

AIM PROCEDURES FOR PARTICIPATING CENTRES

The following functions of the AIM and procedures for participating centres were developed at a WHO/AHILA consultative meeting which included representatives from the AHILA executive committee, African medical librarians, and WHO technical support staff. The meeting took place in Accra, Ghana from 20-22 January 1993. The first objective was to agree on a mission statement that would describe the broad goal of the proposed *African Index Medicus* (AIM). The following statement was agreed upon:

"The mission of the *African Index Medicus* is to improve access to bibliographic and other information resources relating to health issues of African countries through cooperation at national and international level."

Consensus by the participants was reached on the following AIM aspects and procedures:

Types of information to be included in the AIM databases are identified and prioritized as follows:

1. Bibliographical Information

	<u>Priority</u>
- Journals	priority
- Newsletters	optional
- Annual reports	optional
- Statistical reports	optional
- Books/manuals	priority
- Theses	priority
- Pamphlets	optional
- Reports, studies, proceedings	optional
- Audio-visuals	optional

Language: material in any language is to be indexed, with translations of the title into English, French, or Portuguese, according to the country of origin of the record.

Time Frame: it was noted that bibliographies which have attempted data entry retrospectively have rarely managed to catch up to current literature and thus hindering their effectiveness. Data input in the AIM will therefore commence with 1990 imprints and priority given to the most current literature; retrospective cataloguing should come after current data is entered and as time permits it.

Abstracts: noting the value users place on abstracts their inclusion in the database record is to be given priority; author generated abstracts are to be encouraged in African health periodicals, and project administrators at national level should help cataloguing staff in the selection of appropriate text from an introduction or conclusion where author generated abstracts do not exist.

2. Non-bibliographic and Referral Sources are identified as the following :

- on-going health related projects, including research (PRO database) ;
- health information resources & services, including organizations and libraries (SRV database) ;
- specialists in health information and informatics (PER database) .

Separate databases will be created for them to be implemented at national level if appropriate.

3. Full Text Collection and Document Delivery

Participating sites will identify the in-country location of each document. Each site will also develop a document delivery policy regarding level of availability, cost of photocopying services, etc. AHILA will continue to pursue the "centres of excellence" idea and search for funding to create regional document delivery focal points at such libraries as the University of Zimbabwe Medical School and the University of Ibadan Medical School. The possibility of supplying scanned image files of a document via e-mail are being explored.

Responsibilities

The meeting dealt with respective responsibilities and involvement of the various partners in the AIM project.

1. Infrastructure to be Initiated at National Level
 - a working committee is to be set up to coordinate data collection and organization of materials to be included in the databases; this may include division of labor along subject lines or type of material in order to avoid duplication of records.
 - each country is to have a central processing point where records from individual institutions are collected and reviewed before forwarding to the AIM project coordinator; the institution acting as the central processing point may do data entry from worksheets prepared by libraries not yet computerized.
 - central processing points will be determined solely by the willingness of the institution to participate and its ability to function in the role. The institution must be prepared and able to:
 - i. liaise with AIM project coordinator and have appropriate communications facilities for transfer/exchange of records;
 - ii. produce standardized data entry forms (based on AIM project model) and distribute them to institutions not yet computerized;
 - iii. identify appropriate data entry staff for training and work on the project;
 - iv. maintain national databases;
 - v. act as clearing house for information about the project.
2. Responsibilities of AHILA
 - identification of and liaison with potential collaborators/funding sources in Africa;
 - identification of new project sites;
 - ensuring coordination of the project;
 - promotion of the project through the dissemination of information on project developments to interested parties and AHILA members.
3. Responsibilities of WHO (Headquarters and AFRO)
 - production of bibliographic tools such as database format to be used with CDS/ISIS and manuals for project procedures and data entry (AFRO and HQ);
 - maintenance of the main bibliographic and other databases (AFRO);
 - continue close collaboration with AHILA in fund raising and coordination of the project -including liaison with Health Foundation, Carnegie Corporation and other donor agencies (HQ);
 - provision of technical assistance in the form of a project coordinator who will provide on-site training, appropriate tools and maintenance of databases (AFRO).

Technical Aspects of the AIM Project

Though it was previously recommended that the WHOBIS format was to be used as the exchange medium for the AIM project, WHOBIS itself is undergoing changes (WHOBIS is a bibliographic format designed for the WHO Library in Geneva.) The new WHOBIS format is based on the AIM format as decided by the participants at the Accra meeting. African librarians were presented an opportunity not only to affect their own project's database but similar projects being considered in other WHO regions that will also use the WHOBIS format.

WHO/AFRO and WHO/HQ will undertake to convert any records already entered using the previous WHOBIS format into national health information databases into the new AIM format. The AIM format is given to individual institutions as a complete package with not only a Field Definition Table (FDT) but also two display and print formats (PFT), an on-line data entry worksheet (FMT) and sample printed data entry worksheets (see the end of this manual), and a Field Select Table (FST) for creation of an inverted file. Reformatting FST's are included for use in exporting, conversion and maintenance of the databases.

Participants at the Accra meeting voiced various concerns and made recommendations that were incorporated in the creation of the new format. These included the following:

1. In response to a question on the use of standard cataloguing procedures and display, it was noted that in most cases the Anglo-American Cataloguing Rules 2nd Edition (AACR2) were followed in either data entry or in display formats. In some cases, however rules designed for manual cataloguing in card form are not appropriate for use with a computerized bibliographic system. The power of computer and software enable many more access points to information than was previously available. An example was given to show that a computer record need not be limited to only three authors and the AACR2 rules for main entry are not appropriate where any number of authors can be made an access point in a search. The consensus of the participants was that the new format would meet their need for standards where necessary.
2. Suggestions made on modifying the design and use of the data entry worksheets to make them easier for data entry personnel were acted on.
3. A system of using ISO two-letter country codes with a number suffixed was recommended for use as the AIM codes for source of record and physical location of item being catalogued. This recommendation was accepted. (see Tag 20 in the AIM Manual for Data Entry section)
4. Fields were added to the format for provision of information on acquisition, binding, target audience, broad subject heading, etc. (see Tags 920, 930, 6, and 640)
5. It was decided to add a field that would allow coding for access to the record or its export; this would identify records for internal use of an institution where it may not want to export them to the AIM database or may want to restrict their display and distribution to users. (see Tag 915)
6. Some fields were designated as "Local" fields that would not be exported to the AIM database with the essential parts of the record. It was felt that information such as sources and cost of acquisition or about binding, etc. was solely for institutional use. (Local fields include Tags 6, 115, 330, 915, 920, 930)
7. It was decided that terms from the MeSH and DeCS (descriptors for public health subjects) controlled thesauri would be used for main descriptor field; other descriptors/keywords either from another thesaurus, such as POPLINE, or which were very country specific would be entered in the local descriptor field. Non-MeSH descriptors imported from other databases are to be re-indexed with MeSH terms on a limited basis.

8. Due to the diversity of classification schemes used, it is unfeasible to impose a standard scheme or ask libraries to re-classify existing materials for the AIM database, therefore, though the classification number would be exported with the record it would be treated as a field for local use.

It should be emphasized that although it is technically feasible for individual institutions to modify the AIM format for their own use, modification of the FDT and the creation of new fields could impede the ability to exchange records and should not be considered without first discussing the need with the project coordinator. Changing the FDT also means making necessary modifications to PFTs, FSTs, and data entry worksheets.

On the proposed instructional tools, it was decided that a manual (this document) would be produced in stages as modules in order of the need and then compiled into one volume covering all aspects of the AIM project. The component sections include:

- introduction and background to the AIM project;
- self-instruction in the use of CDS/ISIS and data entry using the AIM format;
- CDS/ISIS notes for advanced users and troubleshooting;
- definition of components (FDT, PFTs and sample outputs, FSTs, and worksheets) of the databases to be created (the AIM database, the research project database, the systems and services database, and the information specialists directory database)
- manuals for data entry into each of the databases including characteristics of each field, purposes of the field, rules for entry, and examples. Fields of similar types of information in the databases would be given the same tag numbers, characteristics and rules for entry to ease learning of data entry;
- procedures for exchange of records in the AIM project, checklists for types and prices of equipment needed for participation in the AIM project, and a sample section about the AIM project to be included in funding proposals.

This manual also includes a diskette with the AIM format and sample records to be used for the tutorials.

Information on technical problems and solutions of the AIM project or CDS/ISIS use will be exchanged with the project coordinator by means of e-mail, SatelLife (HealthNet) and post. Dissemination of solutions to problems as well as general information about the project will be communicated through the AHILA bulletin. It is recommended that institutions also obtain a subscription (which is free) to Unesco's UNISIST Newsletter as it contains a great deal of information on CDS/ISIS.

Distribution of CDS/ISIS software: even though the software is free for developing countries, CDS/ISIS users must apply for and register their use of it through Unesco or one of their agency's authorized agents. AHILA is presently negotiating with Unesco on becoming a licensed distributor of CDS/ISIS and ease the procurement, distribution and registration for AIM project participants.

Mechanisms for Exchange of Records

Exported records from a CDS/ISIS database are in a standard text format (ASCII). The file of the exported records are to be sent to the project coordinator or exchanged with other AIM project participants via diskette or e-mail (land lines or SatelLife). Records should be sent on a quarterly basis to the project coordinator who would verify records and incorporate them into the AIM database. Initially, participating centres might want to send records to the project coordinator on a monthly or bi-monthly basis for evaluation.

The project coordinator will export the cumulative AIM database, or subsets (as desired) to participating centres.

Sites exporting on a regular basis can use the following procedures in preparation for exporting new records to the Project Coordinator. In this example the date of the last export was 30 March 1993.

Run the following free-text search:

? v23 > '19930330' (the result becomes Set 1)
or
? val(v23) > 19930330

Then run the following free-text search:

? v915 : 'AIM' (the result becomes Set 2)

Combine the first two searches:

#1 * #2

Save the results under the file name EXPORT and when exporting records enter the file name **EXPORT** in the *Save file name* field of the export worksheet. You will also enter the export FST name **AIM-EX** in the field for *Reformatting FST*. After records are exported you will be prompted if you want to keep EXPORT save file, you can answer N for no if export was successful.

You can follow the same procedure for export of records from non-bibliographic databases using the appropriate export FST: **PRO-EX**, **SRV-EX**, or **PER-EX**

NB: At the Backup drive and/or directory? prompt you must place a backslash "\" after the drive or directory name. If you are exporting the records to a file on a diskette in Drive A: you must respond A:\ , if it is a directory of the C: Drive such as TEMP then you must respond C:\TEMP

Output Considerations

It is envisaged that new records from the AIM will be printed on a quarterly basis; national databases may be printed on an annual basis or as is required. Downloaded CDS/ISIS records (printed to an ASCII text file) can be used for SDI or subject bibliographies and transmitted by e-mail directly to users. Plans are currently under way to explore publishing the AIM database in CD-ROM format, possibly in collaboration with BIREME which has offered their mastering technology and the LILACS disk as a vehicle for distribution.

Complimentary copies of an issue of the printed output will be distributed to potential users and promotional material would be prepared in AFRO. Desk-top publishing needs will be handled by WHO/HLT. National participating centres will be responsible for distribution of the materials within their countries, whilst WHO/HLT would identify and distribute to international recipients.

Participating Centre Requirements

An equipment checklist was designed to provide an idea of the minimum amount of equipment needed to be a participating member of the AIM project. It contains prices in US\$ based on sales in the USA. Local purchases will need to be adjusted (by as much as 100% in some cases). The checklist also presents equipment and software options for those libraries planning activities such as CD-ROM database literature searching and desk-top publishing.

Equipment

Minimum Configuration:

This equipment configuration is considered the minimum necessary to fully contribute to the *African Index Medicus* project [AIM] which would allow the creation of a local health information database and the transfer of records by diskette to project coordinating centre:

		<u>Estimated Price US \$</u>
Computer:	IBM Compatible 386 SX/16 MHz 2 Mb RAM 60 Mb Hard Disk 3.5" High Density and 5.25" High Density Floppy Drives Monochrome or Color Monitor	2,000.00
Printer:	Epson/IBM Proprinter Compatible 24-pin dot matrix printer (Printer spares and Consumables for two years)	400.00
Software:	DOS 5.0 CDS/ISIS 2.3 or later WordPerfect 5.1 (or similar word-processor) Norton Utilities 6.0 or PCTools 7.1 Norton or Central Point Anti virus	75.00 Free from Unesco 500.00 150.00 75.00
UPS:	1.2 KVA backup power supply	750.00

Other options:

If the documentation unit is considering more advanced database management and document delivery services then the following equipment is recommended:

for CD-ROM Database Literature Searching (to be added to configuration above):

CD-ROM Reader:	NEC, Hitachi or Phillips compatible external unit and interface board with cables, MS-DOS Extensions and drivers	700.00
Databases on CD-ROM:	MEDLINE (1980-present) POPLINE	(per year) 1,700.00 free from Johns Hopkins

for Desk-Top Publishing:

Computer:	IBM Compatible 386 DX/33 Mhz 4 Mb RAM (preferably 8) 200 Mb Hard Disk 3.5" High Density & 5.25" High Density Floppy Drives Mouse SVGA Color Monitor w/1 Mb VRAM	3,000.00
Printer:	HP Compatible laser printer (2.5 Mb RAM) (Printer spares and Consumables for two years)	1,400.00
Scanner:	HP Scanjet III or compatible	1,000.00
UPS:	1.2 KVA backup power supply	750.00
FAX Machine:	9600 Baud	500.00

Training

WHO Regional Office for Africa [AFRO] is at present acting as coordinator for the AIM project in collaboration with the Association for Health Information and Libraries in Africa [AHILA]. AFRO will provide the salary for the services of a technical consultant for on-site training of administrators and data entry personnel at country/institution level. Institutions or national programs will however have to meet the cost of travel to training site and expenses for the consultant. Expenses will vary based on airfares and standard per-diem rates.

Training sessions will average 2 weeks (10 working days and travel time to site) and will cover installation and use of CDS/ISIS, instructions on proper data entry, management of the database, exporting records to coordinating centre and importing records from the coordinating centre or other sources (other institutions or downloaded records from other databases such as MEDLINE).

Requests for training by AFRO technical consultant should be made through AHILA after funding has been obtained for travel and expenses.

Budgetary Considerations

This section is intended to be a guide for including participation in the African Index Medicus [AIM] project as part of, or in cooperation with other proposals for funding in library and documentation services. It should be stressed that participation in the AIM project is an "added value" to any other existing service or to services planned in the future. The project will further enhance communication at national and international levels, will support and stimulate clinical and operational research in country and publication of health information nationally and abroad; it will help focus attention on activities and needs of participating countries, will use innovative technology and is cost effective in software, training and operation. This section can be modified to suit each institution's individual need depending on the proposal being submitted.

On-site training travel and expenses should be included in the proposal budget. See checklist for minimum equipment and personnel requirements.

International Cooperation and Linkages

Within the framework of this project, the institution will be a participating member of the African Index Medicus [AIM] Project. AIM is an Association for Health Information and Libraries in Africa [AHILA] coordinated project that fosters the development of national health information databases that use a common software and format so that records can be easily exchanged or compiled with other national databases in the African region. Through the use of innovative new technology, including satellite transmission and electronic mail, it will be possible for an institution to readily request literature searches, exchange data, or have document delivery via full text scanned images at its disposal.

The software being used for the AIM project is Micro-CDS/ISIS which is supported and distributed free by UNESCO. The common format used was developed by WHO in conjunction with AHILA and African librarians to meet the needs of all libraries and all types of bibliographical information. The format can also be specially adapted to meet an individual institution's requirements, if needed, and still meet the criteria for international exchange. WHO Regional Office for Africa will provide the services of a technical consultant to perform on-site training in use of Micro-CDS/ISIS and data entry in the AIM format for institutions that will provide travel and living expenses. Estimated training time is two weeks. On-site training will allow project administrators as well as data entry personnel to be trained at one time on the equipment they are familiar with to help ensure competence and cost-effectiveness.