIRATES
USSR-IN-ASIA
VIETNAM DEMOCRATIC REPUBLIC
VIETNAM REPUBLIC
YEMEN ARAB REPUBLIC
YEMEN PEOPLE'S DEMOCRATIC REPUBLIC
RT TROPICAL ASIA

G580 AFGHANISTAN
BT ASIA
RT COLOMBO PLAN

G582 BAHRAIN
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST

G584 BANGLADESH
BT ASIA
RT COLOMBO PLAN
COMMONWEALTH OF NATIONS
TROPICAL ASIA

G586 BHUTAN
BT ASIA
RT COLOMBO PLAN

G588 BRUNEI
BT ASIA
RT BORNEO
SOUTH EAST ASIA
TROPICAL ASIA
UNITED KINGDOM

G590 BURMA
BT ASIA
RT COLOMBO PLAN
SOUTH EAST ASIA
TROPICAL ASIA

G592 CHINA PEOPLE'S REPUBLIC
UF PEOPLE'S REPUBLIC OF CHINA
BT ASIA
NT ANHWEI
CHEKIANG
FUKIEN
HEILUNGKIANG
HENSI
HONAN
HOPEI
HUNAN
HUPEI
INNER MONGOLIA
KANSU
KIANGSI
KIANGSU
KIRIN
KWANGSI CHUANG
KWANGTUNG
KWEICHOW
LIAONING
NINGSIAHUI
PEKING
SHANGHAI
SHANSI
SHANTUNG
SINKIANG-UIGUR
SZECHWAN
TIBET
TSINGHAI
YUNNAN
RT TROPICAL ASIA

G595 ANHWEI
BT CHINA PEOPLE'S REPUBLIC

G596 CHEKIANG
BT CHINA PEOPLE'S REPUBLIC

G597 FUKIEN
BT CHINA PEOPLE'S REPUBLIC

G598 HEILUNGKIANG
BT CHINA PEOPLE'S REPUBLIC

G599 HENSI
BT CHINA PEOPLE'S REPUBLIC

G600 HONAN
BT CHINA PEOPLE'S REPUBLIC

G601 HOPEI
BT CHINA PEOPLE'S REPUBLIC

G602 HUNAN
BT CHINA PEOPLE'S REPUBLIC

G603 HUPEI
BT CHINA PEOPLE'S REPUBLIC

G681 SUMATRA
UF SUMATERA
BT INDONESIA

G683 TIMOR
BT INDONESIA
RT PORTUGUESE TIMOR

G685 WEST IRIAN
UF IRIAN BARAT
BT INDONESIA
RT NEW GUINEA

G690 IRAN
BT ASIA
RT CENTO
COLOMBO PLAN
MIDDLE EAST

G692 IRAQ
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST

G694 ISRAEL
BT ASIA
RT MEDITERRANEAN COUNTRIES
MIDDLE EAST

G696 JAPAN
BT ASIA
RT COLOMBO PLAN
OECD

G698 JORDAN
UF HASHEMITE KINGDOM OF JORDAN
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST

G700 KHMER
UF CAMBODIA
BT ASIA
RT COLOMBO PLAN
INDOCHINA
SEAMEO
SOUTH EAST ASIA
TROPICAL ASIA

G702 KOREA DEMOCRATIC PEOPLE'S REPUBLIC
UF NORTH KOREA
BT ASIA

G704 KOREA REPUBLIC
UF SOUTH KOREA
BT ASIA
RT COLOMBO PLAN

G706 KUWAIT
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST

G708 LAOS
BT ASIA
RT COLOMBO PLAN
INDOCHINA
SEAMEO
SOUTH EAST ASIA
TROPICAL ASIA

G710 LEBANON
BT ASIA
RT ARAB COUNTRIES
MEDITERRANEAN COUNTRIES
MIDDLE EAST

G712 MACAO
UF MACAU
BT ASIA
RT PORTUGAL
TROPICAL ASIA

G714 MALAYSIA
BT ASIA
NT MALAYA
SABAH
SARAWAK
RT ASEAN
COLOMBO PLAN
COMMONWEALTH OF NATIONS
SEAMEO
SOUTH EAST ASIA
TROPICAL ASIA

G716 MALAYA
BT MALAYSIA

G718 SABAH
BT MALAYSIA
RT BORNEO

G720 SARAWAK
BT MALAYSIA
RT BORNEO

G722 MALDIVES
BT ASIA
RT TROPICAL ASIA

G724 MONGOLIA PEOPLE'S REPUBLIC
BT ASIA
RT CMEA

G726 NEPAL
BT ASIA
RT COLOMBO PLAN

G637 ANDAMAN AND NICOBAR ISLANDS
UF NICOBAR ISLANDS
BT INDIA

G638 ANDHRA PRADESH
BT INDIA

G639 ASSAM
BT INDIA

G640 BIHAR
BT INDIA

G641 GOA, DAMAN AND DIU
BT INDIA

G642 GUJARAT
BT INDIA

G643 HARYANA
BT INDIA

G644 HIMACHAL PRADESH
BT INDIA

G645 JAMMU AND KASHMIR
UF KASHMIR
BT INDIA

G646 KERALA
BT INDIA

G647 LACCADIVE, MINICOY AND AMINDIVI ISLANDS
BT INDIA

G648 MADHYA PRADESH
BT INDIA

G649 MAHARASHTRA
BT INDIA

G650 MANIPUR
BT INDIA

G651 MYSORE
BT INDIA

G652 NAGALAND
BT INDIA

G653 ORISSA
BT INDIA

G654 PUNJAB
BT INDIA

G655 RAJASTHAN
BT INDIA

G656 TAMIL NADU
BT INDIA

G657 TRIPURA
BT INDIA

G658 UTTAR PRADESH
BT INDIA

G659 WEST BENGAL
BT INDIA

G662 INDONESIA
BT ASIA
NT BALI
BELITUNG
CELEBES
FLORES
JAVA
KALIMANTAN
MADURA
MOLUCCAS
SUMATRA
TIMOR
WEST IRIAN
RT ASEAN
COLOMBO PLAN
SEAMEO
SOUTH EAST ASIA
TROPICAL ASIA

G665 BALI
BT INDONESIA

G667 BELITUNG
UF BILLITON
BT INDONESIA

G669 CELEBES
UF Sulawesi
BT INDONESIA

G671 FLORES
BT INDONESIA

G673 JAVA
UF DJAWA
BT INDONESIA

G675 KALIMANTAN
BT INDONESIA
RT BORNEO

G677 MADURA
BT INDONESIA

G679 MOLUCCAS
UF MALUKU
BT INDONESIA

G760 DUBAI
BT UNITED ARAB EMIRATES

G762 FUJAIRAH
BT UNITED ARAB EMIRATES

G764 RAS AL KHAIMAH
BT UNITED ARAB EMIRATES

G766 SHARJAH
BT UNITED ARAB EMIRATES

G768 UMM AL QAIWAIN
BT UNITED ARAB EMIRATES

G770 USSR-IN-ASIA
UF ASIATIC USSR
BT ASIA
NT KAZAKH SSR
KIRGIZ SSR
RSFSR-IN-ASIA
TADZHIK SSR
TURKMEN SSR
UZBEK SSR
RT USSR

G772 KAZAKH SSR
UF KAZAKHSTAN
BT USSR-IN-ASIA

G774 KIRGIZ SSR
BT USSR-IN-ASIA

G776 RSFSR-IN-ASIA
BT USSR-IN-ASIA
RT RSFSR

G778 TADZHIK SSR
BT USSR-IN-ASIA

G780 TURKMEN SSR
BT USSR-IN-ASIA

G782 UZBEK SSR
UF UZBEKISTAN
BT USSR-IN-ASIA

G784 VIETNAM DEMOCRATIC REPUBLIC
UF NORTH VIETNAM
BT ASIA
RT INDOCHINA
SOUTH EAST ASIA
TROPICAL ASIA

G786 VIETNAM REPUBLIC
UF SOUTH VIETNAM
BT ASIA
RT COLOMBO PLAN
INDOCHINA
SEAMEO
SOUTH EAST ASIA
TROPICAL ASIA

G788 YEMEN ARAB REPUBLIC
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST
TROPICAL ASIA

G790 YEMEN PEOPLE'S DEMOCRATIC REPUBLIC
UF ADEN
KAMARAN ISLAND
PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN
SOUTHERN YEMEN
BT ASIA
NT SOCOTRA
RT ARAB COUNTRIES
MIDDLE EAST
TROPICAL ASIA

G792 SOCOTRA
BT YEMEN PEOPLE'S DEMOCRATIC REPUBLIC

G794 BORNEO
RT BRUNEI
KALIMANTAN
SABAH
SARAWAK

G796 INDOCHINA
RT KHMER
LAOS
SOUTH EAST ASIA
VIETNAM DEMOCRATIC REPUBLIC
VIETNAM REPUBLIC

G798 NEW GUINEA
RT PAPUA AND NEW GUINEA
WEST IRIAN

G800 SOUTH EAST ASIA
UF SOUTHEAST ASIA
RT ASEAN
BRUNEI
BURMA
COLOMBO PLAN

G728 OMAN
UF MUSCAT AND OMAN
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST
TROPICAL ASIA

G730 PAKISTAN
BT ASIA
RT CENTO
COLOMBO PLAN
TROPICAL ASIA

G732 PHILIPPINES
BT ASIA
RT ASEAN
COLOMBO PLAN
SEAMEO
SEATO
SOUTH EAST ASIA
TROPICAL ASIA

G734 PORTUGUESE TIMOR
BT ASIA
RT PORTUGAL
SOUTH EAST ASIA
TIMOR
TROPICAL ASIA

G736 QATAR
UF UMM SAID
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST
TROPICAL ASIA

G738 SAUDI ARABIA
BT ASIA
RT ARAB COUNTRIES
MIDDLE EAST
TROPICAL ASIA

G740 SIKKIM
BT ASIA
RT INDIA

G742 SINGAPORE
BT ASIA
RT ASEAN
COLOMBO PLAN
COMMONWEALTH OF NATIONS
SEAMEO
SOUTH EAST ASIA
TROPICAL ASIA

G744 SRI LANKA
UF CEYLON
BT ASIA
RT COLOMBO PLAN
COMMONWEALTH OF NATIONS
TROPICAL ASIA

G746 SYRIA
UF SYRIAN ARAB REPUBLIC
BT ASIA
RT ARAB COUNTRIES
MEDITERRANEAN COUNTRIES
MIDDLE EAST

G748 TAIWAN
UF CHINA (TAIWAN)
FORMOSA
BT ASIA
RT TROPICAL ASIA

G750 THAILAND
BT ASIA
RT ASEAN
COLOMBO PLAN
SEAMEO
SEATO
SOUTH EAST ASIA
TROPICAL ASIA

G752 TURKEY-IN-ASIA
UF ASIATIC TURKEY
BT ASIA
RT TURKEY

G754 UNITED ARAB EMIRATES
UF TRUCIAL STATES
BT ASIA
NT ABU DHABI
AJMAN
DUBAI
FUJAIRAH
RAS AL KHAIMAH
SHARJAH
UMM AL QAIWAIN
RT MIDDLE EAST
TROPICAL ASIA

G756 ABU DHABI
BT UNITED ARAB EMIRATES

G758 AJMAN
BT UNITED ARAB EMIRATES

(G842 UNITED KINGDOM)
(RT) BRUNEI
CAYMAN ISLANDS
CENTO
COLOMBO PLAN
COMMONWEALTH OF NATIONS
COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
FALKLAND ISLANDS
GIBRALTAR
GILBERT AND ELLICE ISLANDS
HONG KONG
IRELAND
MONTSERRAT
NATO
OECD
PACIFIC ISLANDS (UK)
PITCAIRN ISLAND
SEATO
SEYCHELLES
SOUTH PACIFIC COMMISSION
ST HELENA
TURKS AND CAICOS ISLANDS
WEST INDIES ASSOCIATED STATES

G844 GREAT BRITAIN
UF BRITAIN
RT BRITISH ISLES
ENGLAND
SCOTLAND
WALES

G845 ENGLAND
BT UNITED KINGDOM
RT GREAT BRITAIN

G846 NORTHERN IRELAND
BT UNITED KINGDOM
RT IRELAND

G847 SCOTLAND
BT UNITED KINGDOM
RT GREAT BRITAIN

G848 WALES
BT UNITED KINGDOM
RT GREAT BRITAIN

G849 CENTRAL EUROPE
BT EUROPE
NT AUSTRIA
CZECHOSLOVAKIA
GERMAN DEMOCRATIC REPUBLIC
GERMANY FEDERAL REPUBLIC
LIECHTENSTEIN
SWITZERLAND

G850 AUSTRIA
BT CENTRAL EUROPE
RT COUNCIL OF EUROPE
EFTA
OECD

G851 CZECHOSLOVAKIA
BT CENTRAL EUROPE
RT CMEA
WARSAW TREATY ORGANIZATION

G852 GERMAN DEMOCRATIC REPUBLIC
UF BERLIN (EAST)
DDR
EAST BERLIN
EASTERN GERMANY
BT CENTRAL EUROPE
RT CMEA
WARSAW TREATY ORGANIZATION

G854 GERMANY FEDERAL REPUBLIC
UF BERLIN (WEST)
DBR
WEST BERLIN
WESTERN GERMANY
BT CENTRAL EUROPE
RT COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
NATO
OECD

G856 LIECHTENSTEIN
BT CENTRAL EUROPE

G858 SWITZERLAND
BT CENTRAL EUROPE
RT EFTA
OECD

G860 EASTERN EUROPE
BT EUROPE
NT HUNGARY
POLAND
USSR-IN-EUROPE

G862 HUNGARY
BT EASTERN EUROPE
RT CMEA
WARSAW TREATY ORGANIZATION

G864 POLAND
BT EASTERN EUROPE
RT CMEA
WARSAW TREATY ORGANIZATION

(G800 SOUTH EAST ASIA)
(RT) INDOCHINA
INDONESIA
KHMER
LAOS
MALAYSIA
PHILIPPINES
PORTUGUESE TIMOR
SEAMEO
SEATO
SINGAPORE
THAILAND
VIETNAM DEMOCRATIC REPUBLIC
VIETNAM REPUBLIC

G805 EURASIA
NT ASIA
EUROPE

G810 EUROPE
BT EURASIA
NT BALKANS
BRITISH ISLES
CENTRAL EUROPE
EASTERN EUROPE
SCANDINAVIA
WESTERN EUROPE

G820 BALKANS
UF BALKAN STATES
BT EUROPE
NT ALBANIA
BULGARIA
GREECE
ROMANIA
TURKEY-IN-EUROPE
YUGOSLAVIA

G822 ALBANIA
BT BALKANS
RT MEDITERRANEAN COUNTRIES

G824 BULGARIA
BT BALKANS
RT CMEA
WARSAW TREATY ORGANIZATION

G826 GREECE
BT BALKANS
RT MEDITERRANEAN COUNTRIES
RT NATO
OECD

G828 ROMANIA
UF RUMANIA
BT BALKANS
RT CMEA
WARSAW TREATY ORGANIZATION

G830 TURKEY-IN-EUROPE
UF EUROPEAN TURKEY
BT BALKANS
RT TURKEY

G831 TURKEY
RT TURKEY-IN-ASIA
TURKEY-IN-EUROPE
CENTO
NATO
OECD
COUNCIL OF EUROPE
MEDITERRANEAN COUNTRIES
MIDDLE EAST

G832 YUGOSLAVIA
UF JUGOSLAVIA
BT BALKANS
RT CMEA
MEDITERRANEAN COUNTRIES

G834 BRITISH ISLES
BT EUROPE
NT CHANNEL ISLANDS
IRELAND
ISLE OF MAN
UNITED KINGDOM
RT GREAT BRITAIN
WESTERN EUROPE

G836 CHANNNEL ISLANDS
BT BRITISH ISLES

G838 IRELAND
UF IRISH REPUBLIC
BT BRITISH ISLES
RT COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
NORTHERN IRELAND
OECD

G840 ISLE OF MAN
BT BRITISH ISLES

G842 UNITED KINGDOM
UF UK
UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
BT BRITISH ISLES
NT ENGLAND
NORTHERN IRELAND
SCOTLAND
WALES
RT BERMUDA
BRITISH HONDURAS
BRITISH INDIAN OCEAN TERRITORY
BRITISH SOLOMON ISLANDS

G898 JAN MAYEN
BT NORWAY

G899 SVALBARD
UF SPITZBERGEN
BT NORWAY

G900 SWEDEN
BT SCANDINAVIA
RT COUNCIL OF EUROPE
EFTA
NORDIC COUNCIL
OECD

G901 WESTERN EUROPE
BT EUROPE
NT ANDORRA
AZORES
BELGIUM
CANARY ISLES
FRANCE
GIBRALTAR
ITALY
LUXEMBOURG
MADEIRA
MALTA
MONACO
NETHERLANDS
PORTUGAL
SAN MARINO
SPAIN
VATICAN
BT BRITISH ISLES

G902 ANDORRA
BT WESTERN EUROPE
RT FRANCE
SPAIN

G903 AZORES
BT WESTERN EUROPE
RT PORTUGAL

G904 BELGIUM
BT WESTERN EUROPE
RT BENELUX
COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
NATO
OECD

G905 CANARY ISLANDS
BT WESTERN EUROPE
RT SPAIN

G906 FRANCE
BT WESTERN EUROPE
NT CORSICA
RT ANDORRA
COMORO ISLANDS
COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
FRENCH GUIANA
FRENCH TERRITORY OF AFARS AND ISSAS
FRENCH WEST INDIES
MEDITERRANEAN COUNTRIES
NATO
OECD
PACIFIC ISLANDS (FR)
REUNION
SEATO
SOUTH PACIFIC COMMISSION
ST PIERRE AND MIQUELON

G907 CORSICA
BT FRANCE

G908 GIBRALTAR
BT WESTERN EUROPE
RT MEDITERRANEAN COUNTRIES
UNITED KINGDOM

G909 ITALY
BT WESTERN EUROPE
NT SARDINIA
SICILY
RT COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
MEDITERRANEAN COUNTRIES
NATO
OECD
SAN MARINO
VATICAN

G910 SARDINIA
BT ITALY

G911 SICILY
BT ITALY

G912 LUXEMBOURG
BT WESTERN EUROPE
RT BENELUX
COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
NATO
OECD

G866 USSR-IN-EUROPE
UF EUROPEAN USSR
BT EASTERN EUROPE
NT ARMENIAN SSR
AZERBAIDZHAN SSR
BYELORUSSIAN SSR
ESTONIAN SSR
GEORGIAN SSR
LATVIAN SSR
LITHUANIAN SSR
MOLDAVIAN SSR
RSFSR-IN-EUROPE
UKRAINIAN SSR
RT USSR

G867 USSR
UF SOVIET UNION
UNION OF SOVIET SOCIALIST REPUBLICS
RT USSR-IN-ASIA
USSR-IN-EUROPE
CMEA
WARSAW TREATY ORGANIZATION

G868 ARMENIAN SSR
BT USSR-IN-EUROPE

G870 AZERBAIDZHAN SSR
BT USSR-IN-EUROPE

G872 BYELORUSSIAN SSR
UF BELORUSSIYA
BT USSR-IN-EUROPE

G874 ESTONIAN SSR
BT USSR-IN-EUROPE

G876 GEORGIAN SSR
UF GRUZIYA
BT USSR-IN-EUROPE

G878 LATVIAN SSR
BT USSR-IN-EUROPE

G880 LITHUANIAN SSR
BT USSR-IN-EUROPE

G882 MOLDAVIAN SSR
BT USSR-IN-EUROPE

G884 RSFSR-IN-EUROPE
BT USSR-IN-EUROPE
RT RSFSR

G885 RSFSR
UF RUSSIAN SOVIET FEDERATED SOCIALISTIC REPUBLIC
RT RSFSR-IN-ASIA
RSFSR-IN-EUROPE

G888 UKRAINIAN SSR
BT USSR-IN-EUROPE

G890 SCANDINAVIA
BT EUROPE
NT DENMARK
FAROE ISLANDS
FINLAND
ICELAND
NORWAY
SWEDEN

G892 DENMARK
BT SCANDINAVIA
RT COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
FAROE ISLANDS
GREENLAND
NATO
NORDIC COUNCIL
OECD

G893 FAROE ISLANDS
BT SCANDINAVIA
RT DENMARK

G895 FINLAND
BT SCANDINAVIA
RT EFTA
NORDIC COUNCIL
OECD

G896 ICELAND
BT SCANDINAVIA
RT COUNCIL OF EUROPE
EFTA
NATO
NORDIC COUNCIL
OECD

G897 NORWAY
BT SCANDINAVIA
NT JAN MAYEN
SVALBARD
RT COUNCIL OF EUROPE
EFTA
NATO
NORDIC COUNCIL
OECD

G923 AUSTRALIAN CAPITAL TERRITORY
UF ACT
CANBERRA
BT AUSTRALIA

G924 NEW SOUTH WALES
BT AUSTRALIA

G925 NORTHERN TERRITORY
BT AUSTRALIA

G926 QUEENSLAND
BT AUSTRALIA

G927 SOUTH AUSTRALIA
BT AUSTRALIA

G928 TASMANIA
BT AUSTRALIA

G929 VICTORIA
BT AUSTRALIA

G930 WESTERN AUSTRALIA
BT AUSTRALIA

G931 CANTON AND ENDERBURY ISLANDS
UF ENDERBURY ISLAND
BT OCEANIA
RT PACIFIC ISLANDS
PACIFIC ISLANDS (UK)
PACIFIC ISLANDS (US)
TROPICAL OCEANIA

G932 FIJI
BT OCEANIA
RT COLOMBO PLAN
COMMONWEALTH OF NATIONS
PACIFIC ISLANDS
SOUTH PACIFIC COMMISSION
TROPICAL OCEANIA

G933 NAURU
BT OCEANIA
RT COMMONWEALTH OF NATIONS
SOUTH PACIFIC COMMISSION
TROPICAL OCEANIA

G934 NEW HEBRIDES
BT OCEANIA
RT PACIFIC ISLANDS
PACIFIC ISLANDS (FR)
PACIFIC ISLANDS (UK)
TROPICAL OCEANIA

G935 NEW ZEALAND
BT OCEANIA
RT COLOMBO PLAN
COMMONWEALTH OF NATIONS
PACIFIC ISLANDS (NZ)
SEATO
SOUTH PACIFIC COMMISSION

G936 PACIFIC ISLANDS
RT BISMARCK ARCHIPELAGO
BOUGAINVILLE
CANTON AND ENDERBURY ISLANDS
FIJI
HAWAII
NEW HEBRIDES
PACIFIC ISLANDS (AUS)
PACIFIC ISLANDS (FR)
PACIFIC ISLANDS (NZ)
PACIFIC ISLANDS (UK)
PACIFIC ISLANDS (US)
TONGA

G937 PACIFIC ISLANDS (AUS)
BT OCEANIA
NT NORFOLK ISLAND
RT AUSTRALIA
BISMARCK ARCHIPELAGO
BOUGAINVILLE
PACIFIC ISLANDS
TROPICAL OCEANIA

G938 NORFOLK ISLAND
BT PACIFIC ISLANDS (AUS)

G939 PACIFIC ISLANDS (FR)
BT OCEANIA
NT FRENCH POLYNESIA
NEW CALEDONIA
WALLIS AND FUTUNA ISLANDS
RT FRANCE
NEW HEBRIDES
PACIFIC ISLANDS
TROPICAL OCEANIA

G940 FRENCH POLYNESIA
BT PACIFIC ISLANDS (FR)
NT MARQUESAS ISLANDS
SOCIETY ISLANDS
TUAMOTU ARCHIPELAGO
TUBUAI ISLANDS
RT POLYNESIA

G941 MARQUESAS ISLANDS
BT FRENCH POLYNESIA

G913 MADEIRA
BT WESTERN EUROPE
RT PORTUGAL

G914 MALTA
BT WESTERN EUROPE
RT COMMONWEALTH OF NATIONS
COUNCIL OF EUROPE
MEDITERRANEAN COUNTRIES

G915 MONACO
BT WESTERN EUROPE
RT MEDITERRANEAN COUNTRIES

G916 NETHERLANDS
UF HOLLAND
BT WESTERN EUROPE
RT BENELUX
COUNCIL OF EUROPE
EUROPEAN COMMUNITIES
NATO
NETHERLANDS ANTILLES
OECD
SURINAM

G917 PORTUGAL
BT WESTERN EUROPE
RT AZORES
CAPE VERDE ISLANDS
EFTA
MACAO
MADEIRA
NATO
OECD
PORTUGUESE EAST AFRICA
PORTUGUESE WEST AFRICA
PORTUGUESE TIMOR

G918 SAN MARINO
BT WESTERN EUROPE
RT ITALY
MEDITERRANEAN COUNTRIES

G919 SPAIN
BT WESTERN EUROPE
RT ANDORRA
CANARY ISLANDS
MEDITERRANEAN COUNTRIES
OECD
SPANISH SAHARA
SPANISH TERRITORIES OF NORTH AFRICA

G920 VATICAN
UF HOLY SEE
BT WESTERN EUROPE
RT ITALY
MEDITERRANEAN COUNTRIES

G921 OCEANIA
UF AUSTRALASIA
NT AUSTRALIA
CANTON AND ENDERBURY ISLANDS
FIJI
NAURU
NEW HEBRIDES
NEW ZEALAND
PACIFIC ISLANDS (AUS)
PACIFIC ISLANDS (FR)
PACIFIC ISLANDS (NZ)
PACIFIC ISLANDS (UK)
PACIFIC ISLANDS (US)
PAPUA AND NEW GUINEA
TONGA
WESTERN SAMOA

RT TROPICAL OCEANIA

G922 AUSTRALIA
UF COMMONWEALTH OF AUSTRALIA
BT OCEANIA
NT AUSTRALIAN CAPITAL TERRITORY
NEW SOUTH WALES
NORTHERN TERRIROTY
QUEENSLAND
SOUTH AUSTRALIA
TASMANIA
VICTORIA
WESTERN AUSTRALIA
RT CHRISTMAS ISLAND (INDIAN OCEAN)
COCOS ISLANDS
COLOMBO PLAN
COMMONWEALTH OF NATIONS
OECD
PACIFIC ISLANDS (AUS)
PAPUA AND NEW GUINEA
SEATO
SOUTH PACIFIC COMMISSION
TROPICAL OCEANIA

G962 MARSHALL ISLANDS
BT TRUST TERRITORY OF PACIFIC ISLANDS

G963 MICRONESIA
RT TRUST TERRITORY OF PACIFIC ISLANDS

G964 WAKE ISLAND
BT PACIFIC ISLANDS (US)

G965 PAPUA AND NEW GUINEA
BT OCEANIA
NT BISMARCK ARCHIPELAGO
BOUGAINVILLE
RT AUSTRALIA
NEW GUINEA
SOLOMON ISLANDS
TROPICAL OCEANIA

G966 BISMARCK ARCHIPELAGO
BT PAPUA AND NEW GUINEA
RT PACIFIC ISLANDS
PACIFIC ISLANDS (AUS)

G967 BOUGAINVILLE
BT PAPUA AND NEW GUINEA
RT PACIFIC ISLANDS
PACIFIC ISLANDS (AUS)

G 968 SOLOMON ISLANDS
RT BRITISH SOLOMON ISLANDS
PAPUA AND NEW GUINEA

G969 TONGA
UF FRIENDLY ISLANDS
BT OCEANIA
RT COMMONWEALTH OF NATIONS
PACIFIC ISLANDS
TROPICAL OCEANIA

G970 WESTERN SAMOA
BT OCEANIA
RT COMMONWEALTH OF NATIONS
SAMOA
SOUTH PACIFIC COMMISSION
TROPICAL OCEANIA

G971 POLYNESIA
RT FRENCH POLYNESIA

G972 SAMOA
RT AMERICAN SAMOA
WESTERN SAMOA

143

G942 SOCIETY ISLANDS
BT FRENCH POLYNESIA

G943 TUAMOTU ARCHIPELAGO
BT FRENCH POLYNESIA

G944 TUBUAI ISLANDS
BT FRENCH POLYNESIA

G945 NEW CALEDONIA
BT PACIFIC ISLANDS (FR)

G946 WALLIS AND FUTUNA ISLANDS
BT PACIFIC ISLANDS (FR)

G947 PACIFIC ISLANDS (NZ)
BT OCEANIA
NT COOK ISLANDS
NIUE
TOKELAU ISLANDS
RT NEW ZEALAND
PACIFIC ISLANDS
TROPICAL OCEANIA

G948 COOK ISLANDS
UF HERVEY ISLANDS
BT PACIFIC ISLANDS (NZ)

G949 NIUE
BT PACIFIC ISLANDS (NZ)

G950 TOKELAU ISLANDS
BT PACIFIC ISLANDS (NZ)

G951 PACIFIC ISLANDS (UK)
BT OCEANIA
NT BRITISH SOLOMON ISLANDS
GILBERT AND ELLICE ISLANDS
PITCAIRN ISLAND
RT CANTON AND ENDERBURY ISLANDS
NEW HEBRIDES
PACIFIC ISLANDS
TROPICAL OCEANIA

G952 BRITISH SOLOMON ISLANDS
UF GUADALCANAL
SANTA CRUZ ISLANDS
BT PACIFIC ISLANDS (UK)
RT SOLOMON ISLANDS
UNITED KINGDOM

G953 GILBERT AND ELLICE ISLANDS
UF CHRISTMAS ISLAND (PACIFIC OCEAN)
OCEAN ISLAND
PHOENIX ISLAND
BT PACIFIC ISLANDS (UK)
RT UNITED KINGDOM

G954 PITCAIRN ISLAND
BT PACIFIC ISLANDS (UK)
RT UNITED KINGDOM

G955 PACIFIC ISLANDS (US)
BT OCEANIA
NT AMERICAN SAMOA
GUAM
MIDWAY ISLANDS
TRUST TERRITORY OF PACIFIC ISLANDS
WAKE ISLAND
RT CANTON AND ENDERBURY ISLANDS
HAWAII
PACIFIC ISLANDS
TROPICAL OCEANIA
USA

G956 AMERICAN SAMOA
BT PACIFIC ISLANDS (US)
RT SAMOA

G957 GUAM
BT PACIFIC ISLANDS (US)
RT MARIANA ISLANDS

G958 MIDWAY ISLANDS
BT PACIFIC ISLANDS (US)

G959 TRUST TERRITORY OF PACIFIC ISLANDS
UF PACIFIC ISLANDS TRUST TERRITORY
BT PACIFIC ISLANDS (US)
NT CAROLINE ISLANDS
MARIANA ISLANDS
MARSHALL ISLANDS
RT MICRONESIA

G960 CAROLINE ISLANDS
BT TRUST TERRITORY OF PACIFIC ISLANDS

G961 MARIANA ISLANDS
BT TRUST TERRITORY OF PACIFIC ISLANDS
RT GUAM

GM36 GULF OF MEXICO
BT NORTH WESTERN ATLANTIC

GM37 NORTH WESTERN ATLANTIC BASIN
BT NORTH WESTERN ATLANTIC
NT SARGASSO SEA

GM38 SARGASSO SEA
BT NORTH WESTERN ATLANTIC BASIN

GM40 SOUTH ATLANTIC
BT ATLANTIC OCEAN
NT SOUTH EASTERN ATLANTIC
SOUTH WESTERN ATLANTIC

GM41 SOUTH EASTERN ATLANTIC
BT SOUTH ATLANTIC
NT ATLANTIC-INDIAN-ANTARCTIC BASIN
GUINEA BASIN
SIERRA LEONE BASIN
SOUTH EASTERN ATLANTIC BASIN
WALVIS BASIN

GM42 ATLANTIC-INDIAN-ANTARCTIC BASIN
BT SOUTH EASTERN ATLANTIC
RT SOUTHERN OCEAN

GM43 GUINEA BASIN
BT SOUTH EASTERN ATLANTIC

GM44 SIERRA LEONE BASIN
BT SOUTH EASTERN ATLANTIC

GM45 SOUTH EASTERN ATLANTIC BASIN
BT SOUTH EASTERN ATLANTIC

GM46 WALVIS BASIN
UF CAPE BASIN
BT SOUTH EASTERN ATLANTIC

GM47 SOUTH WESTERN ATLANTIC
BT SOUTH ATLANTIC
NT ARGENTINE BASIN
BRAZILIAN BASIN
SCOTIA SEA
WEDDELL SEA

GM48 ARGENTINE BASIN
BT SOUTH WESTERN ATLANTIC

GM49 BRAZILIAN BASIN
BT SOUTH WESTERN ATLANTIC

GM50 SCOTIA SEA
BT SOUTH WESTERN ATLANTIC

GM51 WEDDELL SEA
BT SOUTH WESTERN ATLANTIC

GM55 INDIAN OCEAN
NT AGULHAS BASIN
ARABIAN SEA
BAY OF BENGAL
EASTERN INDIAN-ANTARCTIC BASIN
GULF OF ADEN
KERGUELEN BASIN
MASCARENE BASIN
MAURITIUS BASIN
MID-INDIAN BASIN
NATAL BASIN
NORTH AUSTRALIAN BASIN
PERSIAN GULF
RED SEA
SOMALI BASIN
SOUTH AUSTRALIAN BASIN
SOUTH EAST INDIAN BASIN
TIMOR SEA
WEST AUSTRALIAN BASIN
RT ATLANTIC-INDIAN-ANTARCTIC BASIN

GM56 AGULHAS BASIN
BT INDIAN OCEAN

GM57 ARABIAN SEA
BT INDIAN OCEAN

GM58 BAY OF BENGAL
BT INDIAN OCEAN

GM59 EASTERN INDIAN-ANTARCTIC BASIN
BT INDIAN OCEAN
RT SOUTHERN OCEAN

GM60 GULF OF ADEN
BT INDIAN OCEAN

GM61 KERGUELEN BASIN
BT INDIAN OCEAN

GM62 MASCARENE BASIN
BT INDIAN OCEAN

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M A R I N E A R E A S

GM10 ARCTIC OCEAN
- NT BARENTS SEA
- BEAUFORT SEA
- CHUKCHI SEA
- EAST SIBERIAN SEA
- GREENLAND SEA
- KARA SEA
- LAPTEV SEA
- NORWEGIAN SEA

GM11 BARENTS SEA
- BT ARCTIC OCEAN

GM12 BEAUFORT SEA
- BT ARCTIC OCEAN

GM13 CHUKCHI SEA
- BT ARCTIC OCEAN

GM14 EAST SIBERIAN SEA
- BT ARCTIC OCEAN

GM15 GREENLAND SEA
- BT ARCTIC OCEAN

GM16 KARA SEA
- BT ARCTIC OCEAN

GM17- LAPTEV SEA
- BT ARCTIC OCEAN

GM18 NORWEGIAN SEA
- BT ARCTIC OCEAN

GM20 ATLANTIC OCEAN
- NT NORTH ATLANTIC
- SOUTH ATLANTIC

GM21 NORTH ATLANTIC
- BT ATLANTIC OCEAN
- NT NORTH EASTERN ATLANTIC
- NORTH WESTERN ATLANTIC

GM22 NORTH EASTERN ATLANTIC
- BT NORTH ATLANTIC
- NT BALTIC SEA
- BLACK SEA
- (NT) CAPE VERDE BASIN
- MEDITERRANEAN SEA
- NORTH EASTERN ATLANTIC BASIN
- NORTH SEA

GM23 BALTIC SEA
- BT NORTH EASTERN ATLANTIC

GM24 BLACK SEA
- BT NORTH EASTERN ATLANTIC

GM25 CAPE VERDE BASIN
- BT NORTH EASTERN ATLANTIC

GM26 MEDITERRANEAN SEA
- BT NORTH EASTERN ATLANTIC
- NT ADRIATIC SEA
- AEGEAN SEA
- TYRRHENIAN SEA
- RT MEDITERRANEAN COUNTRIES

GM27 ADRIATIC SEA
- BT MEDITERRANEAN SEA

GM28 AEGEAN SEA
- BT MEDITERRANEAN SEA

GM29 TYRRHENIAN SEA
- BT MEDITERRANEAN SEA

GM30 NORTH EASTERN ATLANTIC BASIN
- BT NORTH EASTERN ATLANTIC

GM31 NORTH SEA
- BT NORTH EASTERN ATLANTIC

GM32 NORTH WESTERN ATLANTIC
- BT NORTH ATLANTIC
- NT BAFFIN BAY
- CARIBBEAN SEA
- GULF OF MEXICO
- NORTH WESTERN ATLANTIC BASIN

GM33 BAFFIN BAY
- BT NORTH WESTERN ATLANTIC
- NT HUDSON BAY

GM34 HUDSON BAY
- BT BAFFIN BAY

GM35 CARIBBEAN SEA
- BT NORTH WESTERN ATLANTIC
- RT CARIBBEAN

GM92 ARAFURA SEA
BT SOUTH WESTERN PACIFIC

GM93 CELEBES SEA
BT SOUTH WESTERN PACIFIC

GM94 CORAL SEA
BT SOUTH WESTERN PACIFIC

GM95 FIJI BASIN
BT SOUTH WESTERN PACIFIC

GM96 SOUTH CHINA SEA
BT SOUTH WESTERN PACIFIC

GM97 SOUTH WESTERN PACIFIC BASIN
BT SOUTH WESTERN PACIFIC

GM98 TASMAN SEA
BT SOUTH WESTERN PACIFIC

GM99 SOUTHERN OCEAN
BT ATLANTIC-INDIAN ANTARCTIC BASIN
EASTERN INDIAN-ANTARCTIC BASIN
PACIFIC-ANTARCTIC BASIN

GM63 MAURITIUS BASIN
BT INDIAN OCEAN

GM64 MID-INDIAN BASIN
BT INDIAN OCEAN

GM65 NATAL BASIN
BT INDIAN OCEAN

GM66 NORTH AUSTRALIAN BASIN
BT INDIAN OCEAN

GM67 PERSIAN GULF
BT INDIAN OCEAN

GM68 RED SEA
BT INDIAN OCEAN

GM69 SOMALI BASIN
BT INDIAN OCEAN

GM70 SOUTH AUSTRALIAN BASIN
BT INDIAN OCEAN

GM71 SOUTH EAST INDIAN BASIN
BT INDIAN OCEAN

GM72 TIMOR SEA
BT INDIAN OCEAN

GM73 WEST AUSTRALIAN BASIN
BT INDIAN OCEAN

GM75 PACIFIC OCEAN
NT NORTH PACIFIC
SOUTH PACIFIC

GM76 NORTH PACIFIC
BT PACIFIC OCEAN
NT NORTH EASTERN PACIFIC
NORTH WESTERN PACIFIC

GM77 NORTH EASTERN PACIFIC
BT NORTH PACIFIC
NT BERING SEA

GM78 BERING SEA
BT NORTH EASTERN PACIFIC

GM79 NORTH WESTERN PACIFIC
BT NORTH PACIFIC
NT CAROLINE BASIN
EAST CHINA SEA
PHILIPPINE SEA
SEA OF JAPAN
SEA OF OKHOTSK
YELLOW SEA

GM80 CAROLINE BASIN
BT NORTH WESTERN PACIFIC

GM81 EAST CHINA SEA
BT NORTH WESTERN PACIFIC

GM82 PHILIPPINE SEA
BT NORTH WESTERN PACIFIC

GM83 SEA OF JAPAN
BT NORTH WESTERN PACIFIC

GM84 SEA OF OKHOTSK
BT NORTH WESTERN PACIFIC

GM85 YELLOW SEA
BT NORTH WESTERN PACIFIC

GM86 SOUTH PACIFIC
BT PACIFIC OCEAN
NT SOUTH EASTERN PACIFIC
SOUTH WESTERN PACIFIC

GM87 SOUTH EASTERN PACIFIC
BT SOUTH PACIFIC
NT CHILE BASIN
PACIFIC-ANTARCTIC BASIN
PERU BASIN

GM88 CHILE BASIN
BT SOUTH EASTERN PACIFIC

GM89 PACIFIC-ANTARCTIC BASIN
BT SOUTH EASTERN PACIFIC
RT SOUTHERN OCEAN

GM90 PERU BASIN
BT SOUTH EASTERN PACIFIC

GM91 SOUTH WESTERN PACIFIC
BT SOUTH PACIFIC
NT ARAFURA SEA
CELEBES SEA
CORAL SEA
FIJI BASIN
SOUTH CHINA SEA
SOUTH WESTERN PACIFIC BASIN
TASMAN SEA

(GØ17 COMMONWEALTH OF NATIONS)
(RT) GHANA
GUYANA
INDIA
JAMAICA
KENYA
LESOTHO
MALAWI
MALAYSIA
MALTA
MAURITIUS
NAURU
NEW ZEALAND
NIGERIA
SIERRA LEONE
SINGAPORE
SRI LANKA
SWAZILAND
TANZANIA
TRINIDAD AND TOBAGO
TONGA
UGANDA
UNITED KINGDOM
WESTERN SAMOA
ZAMBIA

GØ18 COUNCIL OF EUROPE
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AUSTRIA
BELGIUM
CYPRUS
DENMARK
FRANCE
GERMANY FEDERAL REPUBLIC
ICELAND
IRELAND
ITALY
LUXEMBOURG
MALTA
NETHERLANDS
NORWAY
SWEDEN
TURKEY
UNITED KINGDOM

GØ19 EFTA
UF EUROPEAN FREE TRADE ASSOCIATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AUSTRIA
FINLAND
ICELAND
NORWAY
PORTUGAL
SWEDEN
SWITZERLAND

GØ20 EUROPEAN COMMUNITIES
UF EC
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT BELGIUM
DENMARK
FRANCE
GERMANY FEDERAL REPUBLIC
IRELAND
ITALY
LUXEMBOURG
NETHERLANDS
UNITED KINGDOM

GØ21 FAO
UF FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
(BT INTERGOVERNMENTAL ORGANIZATIONS)

GØ22 GATT
UF GENERAL AGREEMENT ON TARIFFS AND TRADE
(BT INTERGOVERNMENTAL ORGANIZATIONS)

GØ23 IAEA
UF INTERNATIONAL ATOMIC ENERGY AGENCY
(BT INTERGOVERNMENTAL ORGANIZATIONS)

GØ24 ILO
UF INTERNATIONAL LABOUR ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)

GØ25 INTER-AMERICAN DEVELOPMENT BANK
UF IBD
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT ARGENTINA
BARBADOS
BOLIVIA
BRAZIL
CANADA
CHILE
COLOMBIA
COSTA RICA
DOMINICAN REPUBLIC
ECUADOR
EL SALVADOR
GUATEMALA
HAITI
HONDURAS
JAMAICA
MEXICO
NICARAGUA
PANAMA
PARAGUAY
PERU
TRINIDAD AND TOBAGO
URUGUAY
USA
VENEZUELA

INTERGOVERNMENTAL ORGANIZATIONS

G010 ASEAN
UF ASSOCIATION OF SOUTH EAST ASIAN NATIONS
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT INDONESIA
MALAYSIA
PHILIPPINES
SINGAPORE
SOUTH EAST ASIA
THAILAND

G011 BENELUX
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT BELGIUM
LUXEMBOURG
NETHERLANDS

G012 CARIFTA
UF CARIBBEAN FREE TRADE ASSOCIATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT BARBADOS
CARIBBEAN
BRITISH HONDURAS
GUYANA
JAMAICA
MONTSERRAT
TRINIDAD AND TOBAGO
WEST INDIES ASSOCIATED STATES

G013 CENTO
UF CENTRAL TREATY ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT IRAN
PAKISTAN
TURKEY
UNITED KINGDOM

G014 CENTRAL AMERICAN COMMON MARKET
UF CACM
MERCADO COMUN CENTRO AMERICANO
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT CENTRAL AMERICA
COSTA RICA
EL SALVADOR
GUATEMALA
HONDURAS
NICARAGUA

G015 CMEA
UF COUNCIL FOR MUTUAL ECONOMIC ASSISTANCE
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT BULGARIA
CUBA
CZECHOSLOVAKIA
GERMAN DEMOCRATIC REPUBLIC
HUNGARY
MONGOLIA PEOPLE'S REPUBLIC
POLAND
ROMANIA
USSR
YUGOSLAVIA

G016 COLOMBO PLAN
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AFGHANISTAN
AUSTRALIA
BANGLADESH
BHUTAN
BURMA
CANADA
FIJI
INDIA
INDONESIA
IRAN
JAPAN
KHMER
KOREA REPUBLIC
LAOS
MALAYSIA
NEPAL
NEW ZEALAND
PAKISTAN
PHILIPPINES
SINGAPORE
SOUTH EAST ASIA
SRI LANKA
THAILAND
UNITED KINGDOM
USA
VIETNAM REPUBLIC

G017 COMMONWEALTH OF NATIONS
UF BRITISH COMMONWEALTH
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AUSTRALIA
BANGLADESH
BAHAMAS
BARBADOS
BOTSWANA
CANADA
CYPRUS
FIJI
GAMBIA

(GØ33 OAU)
(RT) NIGER
NIGERIA
RWANDA
SENEGAL
SIERRA LEONE
SOMALIA
SUDAN
SWAZILAND
TANZANIA
TOGO
TUNISIA
UGANDA
UPPER VOLTA
ZAIRE
ZAMBIA

GØ34 OCAM
UF AFRICAN MALAGASY AND MAURITIUS COMMON ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT CAMEROON
CENTRAL AFRICAN REPUBLIC
CHAD
DAHOMEY
GABON
IVORY COAST
MALAGASY REPUBLIC
MAURITIUS
NIGER
RWANDA
SENEGAL
TOGO
UPPER VOLTA

GØ35 ODECA
UF ORGANIZATION OF CENTRAL AMERICAN STATES
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT COSTA RICA
EL SALVADOR
GUATEMALA
HONDURAS
NICARAGUA

GØ36 OECD
UF ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AUSTRALIA
AUSTRIA
BELGIUM
CANADA
DENMARK
(RT) FINLAND
FRANCE
GERMANY FEDERAL REPUBLIC
GREECE
ICELAND
IRELAND
ITALY
JAPAN
LUXEMBOURG
NETHERLANDS
NORWAY
PORTUGAL
SPAIN
SWEDEN
SWITZERLAND
TURKEY
UNITED KINGDOM
USA

GØ37 SEAMEO
UF SOUTH EAST ASIAN MINISTERS OF EDUCATION ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT INDONESIA
KHMER
LAOS
MALAYSIA
PHILIPPINES
SINGAPORE
SOUTH EAST ASIA
THAILAND
VIETNAM REPUBLIC

GØ38 SEATO
UF SOUTH EAST ASIA TREATY ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AUSTRALIA
FRANCE
NEW ZEALAND
PHILIPPINES
SOUTH EAST ASIA
THAILAND
UNITED KINGDOM
USA

GØ39 SOUTH PACIFIC COMMISSION
UF SPC
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT AUSTRALIA
FIJI
FRANCE
NAURU
NEW ZEALAND
UNITED KINGDOM
USA
WESTERN SAMOA

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G026 INTERNATIONAL BANK
UF IBRD
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
(BT INTERGOVERNMENTAL ORGANIZATIONS)

G027 INTERNATIONAL COFFEE ORGANIZATION
UF ICO
(BT INTERGOVERNMENTAL ORGANIZATIONS)

G028 INTERNATIONAL MONETARY FUND
UF IMF
(BT INTERGOVERNMENTAL ORGANIZATIONS)

G029 LAFTA
UF LATIN AMERICAN FREE TRADE ASSOCIATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT ARGENTINA
BOLIVIA
BRAZIL
CHILE
COLOMBIA
ECUADOR
MEXICO
PARAGUAY
PERU
URUGUAY
VENEZUELA

G030 NATO
UF NORTH ATLANTIC TREATY ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT BELGIUM
CANADA
DENMARK
FRANCE
GERMANY FEDERAL REPUBLIC
GREECE
ICELAND
ITALY
LUXEMBOURG
NETHERLANDS
NORWAY
PORTUGAL
TURKEY
UNITED KINGDOM
USA

G031 NORDIC COUNCIL
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT DENMARK
FINLAND
ICELAND
NORWAY
SWEDEN

G032 OAS
UF ORGANIZATION OF AMERICAN STATES
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT ARGENTINA
BARBADOS
BOLIVIA
BRAZIL
CHILE
COLOMBIA
COSTA RICA
CUBA
DOMINICAN REPUBLIC
ECUADOR
EL SALVADOR
GUATEMALA
HAITI
HONDURAS
JAMAICA
MEXICO
NICARAGUA
PANAMA
PARAGUAY
PERU
TRINIDAD AND TOBAGO
URUGUAY
USA
VENEZUELA

G033 OAU
UF ORGANIZATION OF AFRICAN UNITY
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT ALGERIA
BOTSWANA
BURUNDI
CAMEROON
CENTRAL AFRICAN REPUBLIC
CHAD
CONGO
DAHOMEY
EGYPT
EQUATORIAL GUINEA
ETHIOPIA
GABON
GAMBIA
GHANA
GUINEA
IVORY COAST
KENYA
LESOTHO
LIBERIA
LIBYA
MALAGASY REPUBLIC
MALAWI
MALI
MAURITANIA
MOROCCO

OTHER GEOGRAPHIC GROUPINGS

GG10 ARAB COUNTRIES
- RT BAHRAIN
- IRAQ
- JORDAN
- KUWAIT
- LEBANON
- MIDDLE EAST
- NORTH AFRICA
- OMAN
- QATAR
- SAUDI ARABIA
- SUDAN
- SYRIA
- YEMEN ARAB REPUBLIC
- YEMEN PEOPLE'S DEMOCRATIC REPUBLIC

GG20 MEDITERRANEAN COUNTRIES
- RT ALBANIA
- ALGERIA
- CYPRUS
- EGYPT
- FRANCE
- GIBRALTAR
- GREECE
- ISRAEL
- ITALY
- LEBANON
- LIBYA
- MALTA
- MEDITERRANEAN SEA
- MONACO
- MOROCCO
- SAN MARINO
- SPAIN
- SYRIA
- TUNISIA
- TURKEY
- VATICAN
- YUGOSLAVIA

GG30 MIDDLE EAST
- UF NEAR EAST
- RT ARAB COUNTRIES
- BAHRAIN
- CYPRUS
- IRAN
- IRAQ
- ISRAEL
- JORDAN
- KUWAIT
- (RT) LEBANON
- OMAN
- QATAR
- SAUDI ARABIA
- SYRIA
- TURKEY
- UNITED ARAB EMIRATES
- YEMEN ARAB REPUBLIC
- YEMEN PEOPLE'S DEMOCRATIC REPUBLIC

GG50 TROPICS
- UF TROPICAL ZONE
- NT TROPICAL AFRICA
- TROPICAL AMERICA
- TROPICAL ASIA
- TROPICAL OCEANIA

GG55 TROPICAL AFRICA
- BT TROPICS
- RT AFRICA
- ANGOLA
- BOTSWANA
- CENTRAL AFRICA
- COMORO ISLANDS
- EAST AFRICA
- MALAGASY REPUBLIC
- MALAWI
- MAURITIUS
- NAMIBIA
- PORTUGUESE EAST AFRICA
- REUNION
- RHODESIA
- ST HELENA
- WEST AFRICA
- ZAMBIA

GG60 TROPICAL AMERICA
- BT TROPICS
- RT AMERICA
- ARGENTINA
- BOLIVIA
- BRAZIL
- CARIBBEAN
- CENTRAL AMERICA
- CHILE
- COLOMBIA
- ECUADOR
- FRENCH GUIANA
- GUYANA
- MEXICO
- PARAGUAY
- PERU
- SURINAM
- VENEZUELA

G040 UNESCO
UF UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)

G041 UNITED NATIONS
UF UN
UNITED NATIONS ORGANIZATION
UNO
(BT INTERGOVERNMENTAL ORGANIZATIONS)

G042 WARSAW TREATY ORGANIZATION
UF WARSAW PACT
(BT INTERGOVERNMENTAL ORGANIZATIONS)
RT BULGARIA
CZECHOSLOVAKIA
GERMAN DEMOCRATIC REPUBLIC
HUNGARY
POLAND
ROMANIA
USSR

G043 WHO
UF WORLD HEALTH ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)

G044 WMO
UF WORLD METEOROLOGICAL ORGANIZATION
(BT INTERGOVERNMENTAL ORGANIZATIONS)

PHYSICAL GEOGRAPHY

GZ10	Climatic Areas
GZ11	Arid Zone
GZ12	Semi-arid Zone
GZ13	Cold Zone
GZ14	Permafrost Areas
GZ15	Humid Zone
GZ16	Temperate Zone
—	Tropical Zone (see GG50, p.65)
GZ17	Subtropical Zone

GZ20	Land Areas
GZ21	Plains
GZ22	Coastal Plains
GZ23	Flood Plains
GZ24	Plateaux
GZ25	Mountain Areas
GZ26	Hill Areas
GZ27	Foothills
GZ28	Upland Valleys
GZ29	Islands
GZ30	Reclaimed Land
GZ31	Polders
GZ32	Deltas
GZ33	Sloping Land
—	Inland Waters (use GZ63)
GZ34	River Basins
GZ35	Watersheds
GZ36	Valleys
—	Upland Valleys (use GZ28)
GZ37	Swamps
GZ38	Bogs
GZ39	Marshes
GZ40	Volcanic Areas

GZ50	Water Areas
GZ51	Brackish Water
GZ52	Freshwater
GZ53	Salt Water
GZ54	Marine Areas
GZ55	Oceans
GZ56	Seas
GZ57	Lagoons
GZ58	Estuaries
GZ59	Abyssal Zone
GZ60	Pelagic Zone
GZ61	Continental Shelf
GZ62	Littoral Zone
GZ63	Inland Waters
GZ64	Lakes and Ponds
GZ65	Rivers and Streams
—	River Basins (use GZ34)

GZ70	Vegetation Zones
GZ71	Fertile Zone
GZ72	Forests
GZ73	Prairies
GZ74	Savanna
GZ75	Pampas
GZ76	Steppes
GZ77	Taiga
GZ78	Tundra
GZ79	Deserts
GZ80	Oases
GZ81	Wastelands

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GG70 TROPICAL ASIA
BT TROPICS
RT ASIA
BANGLADESH
BRUNEI
BURMA
CHINA PEOPLE'S REPUBLIC
CHRISTMAS ISLAND (INDIAN OCEAN)
COCOS ISLANDS
HONG KONG
INDIA
INDONESIA
KHMER
LAOS
MACAO
MALAYSIA
MALDIVES
OMAN
PAKISTAN
PHILIPPINES
PORTUGUESE TIMOR
QATAR
SAUDI ARABIA
SINGAPORE
SRI LANKS
TAIWAN
THAILAND
UNITED ARAB EMIRATES
VIETNAM DEMOCRATIC REPUBLIC
VIETNAM REPUBLIC
YEMEN ARAB REPUBLIC
YEMEN PEOPLE'S DEMOCRATIC REPUBLIC

GG75 TROPICAL OCEANIA
BT TROPICS
RT AUSTRALIA
CANTON AND ENDERBURY ISLANDS
FIJI
HAWAII
NAURU
NEW HEBRIDES
OCEANIA
PACIFIC ISLANDS (AUS)
PACIFIC ISLANDS (FR)
PACIFIC ISLANDS (NZ)
PACIFIC ISLANDS (UK)
PACIFIC ISLANDS (US)
PAPUA AND NEW GUINEA
TONGA
WESTERN SAMOA

GEOGRAPHICAL INDEX

G756 ABU DHABI
Abyssinia
USE ETHIOPIA
ACT
USE AUSTRALIAN CAPITAL TERRITORY
Aden
USE YEMEN PEOPLE'S DEMOCRATIC REPUBLIC
GM27 ADRIATIC SEA
GM28 AEGEAN SEA
Afars and Issas Territory
USE FRENCH TERRITORY OF AFARS AND ISSAS
G580 AFGHANISTAN
G100 AFRICA
G110 AFRICA SOUTH OF SAHARA
African Malagasy and Mauritius Common Organization
USE OCAM
GM56 AGULHAS BASIN
G758 AJMAN
G432 ALABAMA
G433 ALASKA
G822 ALBANIA
G376 ALBERTA
G230 ALGERIA
G300 AMERICA
G956 AMERICAN SAMOA
American Virgin Islands
USE VIRGIN ISLANDS (USA)
G637 ANDAMAN AND NICOBAR ISLANDS
G638 ANDHRA PRADESH
G902 ANDORRA
G102 ANGLOPHONE AFRICA
G156 ANGOLA
Anguilla
USE ST KITTS-NEVIS-ANGUILLA
G595 ANHWEI
Anjouan
USE COMORO ISLANDS
G565 ANTARCTICA
G345 ANTIGUA
Antilles, Lesser
USE LESSER ANTILLES
Antilles (Netherlands)
USE NETHERLANDS ANTILLES
GG10 ARAB COUNTRIES
GM57 ARABIAN SEA
GM92 ARAFURA SEA
GM10 ARCTIC OCEAN
G510 ARGENTINA
GM48 ARGENTINE BASIN
G434 ARIZONA
G435 ARKANSAS
G868 ARMENIAN SSR
G333 ARUBA
GØ10 ASEAN
G570 ASIA
Asiatic Turkey
USE TURKEY-IN-ASIA
Asiatic USSR
USE USSR-IN-ASIA
G639 ASSAM
Association of South East Asian Nations
USE ASEAN
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Pe-tsai 1629
Peaches 0716
Peanut 0332
Pears 0718
alligator 1110
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balsam 0890
Peas 1470
asparagus 1490
cajan 1480
chick 1430
grass 1490
pigeon 1480
Pecans 1240
Pedigrees, animal L10
Pelagic zone GZ60
Pennisetum 0130
Pepper 2320
Jamaica 2210
Japanese 2390
Peppermint 2290
Peppers, red 2230
sweet 1845
Perfume plants (general) 2200
Permafrost areas GZ14
Permeability of soils F22
Perry pears 0718
Persea 1110
Persimmons 1124
Pest control, in animals L72
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Pesticides (general) H00
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Pests, of animals L72
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Pet animals 8860
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Phaseolus 1410
Phleum pratense 1930
Phoenix dactylifera 1114
Phormium tenax 0590
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Phylogeny, animal L60
plant F70
Physical situation F10
Physics, freshwaters M30
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Physiological disorders,
animal L74
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Physiology, animal L50
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Phytogeography F70
Phytopathology H20
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Piassava 0590
Picea 3150
Pickles 9130
Pigeon peas 1480
Pigeons 6500
Pigs 5300
Pimento dioica 2210
Pimpinella anisum 2380
Pineapples 1126
Pines 3140
Pinnipeds 8720
Pinus 3140
Piper nigrum 2320
Pisciculture M10
Pistachios 1245
Pistacia terebinthus 2510
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Pisum sativum 1470
Pita floja 0590
Piteira 0590
Plains GZ21
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Nephelium 1190
New cocoyams 1550
New Zealand flax 0590
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Nipa palm (N. fruticans) 0260
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Nutrients, plant F25
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Nutritive value, feeds L30
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Nuts, Brazil 1215
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Oaks 3270
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Oca 1590
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Ocimum basilicum 2390
Octopus 8430
Oil crops (general) 0300
Oil herbs and bushes 0300
Oil palms 0312
Oil trees (general) 0310
Oils, cooking 9520
edible (general) 9500
Okra 1840
Old cocoyams 1550
Olive (Olea europea) 0313
Onions 1740
Welsh 1790
Opium poppies 2740
Orache 1690
Oranges 1060
Orbignya 0312
Orchard grass 1930
Oriental cabbages 1629
Origanum 2390

Ornamental birds 6700
plants 3300
trees (general) 3000
trees, care of K10
Ortaniques 1060
Oryza sativa 0150
Over-fishing M00
Ownership E10
Oxalis tuberosa 1590
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Pachyrhizus erosus 1590
Packaging, food Q30
Pak-choi 1629
Palaquium gutta 2470
Palm, babassu 0312
betel-nut 2710
borassus 0260
carnauba 2420
cohune 0312
date 1114
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nipa 0260
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Palmyra 0260
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Pan 2710
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Pandanus 0590
Panicum miliaceum 0130
miliare 0130
Papaver somniferum 2740
Papayas 1122
Papeda 1090
Paper mulberry 0590
Papermaking K50
Paprikas 2230
Para rubber 2480
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Parasites, of animals L72
Parasitic plants H60
Parsley 2380
turnip-rooted 1590
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Parturition L10
Passion fruit (Passiflora) 1190
Paste 9220
Pastinaca sativa 1565
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Rabbits 5600
Radishes 1570
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Rama 0460
Rambutans 1190
Ramie 0490
Rangelands 1910
Rape 0334
Raphanus sativus 1570
Raspberries 0950
Rat-tailed radishes 1570
Rattan 0500
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Reclamation, land & soil F28
Reclamation potential F26
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Recreational forest areas K00
Red currants 0925
    gram 1480
    peppers 2230
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Reproduction, animal L10
Reptiles (general) 8500
Research A50
    techniques A50
Reserves, game L20
Reservoirs P12
Resin plants (general) 2400
Resistance to pesticides, animal H10
Resources, fishery M00
    forest K00
    land (general) P20
    manpower E10
    natural (general) P00
    soil F26
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Retailing E70
Rheum rhaponticum 1665
Rhizome vegetables 1500
Rhizophora 2660
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Rhubarb 1665
Rhus verniciflua 2590
Ribes divaricatum 0935
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    wild 0190
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Root vegetables (general) 1500
Roots, feed 1970
Roselle 0460
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    Ceara 2430
    Hevea 2480
    India 2490
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    Panama 2430
    Para 2480
Rubber plants (general) 2400
Rubia tinctorum 2650
Rubus idaeus 0950
    loganobaccus 0950
Rue 2330
Ruminants (general) 5200
Runner beans 1410
Rural communities E50
    electrification N10
    industries E10
    institutions E50
    life E50
        re forestry K00
    marketing E70
    populations E50
    sociology E50
        with economics and development E00
Ruta graveolens 2330
Rutabagas 1575
Rye 0160

Saccharomyces 3430
Saccharum 0230
Safety devices N10
Safflower 2670
Saffron 2675
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Sago palm 0215
Salad greens see 1600
Salt water GZ53
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Salmon 8130
Salsify 1590
Salvia officinalis 2390
San hemp 0590
Sapodilla 2520
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Satsumas 1050
Savanna GZ74
Schinopsis 2665
Scorzonera 1590
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geography F70
growth F60
hardiness F60
histology F50
introduction F30
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nutrition F25
pathology H20
pests H10
physiological disorders H50
physiology F60
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science (general) F00
selection F30
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Plantains (Musa) 1112
Plants, parasitic H60
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Poisonous plants (general) H60
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Polders GZ31
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bees 7100
Pollutants T00
Pollution T00
Pollution control T00
Pomegranates 0990
Pomelo 1090
Ponds GZ64
Ponies 5120
Poplars 3275
Poppies, opium 2740
Populations, rural E50
Populus 3275
Porifera 8650
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Porpoises 8710
Ports M10
Potatoes 0210
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Poultry 6000
Power sources N10
Prairies GZ73
Prawns 8310
Precipitation F10
Preservation, food Q10
timber H00
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Prices E70
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Production costs and returns E10
Profiles, soil F23
Propagation, plants F00
forest trees K10
Protection, plant H00
Protozoa infesting animals L72
Prunes 0720
Prunus amygdalus 1210
angustifolia 0720
armeniaca 0712
avium 0714
cerasus 0714
damascena 0720
domestica 0720
italica 0720
persica 0716
salicina 0720
triflora 0720
Pseudocereals 0185
Pseudotsuga menziesii 3110
Psidium guajava 1116
Psophocarpus tetragonolobus 1490
Psychology, feeding S00
social E50
Public health, foodstuffs Q20
veterinary aspects L70
Public relations C00
Pulasan 1190
Pulpwood K50
Pumpkins 1822
Punica granatum 0990
Pyrethrum plant 2820
Pyrol, woolly 1410
Pyrus communis 0718
malus 0710

Quebracho 2665
Queensland arrowroot 1510
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Quercus 3270
Quinces 0722
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Spiny lobsters 8330
Spirits 9920
Sponges 8650
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Spring onions 1740
Sprouting broccoli 1623
Spruces 3150
Squashes (vegetable) 1823
Squids 8430
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Starches 9350
Statistical methods U10
Stemkales 1960
Steppes GZ76
Sterculia urens 2500
Stimulant plants (general) 2100
Storage, food in home R00
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Strawberries 0960
Streams GZ65
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Stylosanthes 1954
Styrax 2590
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Sugar 9320
Sugar apples 1190
Sugar-beets 0220
Sugar-cane 0230
Sugar confectioneries 9330
crops (general) 0200
maple 0250
palms 0260
sorghum 0240
Sunflower 0337
Sunn hemp 0590
Surface water P10
Surgery, veterinary L74
Surveys, forest K10
marine M20
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Swamps GZ37
Swedes 1575
Sweet bananas 1112
basil 2390
bay 2360
cherries 0714
chestnuts 1225
cicely 2380
oranges 1060
peppers 1845
potatoes 1580
Sweetclovers 1955
Sweetcorn 0120
Sweets 9330
Sweetsop 1190
Swietenia 3260
Swine 5300
Sword beans 1490
Syagrus coronata 0312
Syrups 9330
Syzygium aromaticum 2250

Tacca involucrata 1510
Taiga GZ77
Tamarinds 1190
Tan plants (general) 2600
Tangerines 1050
Tannia 1550
Tapa 0590
Tariffs E70
Taro 1550
Tarragon 2390
Taxation E10
fisheries M00
Taxonomy, animal L60
plant F70
Tea 2150
Paraguay 2140
processed 9910
Teaching C00
Teaks 3285
Technical assistance E30
Tectona 3285
Teff 0130
Temperature, soil F22
Temperate zone GZ16
Tenure E10
Tepary beans 1410
Tetragonia expansa 1690
Textile plants (general) 0400
Theobroma cacao 2110
Therapy see Control
Thirst S00
Thyme 2390
Tick beans 1420
Ticks L72
Tillage F27
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mensuration K10
preservation H00
technology K50
Timberyard practices K50
Timothy 1930
Tissues, animal L40
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Seakale 1690
beet 1690
Seelions 8720
Seals 8720
Seas GZ56
Seashore GZ62
Seaweeds 3410
Seasoning timber K50
Secale cereale 0160
Sechium edule 1810
Selection, plant F30
Selling E70
Semi-arid zone GZ12
Semolinas 9210
Sesame (Sesamum indicum) 0335
Setaria 0130
Seville oranges 1060
Shaddock 1090
Shade plants 2040
Shallots 1750
Shea butter tree 0314
Sheep 5240
Shellfish (general) 8200
fresh 9810
Shelterbelts F28
Shrimps 8310
Shrubs, forage 1980
Shungiku 1690
Silk cotton 0480
Silkworms 7900
Silos N10
Silviculture K10
Sim-sim 0335
Sinapis alba 2300
Sisals 0510
Site clearing K10
Sloping land GZ33
Slugs, as plant pests H10
Smilax 2340
Snails, as plant pests H10
edible 8890
Snake gourds 0890
Social psychology E50
services E50
Sociography E50
Sociology, feeding S00
rural E50
Softwoods (general) 3100
Soil absorption F22
analysis F22
atmosphere F22
biochemistry F21
biology F21
capability F26
chemistry F22
classification F23
(Soil) conditioners F25
conservation F28
cultivation F27
depletion F25
distribution F23
exhaustion F25
erosion F28
fauna F21
fertility F25
flora F21
formation F23
genesis F23
horizons F23
improvement F25
losses F28
management F26
mechanics F22
microbiology F21
moisture content F22
physics F22
profiles F23
reclamation F28
reclamation potential F26
resources F26
science (general) F20
solution F22
structure F22
surveying F24
temperature F22
texture F22
toxicity F25
Soils, general F20
Solanum melongena 1830
tuberosum 0210
Solar radiation F10
Soncoya 1190
Sorghum, sugar 0240
Sorghum halepense 1930
saccharum 0240
vulgare technicum 0590
Sorghums 0170
Sour cherries 0714
oranges 1060
Sown mixed pastures 1920
Soya bean (Soybean) 0336
Spanish cedars 3280
chestnuts 1225
Spearmint 2290
Sphenostylis stenocarpa 1590
Spices (general) 2200
Spinach 1670
amaranthus 1690
New Zealand 1690
Spinach beet 1690
Spinacia oleracea 1670

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Walnuts	1250
Waste waters	P10
wood	K50
Wastelands	GZ81
Water, brackish	GZ51
fresh	GZ52
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Water areas	GZ50
capacity of soils	F22
chemistry	P10
conservation	P10
distribution	P12
quality	P10
resources	P10
soil erosion	F28
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Watercress	1680
Watermelons	0820
Watersheds	GZ35
Wattles	2680
Wax palm	2420
plants (general)	2400
Weather	F10
plant injuries by	H50
Weathering, of soils	F23
Weeds	H60
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physiology	F60
Welfare	E50
Wells	P12
Welsh onions	1790
Whales	8710
Whaling	M10
Wheat	0180
Whelks	8490
White currants	0925
mulberries	0990
mustard	2300
Wholesaling	E70
Wild rice	0190
Wildlife, animal	L20
effect of pesticides	H00
plant	F40
Wind in soil erosion	F28
damaging plants	H50
Windbreaks	F28
Windsor beans	1420
Wines	9920
Winter melons	0810
radishes	1570
Wood chemistry	K50
chips	K50
conversion	K50
extracts	K50
industries	K50
preservation	H00
(Wood) production	K10
structure	F50
technology	K50
Woolly pyrol	1410
Worcesterberry	0935
Worms infesting animals	L72
marine	8640
Xanthosoma	1550
Yaks	5219
Yam beans	1590
Yams	1587
Yautia	1550
Yeasts	3430
Yerba de maté	2140
Yields, crop	F00
forest	K10
Ylang-ylang	2387
Yoco	2160
Zamia Floridana	1510
Zanthoxylum piperitum	2390
Zea mays	0120
Zingiber officinale	2260
Zizania	0190
Zoogeography	L60
Zoology	see Animal

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Tobacco 2760
Tomatoes 1850
Tonka 2390
Tools, farm N20
Torrents GZ65
Town and country planning E10
Toxic plants (general) H60
re livestock L74
Toxicity, pesticides
see H00 and L74
soil F25
Toxicology, food Q20
Trachylobium 2440
Trade E70
Trade agreements E70
promotion E70
Tragopogon porrifolius 1590
Transportation (general) E70
fish M10
forest K10
Travels B10
Tree fruits, temperate 0700
Trees, angiosperm (general) 3200
forage 1980
forest (general) 3000
care of forest K10
ornamental (general) 3000
care of ornamental K10
shade 2040
Trichosanthes cucumerina 0890
Trifolium 1951
Triticale 0190
Triticum 0180
Tropical fruits (general) 1100
zone GG50
Trout 8130
Truffles 1885
Tsetse flies L72
Tuber vegetables (general) 1500
Tundra GZ78
Tung oil tree 0315
Turkeys 6600
Turmeric 2370
Turnip-rooted cabbages 1625
parsley 1590
Turnips 1585
Swedish 1575
Turtles 8530

Uglis 1090
Ulluco (Ullucus tuberosus) 1590
Ulmus 3230
Umbelliferous herbs 2380
Unemployment E10
Upland valleys GZ28
Urbanization E50
Urd 1410
Urena lobata 0590

Vaccinium angustifolium 0920
corymbosum 0920
macrocarpon 0990
myrtillus 0990
oxycoccus 0990
Valleys GZ36
upland GZ28
Valuation, forest K10
Vanilla 2383
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Vectors of animal diseases L72
of plant diseases H10
Vegetable juices 9140
marrows 1823
products (general) 9100
Vegetables (general) 1300
canned 9120
cucurbit (general) 1820
dried 9120
earth 1500
fresh 9110
leafy 1600
leguminous (general) 1400
processed 9130
root (general) 1500
Vegetation F40
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Veitchberries 0950
Venison see Meat
Vetches, forage 1956
Veterinary education L70
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profession L70
science L70
surgery L74
Vetiver 2385
Vicia faba 1420
forage species 1956
Vigna 1440
Vines, grape 0940
Viruses re animal diseases L73
re plant diseases H20
Vitis 0940
Voandzeia subterranea 1490
Volcanic areas GZ40

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Indexing Guidelines

In performing original cataloguing, it is necessary to assign index terms to provide additional, or more detailed, subject access to documents within the system. These general guidelines will help in learning how to select the best descriptor terms from a thesaurus or keyword listing. The limitations of your own particular working conditions and the storage capacity of the computer will determine how much time you are able to spend indexing and how many terms should be assigned.

Purpose

The purpose of indexing is to facilitate retrieval of a document by substance or form. Substance is the subject of a work, and form describes the work itself or some of its contents. Examples of substance are: agricultural machinery, arid lands, malaria, Botswana, data collecting. Examples of form are: bibliography, statistics, questionnaire, proceedings.

For the user of a collection, the index points to documents relevant to his or her requirements. Thus, the indexer of those documents is responsible for selecting terms, contained in a thesaurus, which provide a true description of the form and major subject components of any report, monograph, article, project paper, evaluation, memorandum, etc. Major subject components are those topics which are treated in some detail within the document. The mere mention of a subject is not sufficient justification for indexing it, no matter how important the topic is to the AID program.

Guidelines

I. Know the user's need.

The most important challenge in indexing is to keep the user in mind. You must decide, as a user would, which terms or concepts would come to mind in looking for the document to be indexed. Ask yourself, "If I were trying to find this document, which words would I think of?"

Familiarity with AID's or the Mission's goals and programs through periodic review of Congressional Presentations, Annual Budget Submissions, and other policy statements is one way to know which subject areas are likely to "come to mind" for individuals working the the development community.

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AMENDMENT No. 2

p.19 (7th line)	for	... use 1311
	read	... use 0311
p.19 (after 1520)	for	for Sugar beets
	read	for Sugar-beets
p.19 (after 1540)	for	... use 1630
	read	... use 1640
p.22 (2730)	for	2730 Hemp (as Fibre crop use...)
	read	2730 Hemp, Drug plant (as Fibre crop use...)
p.24	read	8510 Crocodiles and Alligators
p.60-64	for GO14 through GO44 read GØ14 ... GØ44	
p.67	for	GS12
	read	GZ12
p.69-77	In Geographical Index: for GO... always read GØ...	

terms assigned. If you have selected only two or three, check to see whether you have been exhaustive in indexing every subject of major importance. If you have assigned more, be certain every word covers substance or form.

II. Analyze the substance.

To index, first analyze the substance of the document. For long, well-organized books, project papers, and reports, read the abstract, look at titles, tables of contents, preface and introductory material, captions, underlined or highlighted words or paragraphs. For shorter reports and documents which do not have introductory passages, etc., read beginning and ending paragraphs and skim in between to pick out important subjects. The shortest works, such as some project documents, memoranda, and cables, will have to be read in their entirety. In all cases, save time by being selective in what you examine in detail. However, do not hesitate to read whatever is necessary to become familiar with the substance of the document because the better you understand, the more accurate your indexing.

III. Select the index terms.

Once you understand the material (it may be helpful to jot down subject areas), select words in the thesaurus to match the subject and form. Use the following guidelines when choosing thesaurus terms.

A. Be SPECIFIC. Choose the most specific terms to describe the subject. Specificity is a fundamental rule of indexing and ensures greater relevancy in document retrieval.

B. Be OBJECTIVE. In translating an author's concepts into index terms, avoid subjective interpretations or criticisms.

C. Be CONSISTENT. If you are indexing several documents on a certain subject or project, look at all or most of them first to understand the subject in its context, and treat it with the same or similar terms throughout.

D. Be EXHAUSTIVE, but do not overindex. Index every topic of major importance, but do not include terms for subjects which are not described in some detail, or use words which are too broad when a more specific one would be suitable. Do not use several terms to describe the same subject area when one will ensure retrieval by a user.

Overindexing burdens the system with a profusion of terms pointing to documents which are barely relevant to the subject indexed. Those who access the system, both librarians and end users, waste their time scanning bibliographies and retrieving documents which have been overindexed. Ask yourself: "If I were a user and selected this document because it was indexed under my subject of interest, would I be satisfied that it was relevant to my needs, or would it be too peripheral to be of any use?"

Most documents should have eight to ten index words. This is an average number and should serve only as a guide in reviewing

Appendix F

CONVERSION OF THE RESEARCH AND DEVELOPMENT DATABASE FOR USE ON THE WANG VS MINICOMPUTER

INCLUDING REPORTS ON TRIPS TO USAID/CAIRO,
NOVEMBER-DECEMBER, 1980
AND
FEBRUARY-MARCH, 1981

Susan G. Weintraub
S&T/DIU/DI
November, 1981

Arrival in Cairo

I arrived in Cairo November 23 and began work the next day.

The DIC collection is housed on the 10th floor of the Cairo Center building where the AID offices are located. In evaluating the collection, I noted that approximately 40% of the publications on the shelves and in the backlog had already been fully processed by DIU and were probably contained in the RANDD database. It seemed pointless to recatalogue these items.

In a meeting with Bob Cunningham and Ron Miller, who were responsible for setting up the WANG VS minicomputer in Cairo, we came up with the idea of saving cataloguing time by transferring the RANDD tape from AID's IBM Mainframe computer in Washington and converting it to be used on the WANG VS. The advantage to having the RANDD tape on-line in Cairo would be in retrieving the cataloguing information on publications which had already been processed for RANDD and then using that information for materials in the Cairo DIC. We could thus have more time for performing original cataloguing on those items not treated in RANDD. Mr. Cunningham and I placed a call to Lee White, discussed our ideas with him and asked him to generate a tape from the IBM system which could be used on the WANG.

The idea of using RANDD in Cairo was also attractive for several other reasons in addition to saving cataloguing time:

1) USAID/Cairo would have access to citations to all AID reports on-line, not just to their own collection, as was originally planned. In this way, once USAID/Cairo was supplied with a full text back-up on microfiche of all documents cited in RANDD, the mission could save weeks in serving requests for information or AID Publications because it would be able to instantly identify the desired item on-line and then print a copy from its microfiche collection. No longer would it be necessary to cable AID/W with such requests. This was a feasible plan since DIU was already committed to the idea of providing full sets of microfiche to Missions as well as other organizations.

2) The system could be easily updated by tape from AID/W.

3) Exchange of tapes from USAID/Cairo would lead to more complete identification/acquisition of Mission-produced publications not included in DIU's collections.

4) Other USAIDs designated to receive WANG VS minicomputers could benefit from receiving the same type of system.

Once it was decided to proceed along these lines, I began work on the collection itself. The modified AGRIS classification system which is used both for RANDD and the Cairo DIC was revised after conferring with Mrs. Cylke and Mr. Hafenrichter. (See Attachment B.)

Background

In Fall, 1980, USAID/Cairo requested assistance in developing a method by which they could access the books and documents in their Development Information Center. This would include performing original cataloguing on newly acquired publications and setting up a system for storing and retrieving these materials. The Mission had recently installed a WANG VS minicomputer. Given the small size of the collection and the availability of a computer system, the Education Division, which manages the Development Information Center, hoped eventually to create an automated (on-line) catalogue of all materials in the collection using the WANG. In the meantime, they needed a manual access system designed so that it could be converted into an automated one.

The Center had been organized by Patricia DeButts based on the expanded AGRIS classification scheme used in the Catalogue of Research Literature for Development, Volume II. Mrs. DeButts returned to the U.S. in August, 1980 just prior to the arrival of her successor, Nancy Cylke.

John Hafenrichter, Division of Education, Office of Human Resources Development and Cooperation (HRDC/EDU), who was in overall charge of the Cairo DIC, requested that I spend several weeks TDY in Cairo to assist in setting up the manual access system and forming a plan for converting it to an automated one. (See Attachment A.)

Preparations

Prior to TDY in Cairo, the DIU input sheet, a cataloguing worksheet currently in use by the Office's Processing branch, was reviewed to see if it might be useful for the Mission DIC. Five thousand copies were ordered and shipped to Cairo.

Asta Teemant in Processing was interviewed regarding current cataloging practices for input sheets; she also provided a copy of some guidelines.

In reference to the automated access system, meetings and/or discussions were held with Lee White of DIU, Dave Washburn of SER/DM and Eric Chen of WANG Laboratories to explore the ways and means of putting the USAID/Cairo DIC collection on-line. Mr. Chen reviewed the proposed input sheet for the Mission and concluded that the Utility packages already available on the WANG VS could probably accomplish what would be required in the way of inputting, searching and reporting. In addition, refinements or improvements needed later could easily be added onto any data file previously created. He made tentative arrangements to produce with me a standardized screen format for inputting the collection, but his computer did not become operational before my scheduled departure and we had no opportunity to accomplish this.

Documentation on the RANDD database and all keyword lists used by DIU were collected. In addition, specifications on the Minolta RP405 microfiche reader/printer were obtained since the Mission wished to print some papercopy from their microfiche collection.

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evaluated the collection. With this list, I was able to return to the AID/W DIC and copy input sheets that had been created by DIU.

Work for this first TDY ended December 18, 1980.

Continued Mission Support and Programming Modifications

I arrived back in AID/W December 29, 1981. One of my first tasks was to copy the input sheets from the list prepared in Cairo. This was accomplished using the AID/W DIC microfiche collection and Minolta RP405 Reader/Printer. Sufficient copies of each sheet were made and headed with either author, title, EG number, subject, or "Egypt" as a keyword. After sorting they were sent to the Mission in batches to be filed in the manual access system. Approximately 300 titles were copied and processed.

Most of my time was spent on modifying the RANDD database for use on the WANG VS. I again contacted WANG Laboratories and was directed this time to speak with Bonnie Jones, a technical representative responsible for the State Department account. After explaining the problems involved with the modification, she agreed to meet with Lee White and me and made arrangements to use the State Department's WANG VS.

During the first session which took place January 7, 1981, we brought a new tape of the RANDD database tape which Mr. White produced according to WANG specifications. When we tried to create a file on the WANG VS we discovered that the RANDD record was too large for the VS Utilities package, particularly for generating a screen input format under the EZFORMAT Utility which limits input to one screen. Ms. Jones spent the session demonstrating what we could do with the WANG and suggested that Mr. White and I rework the RANDD record to fit within a maximum of 1951 bytes.

Mr. White and I spent a number of hours cutting the size of the record and then trying to arrange the fields in a suitable array on paper. We ended up with 20 distinct fields which are:

Date on file
AID/W Document Number
Format
Document ID
Subject
Secondary Subject
Country Code
Language
Title
Author
Year
No. of Pages
Notes
Keyword
Contract
Contract Type
ARDA Issue
Bibliographic Type
Project Number
Record Status

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To distinguish titles in the database which were already on-hand in Cairo from those which were in the general RANDD database, I modified the existing RANDD numbering system. RANDD documents are assigned sequential accession numbers beginning with the characters "PN" (e.g., PN-AAA-001). My modification was to assign Cairo-owned documents a number beginning with EG (e.g., EG-AAA-001). Therefore, any document appearing in the database that carried an EG number would automatically be identified as one owned by the USAID. In the future, other Missions could use the same system substituting their own two-letter country code.

For shelving purposes, a call number was created that combined the first four characters of the classification scheme (e.g., AE10 for Agricultural Economics) and the accession number (EG-AAA-001). In this way, every book would be on the shelves by general subject area and would also be identifiable through the manual system or the database with a unique number, (e.g., AE10 EG-AAA-001).

Next, I revised the AID/W cataloguing input sheet to include two additional fields: the USAID Identification Number (EG number) and Format, a code which would identify whether the DIC publication is in papercopy on the shelves (PC), in microfiche in the microfiche collection (MF), or both (PM). (See Attachment C.)

I began cataloguing DIC materials and used the experience to make modifications in the existing cataloguing practices for the Mission. Mrs. Cylke requested that I concentrate on World Bank publications because of the heavy demand for them. As input sheets were completed, copies were made for certain fields: each author, title, subject code, EG number, and an additional copy for each document indexed with the keyword "Egypt". These sheets were ordered alphabetically or numerically and placed in separate black looseleaf notebooks. This created a manual access system similar to the one originally established by Mr. Hafenrichter during his tenure in DS/DIU in AID/W. Rules for processing and filing input sheets and for labelling books are Attachments D and E.

By the end of my fourth week of TDY, over 200 books had been catalogued.

When the RANDD tape arrived at the Mission, there were technical problems in getting it to run properly. The decision was then made to return to AID/W and concentrate on setting up the computerized system there and subsquently undertake a second TDY at the Mission in February to install the completed package.

Prior to my departure, Mr. Hafenrichter spoke to Lida Allen, Director, Office of Development Information and Utilization. She responded favorably to the idea of converting RANDD for Mission use and agreed to allow me to spend a large percentage of my AID/W time on the project and to return to Cairo as soon as possible. (See Attachment F.)

In order to quickly expand the manual access system to include the documents on-hand in Cairo which were already catalogued in RANDD, a Mission employee went through the DIC shelves and copied the AID/W accession numbers (PN numbers) which had been marked on many of the documents by Mrs. DeButts, Mrs. Cylke or myself when I initially

The alternative was an indexed file with one primary key and up to 7 alternate keys. After a great deal of lengthy deliberation and an assessment of needs, Mr. White and I decided that the primary key would have to be Document ID (the EG or PN number) and two alternate keys would be Subject (four character AGRIS subject code) and Country Code (four character FAO geographic code). There was no way to make Keyword (KY) into a keyed field because it was an occurring field.

The problem of deciding on the primary key was difficult to solve. In a keyed or indexed file on the WANG VS, the primary key must be unique, can never be blank, and cannot be modified in the record. This would pose no problem with materials catalogued solely for the Mission since they would carry an EG number from the start. However the conflict arose for records located at the Mission which were already in RANDD and carried a PN number as the primary key. To show that these documents were in Cairo, they would need an EG number as the primary key. To accomplish this the PN number which always appears as the primary key in the AID/W RANDD database, would have to be moved to a new field called AW or AID/W Document Number. Since the primary key can never be modified, the only way to resolve this without changing the WANG VS programs (not an option at the time), was to delete the PN number record and rekey it anew with an EG number as ID and PN number as AW. Given the alternatives, this seemed the best way to proceed.

The next meeting with WANG took place on February 2, 1981 at the new WANG offices in Rosslyn. At that time Mr. White and I worked with Ms. Jones, Mr. Chen and another WANG technical representative. We made some progress in designing the EZFORMAT screen and setting up the CONTROL file as an indexed file.

In the meantime, AID's Office of Data Management (DM) was concerned about the project since they are responsible for managing all databases and programming throughout the Agency. They requested we write a memorandum from Mrs. Allen to the Director of DM, Mr. Paul Spishak, explaining the project and our requirements. (See Attachment H.) Acting on behalf of USAID/Cairo, we explained the need to convert the database quickly using the existing Utility programs available on the WANG VS, and asked for support from DM. The memo went out January 21, 1981, and we received a response February 11 (see Attachment I) which gave us official permission to solicit help from the WANG technical representatives.

Ms. Jones and I next met at Universal North using AID's WANG VS on February 11. We continued working on setting up the file and finalizing the EZFORMAT which included solving another large problem of how to arrange the occurring fields of author and keyword within the EZFORMAT screen. The solution involved reprograming the actual COBOL program. By February 13, at another all-day session at Universal North, all problems were resolved and the RANDD database was converted to run on a WANG VS minicomputer.

The following week, which was the week prior to the scheduled departure for my second TDY, I spent time on the system learning to use the Inquiry, Report, and Display Utilities, adding actual records which had been catalogued, and converting RANDD records to Mission records (PNs to EGs). I also had a chance to give a brief demonstration to Mr. White as well as to meet with Mr. Spishak, Kathy Gleason, Bill Ruotola and Mary Jo Keenan of DM to tell them about progress made on the system. Mr. Spishak was very interested in the project and its implications.

Ms. Keenan duplicated the RANDD database tapes with the software modifications we had made so that I could carry one with me and send another through the Diplomatic Pouch.

Arrival in Cairo

I arrived back in Cairo February 25, 1981. The converted database was loaded into the WANG VS and came on-line without difficulty. The system was demonstrated to Mrs. Cylke and Mr. Hafenrichter. It was the first time on-line access to the AID Research Database was available outside of AID/W.

During the next four weeks of the scheduled TDY, time was spent on a number of tasks:

1). Training

Mrs. Cylke quickly learned how to use the system, which included inputting new records and modifying existing records; creating reports, and running searches through Inquiry and Display. Almost all training time was devoted to Mrs. Cylke since she headed the DIC and would be the primary user.

2). Inputting

A substantial number of documents catalogued during the first TDY were inputted into the system. This allowed problems in field size to be noted, discussed and resolved. In addition a bibliographic type code for all World Bank publications (90) was added for easy access to this group of documents. An entry format for some fields was determined and guidelines for inputting new records written. Between Mrs. Cylke and myself, approximately 200 new records were added to the on-line catalogue.

3) Demonstrating

Three demonstrations of the system were held. The first followed a meeting of the Mission's senior staff on March 5. After Mrs. Cylke discussed the Cairo DIC and the new system, I demonstrated the system on-line for a few of the senior staff as well as the Mission Director, Mr. Donald S. Brown.

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On March 17, seven separate briefings were held for all offices in the Mission. (An eighth was scheduled for the Office of Agriculture, but the entire staff was away and Mrs. Cylke rescheduled their briefing after my departure.) In seven 45-minute presentations, over 40 USAID/Cairo staff members heard about the services provided by the Cairo DIC and saw an on-line demonstration of the database. Attendees made a number of individual requests for information and immediate responses were provided by the system .

Two handouts were created for the demonstrations. (See Attachment J.)

The following day, a reception and presentation were held for a several librarians in Cairo. Libraries represented were:

American Center (USICA)
The U.S. Embassy Post Reference Library
FAO
American University in Cairo
Institute of National Planning
Cairo University/MIT Project

The librarians who attended the demonstration were impressed with the system and expressed interest in identifying and accessing the AID-produced reports contained therein.

4) Improving

Some improvements to the system were made on-site at the Mission. I made one correction to the EZFORMAT screen, but Bob Cunningham and his staff of programmers, especially Soheir Ghali, solved other system problems and made enhancements as requested.

Difficulties were noted in actually accessing the computer system, particularly for non-programmers. This was resolved by writing a number of procedures and creating a master menu (see Attachment K). After signing on, these procedures allowed the user to go directly into the various functions permitted on the system without having to fill in technical information on the system library, file and volume.

The addition of the RANDD database to the Mission's WANG VS system created the biggest problem. With over 9000 records of 1951 bytes each, RANDD took up an enormous amount of room on the system. We were often unable to sort fields in the Report utility for lack of disk space. Mr. Cunningham recognized the problem and quickly reviewed the contents of the entire system to erase unnecessary files. He also noted that heavy use of the WANG VS for the word processing function was a major cause of the space problem.

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5) Documenting

Most of my final week on TDY was spent writing a manual for using the Cairo RANDD system. It includes a brief explanation of the database, searching theory, detailed chapters on using Display, searching on Inquiry, creating reports, updating and maintaining records, and an appendix with a Field Display Table, and tables for fields which require special codes.

Work for this second TDY ended March 20, 1981

Problems with the System and Recommendations for Improvement

In setting up RANDD for Cairo using the existing WANG utilities, two major problems surfaced:

1) The inability of the Inquiry program to search on all occurrences of a single field at the same time;

2) The nature of the primary key field (non-modifiable) which meant re-keying an entire record to change the field.

Inquiry

Records in the RANDD database are classified according to a broad subject classification scheme, and indexed using a list of descriptor words based on standard thesauri with additions or changes made by cataloguers. Subject access to the database on the AID/W IBM mainframe computer using the Inquire software package (not to be confused with the WANG Inquiry Utility) is generally accomplished through the use of the descriptor words rather than the subject codes. In Inquire, one can specify one or more keywords in a search statement and be certain that the matching record will be retrieved no matter where the keyword appears within the field, that is, whether it is listed first, last or anywhere in between.

On the WANG, one can set up occurring or repeating fields such as keyword or author, but searching is more difficult with the Inquiry utility. To search on an occurring field, one must know which occurrence is being searched, that is, whether one is looking for the fieldvalue in the first, second, third, etc. occurrence. Since such prior knowledge of position is not possible in a bibliographic database such as RANDD where the same descriptor word could be placed in different occurrences for different documents, searching on occurring fields becomes cumbersome.

For example in Inquire, a search for all records indexed with the word 'energy' could be stated:

"Scan keysubj is energy"

The computer then scans the entire keysubject field of every record to produce a match.

On the WANG-VS, a search for every record indexed with the word 'energy' must be stated:

When keyword(1) is 'energy' or keyword(2) is 'energy' or keyword(3) is 'energy' or keyword(4) is 'energy' or keyword(5) is 'energy' or keyword(6) is 'energy' or keyword(7) is 'energy' or keyword(8) is 'energy' or keyword(9) is 'energy' or keyword(10) is 'energy' or keyword(11) is 'energy' or keyword(12) is 'energy' List...

The subscripted numbers after the field 'keyword' refer to the position or occurrence of the value being searched. There are 12 possible occurrences for each keyword so that every keyword search must look at all 12 positions. Not only is this type of search cumbersome to type in, but it limits a keyword search to only one keyword; it would be impractical to try to combine keywords through the use of logical connectors such as AND or OR. Before leaving Cairo, I stored two searches for authors and keywords. To do either of these types of searches, one would only need to replace a value in each portion of the search statement, rather than retyping the entire statement over again. Mrs. Cylke has indicated, however, that even replacing values is too time consuming.

Realizing this problem during the conversion phase, one alternative that I settled on was to rely more heavily on searches by the subject code (e.g., AE10) which is a single field within each record, and in addition, make it an alternate key for even faster access. Geographic code was also made an alternate key since countries and regions are often used to define searches.

However, a true solution to the problem must be found either in altering the Inquiry Utility, writing procedures to circumvent the utility, or writing a search program.

Changing the Primary Key

All documents contained on the RANDD database carry a primary key beginning with PN. To indicate that a publication is available in the USAID/Cairo DIC, the primary key would have to begin with EG, whether it appears in microfiche or papercopy. Since primary keys cannot be modified or left

blank, switching an AID/W assigned identification number to a USAID-assigned EG number meant deleting the entire record and re-keying it. This was a major problem initially because a large number of publications in the Mission DIC identified as being in RANDD had to be deleted and then re-keyed. In the future, this problem will have to be resolved since repeated rekeying increases the risk of introducing errors into the record.

My responsibility back in AID/W, having installed the system in Cairo and written a usable manual, was to contact Data Management, inform them of progress made in Cairo, discuss the problems with the system, and make recommendations for improvement. DM had promised to review the pilot system and then "provide or arrange for the necessary support", depending on the amount of reprogramming necessary. (See Attachment E.)

As instructed, I contacted Mr. Washburn who referred me to Ms. Keenan. She then checked back with the Director's office in SER/DM and requested that I make my recommendations formally in a memorandum to Mr. Spishak. The memo was sent June 1 (see Attachment L).

In the meantime, per instructions from the Mission, I submitted an article on the system to Front Lines. The article discussed the installation of RANDD on the Mission's minicomputer and the benefits gained from it. Front Lines, however, modified the article (see Attachment M) to focus on how DIU answers requests from Missions and the amount of time it takes to get information back and forth through the diplomatic pouch.

Although the Office and the Mission were somewhat disappointed with the re-write, some Missions did appreciate what had been done and USAID/Honduras requested information on receiving the database. Ms. Gleason from SER/DM contacted me late July with regard to the memorandum; Ms. Keenan had left the office and action on the pilot project was turned over to Ms. Gleason. She requested that we put off any discussions until Mr. Cunningham arrived in Washington in August.

During the summer, both Mrs. Cylke and Mr. Cunningham were in Washington and we met together with Mr. White on August 11 to review progress on the system. At that time, it appeared that DM would not be able to offer any assistance in modifying the system. It was agreed that the programming staff in Cairo would have to make as many recommended modifications as their time permitted and send them to AID/W to be incorporated into an official version which could be distributed to other Missions.

UNCLASSIFIED

Attachment A

Department of State

INCOMING TELEGRAM

PAGE 01 CAIRO 22963 161626Z 002207 AID5037
ACTION AID-35

ACTION OFFICE DIU-04
INFO NETC-04 NFEI-03 NEEM-01 STA-10 AADS-01 CHS-01 RELO-01
MAST-01 /026 A4 1

INFO OCT-01 /036 W
----------033643 161630Z /34

P 161108Z OCT 80
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC PRIORITY 3075

UNCLAS CAIRO 22963

AIDAC

E.O. 12065: N/A
SUBJECT: REQUEST FOR TDY, MISSION DIC

1. TO LIDA ALLEN, DS/DIU.

2. REQUEST ADVISE AVAILABILITY SUSAN WEINTRAUB TDY NTE 6 WEEKS BEGINNING ASAP OR NOT LATER THAN NOVEMBER 2.

3. SCOPE OF WORK INCLUDES CATALOGUING LARGE NUMBER RECENTLY ACQUIRED MATERIALS; DEVELOPING INPUT SHEET FORMAT SUITABLE FOR MANUAL RECORD KEEPING AS WELL AS FUTURE AUTOMATED PROCESSING; AND SETTING UP CENTRAL RECORD OF INPUT SHEETS FOR DIC COLLECTION ESTIMATED 3000 PIECES. REQUEST WEINTRAUB EXPLORE POSSIBILITY BRINGING DOCUMENTATION OF SOFTWARE USED PROCESSING AID R&D DATABASE TO ADVISE MISSION COMPUTER STAFF REGARDING AUTOMATION DIC RECORDS.

4. FISCAL DATA AS FOLLOWS: APPROP. 72-1111000; ALLOT. 100-50-263-00-10-11. DILLON

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TABLES FOR FIELDS WHICH REQUIRE SPECIAL VALUES

SUBJECT CODES (SU) Listing by Code.

This is a brief listing of the Subect Codes and their meanings. For more detailed explanation of the subject areas each code covers, refer to the Classification Scheme, Development Information Center, USAID/Cairo.

NOTE: Zeroes (0) are used in these codes, not captial O's. Zeroes must be entered when searching the database for matches to occur.

Code	Subject Name
Class A: Agriculture	
AA00	Agriculture--General
AA50	Agricultural Research
AB50	History of Agriculture
AC00	Agricultural Education, Extension and Advisory Work
AD10	Administration of Agriculture
AD50	Agricultural Legislation
AE10	Agricultural Economics
AE30	Agricultural Development
AE40	Rural Development
AE50	Rural Sociology
AE70	Distribution and Marketing
AF00	Plant Production
AF10	Meteorology and Climatology
AF20	Soil Science
AF22	Soil Chemistry
AF23	Soil Classification and Genesis
AF24	Soil Surveys and Mapping
AF25	Soil Fertility, Fertilizers, and Plant Nutrition
AF26	Soil Resources
AF28	Soil Erosion and Reclamation
AF30	Plant Breeding
AF60	Plant Physiology and Biochemistry
AH00	Plant Protection
AH10	Pests of Plants
AH20	Plant Diseases
AH60	Weeds
AK00	Forestry

AL00	Animal Production
AL30	Animal Nutrition
AL50	Animal Physiology and Biochemistry
AL72	Pests of Animals
AL73	Animal Diseases
AM00	Fisheries
AM40	Aquatic Biology
AN00	Agricultural Machinery and Buildings
AN10	Agricultural Engineering and Structures
AN20	Farm Equipment
AP00	Natural Resources
AP10	Water Resources and Management
AP12	Drainage and Irrigation
AP20	Land Resources
AQ00	Food Science
AQ10	Food Processing
AQ20	Food Microbiology and Toxicology
AR00	Home Economics
AS00	Human Nutrition
AS10	Food Composition
AS20	Physiology of Nutriton
AS30	Feeding

Class C: Communications

CA00	Communications--General
CC00	Communications--Applications

Class D: Development and Economics

DA00	Development and Economics--General
DC00	Development Assistance
DC30	Project Management
DD00	Public Administration
DE10	Banking and Finance
DG00	Labor Economics
DK00	Trade and Commerce
DM00	Industries and Industrialization
DP00	Transportation.

Class J: Education

JA00	Education--General
JA50	Education Research
JC00	Teaching and Learning
JC30	Instructional Materials
JC36	Audio-visual Materials
JC70	Testing and Measurements
JD10	Administration
JE10	Educational Economics and Finance
JE30	Education and Development
JE50	Educational Sociology
JF00	Pre-school, Elementary, Secondary and Vocational Education
JF20	Elementary Education
JF30	Secondary Education
JF50	Technical and Vocational Education
JG00	Higher and Professional Education
JG55	Teacher Education
JK00	Adult Education and Literacy
JL00	Non-formal Education
JM00	Technologies Used in Education
JM10	Educational Radio
JM20	Educational Television
JM50	Satellite and Telecommunications
JM70	Automation

Class L: Urban Development and Housing

LA00	Urban Development and Housing--General
LD00	Housing
LN00	Shelter Construction

Class M: Libraries and Information Sciences

MA00	Libraries and Information Sciences--General
MC00	Library Science/Documentation

Class N: Health

NA00	Health--General
NC00	Education and Manpower
ND00	Delivery Systems
NH00	Maternal and Child Health Care
NS00	Tropical Diseases

Class P: Population

PA00	Popuation--General
PC00	Family Planning

Class S: Social Sciences

SA00	Social Sciences--General
SB00	Anthropology
SD00	Political Science
SE00	Sociology
SG00	Area Studies

Class T: Science and Technology

TA00	Science and Technology--General
TC00	Science and Technology--Applications
TC30	Appropriate Technology
TC50	Energy
TC70	Environment

This input sheet is available through Glossary 0001 and is labeled E.

Sample Input Sheet

CALL NUMBER:
(This is not keyed into the record.)

BIBLIOGRAPHIC INPUT SHEET

1. DATE PROCESSED (DT):
2. CONTROL NO. (ID):
3. FORMAT:

4. AID/W CONTROL NO. (AW):

5. SUBJECT CLASS (SU-OC-GC):

6. TITLE AND SUBTITLE
T1
T2
T3

7. AUTHORS, PERSONAL AND CORPORATE (A1 x 7)

8. NOTES
N1
N2
N3

9. DESCRIPTORS (KY). ENTER UP TO 12 DESCRIPTOR WORDS BELOW ON FOUR LINES:

10. NO. OF PAGES (P):

11. DOCUMENT DATE (YR):

12. CONTRACT NUMBER (C):

13. CONTRACT TYPE (CT):

14. ABSTRACT--ARDA ISSUE (AR):

15. DOCUMENT TYPE (BT):

16. PROJECT NUMBERS (J):

17. LANGUAGE (LA)(Up to 4):

18. RECORD STATUS (RS):

INPUT SHEETS
PROCESSING AND FILING

1. One copy of the input sheet for a given document should be made for each of the following categories:

   Every personal author
   Every corporate author
   Title
   Subject classification number
   Egypt as a descriptor term
   EG Number

2. Write, in red, the name of each personal author, corporate author, classification category, and descriptor term EGYPT at the top left-hand side of each input sheet, one per sheet. For example, if there are three authors for one document, write the name of each author on a separate copy of the input sheet.

3. It is not necessary to write out the title on the left-hand corner of the input sheet. Simply make a check mark in red next to the title and file alphabetically.

4. Author input sheets are subfiled by title. Corporate and personal authors are interfiled.

5. Subject input sheets are subfiled by main entry (i.e., personal author, corporate author, or title if no author). The subject notebook file will be kept in order by classification number. Do not file sheets alphabetically according to the subject name as written in the left-hand corner of the input sheet.

6. Input sheets which make up the EGYPT notebook file are subfiled first by subject and further subfiled under subject by main entry.

7. EG Number input sheets are filed sequentially by number with the lowest first. Example: EG-AAA-001
   EG-AAA-002
   EG-AAB-125
   EG-AAB-683

8. For any other questions concerning alphabetical filing, refer to the <u>ALA Rules for Filing Catalog Cards</u>.

9. However, file AID as it is spelled, not under AGENCY. File A.R.E. and other abbreviations as if they were spelled out. They will probably appear in their long version on the input sheet record.

LABELING

1. The call number for each document consists of the first 4 characters of the classification number plus the entire USAID CONTROL NUMBER or EG Number. Example: If the classification number is LA00-0000-G232 and the EG# is EG-AAA-123, the call number becomes:

   LA00
   EG-AAA-123

2. Use labels with a green stripe across the top for any books that use Egypt or any geographic areas within Egypt as a descriptor term, and/or contain G232 in the last section of the classification number, e.g., LA00-0000-G232.

   For any books which are not Egypt-related, use all-white labels.

3. If possible, place labels on the spine of the book close to, but not touching the bottom. The typed format for the call number placed on the spine should be:

   LA00
   EG-AAA
   -123

   unless the book is thick enough to accommodate the entire call number as written in No. 1 above.

4. If the book is not wide enough for a spine label, place it on the upper left hand corner of the outside cover.

5. Place tape over the label to be sure it does not peel off.

ACTION OFFICE DIU-04
INFO CH6-01 NETC-04 NEE1-03 NEEM-01 STA-10 DM-01 AADS-01
CH8-01 RELO-01 MAST-01 /028 A4 7

INFO OCT-01 /036 W
009816 230245Z /34

R 230000Z DEC 80
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC 6136

UNCLAS CAIRO 28119

AIDAC

E.O. 12065: N/A
SUBJECT: SUSAN WEINTRAUB TDY.

1. FOR LIDA L. ALLEN, DS/DIU AND TOM MCDONOUGH, NE/TECH.
SUMMARY: WEINTRAUB TDY SUCCESSFULLY COMPLETED DECEMBER 18. DS/DIU SUPPORT OF MISSION DIC PROGRAM APPRECIATED AND CONTINUED COLLABORATION REQUESTED.

2. SUBSTANTIAL PROGRESS USING USAID'S WANG COMPUTER TO ACCESS AID'S RANDD DATA BASE ACCOMPLISHED THROUGH WEINTRAUB'S TDY AND DS/DIU BACKSTOPPING. FORTY PERCENT MISSION DIC COLLECTION ALREADY IN RANDD AND DIRECT ACCESS TO RANDD VIA MISSION COMPUTER MAKES DUPLICATIVE PROCESSING UNNECESSARY. USING RANDD FORMATS ADAPTED BY WEINTRAUB FOR WANG UTILITY PACKAGE AN ADDITIONAL 200 PIECES UNIQUE TO MISSION COLLECTION PROCESSED. THUS HALF OF LOCAL COLLECTIONS NOW POTENTIALLY ACCESSIBLE WHEN THE RANDD BROUGHT ON-LINE WITHIN AMEMBASSY CAIRO.

3. ON WEINTRAUB'S RETURN AID/W MISSION REQUESTS THAT NECESSARY ADAPTATION OF RANDD TO WANG HARDWARE/SOFTWARE BE PURSUED IN DS/DIU AND NEWLY PROCESSED INPUTS BE USED TO DEBUG SYSTEM. EFFORT WILL CULMINATE, WHERE WANG COMPUTERS INSTALLED IN OTHER USAIDS, IN PROVIDING: A) DIRECT MISSION ACCESS TO AID'S COMPOSITE TECHNICAL LITERATURE PRODUCTION AS MAINTAINED BY DS/DIU; B) UNIFORM, QUALITATIVE SYSTEM FOR HANDLING MISSION-ACQUIRED MATERIALS; AND C) ON-GOING INFORMATION RESOURCE SHARING WIDELY THROUGHOUT AID.

4. WHEN RANDD ADAPTATIONS TO WANG HARDWARE/SOFTWARE COMPLETED IN DS/DIU, MISSION REQUESTS SUBSEQUENT WEINTRAUB TDY NTE FOUR WEEKS, ESTIMATED LATE FEB./EARLY MARCH. SCOPE OF TDY WORK WILL INCLUDE: INSTALLING PROGRAM, WRITING PROCEDURAL GUIDES, STAFF TRAINING.

6. PLEASE ADVISE CONCURRENCE IN COLLABORATIVE COURSE OF ACTION OUTLINED AND PROJECTED WEINTRAUB TDY. ATHERTON

Department of State

OUTGOING TELEGRAM

PAGE 01 STATE 001894 046583 AID3572
ORIGIN AID-35

ORIGIN OFFICE DIU-03
INFO NEEI-03 NEEM-01 AADS-01 CH8-01 /010 A4 7

INFO OCT-00 035 R

DRAFTED BY DS/DIU:LALLEN:TVS
APPROVED BY DS/DIU:LALLEN
AID/NE:GGOWER (PHONE)
DESIRED DISTRIBUTION
ORGIN I CH 8 INFO AANE NEEET NEEM AADS 8L-00 END
073432 052130Z /34

R 051959Z JAN 81
FM SECSTATE WASHDC
TO AMEMBASSY CAIRO

UNCLAS STATE 001894

AIDAC

E.O. 12065:

AGS:

SUBJECT: SUSAN WEINTRAUB TDY

REF: CAIRO 28119

1. FOR JOHN HAFENRICHTER, HRDC/EDU /

2. DS/DIU CONCURS PLAN OF ACTION PER REFTEL. WEINTRAUB WILL CONTINUE WORK ON MISSION PROJECT TO PUT RANDD DATA-BASE AND MISSION DIC COLLECTION ON LINE IN WANG VS COMPUTER.

3. DS/DIU IS PREPARED TO RELEASE WEINTRAUB FOR TDY AS SOON AS WORK IS COMPLETED IN AID/W.

4. DS/DIU REQUESTS MISSION SEND FISCAL DATA FOR TDY.

5. ETA FOR WEINTRAUB WILL BE DISCUSSED IN SUBSEQUENT CABLE. MUSKIE

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ACTION COPY

Department of State

INCOMING TELEGRAM

FAC 01 CAIRO 01283 2015142 [illegible]
ACTION AID-35

ACTION OFFICE [illegible]
INFO NEDP-02 CHC-01 NETC-04 NEEI-03 NEEM-01 FM-02 AADS-01
CHB-01 RELO-01 MAST-01 LDD-01 022 A2 3

INFO OCT-01 [illegible] W
041762 201521Z /34

P 201042Z JAN 81
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC PRIORITY 6961

UNCLAS CAIRO 01283

AIDAC

E.O. 12065: N/A
SUBJECT: SUSAN WEINTRAUB TDY

REF: A. CAIRO (80) 28119, B. STATE 001894

1. FOR LIDA ALLEN, DS/DIU. FISCAL DATA WEINTRAUB TDY AS FOLLOWS. APPROP. 72-1111000, ALLOT. 100-50-263-00-01-011. TDY ESTIMATE NTE FOUR WEEKS.

2. SCOPE OF WORK TO INCLUDE INSTALLING RANDD DATA BASE AND ADAPTED PROGRAM FOR MISSION DIC ON MISSION WANG VS; WRITING PROCEDURAL GUIDES FOR INFORMATION RETRIEVAL; TRAINING MISSION PERSONNEL IN INPUTTING, REVISING AND SEARCHING; AND PROVIDING CONSULTING SERVICES ON MICROGRAPHIC PROCEDURES AND PROCESSING.

3. ADVISE ESTIMATED DATE OF ARRIVAL AFTER FEBRUARY 15TH AND BEFORE MARCH 1. ATHERTON

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Department of State

INCOMING TELEGRAM

PAGE 01 CAIRO 03532 181125Z 003051 AID7953

ACTION AID-35

ACTION OFFICE DIU-04

INFO CH6-01 NETC-04 NEEI-03 STA-10 DM-01 AADS-01 CH8-01
RELO-01 MAST-01 /027 A4 818

INFO OCT-01 /036 W

----------277672 181125Z /34

P 181021Z FEB 81
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC PRIORITY 7925

UNCLAS CAIRO 03532

AIDAC

E.O. 12065: N/A
SUBJECT: DS/DIU SUPPORT MISSION INFORMATION SYSTEM

REF: STATE 035508

1. FOR DS/DIU AND NE/TECH. WILL MEET WEINTRAUB FEB. 23 ARR. VIA TWA 840. RESERVATIONS MADE AS REQUESTED.

2. MISSION APPRECIATES FULL MEASURE OF SUPPORT IN ADAPTING DS/DIU TECHNICAL DATA BASE TO MISSION WANG UTILITY VS SYSTEM WHICH DS/DIU HAS MADE AND CONTINUES MAKE AVAILABLE AS WELL AS DS/DIU COORDINATION OF ACTIVITY WITH SER/DM. ATHERTON

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FIELD DISPLAY TABLE

The following table lists each field in the DIC database and gives major characteristics. Starting position refers to actual location in the record; this positioning is evident when viewing a record in Display. All fields are character fields rather than numeric eventhough some values are numbers. Length is number of spaces each field occupies on the record no matter how much room the actual value takes up. Number of occurrences indicates the maximum number of values each field can have in any one record. The keyed fields are those which are indexed.

FIELD NAME (Abbrev.)	STARTING POSITION	TYPE OF FIELD	LENGTH	NO. OCCURENCES	KEYED?
DT--Date on file	1	C	6	1	No
AW--AID/W Doc. No.	7	C	8	1	No
DF--Format	15	C	2	1	No
ID--Doc. ID	17	C	8	1	Yes
SU--Subject	25	C	4	1	Yes
OC--Secondary	29	C	4	1	No
GC--Country Code	33	C	4	1	Yes
LA--Language	37	C	8	1	No
T1--Title1	45	C	67	1	No
T2--Title2	112	C	67	1	No
T3--Title3	179	C	67	1	No
AU--Author (1-7)	295	C	67	7	No
YR--Year	1032	C	2	1	No
P--Pagin	1034	C	6	1	No
N1--Notes1	1040	C	67	1	No
N2--Notes2	1107	C	67	1	No
N3--Notes3	1174	C	67	1	No
KY--Keyword (1-12)	1375	C	25	12	No
C--Contract	1875	C	19	1	No
CT--Contract Type	1896	C	1	1	No
AR--ARDA Issue	1897	C	7	1	No
BT--Bibtype	1904	C	2	1	No
J--Project Number	1906	C	45	1	No
RS--Record Status	1951	C	1	1	No

MEMORANDUM

TO: SER/DM, Paul Spishak, Director

FROM: DS/DIU, Lida L. Allen, Director

SUBJECT: RANDD Database Conversion to WANG VS Minicomputer

In November, DS/DIU was requested by USAID/Cairo to establish a cataloging and indexing system for the Mission's collection of publications contained in their Development Information Center (DIC). With Mission funding, Susan Weintraub was sent on a four week TDY to implement a manual system and begin investigating the best way to convert that system to an automated one. Before leaving, she contacted Mr. Dave Washburn of DM as well as Eric Chen of WANG to find out how the WANG VS at the Mission could handle the type of functions required in maintaining and searching a bibliographic database whose records would be structured similarly to those in the RANDD (Research Literature for Development) database on the AID computer. Mr. Chen examined the bibliographic input sheet used for RANDD and stated that the existing WANG VS utilities could probably meet the requirements, or at least they could do so initially. If more sophisticated searching or a longer record were needed, software could be written and added later.

In Cairo, Mrs. Weintraub discovered that approximately 40 to 50% of the USAID Development Information Center collection had already been fully processed by DIU and was in the RANDD database. Informal conversations with Bob Cunningham and Ron Miller led to the idea of converting RANDD to the WANG VS in order to cut down on Mrs. Weintraub's cataloging workload at the Mission. However, the implications of bringing RANDD to USAID/Cairo were much broader. Not only could RANDD be used as a cataloging/processing tool much as DIU now uses OCLC (the Ohio College Library Center cataloging system), but it could also enhance the Mission DIC's service capability to Mission personnel, their contractors and GOE counterparts by allowing immediate on-line access to AID's unique database of development literature. In addition, input of Mission-produced documentation would greatly aid in the identification and acquisition of documents which DIU has been hard-pressed but generally unsuccessful in obtaining. In a broader perspective, if the system could be implemented in Cairo, it could then be sent to other Missions with WANG equipment and documentation centers.

There is a great deal of pressure at the Mission to implement this system as soon as possible. The DIC collection has virtually no means of access while demand for information and/or publications continues to increase. The manual access system, begun during Mrs. Weintraub's TDY, will take months to set up. In order to gain immediate access to a substantial portion of the collection and to get the rest of the collection input quickly, the Mission has expressed the desire to have RANDD installed in Cairo using the utilities now available with the WANG VS. The need is so urgent that they have requested that Mrs. Weintraub return with a workable system in February or early March.

Responding to this short-term need and considering the overall importance of the request in terms of DIU's goals, DIU is permitting Mrs. Weintraub to continue working on the USAID/Cairo manual and computer access systems despite her normal duties in the AID/W Development Information Center. Lee White is also being made available for the project whenever necessary.

As a short-term solution to an immediate problem, DIU and USAID/Cairo feel that using RANDD under the WANG VS utilities would be more than satisfactory. However, since some adjustment to the utility-generated programs will be necessary to accommodate the record size for RANDD and USAID/Cairo documents, DIU requests DM to provide some support in this area from a WANG technical expert. Instruction in setting up and using the system would also be needed. Access time to AID's WANG VS (or to any of the computers available from WANG in Rosslyn, Bethesda or Rockville) would be required so that Mrs. Weintraub can become familiar with the system.

DIU, in the future, would want a more sophisticated and flexible information and retrieval system for accessing RANDD on the WANG VS. DIU's goal would be to set up RANDD, on request, in any Mission having both a minicomputer and some sort of information facility. This is of utmost importance to the Agency's commitment, and DIU's mandate, to disseminate information on development to Mission personnel and their LDC counterparts. DIU requests that after the USAID/Cairo pilot project is operational, DM undertake a review of this system, advise DIU of the practicality (cost/benefit) of either modifying the current system or designing and programming a new more sophisticated system, and provide the necessary support to implement their recommendations.

Attachment I

UNITED STATES GOVERNMENT

memorandum

DATE: FEB 11 1981

REPLY TO ATTN OF: DM/OD, Paul Spishak, Director

SUBJECT: RANDO Database Conversion to Wang VS Minicomputer

TO: DS/DIU, Lida L. Allen, Director

Your January 21 memorandum requesting technical support in converting the RANDO database to the Wang VS minicomputer was reviewed by my staff. You have indicated there are two areas in which you need assistance: a short term solution to enable USAID/Cairo to access the RANDO bibliographic data on their mini as soon as possible; and, a long term solution to provide a RANDO system on other Wang VS minicomputers.

Dave Washburn, DM/PSE, referred Susan Weintraub of your staff to a Wang analyst for assistance in the first area. I understand Ms. Weintraub extracted data from the RANDO database and will be testing a pilot system on a VS minicomputer to be made available by Wang. This timely assistance from Wang should permit Ms. Weintraub's return to Cairo with a version of RANDO suitable for use on the USAID minicomputer before the end of February.

With regard to the second area, DM staff will review the pilot system when it is operational prior to implementation in other USAIDs. If extensive design or programming is required, DM may be unable to locate the required resources, as our budget has been severely curtailed. If the effort is determined to be minimal, then we will provide or arrange for the necessary support. If Ms. Weintraub could retain a copy of the pilot system she will be leaving at USAID/Cairo, work on this could proceed here on DM's minicomputer after her return.

Please ask Ms. Weintraub to contact Mr. Washburn (632-9724) upon her return from Cairo so that we can commence the next phase of this project.

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

OPTIONAL FORM NO. 10
REV. 7-76
GSA FPMR 41 CFR 101-11.6
5010-112

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Attachment J

Development Information Center

I. Resource Center

A. Available in USAID/CAIRO

1. Research & Development Data Base (RANDD).
2. D.I.C. Collection.
3. Egypt Project Documentation Collection.
4. Journals.
5. Gazette/Cairo Press Review.
6. Economic Data.

B. Available in AID/W

1. RANDD including ARDA (A.I.D. Research and Development Abstracts).
2. Development Information System Data Base.
3. Project History File.
4. Economic and Social Data System.
5. Data Bases external to AID including National Agricultural Library, Library of Congress, Engineering Index, National Library of Medicine and Department of Energy.
6. Acquisition of AMTID titles, journal articles and other USG publications.

II. Collection Center

A. Incoming

1. PPs/PIDs/Evaluations.
2. Internal USAID Documents.
3. All USAID-funded Studies, Reports, etc.
4. Egyptian Data.

B. Outgoing

1. Forward to AID/W all USAID materials appropriate for AID "Memory".

III. Outreach Center

A. Mission Personnel

1. MEETS (Media Extension Education and Training Service) Program.
2. Ordering facilities: books, journals, AMTID and other USG publications.
3. Inter-library Cooperation in Cairo.

   a. AUC
   b. FAO
   c. Institute of National Planning

B. Broader Development Community

1. Contractors/Consultants both AID and non-AID.
2. University Professors and Researchers.
3. Other libraries.

March 5 1981

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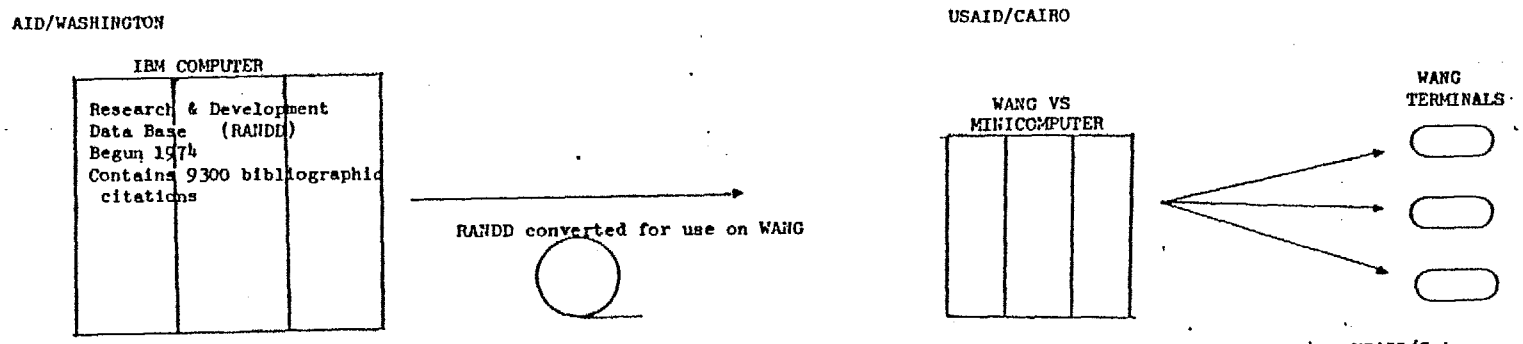
THE DEVELOPMENT INFORMATION CENTER SYSTEM
USAID/CAIRO

A Pilot System Potentially Applicable to Every AID Mission



1. The Office of Development Information and Utilization (DS/DIU) maintains the Research & Development Data Base (RANDD) which currently contains 9300 citations to AID-produced/funded books and reports. Over 1,000 new publications are entered every year.

   Until February, 1981, the RANDD Data Base was searchable on-line by author, title, subject, keyword, contract number, etc. only in AID/W on the IBM computer.

2. In January and February, 1981 the RANDD database was modified to be run on a WANG VS Minicomputer. Adaptations were made to the file to allow for decreased storage space on the WANG and to meet the special needs of the USAID/Cairo Development Information Center.

3. On February 25, 1981, the initial RANDD tape of 9300 citations was installed and made operational on the USAID/Cairo WANG VS.

   The USAID/Cairo DIC will be responsible for maintaining and updating the database and is currently feeding in citations to their entire library collection.

4. USAID/Cairo now has immediate, on-line access to a new database comprised of AID/W reports, and materials in the Cairo DIC. It is searchable by author, subject, title, country, keyword, etc. Full text for every citation on the data base will be available in the Mission on microfiche. New citations to be added to the data base as well as full text on microfiche will be sent from AID/W on a continuing basis.

(J-1)

Attachment K

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*****************************************************************************
****          1         2         3         4         5         6         7
**** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
*  *
* 1*
* 2*
* 3*                 ******************************************
* 4*                          WELCOME TO THE USAID/CAIRO
* 5*                       DEVELOPMENT INFORMATION CENTER
* 6*                                 SYSTEM
* 7*                 ******************************************
* 8*
* 9*                 TO DISPLAY CONTENTS OF FILE PRESS        PF-KEY (01)
*10*
* 1*                 TO SEARCH THE FILE USING INQUIRY PRESS   PF-KEY (02)
* 2*
* 3*                 TO CREATE REPORTS ON THE FILE PRESS      PF-KEY (03)
* 4*
* 5*                 TO ADD, MODIFY OR DELETE RECORDS PRESS   PF-KEY (04)
* 6*
* 7*
* 8*
* 9*
*20*
* 1*
* 2*                 ************ TO EXIT PRESS PF-KEY (16) ************
* 3*
* 4*
*  *
*****************************************************************************
****          1         2         3         4         5         6         7
**** 12345678901234567890123456789012345678901234567890123456789012345678901234
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Attachment L

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June 1,1981

MEMORANDUM

TO: SER/DM, Mr. Paul Spishak, Director

FROM: DS/DIU/DI, Susan G. Weintraub, Librarian

SUBJECT: Wang Version of RANDD

As you are aware, I completed the initial conversion of the RANDD database for use on the WANG VS just prior to my departure for USAID/Cairo on February 22. Ms. Bonnie Jones of WANG was responsible for working out various problems we encountered and I found her to be most helpful and generous with her time.

On February 25, my first day of work at the Mission, RANDD was ful operational. From then until my departure March 21, time was spen inputting records from the manual system developed on my first TDY November-December, 1980, training Nancy Cylke of the Cairo Development Information Center on the use of the system, writing PROCEDURES on the WANG to make entry into Cairo-RANDD easier, and writing a user's manual. Additional time was spent on demonstrations to all Mission personnel, including the Mission Director and Deputy Mission Director and their senior staff, and tr librarians in Cairo. RANDD was well received and Mrs. Cylke has recently reported to me that they are using the system and that Mission personnel are very pleased with resulting citations to AID-produced reports.

As expected, however, some adjustments to the existing utilities need be made before the system can be sent to other Missions. Majc requirements are as follows:

1. INQUIRY must be changed to allow for easier searching on al occurring fields (currently AUTHOR and KEYWORD). In Cairo-RANDD, u to 12 keywords or descriptors may be applied to any one record in the field KEYWORD. In order to search on INQUIRY, each occurrence (K1 to K12) must be searched to be certain that a particular keywor has been retrieved whether it is located in the K1 or the K12 position. (Example: The only way to retrieve every document indexed using the keyword "energy" would be: "WHEN K1 is "energy" or K2 is "energy" or K3 is "energy", etc.) This mode of searching makes for lengthy search statements and prohibits combining keywords, which is essential for subject searching in RANDD. Authors also need to be searched without specifying occurrence.

2. The AUTHOR field in RANDD is also an occurring field. However, there needs to be a way to sort each occurrence together with the others to create a single listing of citations by all authors. Now it is only possible to sort authors separately according to occurrence (A1 through A8). Keywords must also be sorted together to provide a Cairo-produced authority list of all keywords used.

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3. A mechanism for reassigning or modifying the primary key field ID (Document ID) needs to be worked out, if possible, to avoi having to completely delete a record and then re-key it with the ne ID number.

4. An expanded REPORT utility is needed to accommodate full citations which always exceed the three-line limit now allowed by REPORT. Does WANG have plans to expand REPORT?

5. There should be some small adjustments in two or three existing fields.

I have a copy of the Cairo RANDD as well as the manual which still requires some revision. I look forward both to meeting with DM to discuss the project in Cairo, and particularly to working towards making the above improvements as well as any others which you feel are necessary.

Clearances: for MB
DS/DIU, Lida L. Allen_____
DS/DIU, Lee White_____

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lopment aid. Nearly half of the lter budget would go toward gricultural and rural develop- ent, particularly to stimulate od production.

Coy ponted out that the United ates' role in the region has anged considerably over the ist two decades. "We are no ger the dominant source of ncial resource transfers. Our mary task now is to play the d role as a catalyst and risk er, attracting complementary blic and private resources."

Millions of Asians, willing but ble to provide for themselves, nstitute a wasted resource not y to their nations but to the rld at large, Frederick Schieck, ng assistant administrator for a, told the House Foreign Af- 's Committee. Progress is be- made, he said, but problems ain with new ones "arising . frightening speed and far- ching effect."

he basic problem is the same vith three other major regions he world in which AID has grams—the food-population lance. Schieck pointed out dramatic advances in stem- g population growth in Asia e been made, particularly in , Thailand and Indonesia. ortant progress in food pro- ion, especially in India, the ppines and Bangladesh, has accomplished.

Still, however bright these tics," he said, "they are but ginning." The Agency's pro- —$448.7 million in develop- loans and grants and $60 on in Economic Support

An Egyptian worker cleans an AID-assisted canal near Cairo. Egypt is slated to receive $750 million in Economic Support Funds during fiscal 1982.

vention of shore erosion and the Aswan Dam's impact on the Eastern Mediterranean.

Computer speeds research process in Egypt

The Egypt mission has found a way to cut days to minutes, at least when it comes to obtaining research material previously available only from headquarters.

When an AID officer in Cairo working on a water project, for example, wanted information about other water project experience the Agency had undertaken, that officer had to cable or write the Development Information and Utilization Office (DIU) in Washington. The office's two information centers—one in Rosslyn and the other in the State Department building—would search more than 9,200 publications, put together material helpful to the requesting officer and send it out via air pouch.

All pouch material is handled by the State mail room, which sends official mail overseas according to a special schedule. Mail bound for Egypt leaves Washington on Mondays, Wednesdays and Fridays. Other AID field offices are not as fortunate; some have only one mail a week.

It should take about three days for mail marked "air pouch" to get to its destination, reports an AID mail room employee. Employees stationed overseas report, however, it's more like a week. Thus, if the information center received a simple request from Egypt on Monday, it might be able to fill it that day, but it would probably would not get to the State mail room until Wednesday.

Add three days to the timetable and the water project officer most likely would get his or her package the following Monday. That's a full week for a mission that has three mail deliveries a week and that's based on ideal conditions. For the AID overseas office that gets mail once a week, it could take almost two weeks before material in answer to a simple request would get there.

Some requests are more difficult to fill than others. The two centers coordinate their efforts; even so, some requests can take several days. Volume also affects the time it takes to fill requests. In February, according to the DIU office, 44% of staff time in February was spent on mission support.

The Egypt mission accomplished the time- and money-saving feat that allows the mission to conduct its own searches on such topics as rural health delivery, forestry, solar energy, family planning, radio education, potable water crop production or any one of hundreds of other subjects on its Wang minicomputer. Until February, this information resource could be used only by the DIU office, which created and maintains the RANDD, short for Research and Development Database, system. Now, instead of contacting Washington, Nancy Cylke sits at the mission's Wang terminal—the same one used for word processing, and searches AID documents as well as Egyptian ministry publications—all located on microfiche or on the shelves in the mission's development information center she heads.

The project began last November when the mission asked for help in setting up a manual cataloguing system for the materials that it eventually planned on putting into the Wang system.

Susan Weintraub of the Rosslyn branch of Washington's development information center went to Cairo and found at least 40% of the nearly 3,000 books and other materials held by the mission already had been processed by her office and were in the RANDD system. Informal discussion with the computer staff in Cairo, particularly Robert Cunningham, resulted in the idea of making a copy of the Washington data base for Cairo and adding the mission's material to it.

Weintraub carried out the conversion of the data base back in Washington with the help of Lee White in DIU and Wang Laboratories. The RANDD data base was modified to fit on the Wang and to meet the special needs of the mission.

A pilot demonstration is part of a long-range effort by DIU to provide its automated development information resources to AID missions on request. That is, providing the mission has the proper computer equipment.

The Egypt project took less than four months. After only a few weeks, Weintraub has received enthusiastic reports about the convenience of the system as well as the time saving.

FRONT LINES, *an internal publication of the Agency for International Development, is published by the Press and Publications Division, Office of Public Affairs.*

All Agency employees and retirees are encouraged to contribute stories, pictures and ideas. Material should be submitted at least 10 days in advance of the next publication date to Editor, Front Lines, Room 4890, AID, Washington, DC 20523. Phone: (202) 632-3755.

Next Issue: May 7, 1981

Attachment M

Indexing Guidelines

In performing original cataloguing, it is necessary to assign index terms to provide additional, or more detailed, subject access to documents within the system. These general guidelines will help in learning how to select the best descriptor terms from a thesaurus or keyword listing. The limitations of your own particular working conditions and the storage capacity of the computer will determine how much time you are able to spend indexing and how many terms should be assigned.

Purpose

The purpose of indexing is to facilitate retrieval of a document by substance or form. Substance is the subject of a work, and form describes the work itself or some of its contents. Examples of substance are: agricultural machinery, arid lands, malaria, Botswana, data collecting. Examples of form are: bibliography, statistics, questionnaire, proceedings.

For the user of a collection, the index points to documents relevant to his or her requirements. Thus, the indexer of those documents is responsible for selecting terms, contained in a thesaurus, which provide a true description of the form and major subject components of any report, monograph, article, project paper, evaluation, memorandum, etc. Major subject components are those topics which are treated in some detail within the document. The mere mention of a subject is not sufficient justification for indexing it, no matter how important the topic is to the AID program.

Guidelines

I. Know the user's need.

The most important challenge in indexing is to keep the user in mind. You must decide, as a user would, which terms or concepts would come to mind in looking for the document to be indexed. Ask yourself, "If I were trying to find this document, which words would I think of?"

Familiarity with AID's or the Mission's goals and programs through periodic review of Congressional Presentations, Annual Budget Submissions, and other policy statements is one way to know which subject areas are likely to "come to mind" for individuals working the the development community.

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II. Analyze the substance.

To index, first analyze the substance of the document. For long, well-organized books, project papers, and reports, read the abstract, look at titles, tables of contents, preface and introductory material, captions, underlined or highlighted words or paragraphs. For shorter reports and documents which do not have introductory passages, etc., read beginning and ending paragraphs and skim in between to pick out important subjects. The shortest works, such as some project documents, memoranda, and cables, will have to be read in their entirety. In all cases, save time by being selective in what you examine in detail. However, do not hesitate to read whatever is necessary to become familiar with the substance of the document because the better you understand, the more accurate your indexing.

III. Select the index terms.

Once you understand the material (it may be helpful to jot down subject areas), select words in the thesaurus to match the subject and form. Use the following guidelines when choosing thesaurus terms.

A. Be SPECIFIC. Choose the most specific terms to describe the subject. Specificity is a fundamental rule of indexing and ensures greater relevancy in document retrieval.

B. Be OBJECTIVE. In translating an author's concepts into index terms, avoid subjective interpretations or criticisms.

C. Be CONSISTENT. If you are indexing several documents on a certain subject or project, look at all or most of them first to understand the subject in its context, and treat it with the same or similar terms throughout.

D. Be EXHAUSTIVE, but do not overindex. Index every topic of major importance, but do not include terms for subjects which are not described in some detail, or use words which are too broad when a more specific one would be suitable. Do not use several terms to describe the same subject area when one will ensure retrieval by a user.

Overindexing burdens the system with a profusion of terms pointing to documents which are barely relevant to the subject indexed. Those who access the system, both librarians and end users, waste their time scanning bibliographies and retrieving documents which have been overindexed. Ask yourself: "If I were a user and selected this document because it was indexed under my subject of interest, would I be satisfied that it was relevant to my needs, or would it be too peripheral to be of any use?"

Most documents should have eight to ten index words. This is an average number and should serve only as a guide in reviewing

terms assigned. If you have selected only two or three, check to see whether you have been exhaustive in indexing every subject of major importance. If you have assigned more, be certain every word covers substance or form.

Appendix F

CONVERSION OF THE RESEARCH AND DEVELOPMENT DATABASE FOR USE ON THE WANG VS MINICOMPUTER

INCLUDING REPORTS ON TRIPS TO USAID/CAIRO,
NOVEMBER-DECEMBER, 1980
AND
FEBRUARY-MARCH, 1981

Susan G. Weintraub
S&T/DIU/DI
November, 1981

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Background

In Fall, 1980, USAID/Cairo requested assistance in developing a method by which they could access the books and documents in their Development Information Center. This would include performing original cataloguing on newly acquired publications and setting up a system for storing and retrieving these materials. The Mission had recently installed a WANG VS minicomputer. Given the small size of the collection and the availability of a computer system, the Education Division, which manages the Development Information Center, hoped eventually to create an automated (on-line) catalogue of all materials in the collection using the WANG. In the meantime, they needed a manual access system designed so that it could be converted into an automated one.

The Center had been organized by Patricia DeButts based on the expanded AGRIS classification scheme used in the Catalogue of Research Literature for Development, Volume II. Mrs. DeButts returned to the U.S. in August, 1980 just prior to the arrival of her successor, Nancy Cylke.

John Hafenrichter, Division of Education, Office of Human Resources Development and Cooperation (HRDC/EDU), who was in overall charge of the Cairo DIC, requested that I spend several weeks TDY in Cairo to assist in setting up the manual access system and forming a plan for converting it to an automated one. (See Attachment A.)

Preparations

Prior to TDY in Cairo, the DIU input sheet, a cataloguing worksheet currently in use by the Office's Processing branch, was reviewed to see if it might be useful for the Mission DIC. Five thousand copies were ordered and shipped to Cairo.

Asta Teemant in Processing was interviewed regarding current cataloging practices for input sheets; she also provided a copy of some guidelines.

In reference to the automated access system, meetings and/or discussions were held with Lee White of DIU, Dave Washburn of SER/DM and Eric Chen of WANG Laboratories to explore the ways and means of putting the USAID/Cairo DIC collection on-line. Mr. Chen reviewed the proposed input sheet for the Mission and concluded that the Utility packages already available on the WANG VS could probably accomplish what would be required in the way of inputting, searching and reporting. In addition, refinements or improvements needed later could easily be added onto any data file previously created. He made tentative arrangements to produce with me a standardized screen format for inputting the collection, but his computer did not become operational before my scheduled departure and we had no opportunity to accomplish this.

Documentation on the RANDD database and all keyword lists used by DIU were collected. In addition, specifications on the Minolta RP405 microfiche reader/printer were obtained since the Mission wished to print some papercopy from their microfiche collection.

Arrival in Cairo

I arrived in Cairo November 23 and began work the next day.

The DIC collection is housed on the 10th floor of the Cairo Center building where the AID offices are located. In evaluating the collection, I noted that approximately 40% of the publications on the shelves and in the backlog had already been fully processed by DIU and were probably contained in the RANDD database. It seemed pointless to recatalogue these items.

In a meeting with Bob Cunningham and Ron Miller, who were responsible for setting up the WANG VS minicomputer in Cairo, we came up with the idea of saving cataloguing time by transferring the RANDD tape from AID's IBM Mainframe computer in Washington and converting it to be used on the WANG VS. The advantage to having the RANDD tape on-line in Cairo would be in retrieving the cataloguing information on publications which had already been processed for RANDD and then using that information for materials in the Cairo DIC. We could thus have more time for performing original cataloguing on those items not treated in RANDD. Mr. Cunningham and I placed a call to Lee White, discussed our ideas with him and asked him to generate a tape from the IBM system which could be used on the WANG.

The idea of using RANDD in Cairo was also attractive for several other reasons in addition to saving cataloguing time:

1) USAID/Cairo would have access to citations to all AID reports on-line, not just to their own collection, as was originally planned. In this way, once USAID/Cairo was supplied with a full text back-up on microfiche of all documents cited in RANDD, the mission could save weeks in serving requests for information or AID Publications because it would be able to instantly identify the desired item on-line and then print a copy from its microfiche collection. No longer would it be necessary to cable AID/W with such requests. This was a feasible plan since DIU was already committed to the idea of providing full sets of microfiche to Missions as well as other organizations.

2) The system could be easily updated by tape from AID/W.

3) Exchange of tapes from USAID/Cairo would lead to more complete identification/acquisition of Mission-produced publications not included in DIU's collections.

4) Other USAIDs designated to receive WANG VS minicomputers could benefit from receiving the same type of system.

Once it was decided to proceed along these lines, I began work on the collection itself. The modified AGRIS classification system which is used both for RANDD and the Cairo DIC was revised after conferring with Mrs. Cylke and Mr. Hafenrichter. (See Attachment B.)

To distinguish titles in the database which were already on-hand in Cairo from those which were in the general RANDD database, I modified the existing RANDD numbering system. RANDD documents are assigned sequential accession numbers beginning with the characters "PN" (e.g., PN-AAA-001). My modification was to assign Cairo-owned documents a number beginning with EG (e.g., EG-AAA-001). Therefore, any document appearing in the database that carried an EG number would automatically be identified as one owned by the USAID. In the future, other Missions could use the same system substituting their own two-letter country code.

For shelving purposes, a call number was created that combined the first four characters of the classification scheme (e.g., AE10 for Agricultural Economics) and the accession number (EG-AAA-001). In this way, every book would be on the shelves by general subject area and would also be identifiable through the manual system or the database with a unique number, (e.g., AE10 EG-AAA-001).

Next, I revised the AID/W cataloguing input sheet to include two additional fields: the USAID Identification Number (EG number) and Format, a code which would identify whether the DIC publication is in papercopy on the shelves (PC), in microfiche in the microfiche collection (MF), or both (PM). (See Attachment C.)

I began cataloguing DIC materials and used the experience to make modifications in the existing cataloguing practices for the Mission. Mrs. Cylke requested that I concentrate on World Bank publications because of the heavy demand for them. As input sheets were completed, copies were made for certain fields: each author, title, subject code, EG number, and an additional copy for each document indexed with the keyword "Egypt". These sheets were ordered alphabetically or numerically and placed in separate black looseleaf notebooks. This created a manual access system similar to the one originally established by Mr. Hafenrichter during his tenure in DS/DIU in AID/W. Rules for processing and filing input sheets and for labelling books are Attachments D and E.

By the end of my fourth week of TDY, over 200 books had been catalogued.

When the RANDD tape arrived at the Mission, there were technical problems in getting it to run properly. The decision was then made to return to AID/W and concentrate on setting up the computerized system there and subsquently undertake a second TDY at the Mission in February to install the completed package.

Prior to my departure, Mr. Hafenrichter spoke to Lida Allen, Director, Office of Development Information and Utilization. She responded favorably to the idea of converting RANDD for Mission use and agreed to allow me to spend a large percentage of my AID/W time on the project and to return to Cairo as soon as possible. (See Attachment F.)

In order to quickly expand the manual access system to include the documents on-hand in Cairo which were already catalogued in RANDD, a Mission employee went through the DIC shelves and copied the AID/W accession numbers (PN numbers) which had been marked on many of the documents by Mrs. DeButts, Mrs. Cylke or myself when I initially

evaluated the collection. With this list, I was able to return to the AID/W DIC and copy input sheets that had been created by DIU.

Work for this first TDY ended December 18, 1980.

Continued Mission Support and Programming Modifications

I arrived back in AID/W December 29, 1981. One of my first tasks was to copy the input sheets from the list prepared in Cairo. This was accomplished using the AID/W DIC microfiche collection and Minolta RP405 Reader/Printer. Sufficient copies of each sheet were made and headed with either author, title, EG number, subject, or "Egypt" as a keyword. After sorting they were sent to the Mission in batches to be filed in the manual access system. Approximately 300 titles were copied and processed.

Most of my time was spent on modifying the RANDD database for use on the WANG VS. I again contacted WANG Laboratories and was directed this time to speak with Bonnie Jones, a technical representative responsible for the State Department account. After explaining the problems involved with the modification, she agreed to meet with Lee White and me and made arrangements to use the State Department's WANG VS.

During the first session which took place January 7, 1981, we brought a new tape of the RANDD database tape which Mr. White produced according to WANG specifications. When we tried to create a file on the WANG VS we discovered that the RANDD record was too large for the VS Utilities package, particularly for generating a screen input format under the EZFORMAT Utility which limits input to one screen. Ms. Jones spent the session demonstrating what we could do with the WANG and suggested that Mr. White and I rework the RANDD record to fit within a maximum of 1951 bytes.

Mr. White and I spent a number of hours cutting the size of the record and then trying to arrange the fields in a suitable array on paper. We ended up with 20 distinct fields which are:

Date on file
AID/W Document Number
Format
Document ID
Subject
Secondary Subject
Country Code
Language
Title
Author
Year
No. of Pages
Notes
Keyword
Contract
Contract Type
ARDA Issue
Bibliographic Type
Project Number
Record Status

The correct field names and abbreviations are shown in the Field Display Table. (See Attachment G.)

The fields added for Cairo were: "Format" to indicate whether the document exists in papercopy, microfiche or both at the Mission; and "AID/W Document ID" which is where the AID/W PN Number is placed when an EG Number is added to the Document ID field.

Fields deleted from the original RANDD Database were:

DT-LSTUD
DT-LSTRP
REFORG
DOC-STAT
ARDS
CRLD
ABSTRACT
All Decode fields

In addition the following fields were shortened and/or changed:

DOC-TITL was changed from a single field of 250 characters to three fields, TITLE1, TITLE2, TITLE3 of 67 characters each;

NOTES was changed from a single field of 360 characters to three fields NOTES1, NOTES2, NOTES3 of 67 characters each;

AUTHOR was changed from a variable field with 15 repeats of 150 characters each to a variable (or occurring) field with 7 repeats of 67 characters each;

KEYSUBJ was changed from a variable field with 20 repeats of 25 characters each to a variable (or occurring) field with 12 repeats of 25 characters each;

PROJECT9 was changed from a variable field with 10 repeats of 9 characters each to a single field of 45 characters (i.e., 5 project numbers of 9 characters each);

LANGUAGE was changed from a variable field with 4 repeats of 2 characters each to a single field of 8 characters (i.e., 4 languages of 2 characters each).

The changes in the record were made based on my experiences in cataloguing materials at the Mission and my assessment of their requirements of an on-line database which would be used essentially as an on-line card catalogue. The Mission had given me the responsibility for making these decisions.

I had also decided at this time that a consecutive file would be inadequate. There would be no quick access point to records in the file which would ultimately pose problems in searching and maintaining a file the size of RANDD which at that time numbered over 9000 records.

The alternative was an indexed file with one primary key and up to 7 alternate keys. After a great deal of lengthy deliberation and an assessment of needs, Mr. White and I decided that the primary key would have to be Document ID (the EG or PN number) and two alternate keys would be Subject (four character AGRIS subject code) and Country Code (four character FAO geographic code). There was no way to make Keyword (KY) into a keyed field because it was an occurring field.

The problem of deciding on the primary key was difficult to solve. In a keyed or indexed file on the WANG VS, the primary key must be unique, can never be blank, and cannot be modified in the record. This would pose no problem with materials catalogued solely for the Mission since they would carry an EG number from the start. However the conflict arose for records located at the Mission which were already in RANDD and carried a PN number as the primary key. To show that these documents were in Cairo, they would need an EG number as the primary key. To accomplish this the PN number which always appears as the primary key in the AID/W RANDD database, would have to be moved to a new field called AW or AID/W Document Number. Since the primary key can never be modified, the only way to resolve this without changing the WANG VS programs (not an option at the time), was to delete the PN number record and rekey it anew with an EG number as ID and PN number as AW. Given the alternatives, this seemed the best way to proceed.

The next meeting with WANG took place on February 2, 1981 at the new WANG offices in Rosslyn. At that time Mr. White and I worked with Ms. Jones, Mr. Chen and another WANG technical representative. We made some progress in designing the EZFORMAT screen and setting up the CONTROL file as an indexed file.

In the meantime, AID's Office of Data Management (DM) was concerned about the project since they are responsible for managing all databases and programming throughout the Agency. They requested we write a memorandum from Mrs. Allen to the Director of DM, Mr. Paul Spishak, explaining the project and our requirements. (See Attachment H.) Acting on behalf of USAID/Cairo, we explained the need to convert the database quickly using the existing Utility programs available on the WANG VS, and asked for support from DM. The memo went out January 21, 1981, and we received a response February 11 (see Attachment I) which gave us official permission to solicit help from the WANG technical representatives.

Ms. Jones and I next met at Universal North using AID's WANG VS on February 11. We continued working on setting up the file and finalizing the EZFORMAT which included solving another large problem of how to arrange the occurring fields of author and keyword within the EZFORMAT screen. The solution involved reprograming the actual COBOL program. By February 13, at another all-day session at Universal North, all problems were resolved and the RANDD database was converted to run on a WANG VS minicomputer.

The following week, which was the week prior to the scheduled departure for my second TDY, I spent time on the system learning to use the Inquiry, Report, and Display Utilities, adding actual records which had been catalogued, and converting RANDD records to Mission records (PNs to EGs). I also had a chance to give a brief demonstration to Mr. White as well as to meet with Mr. Spishak, Kathy Gleason, Bill Ruotola and Mary Jo Keenan of DM to tell them about progress made on the system. Mr. Spishak was very interested in the project and its implications.

Ms. Keenan duplicated the RANDD database tapes with the software modifications we had made so that I could carry one with me and send another through the Diplomatic Pouch.

Arrival in Cairo

I arrived back in Cairo February 25, 1981. The converted database was loaded into the WANG VS and came on-line without difficulty. The system was demonstrated to Mrs. Cylke and Mr. Hafenrichter. It was the first time on-line access to the AID Research Database was available outside of AID/W.

During the next four weeks of the scheduled TDY, time was spent on a number of tasks:

1). Training

Mrs. Cylke quickly learned how to use the system, which included inputting new records and modifying existing records; creating reports, and running searches through Inquiry and Display. Almost all training time was devoted to Mrs. Cylke since she headed the DIC and would be the primary user.

2). Inputting

A substantial number of documents catalogued during the first TDY were inputted into the system. This allowed problems in field size to be noted, discussed and resolved. In addition a bibliographic type code for all World Bank publications (90) was added for easy access to this group of documents. An entry format for some fields was determined and guidelines for inputting new records written. Between Mrs. Cylke and myself, approximately 200 new records were added to the on-line catalogue.

3) Demonstrating

Three demonstrations of the system were held. The first followed a meeting of the Mission's senior staff on March 5. After Mrs. Cylke discussed the Cairo DIC and the new system, I demonstrated the system on-line for a few of the senior staff as well as the Mission Director, Mr. Donald S. Brown.

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On March 17, seven separate briefings were held for all offices in the Mission. (An eighth was scheduled for the Office of Agriculture, but the entire staff was away and Mrs. Cylke rescheduled their briefing after my departure.) In seven 45-minute presentations, over 40 USAID/Cairo staff members heard about the services provided by the Cairo DIC and saw an on-line demonstration of the database. Attendees made a number of individual requests for information and immediate responses were provided by the system .

Two handouts were created for the demonstrations. (See Attachment J.)

The following day, a reception and presentation were held for a several librarians in Cairo. Libraries represented were:

American Center (USICA)
The U.S. Embassy Post Reference Library
FAO
American University in Cairo
Institute of National Planning
Cairo University/MIT Project

The librarians who attended the demonstration were impressed with the system and expressed interest in identifying and accessing the AID-produced reports contained therein.

4) Improving

Some improvements to the system were made on-site at the Mission. I made one correction to the EZFORMAT screen, but Bob Cunningham and his staff of programmers, especially Soheir Ghali, solved other system problems and made enhancements as requested.

Difficulties were noted in actually accessing the computer system, particularly for non-programmers. This was resolved by writing a number of procedures and creating a master menu (see Attachment K). After signing on, these procedures allowed the user to go directly into the various functions permitted on the system without having to fill in technical information on the system library, file and volume.

The addition of the RANDD database to the Mission's WANG VS system created the biggest problem. With over 9000 records of 1951 bytes each, RANDD took up an enormous amount of room on the system. We were often unable to sort fields in the Report utility for lack of disk space. Mr. Cunningham recognized the problem and quickly reviewed the contents of the entire system to erase unnecessary files. He also noted that heavy use of the WANG VS for the word processing function was a major cause of the space problem.

5) Documenting

Most of my final week on TDY was spent writing a manual for using the Cairo RANDD system. It includes a brief explanation of the database, searching theory, detailed chapters on using Display, searching on Inquiry, creating reports, updating and maintaining records, and an appendix with a Field Display Table, and tables for fields which require special codes.

Work for this second TDY ended March 20, 1981

Problems with the System and Recommendations for Improvement

In setting up RANDD for Cairo using the existing WANG utilities, two major problems surfaced:

1) The inability of the Inquiry program to search on all occurrences of a single field at the same time;

2) The nature of the primary key field (non-modifiable) which meant re-keying an entire record to change the field.

Inquiry

Records in the RANDD database are classified according to a broad subject classification scheme, and indexed using a list of descriptor words based on standard thesauri with additions or changes made by cataloguers. Subject access to the database on the AID/W IBM mainframe computer using the Inquire software package (not to be confused with the WANG Inquiry Utility) is generally accomplished through the use of the descriptor words rather than the subject codes. In Inquire, one can specify one or more keywords in a search statement and be certain that the matching record will be retrieved no matter where the keyword appears within the field, that is, whether it is listed first, last or anywhere in between.

On the WANG, one can set up occurring or repeating fields such as keyword or author, but searching is more difficult with the Inquiry utility. To search on an occurring field, one must know which occurrence is being searched, that is, whether one is looking for the fieldvalue in the first, second, third, etc. occurrence. Since such prior knowledge of position is not possible in a bibliographic database such as RANDD where the same descriptor word could be placed in different occurrences for different documents, searching on occurring fields becomes cumbersome.

For example in Inquire, a search for all records indexed with the word 'energy' could be stated:

"Scan keysubj is energy"

The computer then scans the entire keysubject field of every record to produce a match.

On the WANG-VS, a search for every record indexed with the word 'energy' must be stated:

When keyword(1) is 'energy' or keyword(2) is 'energy' or keyword(3) is 'energy' or keyword(4) is 'energy' or keyword(5) is 'energy' or keyword(6) is 'energy' or keyword(7) is 'energy' or keyword(8) is 'energy' or keyword(9) is 'energy' or keyword(10) is 'energy' or keyword(11) is 'energy' or keyword(12) is 'energy' List...

The subscripted numbers after the field 'keyword' refer to the position or occurrence of the value being searched. There are 12 possible occurrences for each keyword so that every keyword search must look at all 12 positions. Not only is this type of search cumbersome to type in, but it limits a keyword search to only one keyword; it would be impractical to try to combine keywords through the use of logical connectors such as AND or OR. Before leaving Cairo, I stored two searches for authors and keywords. To do either of these types of searches, one would only need to replace a value in each portion of the search statement, rather than retyping the entire statement over again. Mrs. Cylke has indicated, however, that even replacing values is too time consuming.

Realizing this problem during the conversion phase, one alternative that I settled on was to rely more heavily on searches by the subject code (e.g., AE10) which is a single field within each record, and in addition, make it an alternate key for even faster access. Geographic code was also made an alternate key since countries and regions are often used to define searches.

However, a true solution to the problem must be found either in altering the Inquiry Utility, writing procedures to circumvent the utility, or writing a search program.

Changing the Primary Key

All documents contained on the RANDD database carry a primary key beginning with PN. To indicate that a publication is available in the USAID/Cairo DIC, the primary key would have to begin with EG, whether it appears in microfiche or papercopy. Since primary keys cannot be modified or left

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blank, switching an AID/W assigned identification number to a USAID-assigned EG number meant deleting the entire record and re-keying it. This was a major problem initially because a large number of publications in the Mission DIC identified as being in RANDD had to be deleted and then re-keyed. In the future, this problem will have to be resolved since repeated rekeying increases the risk of introducing errors into the record.

My responsibility back in AID/W, having installed the system in Cairo and written a usable manual, was to contact Data Management, inform them of progress made in Cairo, discuss the problems with the system, and make recommendations for improvement. DM had promised to review the pilot system and then "provide or arrange for the necessary support", depending on the amount of reprogramming necessary. (See Attachment E.)

As instructed, I contacted Mr. Washburn who referred me to Ms. Keenan. She then checked back with the Director's office in SER/DM and requested that I make my recommendations formally in a memorandum to Mr. Spishak. The memo was sent June 1 (see Attachment L).

In the meantime, per instructions from the Mission, I submitted an article on the system to Front Lines. The article discussed the installation of RANDD on the Mission's minicomputer and the benefits gained from it. Front Lines, however, modified the article (see Attachment M) to focus on how DIU answers requests from Missions and the amount of time it takes to get information back and forth through the diplomatic pouch.

Although the Office and the Mission were somewhat disappointed with the re-write, some Missions did appreciate what had been done and USAID/Honduras requested information on receiving the database. Ms. Gleason from SER/DM contacted me late July with regard to the memorandum; Ms. Keenan had left the office and action on the pilot project was turned over to Ms. Gleason. She requested that we put off any discussions until Mr. Cunningham arrived in Washington in August.

During the summer, both Mrs. Cylke and Mr. Cunningham were in Washington and we met together with Mr. White on August 11 to review progress on the system. At that time, it appeared that DM would not be able to offer any assistance in modifying the system. It was agreed that the programming staff in Cairo would have to make as many recommended modifications as their time permitted and send them to AID/W to be incorporated into an official version which could be distributed to other Missions.

Attachment A

Department of State

INCOMING TELEGRAM

PAGE 01 CAIRO 22963 161626Z 002207 AID5037
ACTION AID-35

ACTION OFFICE DIU-04
INFO NETC-04 NFEI-03 NEEM-01 STA-10 AADS-01 CHS-01 RELO-01
MAST-01 /026 A4 1

INFO OCT-01 /036 W
----------033643 161630Z /34

P 161108Z OCT 80
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC PRIORITY 3675

UNCLAS CAIRO 22963

AIDAC

E.O. 12065: N/A
SUBJECT: REQUEST FOR TDY, MISSION DIC

1. TO LIDA ALLEN, DS/DIU.

2. REQUEST ADVISE AVAILABILITY SUSAN WEINTRAUB TDY NTE 6 WEEKS BEGINNING ASAP OR NOT LATER THAN NOVEMBER 2.

3. SCOPE OF WORK INCLUDES CATALOGUING LARGE NUMBER RECENTLY ACQUIRED MATERIALS; DEVELOPING INPUT SHEET FORMAT SUITABLE FOR MANUAL RECORD KEEPING AS WELL AS FUTURE AUTOMATED PROCESSING; AND SETTING UP CENTRAL RECORD OF INPUT SHEETS FOR DIC COLLECTION ESTIMATED 3000 PIECES. REQUEST WEINTRAUB EXPLORE POSSIBILITY BRINGING DOCUMENTATION OF SOFTWARE USED PROCESSING AID R&D DATABASE TO ADVISE MISSION COMPUTER STAFF REGARDING AUTOMATION DIC RECORDS.

4. FISCAL DATA AS FOLLOWS: APPROP. 72-1111000; ALLOT. 100-50-263-00-10-11. DILLON

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TABLES FOR FIELDS WHICH REQUIRE SPECIAL VALUES

SUBJECT CODES (SU) Listing by Code.

This is a brief listing of the Subect Codes and their meanings. For more detailed explanation of the subject areas each code covers, refer to the Classification Scheme, Development Information Center, USAID/Cairo.

NOTE: Zeroes (0) are used in these codes, not captial O's. Zeroes must be entered when searching the database for matches to occur.

Code	Subject Name
Class A: Agriculture	
AA00	Agriculture--General
AA50	Agricultural Research
AB50	History of Agriculture
AC00	Agricultural Education, Extension and Advisory Work
AD10	Administration of Agriculture
AD50	Agricultural Legislation
AE10	Agricultural Economics
AE30	Agricultural Development
AE40	Rural Development
AE50	Rural Sociology
AE70	Distribution and Marketing
AF00	Plant Production
AF10	Meteorology and Climatology
AF20	Soil Science
AF22	Soil Chemistry
AF23	Soil Classification and Genesis
AF24	Soil Surveys and Mapping
AF25	Soil Fertility, Fertilizers, and Plant Nutrition
AF26	Soil Resources
AF28	Soil Erosion and Reclamation
AF30	Plant Breeding
AF60	Plant Physiology and Biochemistry
AH00	Plant Protection
AH10	Pests of Plants
AH20	Plant Diseases
AH60	Weeds
AK00	Forestry

AL00	Animal Production
AL30	Animal Nutrition
AL50	Animal Physiology and Biochemistry
AL72	Pests of Animals
AL73	Animal Diseases
AM00	Fisheries
AM40	Aquatic Biology
AN00	Agricultural Machinery and Buildings
AN10	Agricultural Engineering and Structures
AN20	Farm Equipment
AP00	Natural Resources
AP10	Water Resources and Management
AP12	Drainage and Irrigation
AP20	Land Resources
AQ00	Food Science
AQ10	Food Processing
AQ20	Food Microbiology and Toxicology
AR00	Home Economics
AS00	Human Nutrition
AS10	Food Composition
AS20	Physiology of Nutriton
AS30	Feeding

Class C: Communications

CA00	Communications--General
CC00	Communications--Applications

Class D: Development and Economics

DA00	Development and Economics--General
DC00	Development Assistance
DC30	Project Management
DD00	Public Administration
DE10	Banking and Finance
DG00	Labor Economics
DK00	Trade and Commerce
DM00	Industries and Industrialization
DP00	Transportation.

Class J: Education

JA00	Education--General
JA50	Education Research
JC00	Teaching and Learning
JC30	Instructional Materials
JC36	Audio-visual Materials
JC70	Testing and Measurements
JD10	Administration
JE10	Educational Economics and Finance
JE30	Education and Development
JE50	Educational Sociology
JF00	Pre-school, Elementary, Secondary and Vocational Education
JF20	Elementary Education
JF30	Secondary Education
JF50	Technical and Vocational Education
JG00	Higher and Professional Education
JG55	Teacher Education
JK00	Adult Education and Literacy
JL00	Non-formal Education
JM00	Technologies Used in Education
JM10	Educational Radio
JM20	Educational Television
JM50	Satellite and Telecommunications
JM70	Automation

Class L: Urban Development and Housing

LA00	Urban Development and Housing--General
LD00	Housing
LN00	Shelter Construction

Class M: Libraries and Information Sciences

MA00	Libraries and Information Sciences--General
MC00	Library Science/Documentation

Class N: Health

NA00	Health--General
NC00	Education and Manpower
ND00	Delivery Systems
NH00	Maternal and Child Health Care
NS00	Tropical Diseases

Class P: Population

PA00	Popuation--General
PC00	Family Planning

Class S: Social Sciences

SA00	Social Sciences--General
SB00	Anthropology
SD00	Political Science
SE00	Sociology
SG00	Area Studies

Class T: Science and Technology

TA00	Science and Technology--General
TC00	Science and Technology--Applications
TC30	Appropriate Technology
TC50	Energy
TC70	Environment

This input sheet is available through Glossary 0001 and is labeled E.

Sample Input Sheet

CALL NUMBER:
(This is not keyed into the record.)

BIBLIOGRAPHIC INPUT SHEET

1. DATE PROCESSED (DT):
2. CONTROL NO. (ID):
3. FORMAT:

4. AID/W CONTROL NO. (AW):

5. SUBJECT CLASS (SU-OC-GC):

6. TITLE AND SUBTITLE
T1
T2
T3

7. AUTHORS, PERSONAL AND CORPORATE (A1 x 7)

8. NOTES
N1
N2
N3

9. DESCRIPTORS (KY). ENTER UP TO 12 DESCRIPTOR WORDS BELOW ON FOUR LINES:

10. NO. OF PAGES (P):

11. DOCUMENT DATE (YR):

12. CONTRACT NUMBER (C):

13. CONTRACT TYPE (CT):

14. ABSTRACT--ARDA ISSUE (AR):

15. DOCUMENT TYPE (BT):

16. PROJECT NUMBERS (J):

17. LANGUAGE (LA)(Up to 4):

18. RECORD STATUS (RS):

INPUT SHEETS
PROCESSING AND FILING

1. One copy of the input sheet for a given document should be made for each of the following categories:

   Every personal author
   Every corporate author
   Title
   Subject classification number
   Egypt as a descriptor term
   EG Number

2. Write, in red, the name of each personal author, corporate author, classification category, and descriptor term EGYPT at the top left-hand side of each input sheet, one per sheet. For example, if there are three authors for one document, write the name of each author on a separate copy of the input sheet.

3. It is not necessary to write out the title on the left-hand corner of the input sheet. Simply make a check mark in red next to the title and file alphabetically.

4. Author input sheets are subfiled by title. Corporate and personal authors are interfiled.

5. Subject input sheets are subfiled by main entry (i.e., personal author, corporate author, or title if no author). The subject notebook file will be kept in order by classification number. Do not file sheets alphabetically according to the subject name as written in the left-hand corner of the input sheet.

6. Input sheets which make up the EGYPT notebook file are subfiled first by subject and further subfiled under subject by main entry.

7. EG Number input sheets are filed sequentially by number with the lowest first. Example: EG-AAA-001
   EG-AAA-002
   EG-AAB-125
   EG-AAB-683

8. For any other questions concerning alphabetical filing, refer to the <u>ALA Rules for Filing Catalog Cards</u>.

9. However, file AID as it is spelled, not under AGENCY. File A.R.E. and other abbreviations as if they were spelled out. They will probably appear in their long version on the input sheet record.

LABELING

1. The call number for each document consists of the first 4 characters of the classification number plus the entire USAID CONTROL NUMBER or EG Number. Example: If the classification number is LA00-0000-G232 and the EG# is EG-AAA-123, the call number becomes:

   LA00
   EG-AAA-123

2. Use labels with a green stripe across the top for any books that use Egypt or any geographic areas within Egypt as a descriptor term, and/or contain G232 in the last section of the classification number, e.g., LA00-0000-G232.

   For any books which are not Egypt-related, use all-white labels.

3. If possible, place labels on the spine of the book close to, but not touching the bottom. The typed format for the call number placed on the spine should be:

   LA00
   EG-AAA
   -123

   unless the book is thick enough to accommodate the entire call number as written in No. 1 above.

4. If the book is not wide enough for a spine label, place it on the upper left hand corner of the outside cover.

5. Place tape over the label to be sure it does not peel off.

Attachment F

ACTION COPY

Department of State

INCOMING TELEGRAM

PAGE 01 CAIRO 28119 230245Z 044978 AID2031
ACTION AID-35

ACTION OFFICE DIU-04
INFO CH6-01 NETC-04 NEE1-03 NEEM-01 STA-10 DM-01 AADS-01
CH8-01 RELO-01 MAST-01 /028 A4 7

INFO OCT-01 /036 W
----------009816 230245Z /34

R 230000Z DEC 80
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC 6136

UNCLAS CAIRO 28119

AIDAC

E.O. 12065: N/A
SUBJECT: SUSAN WEINTRAUB TDY.

1. FOR LIDA L. ALLEN, DS/DIU AND TOM MCDONOUGH, NE/TECH. SUMMARY: WEINTRAUB TDY SUCCESSFULLY COMPLETED DECEMBER 18. DS/DIU SUPPORT OF MISSION DIC PROGRAM APPRECIATED AND CONTINUED COLLABORATION REQUESTED.

2. SUBSTANTIAL PROGRESS USING USAID'S WANG COMPUTER TO ACCESS AID'S RANDD DATA BASE ACCOMPLISHED THROUGH WEINTRAUB'S TDY AND DS/DIU BACKSTOPPING. FORTY PERCENT MISSION DIC COLLECTION ALREADY IN RANDD AND DIRECT ACCESS TO RANDD VIA MISSION COMPUTER MAKES DUPLICATIVE PROCESSING UNNECESSARY. USING RANDD FORMATS ADAPTED BY WEINTRAUB FOR WANG UTILITY PACKAGE AN ADDITIONAL 200 PIECES UNIQUE TO MISSION COLLECTION PROCESSED. THUS HALF OF LOCAL COLLECTIONS NOW POTENTIALLY ACCESSIBLE WHEN THE RANDD BROUGHT ON-LINE WITHIN AMEMBASSY CAIRO.

3. ON WEINTRAUB'S RETURN AID/W MISSION REQUESTS THAT NECESSARY ADAPTATION OF RANDD TO WANG HARDWARE/SOFTWARE BE PURSUED IN DS/DIU AND NEWLY PROCESSED INPUTS BE USED TO DEBUG SYSTEM. EFFORT WILL CULMINATE, WHERE WANG COMPUTERS INSTALLED IN OTHER USAIDS, IN PROVIDING: A) DIRECT MISSION ACCESS TO AID'S COMPOSITE TECHNICAL LITERATURE PRODUCTION AS MAINTAINED BY DS/DIU; B) UNIFORM, QUALITATIVE SYSTEM FOR HANDLING MISSION-ACQUIRED MATERIALS; AND C) ON-GOING INFORMATION RESOURCE SHARING WIDELY THROUGHOUT AID.

4. WHEN RANDD ADAPTATIONS TO WANG HARDWARE/SOFTWARE COMPLETED IN DS/DIU, MISSION REQUESTS SUBSEQUENT WEINTRAUB TDY NTE FOUR WEEKS, ESTIMATED LATE FEB./EARLY MARCH. SCOPE OF TDY WORK WILL INCLUDE: INSTALLING PROGRAM, WRITING PROCEDURAL GUIDES, STAFF TRAINING.

6. PLEASE ADVISE CONCURRENCE IN COLLABORATIVE COURSE OF ACTION OUTLINED AND PROJECTED WEINTRAUB TDY. ATHERTON

245

UNCLASSIFIED

Department of State

OUTGOING TELEGRAM

PAGE 01 STATE 001894 045883 AID3572
ORIGIN AID-35

ORIGIN OFFICE DIU-01
INFO NEEI-03 NEEM-01 AADS-01 CH8-01 /010 A4 7

INFO OCT-00 035 R

DRAFTED BY DS/DIU:LALLEN:TVS
APPROVED BY DS/DIU:LALLEN
AID/NE:GGOWER (PHONE)
DESIRED DISTRIBUTION
ORGIN I CH 8 INFO AANE NEEET NEEM AADS 8L-00 END
----------073432 052130Z /34

R 051959Z JAN 81
FM SECSTATE WASHDC
TO AMEMBASSY CAIRO

UNCLAS STATE 001894

AIDAC

E.O. 12065:

AGS:

SUBJECT: SUSAN WEINTRAUB TDY

REF: CAIRO 28119

1. FOR JOHN HAFENRICHTER, HRDC/EDU

2. DS/DIU CONCURS PLAN OF ACTION PER REFTEL. WEINTRAUB WILL CONTINUE WORK ON MISSION PROJECT TO PUT RANDD DATA-BASE AND MISSION DIC COLLECTION ON LINE IN WANG VS COMPUTER.

3. DS/DIU IS PREPARED TO RELEASE WEINTRAUB FOR TDY AS SOON AS WORK IS COMPLETED IN AID/W.

4. DS/DIU REQUESTS MISSION SEND FISCAL DATA FOR TDY.

5. ETA FOR WEINTRAUB WILL BE DISCUSSED IN SUBSEQUENT CABLE.
MUSKIE

BEST AVAILABLE COPY

UNCLASSIFIED

246

ACTION COPY

Department of State

INCOMING TELEGRAM

PAGE 01 CAIRO 01283 2015142 058264 [illegible]
ACTION AID-35

ACTION OFFICE [illegible]
INFO NEDP-02 CHC-01 NETC-04 NEEI-03 NEEM-01 FM-02 AADS-01
CH8-01 RELO-01 MAST-01 LDO-01 022 A2 3

INFO OCT-01 036 W
----------041762 2015212 /34

P 201040Z JAN 81
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC PRIORITY 6961

UNCLAS CAIRO 01283

AIDAC

E.O. 12065: N/A
SUBJECT: SUSAN WEINTRAUB TDY

REF: A. CAIRO (80) 28119, B. STATE 001894

1. FOR LIDA ALLEN, DS/DIU. FISCAL DATA WEINTRAUB TDY AS FOLLOWS. APPROP. 72-1111000, ALLOT. 100-50-263-00-01-011. TDY ESTIMATE NTE FOUR WEEKS.

2. SCOPE OF WORK TO INCLUDE INSTALLING RANDD DATA BASE AND ADAPTED PROGRAM FOR MISSION DIC ON MISSION WANG VS; WRITING PROCEDURAL GUIDES FOR INFORMATION RETRIEVAL; TRAINING MISSION PERSONNEL IN INPUTTING, REVISING AND SEARCHING AND PROVIDING CONSULTING SERVICES ON MICROGRAPHIC PROCEDURES AND PROCESSING.

3. ADVISE ESTIMATED DATE OF ARRIVAL AFTER FEBRUARY 15TH AND BEFORE MARCH 1. ATHERTON

BEST AVAILABLE COPY

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Department of State

INCOMING TELEGRAM

PAGE 01 CAIRO 03532 181125Z 003051 AID7953

ACTION AID-35

ACTION OFFICE DIU-04

INFO CH6-01 NETC-04 NEEI-03 STA-10 DM-01 AADS-01 CH8-01
RELO-01 MAST-01 /027 A4 818

INFO OCT-01 /036 W

----------277672 181125Z /34

P 181021Z FEB 81
FM AMEMBASSY CAIRO
TO SECSTATE WASHDC PRIORITY 7925

UNCLAS CAIRO 03532

AIDAC

E.O. 12065: N/A
SUBJECT: DS/DIU SUPPORT MISSION INFORMATION SYSTEM

REF: STATE 035508

1. FOR DS/DIU AND NE/TECH. WILL MEET WEINTRAUB FEB. 23 ARR. VIA TWA 840. RESERVATIONS MADE AS REQUESTED.

2. MISSION APPRECIATES FULL MEASURE OF SUPPORT IN ADAPTING DS/DIU TECHNICAL DATA BASE TO MISSION WANG UTILITY VS SYSTEM WHICH DS/DIU HAS MADE AND CONTINUES MAKE AVAILABLE AS WELL AS DS/DIU COORDINATION OF ACTIVITY WITH SER/DM. ATHERTON

FIELD DISPLAY TABLE

The following table lists each field in the DIC database and gives major characteristics. Starting position refers to actual location in the record; this positioning is evident when viewing a record in Display. All fields are character fields rather than numeric eventhough some values are numbers. Length is number of spaces each field occupies on the record no matter how much room the actual value takes up. Number of occurrences indicates the maximum number of values each field can have in any one record. The keyed fields are those which are indexed.

FIELD NAME (Abbrev.)	STARTING POSITION	TYPE OF FIELD	LENGTH	NO. OCCURENCES	KEYED?
DT--Date on file	1	C	6	1	No
AW--AID/W Doc. No.	7	C	8	1	No
DF--Format	15	C	2	1	No
ID--Doc. ID	17	C	8	1	Yes
SU--Subject	25	C	4	1	Yes
OC--Secondary	29	C	4	1	No
GC--Country Code	33	C	4	1	Yes
LA--Language	37	C	8	1	No
T1--Title1	45	C	67	1	No
T2--Title2	112	C	67	1	No
T3--Title3	179	C	67	1	No
AU--Author (1-7)	295	C	67	7	No
YR--Year	1032	C	2	1	No
P--Pagin	1034	C	6	1	No
N1--Notes1	1040	C	67	1	No
N2--Notes2	1107	C	67	1	No
N3--Notes3	1174	C	67	1	No
KY--Keyword (1-12)	1375	C	25	12	No
C--Contract	1875	C	19	1	No
CT--Contract Type	1896	C	1	1	No
AR--ARDA Issue	1897	C	7	1	No
BT--Bibtype	1904	C	2	1	No
J--Project Number	1906	C	45	1	No
RS--Record Status	1951	C	1	1	No

MEMORANDUM

TO: SER/DM, Paul Spishak, Director

FROM: DS/DIU, Lida L. Allen, Director

SUBJECT: RANDD Database Conversion to WANG VS Minicomputer

In November, DS/DIU was requested by USAID/Cairo to establish a cataloging and indexing system for the Mission's collection of publications contained in their Development Information Center (DIC). With Mission funding, Susan Weintraub was sent on a four week TDY to implement a manual system and begin investigating the best way to convert that system to an automated one. Before leaving, she contacted Mr. Dave Washburn of DM as well as Eric Chen of WANG to find out how the WANG VS at the Mission could handle the type of functions required in maintaining and searching a bibliographic database whose records would be structured similarly to those in the RANDD (Research Literature for Development) database on the AID computer. Mr. Chen examined the bibliographic input sheet used for RANDD and stated that the existing WANG VS utilities could probably meet the requirements, or at least they could do so initially. If more sophisticated searching or a longer record were needed, software could be written and added later.

In Cairo, Mrs. Weintraub discovered that approximately 40 to 50% of the USAID Development Information Center collection had already been fully processed by DIU and was in the RANDD database. Informal conversations with Bob Cunningham and Ron Miller led to the idea of converting RANDD to the WANG VS in order to cut down on Mrs. Weintraub's cataloging workload at the Mission. However, the implications of bringing RANDD to USAID/Cairo were much broader. Not only could RANDD be used as a cataloging/processing tool much as DIU now uses OCLC (the Ohio College Library Center cataloging system), but it could also enhance the Mission DIC's service capability to Mission personnel, their contractors and GOE counterparts by allowing immediate on-line access to AID's unique database of development literature. In addition, input of Mission-produced documentation would greatly aid in the identification and acquisition of documents which DIU has been hard-pressed but generally unsuccessful in obtaining. In a broader perspective, if the system could be implemented in Cairo, it could then be sent to other Missions with WANG equipment and documentation centers.

There is a great deal of pressure at the Mission to implement this system as soon as possible. The DIC collection has virtually no means of access while demand for information and/or publications continues to increase. The manual access system, begun during Mrs. Weintraub's TDY, will take months to set up. In order to gain immediate access to a substantial portion of the collection and to get the rest of the collection input quickly, the Mission has expressed the desire to have RANDD installed in Cairo using the utilities now available with the WANG VS. The need is so urgent that they have requested that Mrs. Weintraub return with a workable system in February or early March.

250

Responding to this short-term need and considering the overall importance of the request in terms of DIU's goals, DIU is permitting Mrs. Weintraub to continue working on the USAID/Cairo manual and computer access systems despite her normal duties in the AID/W Development Information Center. Lee White is also being made available for the project whenever necessary.

As a short-term solution to an immediate problem, DIU and USAID/Cairo feel that using RANDD under the WANG VS utilities would be more than satisfactory. However, since some adjustment to the utility-generated programs will be necessary to accommodate the record size for RANDD and USAID/Cairo documents, DIU requests DM to provide some support in this area from a WANG technical expert. Instruction in setting up and using the system would also be needed. Access time to AID's WANG VS (or to any of the computers available from WANG in Rosslyn, Bethesda or Rockville) would be required so that Mrs. Weintraub can become familiar with the system.

DIU, in the future, would want a more sophisticated and flexible information and retrieval system for accessing RANDD on the WANG VS. DIU's goal would be to set up RANDD, on request, in any Mission having both a minicomputer and some sort of information facility. This is of utmost importance to the Agency's commitment, and DIU's mandate, to disseminate information on development to Mission personnel and their LDC counterparts. DIU requests that after the USAID/Cairo pilot project is operational, DM undertake a review of this system, advise DIU of the practicality (cost/benefit) of either modifying the current system or designing and programming a new more sophisticated system, and provide the necessary support to implement their recommendations.

Attachment I

UNITED STATES GOVERNMENT

memorandum

DATE: FEB 11 1981

REPLY TO ATTN OF: DM/OD, Paul Spishak, Director

SUBJECT: RANDD Database Conversion to Wang VS Minicomputer

TO: DS/DIU, Lida L. Allen, Director

Your January 21 memorandum requesting technical support in converting the RANDD database to the Wang VS minicomputer was reviewed by my staff. You have indicated there are two areas in which you need assistance: a short term solution to enable USAID/Cairo to access the RANDD bibliographic data on their mini as soon as possible; and, a long term solution to provide a RANDD system on other Wang VS minicomputers.

Dave Washburn, DM/PSE, referred Susan Weintraub of your staff to a Wang analyst for assistance in the first area. I understand Ms. Weintraub extracted data from the RANDD database and will be testing a pilot system on a VS minicomputer to be made available by Wang. This timely assistance from Wang should permit Ms. Weintraub's return to Cairo with a version of RANDD suitable for use on the USAID minicomputer before the end of February.

With regard to the second area, DM staff will review the pilot system when it is operational prior to implementation in other USAIDs. If extensive design or programming is required, DM may be unable to locate the required resources, as our budget has been severely curtailed. If the effort is determined to be minimal, then we will provide or arrange for the necessary support. If Ms. Weintraub could retain a copy of the pilot system she will be leaving at USAID/Cairo, work on this could proceed here on DM's minicomputer after her return.

Please ask Ms. Weintraub to contact Mr. Washburn (632-9724) upon her return from Cairo so that we can commence the next phase of this project.

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

OPTIONAL FORM NO. 10
REV. 7-76
GSA FPMR 41 CFR 101-11.6
5010-112

752

Attachment J

Development Information Center

I. Resource Center

A. Available in USAID/CAIRO

1. Research & Development Data Base (RANDD).
2. D.I.C. Collection.
3. Egypt Project Documentation Collection.
4. Journals.
5. Gazette/Cairo Press Review.
6. Economic Data.

B. Available in AID/W

1. RANDD including ARDA (A.I.D. Research and Development Abstracts).
2. Development Information System Data Base.
3. Project History File.
4. Economic and Social Data System.
5. Data Bases external to AID including National Agricultural Library, Library of Congress, Engineering Index, National Library of Medicine and Department of Energy.
6. Acquisition of AMTID titles, journal articles and other USG publications.

II. Collection Center

A. Incoming

1. PPs/PIDs/Evaluations.
2. Internal USAID Documents.
3. All USAID-funded Studies, Reports, etc.
4. Egyptian Data.

B. Outgoing

1. Forward to AID/W all USAID materials appropriate for AID "Memory".

III. Outreach Center

A. Mission Personnel

1. MEETS (Media Extension Education and Training Service) Program.
2. Ordering facilities: books, journals, AMTID and other USG publications.
3. Inter-library Cooperation in Cairo.

   a. AUC
   b. FAO
   c. Institute of National Planning

B. Broader Development Community

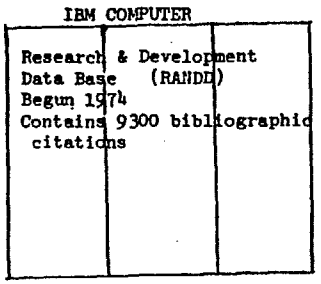
1. Contractors/Consultants both AID and non-AID.
2. University Professors and Researchers.
3. Other libraries.

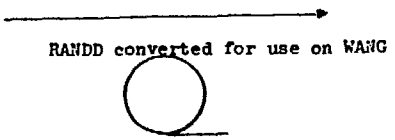
March 5, 1981

THE DEVELOPMENT INFORMATION CENTER SYSTEM
USAID/CAIRO

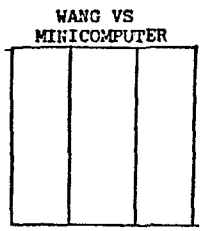
A Pilot System Potentially Applicable to Every AID Mission

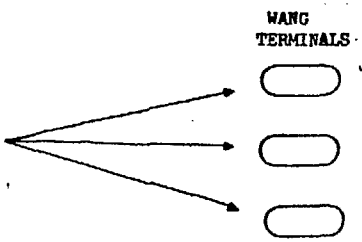
AID/WASHINGTON





USAID/CAIRO





1. The Office of Development Information and Utilization (DS/DIU) maintains the Research & Development Data Base (RANDD) which currently contains 9300 citations to AID-produced/funded books and reports. Over 1,000 new publications are entered every year.

   Until February, 1981, the RANDD Data Base was searchable on-line by author, title, subject, keyword, contract number, etc. only in AID/W on the IBM computer.

2. In January and February, 1981 the RANDD database was modified to be run on a WANG VS Minicomputer. Adaptations were made to the file to allow for decreased storage space on the WANG and to meet the special needs of the USAID/Cairo Development Information Center.

3. On February 25, 1981, the initial RANDD tape of 9300 citations was installed and made operational on the USAID/Cairo WANG VS.

   The USAID/Cairo DIC will be responsible for maintaining and updating the database and is currently feeding in citations to their entire library collection.

4. USAID/Cairo now has immediate, on-line access to a new database comprised of AID/W reports, and materials in the Cairo DIC. It is searchable by author, subject, title, country, keyword, etc. Full text for every citation on the data base will be available in the Mission on microfiche. New citations to be added to the data base as well as full text on microfiche will be sent from AID/W on a continuing basis.

Attachment K

```
*****************************************************************************
****          1         2         3         4         5         6         7
**** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
*  *
* 1*
* 2*
* 3*                 ******************************************
* 4*                          WELCOME TO THE USAID/CAIRO
* 5*                       DEVELOPMENT INFORMATION CENTER
* 6*                                 SYSTEM
* 7*                 ***********************************************
* 8*
* 9*                 TO DISPLAY CONTENTS OF FILE PRESS        PF-KEY (01)
*10*
* 1*                 TO SEARCH THE FILE USING INQUIRY PRESS   PF-KEY (02)
* 2*
* 3*                 TO CREATE REPORTS ON THE FILE PRESS      PF-KEY (03)
* 4*
* 5*                 TO ADD, MODIFY OR DELETE RECORDS PRESS   PF-KEY (04)
* 6*
* 7*
* 8*
* 9*
*20*
* 1*
* 2*                 *********** TO EXIT PRESS PF-KEY (16) ************
* 3*
* 4*
*  *
*****************************************************************************
****          1         2         3         4         5         6         7
**** 12345678901234567890123456789012345678901234567890123456789012345678901234
*****************************************************************************
```

Attachment L

June 1,1981

MEMORANDUM

TO: SER/DM, Mr. Paul Spishak, Director

FROM: DS/DIU/DI, Susan G. Weintraub, Librarian

SUBJECT: Wang Version of RANDD

As you are aware, I completed the initial conversion of the RANDD database for use on the WANG VS just prior to my departure for USAID/Cairo on February 22. Ms. Bonnie Jones of WANG was responsible for working out various problems we encountered and I found her to be most helpful and generous with her time.

On February 25, my first day of work at the Mission, RANDD was full operational. From then until my departure March 21, time was spent inputting records from the manual system developed on my first TDY November-December, 1980, training Nancy Cylke of the Cairo Development Information Center on the use of the system, writing PROCEDURES on the WANG to make entry into Cairo-RANDD easier, and writing a user's manual. Additional time was spent on demonstrations to all Mission personnel, including the Mission Director and Deputy Mission Director and their senior staff, and to librarians in Cairo. RANDD was well received and Mrs. Cylke has recently reported to me that they are using the system and that Mission personnel are very pleased with resulting citations to AID-produced reports.

As expected, however, some adjustments to the existing utilities need be made before the system can be sent to other Missions. Major requirements are as follows:

1. INQUIRY must be changed to allow for easier searching on all occurring fields (currently AUTHOR and KEYWORD). In Cairo-RANDD, up to 12 keywords or descriptors may be applied to any one record in the field KEYWORD. In order to search on INQUIRY, each occurrence (K1 to K12) must be searched to be certain that a particular keyword has been retrieved whether it is located in the K1 or the K12 position. (Example: The only way to retrieve every document indexed using the keyword "energy" would be: "WHEN K1 is "energy" or K2 is "energy" or K3 is "energy", etc.) This mode of searching makes for lengthy search statements and prohibits combining keywords, which is essential for subject searching in RANDD. Authors also need to be searched without specifying occurrence.

2. The AUTHOR field in RANDD is also an occurring field. However, there needs to be a way to sort each occurrence together with the others to create a single listing of citations by all authors. Now it is only possible to sort authors separately according to occurrence (A1 through A8). Keywords must also be sorted together to provide a Cairo-produced authority list of all keywords used.

3. A mechanism for reassigning or modifying the primary key field ID (Document ID) needs to be worked out, if possible, to avoid having to completely delete a record and then re-key it with the new ID number.

4. An expanded REPORT utility is needed to accommodate full citations which always exceed the three-line limit now allowed by REPORT. Does WANG have plans to expand REPORT?

5. There should be some small adjustments in two or three existing fields.

I have a copy of the Cairo RANDD as well as the manual which still requires some revision. I look forward both to meeting with DM to discuss the project in Cairo, and particularly to working towards making the above improvements as well as any others which you feel are necessary.

Clearances: for MB
DS/DIU, Lida L. Allen_____
DS/DIU, Lee White_____

Funds and $265.3 million in development aid. Nearly half of the latter budget would go toward agricultural and rural development, particularly to stimulate food production.

Coy ponted out that the United States' role in the region has changed considerably over the past two decades. "We are no longer the dominant source of financial resource transfers. Our primary task now is to play the lead role as a catalyst and risk taker, attracting complementary public and private resources."

Millions of Asians, willing but unable to provide for themselves, constitute a wasted resource not only to their nations but to the world at large, Frederick Schieck, acting assistant administrator for Asia, told the House Foreign Affairs Committee. Progress is being made, he said, but problems remain with new ones "arising with frightening speed and far-reaching effect."

The basic problem is the same as with three other major regions of the world in which AID has programs—the food-population imbalance. Schieck pointed out that dramatic advances in stemming population growth in Asia have been made, particularly in India, Thailand and Indonesia. Important progress in food production, especially in India, the Philippines and Bangladesh, has been accomplished.

"Still, however bright these statistics," he said, "they are but a beginning." The Agency's program—$448.7 million in development loans and grants and $60 million in Economic Support

An Egyptian worker cleans an AID-assisted canal near Cairo. Egypt is slated to receive $750 million in Economic Support Funds during fiscal 1982.

such areas as aquaculture, prevention of shore erosion and the Aswan Dam's impact on the Eastern Mediterranean.

Computer speeds research process in Egypt

The Egypt mission has found a way to cut days to minutes, at least when it comes to obtaining research material previously available only from headquarters.

When an AID officer in Cairo working on a water project, for example, wanted information about other water project experience the Agency had undertaken, that officer had to cable or write the Development Information and Utilization Office (DIU) in Washington. The office's two information centers—one in Rosslyn and the other in the State Department building—would search more than 9,200 publications, put together material helpful to the requesting officer and send it out via air pouch.

All pouch material is handled by the State mail room, which sends official mail overseas according to a special schedule. Mail bound for Egypt leaves Washington on Mondays, Wednesdays and Fridays. Other AID field offices are not as fortunate; some have only one mail a week.

It should take about three days for mail marked "air pouch" to get to its destination, reports an AID mail room employee. Employees stationed overseas report, however, it's more like a week. Thus, if the information center received a simple request from Egypt on Monday, it might be able to fill it that day, but it would probably would not get to the State mail room until Wednesday.

Add three days to the timetable and the water project officer most likely would get his or her package the following Monday. That's a full week for a mission that has three mail deliveries a week and that's based on ideal conditions. For the AID overseas office that gets mail once a week, it could take almost two weeks before material in answer to a simple request would get there.

Some requests are more difficult to fill than others. The two centers coordinate their efforts; even so, some requests can take several days. Volume also affects the time it takes to fill requests. In February, according to the DIU office, 44% of staff time in February was spent on mission support.

The Egypt mission accomplished the time- and money-saving feat that allows the mission to conduct its own searches on such topics as rural health delivery, forestry, solar energy, family planning, radio education, potable water crop production or any one of hundreds of other subjects on its Wang minicomputer. Until February, this information resource could be used only by the DIU office, which created and maintains the RANDD, short for Research and Development Database, system. Now, instead of contacting Washington, Nancy Cylke sits at the mission's Wang terminal—the same one used for word processing, and searches AID documents as well as Egyptian ministry publications—all located on microfiche or on the shelves in the mission's development information center she heads.

The project began last November when the mission asked for help in setting up a manual cataloguing system for the materials that it eventually planned on putting into the Wang system.

Susan Weintraub of the Rosslyn branch of Washington's development information center went to Cairo and found at least 40% of the nearly 3,000 books and other materials held by the mission already had been processed by her office and were in the RANDD system. Informal discussion with the computer staff in Cairo, particularly Robert Cunningham, resulted in the idea of making a copy of the Washington data base for Cairo and adding the mission's material to it.

Weintraub carried out the conversion of the data base back in Washington with the help of Lee White in DIU and Wang Laboratories. The RANDD data base was modified to fit on the Wang and to meet the special needs of the mission.

A pilot demonstration is part of a long-range effort by DIU to provide its automated development information resources to AID missions on request. That is, providing the mission has the proper computer equipment.

The Egypt project took less than four months. After only a few weeks, Weintraub has received enthusiastic reports about the convenience of the system as well as the time saving.

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Attachment M

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Indexing Guidelines

In performing original cataloguing, it is necessary to assign index terms to provide additional, or more detailed, subject access to documents within the system. These general guidelines will help in learning how to select the best descriptor terms from a thesaurus or keyword listing. The limitations of your own particular working conditions and the storage capacity of the computer will determine how much time you are able to spend indexing and how many terms should be assigned.

Purpose

The purpose of indexing is to facilitate retrieval of a document by substance or form. Substance is the subject of a work, and form describes the work itself or some of its contents. Examples of substance are: agricultural machinery, arid lands, malaria, Botswana, data collecting. Examples of form are: bibliography, statistics, questionnaire, proceedings.

For the user of a collection, the index points to documents relevant to his or her requirements. Thus, the indexer of those documents is responsible for selecting terms, contained in a thesaurus, which provide a true description of the form and major subject components of any report, monograph, article, project paper, evaluation, memorandum, etc. Major subject components are those topics which are treated in some detail within the document. The mere mention of a subject is not sufficient justification for indexing it, no matter how important the topic is to the AID program.

Guidelines

I. Know the user's need.

The most important challenge in indexing is to keep the user in mind. You must decide, as a user would, which terms or concepts would come to mind in looking for the document to be indexed. Ask yourself, "If I were trying to find this document, which words would I think of?"

Familiarity with AID's or the Mission's goals and programs through periodic review of Congressional Presentations, Annual Budget Submissions, and other policy statements is one way to know which subject areas are likely to "come to mind" for individuals working the the development community.

II. Analyze the substance.

To index, first analyze the substance of the document. For long, well-organized books, project papers, and reports, read the abstract, look at titles, tables of contents, preface and introductory material, captions, underlined or highlighted words or paragraphs. For shorter reports and documents which do not have introductory passages, etc., read beginning and ending paragraphs and skim in between to pick out important subjects. The shortest works, such as some project documents, memoranda, and cables, will have to be read in their entirety. In all cases, save time by being selective in what you examine in detail. However, do not hesitate to read whatever is necessary to become familiar with the substance of the document because the better you understand, the more accurate your indexing.

III. Select the index terms.

Once you understand the material (it may be helpful to jot down subject areas), select words in the thesaurus to match the subject and form. Use the following guidelines when choosing thesaurus terms.

A. Be SPECIFIC. Choose the most specific terms to describe the subject. Specificity is a fundamental rule of indexing and ensures greater relevancy in document retrieval.

B. Be OBJECTIVE. In translating an author's concepts into index terms, avoid subjective interpretations or criticisms.

C. Be CONSISTENT. If you are indexing several documents on a certain subject or project, look at all or most of them first to understand the subject in its context, and treat it with the same or similar terms throughout.

D. Be EXHAUSTIVE, but do not overindex. Index every topic of major importance, but do not include terms for subjects which are not described in some detail, or use words which are too broad when a more specific one would be suitable. Do not use several terms to describe the same subject area when one will ensure retrieval by a user.

Overindexing burdens the system with a profusion of terms pointing to documents which are barely relevant to the subject indexed. Those who access the system, both librarians and end users, waste their time scanning bibliographies and retrieving documents which have been overindexed. Ask yourself: "If I were a user and selected this document because it was indexed under my subject of interest, would I be satisfied that it was relevant to my needs, or would it be too peripheral to be of any use?"

Most documents should have eight to ten index words. This is an average number and should serve only as a guide in reviewing

terms assigned. If you have selected only two or three, check to see whether you have been exhaustive in indexing every subject of major importance. If you have assigned more, be certain every word covers substance or form.