

**Education Management Information System Programme (EMIS)
and Related Activities: Annual Program Summary and
Fourth Quarter Progress Report October – December 2003
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Education Management Information System Programme (EMIS) and Related Activities

Fourth Quarter Progress Report October – December 2003

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ANNUAL PROGRAMME SUMMARY

TASK 1 - EMIS

This Summary of Subcontract Activities describes the major activities and accomplishments of the Academy for Educational Development (AED) subcontract to develop the Zambia version of the ED*ASSIST education management information system. The Zambia ED*ASSIST system was developed under contract to the US Agency for International Development (USAID) during the period February 2002 – February 2004.

Development and Installation of Zambia Version of ED*ASSIST. The ED*ASSIST Education Management Information System is an education management information system (EMIS), programmed in the Microsoft ACCESS database development system. It was developed by AED with the support of USAID and other organizations, in 1997, and has been installed in six countries (Nicaragua, Benin, Lesotho, Kenya, Uganda, and Zambia). The purpose of ED*ASSIST is to assist collection, storage, and retrieval of data from the national annual school census. ED*ASSIST consists of three major components: the Questionnaire Tracking System (QTS), which monitors the distribution and receipt of questionnaires; the Integrated Data Entry Application (IDEA), a data-entry program that keyers use to enter the census data into a Microsoft Access database; and the Data Dissemination Module (DDM), which produces a large set of reports from the data. ED*ASSIST is developed for a new country by making modifications to an existing system from a country having a similar educational system. The development of the QTS and IDEA is done at AED's headquarters in Washington, DC; the development of the DDM is done on-site (in this case, in Zambia).

One of the primary motivations for developing ED*ASSIST in Zambia was that the country had gotten several years behind in the processing of its education statistics. When the project began in 2002, completed questionnaires were available for 2000 and 2001, and questionnaires were being collected for 2002. AED/Washington developed a Zambia version of the QTS and versions of IDEA for each year. The QTS was used to track questionnaires for the 2002 census. Periodically (e.g., each week), the QTS is used to produce a "missing schools" report that indicates which schools have not yet responded to the census. The missing schools are contacted (via faxes of the missing-schools list to provinces and districts), and requested to complete the survey. By means of this diligent feedback, the response rate for 2002 was pushed to 99% for Basic Schools and 96% for Secondary Schools. These response rates were the highest levels seen in any country in Africa in the time since ED*ASSIST had been introduced.

The goal for 2002 was to have all of the data entered for the years 2000-2002 by well before the end of the year, and to have reports available (from the DDM) for a "core" set of education indicators by December. That goal was achieved. Two different DDMs were developed – one containing data for years 2000-2001, and one containing data for the year 2002. Upon completion of the development of these DDMs, it was decided that in the future a separate DDM would be developed for each year, if significant changes occurred in the Annual School Census Questionnaire for that year. The reason for this decision was that it is very difficult to develop a DDM containing

most of the data from two different years, if the type and format of the data differ substantially in the two years.

For the years 2000 through 2002, data were collected from Basic Schools and from Secondary Schools. Starting in 2003, data were collected also from Community Schools.

The project included a “pilot test” that was to test the use of ED*ASSIST at provincial and district levels. The pilot test included all 19 districts from Eastern and Southern Provinces. After some discussion, it was decided that all questionnaire data would be entered into the ED*ASSIST database at the Ministry of Education (MOE) Headquarters in Lusaka, and that the objective of the pilot test would be to train provinces and districts to retrieve data from the system. Each provincial and district office was provided with two computers (including Microsoft “Office” software) and a fax machine; each provincial office was also provided a copier. Because many potential users were unfamiliar with computers, the pilot test included training in basic computer literacy, including training in Microsoft Word, Excel, and PowerPoint.

At the beginning of the development effort, a conference was held in which the project objectives were described to interested parties. In that conference, the ED*ASSIST system was demonstrated.

Monitoring the Use of ED*ASSIST. As soon as Zambian versions of the ED*ASSIST components were available, they were installed on Ministry of Education computers for use by MOE staff in collecting, storing, and processing Annual School Census data. Training was provided on how to operate the ED*ASSIST software programs.

The IDEA was installed on seven MOE computers, and the QTS on one of those computers. The system was set up for independent data entry to be conducted on each computer. Each week, data were downloaded from the keying workstations to a “backup” computer (all computers were linked together in a “peer-to-peer” local area network). From time to time, and upon completion of data entry, the downloaded data were consolidated into two databases, one containing data for basic schools and the other containing data for secondary schools.

Whenever problems arose on the QTS and IDEA programs, those problems were generally resolved by AED/Washington staff (since those programs had been developed by AED/Washington staff). Modifications were made to the DDM on-site.

Training. As mentioned, training was provided to MOE data-entry staff as soon as the QTS and IDEA programs were available. As soon as the DDM was available, selected members of the staff of the Planning Directorate were instructed in its use. During the pilot test, formal classroom training was provided to pilot-test participants. That training consisted of five days of classroom instruction in use of the DDM.

Improvements to the DDM. As is the case for ED*ASSIST versions in other countries, the DDM enables the user to produce a wide variety of reports on school, student, and teacher characteristics, including all international education “indicators,”

such as enrolment ratios, pupil-teacher ratios, and completion ratios. A list of all of the available reports is provided in an appendix at the end of this report. The DDM developed for Zambia included some significant improvements over the versions available in other countries. A major increase in functionality that was incorporated was the ability to provide the user with a large number of “selection criteria,” which are used to restrict reports to geographic and school subsets of interest. The selection criteria include province, district, constituency, ward, urban/rural location, running agency, school size, educational level, school type, school boarding type, PAGE status, SHN status, and individual school. The ability to restrict reports to geographic and school sets of interest has been very helpful in enabling the MOE to respond to a wide variety of report requests. Another major improvement was a redesign of the system to perform selections and aggregations of data prior to constructing table “joins.” This improvement has enabled the DDM to produce reports in a fraction of the time previously required. As with other-country versions of the DDM, the Zambia version can produce reports that are broken down by various geographic categories, including national, provincial, district, constituency, ward, and individual school.

Provision of Data to Requestors. The ED*ASSIST DDM has been used to provide reports to a variety of organizations, including MOE departments, USAID and other donor agencies, UNZA researchers, Zambia Government agencies, and private organizations. Reports are usually produced in hard-copy, but some requestors request the data on other media, including floppy diskette, CD, and e-mail attachment files. In 2002, the DDM program and data for years 2000-2003 were placed on a CD and distributed to scores of interested parties. (The distribution CD was created using the “InstallShield” program, which produces an easy-to-use installation “setup” file.) An “Information Request Form” was developed that helps data requestors specify the desired reports.

Links to Other Data Bases and Systems. Efforts have been undertaken to link the data in ED*ASSIST to other data bases and systems. Preliminary meetings have been held with staff in the MOE Human Resources and Registry departments, to specify requirements for a Human Resources database system and a file-tracking database system. ED*ASSIST data on teachers were provided to the project to develop a government-wide personnel management information system. ED*ASSIST data on schools were combined with geographic information system (GIS) data (political boundary and geographic data, school geographic coordinates) to produce maps showing school locations and characteristics. Preliminary discussions have been held with the Education Council of Zambia concerning the acquisition of aggregated student assessment data to include in ED*ASSIST.

Population Data and Projections. In order to calculate certain indicators, such as gross and net enrolment rates, data are needed from the Zambia Census of Population. The needed data are population counts by age and gender, disaggregated to the district level (i.e., age x gender counts for the nation as a whole, for each province, and for each district). These data were obtained for the year 2000 from the Central Statistics Office, and projected to later years for use by ED*ASSIST. Currently, simple projections are used in which the population in each age x gender x geographic unit category are increased by 2.4% per year (the recent historical growth rate). When the

CSO releases official projections (based on the cohort-component method), those data will be used in the ED*ASSIST calculations.

Data Validation Efforts. In an effort to determine the validity of the data contained in the ED*ASSIST system, school-level reports have been produced and distributed. These reports include a “school directory,” which includes identification and enrolment data on each school (one line of data per school) and a “school profile,” which is a one-page summary of each school’s Annual School Census data. The directories have been distributed in hard-copy to a number of interested parties, and the school profiles were distributed to all schools. The school directory can also be produced from any of the DDM CDs.

TASK 2 – Capacity Building

Training Programme

George Caldwell and Drake Warrick ran the first several weeks of training, compromising the amount of time they were able to spend on other endeavors. Thereafter, the UNZA Computer Centre team took over Drake Warrick’s portion of the training programme and Beatrice Mugwagwa was trained to take over George Caldwell’s portion of the programme (on using EMIS software). David Guemes observed much of the training and made constructive suggestions, for the improvement of the programme. Advanced training for two HQ staff began in March in South Africa. This advanced training consisted of network administration which will provide them with the skill necessary to manage the MOE network infrastructure.

The programme proceeded successfully through the quarter with positive reviews and clear progress from participants. The costs remained within the budget and the programme itself was deemed a success. 20 additional secretaries received 3 days of training. Mr. B. Musonda was sent for advanced Access training in SA.

Data-Entry Adjustment

In light of training programme experience, EMIS staff determined that data-entry should not be part of the EMIS pilot in the Southern and Eastern Provinces. This decision was based on their observations of the skill level of staff attending training as well as what would be required in refining EMIS software program procedures. MOE staff are very new to computers and required much more training and practice than the EMIS training could afford them by the end of March. Without the proper amount of training and practice, EMIS staff could not guarantee the success of the exercise. It should be noted that this did not compromise the stated Scope of Work, but rather realigned project goals. The performance indicator is the number of districts producing reports from the system. With this change, the EMIS programme focused the training on the DDM software module where they trained staff to successfully generate reports and use these reports to make informed decisions.

MOE IT Requirements Analysis

This exercise was completed in the 4th quarter and is described in detail later in this report.

Mr. Warrick accompanied the Minister of Education to the Government Leader’s Forum in South Africa. He also attended the Partners in Education Conference hosted by USAID Africa Bureau in Mbabane, Swaziland.

TASK 3 – Assessment

International Workshop Planning

The international assessment conference was successfully held from June 29 to July 3, 2003 at the Zambezi Sun Hotel in Livingstone and attracted a total of 52 participants from the sub-region, Zambia and the USA. (Please see detailed report in Appendix)

Grade Four Competency Test and Workshop

The comparative report was produced and reviewed. The reports are attached for review. The sampling units for this study were 970 children who were about to complete their Grade 4 work in the IRI centers and 842 Grade 5 pupils who had completed their Grade 4 work in 2002. The IRI pupils completed their Grade 4 - six months' coursework on January 16th 2003. The 970 children from the IRI centers were sampled from 15 districts and 51 centers. The 842 children from the GRZ schools were sampled from 7 provinces, 17 districts and 43 schools. The tests were administered by officers from the ECZ and EBS as well as the DIPs from the sampled districts. A briefing on test administration guidelines was conducted for the EBS officers and DIPs in Lusaka. After the briefing, the DIPs ECZ and EBS officers went to the centers in mid January 2003. A workshop on assessment was held at the Jul's Conference Facility in Lusaka for ECZ and EBS between 10 and 11 July, 2003 and facilitated by Dr. Diane Garavaglia and Ms. Amy Basevich both from AIR Washington. Please see the detailed report included in the 2nd quarter report.

TASK 4 – Community Data Collection and Use

The task was executed by a consultant Ms. M. Malyenkuku who worked between April 22 and June 10, 2003. Various findings and recommendations were reported.

TASK 5 – MOE and USAID Monitoring Requirements

Midterm Assessment

As set forth in the project contract, AIR contracted an external review team to conduct an external assessment of the EMIS project. The team was comprised of 4 well-qualified individuals: Ms. Malyenkuku, formerly of the MOE; Ms. Emmy Mbozi, Head of Department for Adult Education and Extension Studies at the University of Zambia; Mr. Tegegn Nuresu Wako, Consultant, ADEA; and Mr. Glory Joseph Tlou Makwati, Consultant, ADEA. They met with many groups, including the EMIS team, CHANGES staff, ECZ, EBS, USAID, District Education Officers, the and the Permanent Secretary. They presented their preliminary findings on February 10th and submitted a final report several weeks later.

Reporting

The program provided, as requested and required, all reports and information from the ED*Assist system. Request for information not only came from the MOE and USAID but also from external entities.

ACCOMPLISHMENTS BY TASK FOR THE QUARTER

In this section the progress and achievements attained during the October to December 2003 quarter will be highlighted for the major components of the EMIS programme.

TASK 1 - Education Management Information System (EMIS)

1. Progress on Indicators

Activity	Indicator	Means of Verification	Target	Actual As of 12/03
1. Conduct EMIS needs assessment including resource requirements	Develop equipment specifications and determine resource requirements	Implementation workplan	March 2002	Completed March 2002
Activity 1. Work completed in 2 nd quarter 2002. It involved elaboration of both statistical and transactional requirements for EMIS in light of decentralization plans, extent of reengineering, staff capacity, procurement needs, stage of development of School Mapping, and key political timing points.				
2. Import historical data in to ED*ASSIST	Available historical data in readily accessible form	Production of report from ED*ASSIST	December 2002	Not to be completed
Activity 2. Data prior to 2000 is retained in a separate database programme called IMPS. This decision was made in the 3 rd quarter 2002 and is explained in that quarterly report.				
3. Create reports from backlog of data	Available historical data	Production of reports from ED*ASSIST	(a) 2000 and 2001 data readily available by December 2002; (b) 20 standardized reports; (c) multiple geographic levels; (d) filters for data	All target were met and exceeded. Work continued with the development of new reports for use in the 2004 program.
Activity 3. Historical data has now been made available for use in the MOE. Additional standard reports have been added bringing the number of standard reports to 65. Additionally, the graphing capabilities have been extended and improved in existing databases and will be applied to 2004 database development.				
4. Modify or redesign Annual School Census (ASC) questionnaire	Streamlined data entry process;	(a) Stakeholders review and pilot testing; (b) new survey layout and questions	May 2003	New singular questionnaire pilot tested in 3 rd quarter '03.

Activity	Indicator	Means of Verification	Target	Actual As of 12/03
<p>Activity 4. There has been a major redesign of the ASC. The MOE has decided that it should use a single questionnaire for all educational levels (Primary, Upper basic, High school, Community schools and IRI centers). The questionnaire was successfully pilot tested throughout Lusaka province and at various educational levels. Following the review of the pilot the form was submitted to the tender committee to identify a printer. There will be approximately 40,000 copies made.</p>				
<p>5. Move data gathering for school year to early in school cycle</p>	<p>Generate next year's Annual Census documents at end of prior year</p>	<p>2004 survey printed and distributed</p>	<p>October 2003</p>	<p>Completed in November '03.</p>
<p>Activity 5. This is the first step toward insuring that "this year's data is available this year." It gets the survey forms out to the schools so that school officials have enough time to complete them before they are due, with an eye to future data deadlines. Forms will be distributed in the 1st quarter '04. It is planned that the distribution will happen at the same time as the national census training programme.</p>				
<p>6. Produce EMIS output reports</p>	<p>Information readily available through ED*ASSIST reports</p>	<p>Routine requests for information disseminated through readily available reports</p>	<p>20 ED*ASSIST base reports and 5 custom reports in first year</p>	<p>65 reports of various data types are now available including graphs. School profiles distributed.</p>
<p>Activity 6. The Data Dissemination Module is continually being updated to produce reports in response to data requests from both inside and outside the MOE. School profile reports were printed and distributed to every school. This effort served to raise awareness of available data and to provide feedback to schools, districts and provinces.</p>				
<p>7. Develop and adjust ED*ASSIST inputs/process/outputs, based on Policy/ Managerial training and other Ministerial inputs</p>	<p>Procedure for maintaining systems relevance to the Zambian environment</p>	<p>(a) Stakeholder meetings (b) Evolving ED*ASSIST processes (c) Collaborative meetings</p>	<p>(a) Changes made in the Annual School Census; (b) Managerial EMIS Training; (c) Ministerial inputs toward improving EMIS platform</p>	<p>(a) Changes made in Annual School Census; (b) Planning for 4th quarter (c) Improvements are constantly being made as the result of close collaboration with MOE staff</p>
<p>Activity 7. This ongoing activity has involved, and will continue to involve, close collaboration with colleagues at the MOE to improve the applicability of ED*Assist to MOE needs. A weeklong computer training session was provided to senior staff. Include in the training was an introduction to ED*Assist. Feedback from the session on the usability of the system helped to make adjustments to improve the 2004 system.</p>				

Activity	Indicator	Means of Verification	Target	Actual As of 12/03
8. Prepare for implementing decentralization of EMIS functions	Completion of skills training for EMIS activities	(a) Development of confirmed schedule; (b) Registration of participants (c) Production of training materials	(a) Training schedule developed; (b) Submission of registration documents after training for 77 staff; (c) 13 class manuals produced	(a) 10 class manuals completed; (b) Training program completed (c) 11 manuals produced (d) Activity completed in 2 nd quarter.
<p>Activity 8. 77 staff were targeted for training from Eastern, Southern, and including Northern and Western Provinces. However, only 69 completed the training program. A second EMIS training programme has been planned and funding secured through the African Development Bank. It is planned that the training will begin in the 1st quarter of '04. The provinces taking part in the new programme are Luapula, North-western, Northern, and Western. A few Lusaka province staff will also be included in the training programme. This new programme will target approximately 80 staff.</p>				
9. Procure hardware/software required for the EMIS	Procurement completed during first year	(a) Receipt of equipment in Washington; (b) Receipt of equipment in Lusaka; (c) Equipment and related supplies installed at district level; (d) Inventory of non-expendable equipment	(a) Equipment in Washington by June 2002; (b) Equipment in Lusaka by August 2002; (c) Equipment installed by August 2002; (d) Inventory submitted to MOE by September 2002 (e) 2 nd computers distributed to districts by April '03	(a) Arrived by September 15 2002; (b) Arrived in Lusaka in December 2002; (c) Installed in December 2002; (d) Inventory completed January 2003 and maintained regularly thereafter. (e) Distribution of 2 nd computer completed in June '03
<p>Activity 9. Major activity for this task was completed in the 2nd quarter '03.</p>				

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
10. Create stronger links between ED*ASSIST and support agencies	Various sources of data being captured within ED*ASSIST	(a) Departments other than the Planning Unit utilizing ED*ASSIST; (b) Definition of common numbering scheme for all schools linked to school mapping data	(a) Personnel and accounting units “plugged in” to ED*ASSIST to the extent necessary and possible; (b) School mapping data linked by June 2003	(a) Preparatory meetings have been held with Personnel (b) Completed as scheduled
<p>Activity 10. Collaboration among development projects leverages funds, eliminates redundancy, and increased effectiveness. Additional meetings are being held with Personnel department to plan for the development of a training database and registry database that would tie in with the ED*Assist system. School mapping data has been made available and is currently being used with Arcview 8. The program supported the completion of the school mapping report and submission to the Permanent Secretary. Training staff to produce maps on demand is planned for the 1st quarter '04.</p>				
11. Complete information organization/cleaning	Data readily available for dissemination	Routine requests for information disseminated through readily available reports	Cleaning completed by September 2003	2003 data entry is still underway and planned for completion and cleaning in the 4 th quarter '03.
<p>Activity 11. These exercises remove inaccuracies from the databases and make information more reliable for reporting. Although the initial phase was completed in the 4th quarter of 2002, this effort is a continuing activity throughout the life of the program.</p>				

2. Highlights

ED*Assist Software and Related Developments

1. Technical support was provided to staff of the Ministry of Education (MOE) in support of their entry of data from the 2003 Annual School Census Questionnaire into the Ed*Assist Education Management Information System (EMIS). Data entry was completed for data other than teacher data on October 20, and entry of the teacher data was completed on December 1. The response rates for the 2003 Annual School Census were as follows: Basic Schools: 93% (4332 out of 4662 schools); Secondary Schools: 89% (315 out of 353 schools); Community Schools: 61% (1086 out of 1793 schools). Because of the low response rates, it was decided to impute values for nonresponding schools using data from schools that responded in 2002 but not in 2003. The percentage of responders plus imputees is as follows: Basic Schools: 98% (4580 out of 4662 schools); Secondary Schools: 97% (344 out of 353 schools) (imputation was not possible for Community Schools, since they were not included in Ed*Assist in 2002).
2. A “Data Dissemination Module” (DDM) program was prepared to produce automated reports for the 2003 Census data. The 2003 DDM contained all of the reports included in the 2002 DDM, plus a few more, such as a “Completion-Rate” report. Hard-copy reports were provided to USAID on

November 10, for all of the programmatic indicators of interest to USAID. Revised and additional reports on November 24. A complete set of hard-copy reports was submitted to the Director of the Ministry of Education's Planning Directorate on November 24, for all reports contained in the 2003 DDM.

3. A compact disk (CD) was prepared that contained the DDM for 2003, as well as the DDMs for previous years (2000-2001 and 2002). Copies of this CD were made and distributed to all parties of interest (MOE Headquarters offices, provincial and district education offices, USAID, other Zambia agencies, and donor agencies).
4. A "school profile" report was prepared for each school in the nation (listed in the Ed*Assist database), and distributed to the schools. The school profile report contains a one-page summary of all the data provided in the Annual School Census Questionnaire.
5. Reports were prepared from the Ed*Assist system for a variety of requestors.
6. Organizational and Program Linkages: The project supported and assisted in the facilitation of an EMIS briefing session for the cooperating partners working with the Ministry and Provincial Education Officers (PEO) from all nine provinces. The objective of the briefing was to raise awareness of the Ministry's EMIS programme as well as to promote the Ministry's capacity to facilitate in-house training. The briefing session was co-hosted by the Ministry and USAID in October.

TASK 2 - Capacity Building

1. Progress on Indicators

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
1. Inclusion of staff outside of pilot provinces in EMIS training	Staff identified in other provinces to participate in pilot programme	Participation in EMIS training by staff from Northern and Western provinces.	(a) Identify and invite 5 staff each from Northern and Western provinces; (b) 5 staff from each province participates in EMIS platform training	(a) Provinces notified in May 2002 and staff invited in September 2002. Official plans made in December 2002 to begin in January 2003 (b) 6 Staff completed the training programme
<p>Activity 1. Training activities are building capacity among staff whose provinces are not yet participating in the EMIS pilot. This training will help staff in Northern and Western Provinces carryout decentralization activities currently being undertaken. 6 staff from Northern and Western combined, completed the training programme. The ministry will be funding a second phase of training for 4 additional provinces. These provinces will be Northern, Western, Northwestern and Luapula. The target number of staff to be trained is 80.</p>				
2. Participation in educational workshops	Staff sent to educational workshops	Trip reports	3	2
<p>Activity 2. Educational workshops facilitate the sharing of ideas and research across national lines. There were no MOE staff sent to workshops in the quarter.</p>				
3. Provide improved information technology in MOE Headquarters	Procurement and installation of network, computer, and related equipment	(a) New IT equipment in MOE headquarters (b) Functioning network (c) 2 nd computers distributed after the completion of training programme	(a) August 2002 (b) Jan 2003 (c) April 2003	(a) IT equipment installed at MOE HQ in mid-December 2002. (b) Network configured and stable. (c) Completed as scheduled (d) IT Assessment complete

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
<p>Activity 3. Major technical network problems have been solved, however minor configuration issues are still being looked into with the service and support contractor, ASC, and the Internet Service Provider (ISP), CopperNet Solutions. An IT assessment was conducted by a team led by an external Canadian expert in networking, communication and operating system technologies and a local expert who understands the telecommunication and connectivity services in Zambia. The team also included members drawn from the Directorate of Planning and Information, the ECZ, and the Information Communication Technology (ICT) Steering Committee.</p>				
<p>4. Provide improved information technology in Eastern and Southern Provinces</p>	<p>Procurement and installation of computer and related equipment</p>	<p>(a) New IT equipment in Eastern and Southern districts and provinces (b) second computer distributed</p>	<p>(a) Phase one distributions August 2002 (b) Phase two distribution April 2003</p>	<p>(a) Completed January 2003 (b) Completed June 2003 (c) maintenance support continues in Eastern Province</p>
<p>Activity 4. Eastern Province continues to benefit from the maintenance contract established between the MOE and Instant Systems that is based in Chipata. Few problems are experienced with the hardware and staff are able to get answers to basic hardware and software questions when the technical expert visits every quarter.</p>				
<p>5. Provide policy/managerial level training</p>	<p>Managers in the MOE have been trained</p>	<p>Adoption of EMIS related policy which addresses various areas of usage and management</p>	<p>Planned managerial EMIS Training</p>	<p>Senior staff were provided with computer training</p>
<p>Activity 5. Senior staff were provided with computer training and introduction in the use of ED*Assist. The exercise provided a valuable opportunity to present the resources available to the senior staff of the Ministry through its IT infrastructure.</p>				
<p>6. Conduct training needs analysis</p>	<p>Produce training programme</p>	<p>Trip reports from Southern and Eastern province</p>	<p>April 2002</p>	<p>April 2002</p>
<p>Activity 6. Completed in first quarter 2002.</p>				
<p>7. Provide EMIS and technical training to headquarters staff</p>	<p>Evidence of major training having been completed</p>	<p>Staff registration records from training</p>	<p>Provide 5 weeks of training to 10 staff</p>	<p>40 Secretarial staff provided 3 days of training</p>
<p>Activity 7. Upon the completion of training for the pilot provinces and because continued major training had not been organized by the ministry, a three day training course was provided to 20 additional secretarial staff. The programme covered topics as MS Outlook, File Management, E-mail, Internet Searching, and EMIS. The participants list is attached.</p>				

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
8. Provide EMIS and technical training to Provincial and District staff	Evidence of major training having been completed	Staff registration records from training	Provide 5 weeks of training to 77 staff	69 individuals were trained and training ended in June 2003
<p>Activity 8. Commenced in January 2003 and will continue through June 2003 such that all staff in training received five weeks in a rotating schedule. The training facility has been equipped with new computers procured by the ministry in order to offer continued training to other provinces and HQ staff. The Human Resources department has been having discussions with UNZA to continue the facilitation of trainers for the training programme. No agreement has been reached although the Permanent Secretary strongly wants training to continue and expand. Final arrangements have been made to conduct a second EMIS training programme beginning in Jan '04.</p>				
9. Provide advanced technical training to headquarters staff	Evidence of major training having been completed	(a) Identification of relevant courses (b) Course registration records	3 staff from HQ and 1 from ECZ	4 staff sent to SA in between the 1 st and 2 nd quarter '03.
<p>Activity 9. This activity could not be effectively acted upon until the MOE hired three key IT staff for the planning unit, as part of the restructuring effort. This occurred in January 2003, at which point planning and registration began. At the end of the 1st quarter the Systems Development Manager, Mr. K. Kalala, and the Senior Network Engineer, Mr. S. Muyunda were sent to South Africa for advanced network management training. Ms. Beatrice Mugwagwa and Mr. Charles Ndakala were also sent to South Africa for Advanced IT training at the end of March 2003. 4 staff were sent to South Africa for technical training, which focused on Networking, VBA, SQL, and Access. Because two of those sent to SA are no longer working for the Ministry Mr. Bupe Musonda, the Snr. Statistician was sent for advanced training in Access. It will be necessary to identify two additional individuals to fill the gap as Network Administrator. Once identified they will need to be sent for training.</p>				
10. Develop and or provide for on-the-job training, job aids, self-instructional modules, workshops, study tours, and specialized in-country and third-country training.	Number of training materials and training opportunities made available to Planning Unit, Eastern and Southern Provincial Office staff	(a) Training materials; (b) Course registration records; (c) Trip reports (d) Workshop records	(a) 13 manuals (b) 5 weeks of attendance	(a) 11 manuals (b) Training completed in June '03
<p>Activity 10. Drake Warrick prepared extensive training materials to address Zambia's specific EMIS needs based upon the needs assessment. The training materials are continually being adjusted to ensure that they are appropriate for the level of training being delivered and the audience.</p>				
11. Provide technical assistance to improve the Ministry's capacity to obtain, manage, report and use data regarding the impact of HIV/AIDS on basic education.	Inclusion of questions related to HIV/AIDS in annual school census	Analysis of results from census exercise	(a) Revised survey questions for 2004 (b) Have HIV/AIDS data on record in case it is needed	(a) Survey questions revised for 2004

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
Activity 11. The annual school census forms now capture more specific data related to HIV/AIDS. These questions include causes of death for teachers, teacher absenteeism, number of student deaths, and student orphan-hood. In collaboration with the HIV/AIDS component of the Ministry, the EMIS programme will identify further indicators that can be included in the EMIS system for annual reporting purposes.				

2. Highlights

Training

Senior staff were provided with computer training and introduction in the use of ED*Assist. The exercise provided a valuable opportunity to present the resources available to the senior staff of the Ministry through its IT infrastructure.

Network Capacity at MOE Headquarters

The installation of a mast tower at the Lusaka PEO and a mounting pole at EBS were completed.

The MoE senior staff asked what would be required to expand the network to the eight other PEOs and, where feasible, to the District Education Offices (DEOs). The ministry feels this expansion will greatly improve the quality and speed of information from the regional offices and would provide cost savings. To prepare for this expansion, the project coordinated an analysis of the Ministry's networks current capabilities and a review of the options available to expand the network to the provinces and districts. The stated objectives of the report were to:

1. Assess the current IT capacity of the ministry, its current strengths and weaknesses.
2. Consider reasonable software options to ensure a stable, reasonably priced, multi-desktop, internal network.
3. Conduct connectivity assessments of two Provincial Education Offices, one along the line of rail and one outside established IT infrastructure.
4. Recommend solutions to meet the ministry's network expansion requirements.
5. Identify appropriate and workable solutions in varying geographical, topographical and level of connectivity penetration areas. Solutions should include both data and voice options.
6. Define specifications and requirements to also cover extension to the districts.¹

The assessment was conducted by a team led by an external Canadian expert in networking, communication and operating system technologies and a local expert who understands the telecommunication and connectivity services in Zambia. The team also included members drawn from the Directorate of Planning and Information, the ECZ, and the Information Communication Technology (ICT) Steering Committee.

¹ Objectives are from AED Consultant Work Order No. (303-01-01)

The team met with the ICT Steering Committee to clarify the objectives and the members were provided with reports and memos relating to the ministry's plans. The team then visited Provinces and Districts and interviewed members from the following areas within the ministry in order to collect information for the assessment:

- The Ministry headquarters.
- The Examinations Council of Zambia.
- The Curriculum Development Centre.
- The Teacher Education Department.
- The Education Broadcasting Service.
- Five Provincial Education Offices.
- Five District Education Offices.
- Two Teacher Training Colleges.
- One Teacher Resource Centre.

The team also met with representatives from USAID, Internet service providers, companies offering IT services, computer equipment vendors, and Zamtel, the main telephone access company. The complete report was submitted separately.

TASK 3 - Assessment

1. Progress on Indicators

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
1. Enhance the capacity of Examinations Council personnel in competency test development, implementation, and use.	Develop a grade 4 test development workplan and present workshop training	(a) Final test available in January for use in IRI centers (b) Pilot report and review documents (c) Workshop for ECZ staff	(a) Mid-January (b) April 2003 (c) March 2003	(a) Completed as planned (b) Documents completed in June (c) completed in June '03
Activity 1. Activity on this task was completed in July '03. It is planned that additional technical assistance will be provided in the 1 st quarter '04.				

2. Highlights

TASK 4 - Community Data Collection and Use

1. Progress on Indicators

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
1. Help communities identify information needs, collect such information, and use it to improve the quality of education overall.	Development of community data resources under EMIS platform	Task force meetings and minutes	December 2003	Meetings not completed
Activity 1. No activity in this quarter. Meetings are required with MOE to determine the best plan of action in this area.				
2. Harmonize data points so that efforts of data collection are included in the EMIS reporting framework.	Collaborate with implementing partners to harmonize community data collection efforts	Report of aggregate community data from all implementing partners, including the MOE Planning Unit	December 2003	Review completed
Activity 2. A consultant carried out the activities outlined in the workplan. The EMIS Programme Assistant worked closely with the consultant to coordinate and organize the activities and deliverables. The findings report is attached for review.				
3. Focus on data regarding HIV/AIDS	Ensure inclusion of HIV/AIDS data in community data collection and organization effort	Development of indicators on HIV/AIDS	December 2003	Partially complete March 2003
Activity 3. Included in the redesign of the 2004 school census questionnaire. Questions related to HIV/AIDS were revised and some added. This is in an effort to further incorporate the ability to report on relevant factors impacting education in this area.				

2. Highlights

Planning

Activities for this task were completed in the 2nd quarter '03.

TASK 5 - MOE and USAID Monitoring Requirements

1. Progress on Indicators

Activity	Indicator	Means of Verification	Target	Actual as of 12/03
1. Assist USAID in collecting, collating, analyzing, and presenting data required for SO2 management and reporting for USAID/Zambia's Results Review and Resource Request annually	Provision of reports to USAID/Zambia on request	(a) Report on five Strategic Objective indicators (b) Meet USAID ad-hoc data requirements	(a) September 2003, (b) As needed	(a) Provided (b) As needed
Activity 1. A project profile, which is requested by USAID/Zambia annually, was provided.				
2. Provide information on project progress to USAID/Zambia	Open and timely communication with USAID/Zambia	Quarterly reports and annual summaries	(a) 2003 4 th quarter report submitted in Jan (b) Annual summary every Jan as part of fourth quarter report	Produced and submitted in Nov '03
Activity 2. The project is "on track" with reporting and all reports are submitted in a timely fashion.				
3. Provide financial information on project to USAID/Zambia	Accounting for expenses to USAID/Zambia in a timely fashion	Quarterly reports and annual summaries	(a) Quarterly reports submitted every fourth calendar month (b) Annual summary every Jan as part of fourth quarter report	Financial statements are included in every quarterly report and as requested.
Activity 3. We have provided, and will continue to provide, statements of financial activities.				

2. Highlights

Routine activity in this area is attended to as planned and requested.

PROGRAMME ADMINISTRATION

Meetings

- Routine Chief of Party meetings with USAID/Zambia.
- Ministry meetings as required and quarterly briefing with PS.

In-Country Staff

- The programme has continued to employ John Kaumba as a Network Administrator to help supervise the network expansion work. Alex Mwila continues to work as the Programme Accountant. Betty Nalungwe continues as the Programme Assistant. Gibson Muparadzi continues as the Programme Driver.

Quarterly Travel

- IT consultant, Mr. Mark Donner, visited and participated in the IT assessment and requirements analysis.

Staff Leave

- Mr. Warrick took leave from 24 November 2003 to 28 November 2003.
- Dr. George Caldwell took leave from 11 December 2003 to 3 January 2004.

CHALLENGES AND LESSONS LEARNED

Software Dynamics

The Snr. EMIS Specialist, working with ministry staff and AED Washington experts, continue to enhance and expand the ED*Assist system.

2003 Data Entry

The 2003 data entry programme faced many challenges. The introduction of new staff and the low response rate presented several problems. It was not until the end of November that data entry was complete for 2003 for teacher details. It is hoped that the 2004 exercise will be more organized and that efforts to complete the programme in a timely and efficient manner will be achieved.

2004 Annual School Census Questionnaire

Major effort has been made in the development of a single questionnaire for all educational levels. Extensive discussions have been held with ministry staff and amongst the EMIS Advisors on the pros and cons of going in such a direction. The ministry has given its position that it wants to use a single questionnaire. Following a thorough pilot test it is felt that the new questionnaire will pose very little problem to new school levels in completing. It is hoped that the effort will pave the way for the development of a single database as well.

Computer Equipment and Network Expansion

Equipment problems with EMIS related hardware are not as numerous as in previous quarters. The completion of the IT report on the Ministry has brought to light serious issues related to financial and human capacity to expand the MOE's network infrastructure. Down time of the MOE network gateway raised the issue of technical support from quality of the ISP. Switching to the back-up connection was not as efficient and convenient as it should have been and reverting back to the main radio presented unforeseen problems.

EMIS Awareness

It has been brought to light that the level of awareness of the EMIS related resources of the MOE needs to be heightened. Many users are unaware of the type of resources and information available to them. This is not only for Lusaka based staff, but also those in the provincial capitals and districts. The "Just ASC" flyers were a step in the direction of informing all staff of what's available. Much more work needs to be done in this area. The MOE and Cooperating Partner briefing was another attempt to inform MOE staff and interested parties outside of the Ministry on the current status of EMIS related activities

ANTICIPATED ACTIVITIES IN NEXT QUARTER

Software Development

Continued production of standard reports for the ED*Assist program. The development of a new teacher data entry screen for the IDEA module.

Annual School Census

Distribution of the school questionnaire and training of school representatives on completing the form correctly.

Networking MOE Headquarters and Satellite Offices

Connection of Educational Broadcasting Services (EBS), and Lusaka Provincial Education Office (PEO) to the MOE network infrastructure.

Training

Identification of 2 additional HQ staff who will be sent for advanced training for network administration. There is currently no planned training during the 4th quarter.

GIS

There will be Arcview training provided to Directorate of Planning and Information staff on how to produce maps directly from ED*Assist data.

Task 3 – Assessment TA with ECZ

Activities in this area have been completed. However, as part of the no-cost extension short-term technical assistance will be provided in the area of continuous assessment.

Task 4 – Community Data Collection and Use

Advisory meetings are to be held with MOE staff to determine the way forward in this area of support.

Travel

Field visit are planned as part of the monitoring program of the national school census training.

APPENDICES

Appendix A — Programme Description

In 1999, Zambia's Ministry of Education (MOE) launched its sector reform programme, the Basic Education Sub-Sector Investment Programme (BESSIP) for the period 1999–2006. The main objectives for BESSIP are to increase enrollment rates and improve learning achievement at the primary school level by enhancing ongoing programmes and developing new ones.

As a part of BESSIP, the EMIS project began its work in January 2002 to improve capabilities of the MOE to collect, organize, process, store, share, and disseminate education information for informed planning and management of education at all levels. To do so, the project focuses on five tasks:

- Task 1: Education Management Information System (EMIS)
- Task 2: Capacity Building
- Task 3: Assessment
- Task 4: Community Data Collection & Use
- Task 5: MOE and USAID Monitoring Requirements

Through these tasks, the project will build the capacity of the MOE to obtain, manage, report, use, and/or demand good information for good decision-making, help establish an EMIS platform that provides the MOE at all levels with access to that information, and enable the MOE to use real data to plan and to project needs and resource requirements within the MOE.

Appendix B — Purpose of Quarterly Report

This quarterly report summarizes the project's progress in relation to agreed upon milestones. During the current quarter, activities have been completed, task implementations have been planned, and decisions have been made to:

1. Expand the Ministry's Information Technology (IT) infrastructure and communication capacity,
2. Provide sustainable capacity building training to Eastern and Southern provinces as well as the Ministry as a whole,
3. Improve the assessment capacity of the Ministry through the Exams Council of Zambia (ECZ),
4. Further develop the ED*ASSIST system, and
5. Meet the reporting and monitoring obligations of the MOE and USAID.

Appendix C — Quarterly Financial Report (October to December 2003)

Zambia EMIS

Quarterly expenses
October-December 2003

	Accrued as of September 30, 2003	October	November	December	Fourth quarter total	Project to date total
LABOR	\$1,379,642.29	\$24,018.21	\$151,353.20	\$88,539.06	\$263,910.47	\$1,643,552.76
ODC's	\$930,829.41	\$12,167.91	\$32,228.53	\$18,798.82	\$63,195.26	\$994,024.67
Total Expenditures	\$2,310,471.70	\$36,186.12	\$183,581.73	\$107,337.88	\$327,105.73	\$2,637,577.43

Appendix D — Project Literature to Date

Applied Education Management Information Systems (EMIS) for Effective Decision-Making: The ED*ASSIST Approach. *The Academy of Educational Development (AED) for the Zambia Ministry of Education: Washington, DC.* July 31-August 11, 2000.

Applied Educational Management Information System for Effective Decision-Making: EMIS Concept Paper, 2nd Draft. Finance and Projects, Planning Unit, Zambia Ministry of Education. September 2000.

Report on EMIS Situational Analysis and Statistical Support. American Institutes for Research (AIR) and The Academy for Educational Development (AED) for the Zambia Ministry of Education. December 2000, revised January 2001.

Statement of Work (SOW): Development and Implementation of a Zambian Education Management Information System (EMIS) and Related Capacity Building Activities. June 26, 2001.

Revised Budget Plan: Pricing Notes & ODC Justification. American Institutes for Research. November 9, 2001.

2000 Programme Performance Indicators: Basic Education Sub Sector Investment Programme (BESSIP). The Academy for Education Development, System Services Center for the Zambia Ministry of Education. November 30, 2001.

Scope of Work for Corinne Calfee. American Institutes for Research. March 15, 2002.

Trip Report: Readiness Assessment of Southern Province, Livingstone District, and Kolomo District Offices. R. Drake Warrick, J. George Caldwell, and Corinne Calfee. March 26, 2002.

Trip Report: Corinne Calfee. American Institutes for Research. April 9, 2002.

Scope of Work for Diane Garavaglia. American Institutes for Research. April 11, 2002.

Inception Report

R. Drake Warrick and Corinne Calfee. American Institutes for Research. June 2002.

Technical Assistance Programme Plan for Examinations Council of Zambia.

Diane Garavaglia, American Institutes for Research, August 2000

EMIS and Related Activities Mid-term Assessment,
*Glory Makwati (ADEA), Mpongo Malyenkuku (Consultant), Emmy Mbozi (UNZA),
Tegegn Wako (ADEA)*

ECZ Grade 4 Assessment Pilot Test Report

William Kapambwe, ECZ: May 2003

ECZ Grade 4 Assessment Pilot Test Report – Document Review

Garavaglia, American Institutes for Research, June 2003

International Conference on Assessment – Conference Report
Conference Secretariat, ECZ June 2003

Trip Report from Kurt Moses, AED
June 2003

Task 4 Initial Findings Report
Ms. Malyenkuku, Consultant, June 2003

EMIS Joint Briefing for MOE and Cooperating Partners – Summary
Mr. Warrick, October 2003

EMIS/ED* Assist Utilization Memo – Eastern and Southern Province
Mr. Warrick and Dr. Caldwell, November 2003

Assessment of Current IT Capabilities and Connectivity Assessments of Provincial and District Offices
Mark Donner and Shuller Habeenzu, December 2003

EMIS Achievements – Internal Summary
Jen Anderson and Betty Nalungwe, January 2004

Trip Report from Jen Anderson, AIR
February 2004

SUMMARY: Suggestions For Continuing the Process, ECZ
Dr. Jane Schubert and Dr. Paul Williams, February 2004

Appendix E – MOE and Cooperating Partner EMIS Briefing

Memo

To: Dr. L. Musonda, A/Director – Directorate of Planning and Information

From: Mr. R. Drake Warrick, Chief of Party and Sr. Technical Advisor - EMIS

CC: Mrs. B. Chilangwa, Permanent Secretary
Mr. Katundu, Chief Planning Officer
Mr. C. Ndakala, A/Systems Development Manager
Mr. R. Henning, Education Officer- USAID
Dr. G. Caldwell, Sr. EMIS Specialist

Date: 7-Oct-03

Re: EMIS Briefing for PEOs and Donor Community...

In an effort to raise awareness of the Ministry's EMIS programme, I would like to suggest a briefing meeting for Directors of each MOE organizational unit, all PEO's and all of the Ministry's Cooperating partners. Such a meeting will serve to meet three main goals. Firstly for the Ministry's Directors and Provincial officials, it will allow headquarters to present data that is available for use in this years budget exercise. We will also have the opportunity to inform the Directors and PEOs on the process for requesting information and how they can also utilize the ED*Assist system from CDs that we can distribute. Secondly, for the Donor community, the meeting gives the Ministry the opportunity to present the Ministry's system for collecting, managing and disseminating statistical data. We will be able to highlight the infrastructure and procedures that have been established to support a sustainable way forward. Thirdly, and possibly most important, the meeting allows for a general discussion on the Ministry's vision for the overall EMIS programme, and how Ministry staff and other interested parties can utilize Ministry data for planning and decision making purposes.

Let me also propose that this meeting be co-hosted by the Ministry and USAID/Zambia with a joint invitation going out from you and the USAID/Zambia Education Advisor, Dr. Henning. I will draft this invitation for you and Dr. Henning to consider. To give ample time for invitees to plan to attend the meeting I suggest the event take place on 30 October, 2003 at 09:00. I believe that having the event in the computer lab here at headquarters will also promote the capacity the Ministry has for facilitating in-house training. We can give some feedback on the training programmes we have provided and those that will begin soon.

It would be appropriate if the facilitators comprised members of the Planning and Information Directorate. Allow me to propose you as the Chair of this meeting and main facilitator. You could be supported by Mr. Bupe Musonda, and/or Ms. Beatrice Mugwagwa who can give a presentation of the ED*Assist system and discuss the availability of data. Mr. Charles Ndakala could present the infrastructure that has been put in place and bring attention to the 2004 Annual School Census and how the Ministry is making advances in collecting data from all levels of the education system. He could also highlight plans for conducting the national training of Basic,

Secondary, and Community school teachers, including IRI Centre mentors. Of course Dr. Caldwell and I would also participate on the panel during the open discussion you as Chair would facilitate. It can be during this open discussion that you can highlight the vision and the efforts to ensure that the EMIS programme is designed and implemented with manageability and sustainability in mind, and that the programme is tied directly to measurable indicators within the Ministry's five year strategic plan.

For your consideration, let me suggest the following agenda:

- 8:45 - 9:00: Arrival of invitees
- 9:00 – 9:30: Opening remarks and setting the stage
- 9:30 – 10:15: Presentation of ED*Assist
- 10:15 – 11:00: Presentation of Infrastructure, 2004 Annual School Census form, training programmes.
- 11:00 – 11:30 Presentation of vision and way forward
- 11:30 – 12:00 Open discussion and Q and A

Please let me know your thoughts on this proposal as soon as you can.

EMIS Briefing Session – Participants’ List

MOE Training Lab – Friday October 31, 2003

Name	Title	Province/Organization
Y.S. Mwansa	Provincial Ed. Officer	Central Province
V.A. Simpila	Provincial Ed. Officer	Luapula Province
V.M. Muyatwa	Provincial Ed. Officer	Western Province
B.C. Mwale	Provincial Ed. Officer	Northern Province
J.B. Chilaka	Provincial Ed. Officer	Eastern Province
T.M. Hangwa	Senior Planning Officer	Southern Province
B.D. Khulila	Provincial Education Standards Officer	Copperbelt Province
J.B. Muchelemba	Donor Rep.	CIDA-PSU
M. Christensen	Donor Rep.	DANIDA
M. Kwambwa	Donor Rep.	Ireland Embassy
E. Rossetti	Donor Rep.	European Commission
G. Daka	Donor Rep.	Netherlands Embassy
M. Fink-Nielsen	Donor Rep.	UNICEF
M. Banda	Donor Rep.	UNICEF
T. Zebroff	Donor Rep.	DFID
E. Graybill	Chief of Party	CHANGES
R. Arden	Donor Rep.	DFID
T. Karppinen	Donor Rep.	Embassy of Finland
K. S. Johanssen	Donor Rep.	Royal Norwegian Embassy
G. Caldwell	Snr. EMIS Specialist	EMIS- MOE
H. Siege	Donor Rep.	G.T.Z

Memo for File

Date: 8-Nov-03

Re: Summary of EMIS Briefing for PEOs and Donor Community...

On the 31st October The Planning and Information Directorate successfully co-hosted an EMIS briefing meeting. The target group was the PEOs from all nine provinces or their representatives. The invited guest also included cooperating partners. The list of those who attended is included in this memo for file. The event was the first step in an effort to raise awareness of the Ministry's EMIS programme.

The following is the agenda and brief observations taken:

9:00 – 9:30: Opening remarks and setting the stage – Mr. Warrick began the session by briefly noting the programme for the meeting and introducing the Director of Planning and Information, the Education Advisor for USAID, and individuals who were designated to give presentations.

9:30 – 10:15: Presentation of ED*Assist – Ms. Mugwagwa discussed the system that is used at the MOE to manage and disseminate information. She discussed the various parts of the ED*Assist, the QTS (school registry), IDEA (data entry), DDM (data reporting). Ms. Mugwagwa also demonstrated how the DDM is used to produce standard reports.

At the end of this particular presentation some questions were taken. The main question came from DFID and was related to the type of indicators reflected on the DDM interface. It was expressed that specific Donor related activities should not be singled out in the system and that the indicators should be those that the Ministry feels are the most important. This point was in reference to PAGE and SHN standing out prominently on the user interface and which are indicators specifically supported by USAID. Mr. Warrick and Dr. Caldwell discussed how the system could be modified so that no one Donor specific indicator was given preference. Following the discussion the two agreed that the interface could be updated so that such indicators would be placed under a general Special Programs drop-down list.

10:15 – 11:00: Presentation of Infrastructure, 2004 Annual School Census form, training programmes – Mr. Warrick began this segment on behalf of Mr. Ndakala, who was traveling at the time, by discussing the IT Infrastructure of the Ministry and training programmes that have been provided to staff. It was noted that the Ministry has an established wide-area-network with a broadband connection to the Internet. Mr. Warrick mentioned that the offices of HQ, ECZ, TED, CDC were currently connected and sharing e-mail and internet facilities. He also noted that EBS and the Lusaka PEO will soon be connected. It was mentioned that there is currently a consultant team performing a requirements analysis on the feasibility of extending IT connectivity to PEOs. In the area of training it was noted that staff in Eastern, Southern, Northern and Western have been provided with five weeks of training in computer literacy. The topics covered were PC basics, file management MS Word, MS Excel, Outlook, ED*Assist and Internet searching. Also, it was noted that 40 secretaries posted throughout the Ministry received a special three-day course covering file management, e-mail and internet searching. Advanced training for several staff in the Planning and Information Directorate had

been provided to ensure that capacity development could be assured and that more was planned. Also mentioned was the fact that a second phase of training would be provided started in Jan. This training would be for staff in Luapula, Northern, Northwestern and Western.

The second presentation was given by Mr. B. Musonda. He discussed Data collection, data dissemination and the 2004 annual school census exercise. He noted that the collection process for the 2003 exercise was not as good as it should have been and that this delayed the data entry programme, which in turn delayed the Ministry's ability to get current years data out in a timely fashion. He expressed the PEO and District office should make every effort to plan in advance for this activity. He noted that the 2004 census form had been modified and is now a single form for all education levels, basic, secondary, community and IRI centres.

Following the presentations questions were taken. Two main comment and suggestion came out, one from the donors and the other from the PEOs. The donors suggested that collection of the data could be improved if inspectors were sent to each school during the data collection phase and assisted with completing the form and at the same time conducted an inspection of the school. The PEOs commented that it would be helpful if greater investment could be made on the part of the Ministry to give additional funding to Provinces to carry out the data collection. The Director noted in response that this activity should not be considered a separate programme and that Provinces and Districts should plan to utilize funding already allocated in their budgets.

11:00 – 11:30 Presentation of vision and way forward – The Director of Planning and Information opened this session. He highlighted the plans that the Ministry has to build upon the work that has already been completed. He stressed that there is still work to be done in the area of capacity building and decentralization. Specifically he talked about ICT Policy and how it is needed in order to give direction to programmes and help in the management and strategic planning of an overall EMIS system. He noted that Capacity Building is critical to successfully implementing an EMIS system and that training programmes need to be put in place that will address the skill gaps the Ministry is faced with. Also, he mentioned that the training facility should be fully utilized in an effort to achieve this goal of having properly trained staff at the Ministry. He raised the importance of utilizing GIS information and that the Ministry would soon be getting a final report from the Mapping consultant and then hope to soon begin producing our own maps. Continued support of the EMIS programme was brought forward when the Director noted that EMIS activities will continue to be a part of the new programme supported by USAID. Additionally, the Director expressed that the Ministry wants to introduce ICT in schools for pedagogical purposes and that this effort is mandated as part to the five year strategic plan. Following the Director the Education Advisor for USAID/Zambia spoke and noted that the mission is committed to continuing its support of Education in Zambia through various programs at the Ministry of Education. He noted that in that area of EMIS he hope that continued support will build upon the successes that have already been made. He also echoed the sentiments of the Director by reiterating the fact that activities in the area of EMIS are not project specific and that they are apart of a programme with in the Ministry that should be fully supported by all cooperating partners.

11:30 – 12:00 Open discussion and Q and A – In the open session the participants were able to table various issues which the panel could then respond to. Some of the topics raised were:

- a) feedback needs to get back to the schools and the Provincial and District offices in a timely fashion after questionnaires are submitted.
- b) The Ministry should be looking at the indicators that are noted in the poverty reduction paper.
- c) There should be an effort to decentralize the skills and awareness of the importance of data.

- d) It should be assured that adult literacy and early childhood data is collected. This is in line with the EFA goals.
- e) Capacity building should be sustainable.
- f) There should be a costed plan for the EMIS and training programmes.
- g) It is of great importance that an ICT policy be developed.
- h) It would be useful for the Ministry to establish a help desk.

Appendix F – School Mapping Support

Memo

To: Dr. L. Musonda, A/Director – Directorate of Planning and Information
From: Mr. R. Drake Warrick, Chief of Party and Sr. Technical Advisor - EMIS
CC: Mr. Katundu, Chief Planning Officer
Mr. C. Ndakala, A/Systems Development Manager
Dr. G. Caldwell, Senior EMIS Specialist
Date: 7-Oct-03
Re: Support of School Mapping Exercise ...

This afternoon Dr. Caldwell and I met with the school mapping consultant, Mr. Gabriel Mushingi, to discuss how the EMIS programme might be able to support the efforts of the Ministry to complete this exercise. Our discussion was positive and we ended with a plan for Mr. Mushingi to deliver to the Ministry, maps and data that comply with the current contract by 3 November.

It was agreed that Mr. Mushingi will deliver the following:

1. 3 National maps. One map will represent basic school distribution, the second will show secondary school disbursement and the last will highlight the pupil teacher ratio.
2. 9 Provincial maps. Each provincial map will represent a different theme. The themes will be selected by Mr. Mushingi from the approved list agreed to by the Ministry.
3. 72 District maps. The nine themes will be divided between the 72 districts providing eight groupings for comparison.
4. Data CD. Mr. Mushingi will provide on CD all of the maps described above. In addition he will include all of the latitude and longitude coordinates, geographical boundaries, and geographical themes.

To support this effort the EMIS programme provided Mr. Mushingi with a CD-RW external drive and has committed printing facilities here at headquarters. Mr. Mushingi will bring maps to me or Dr. Caldwell for printing in color. If you have any questions regarding the above plan, please let me know.

Appendix G – 2004 Annual School Census Training Programme

2 June 2004

To: All Provincial Education Officers

Re: Training on compilation of the 2004 Annual School Census form.

Attn: Senior Planning Officer

The Planning and Information Directorate has organized a training programme for the 2004 Annual School Census exercise. Training will be conducted by staff from HQ who will be paired up with Statistical Officers from your respective Provinces. The target group to receive training are those individuals from every basic, secondary, and community schools, including IRI Centres, who are designated with the responsibility to complete the Annual School Census form.

The purpose of the training is twofold. First, it will bring together staff at all educational levels to learn about the revised questionnaire and how to complete the form with accurate information in a timely manner. Second, the training sessions will allow us to distribute the 2004 Annual School Census form to the school level thoroughly and efficiently.

Training will be conducted simultaneously in all Provinces. Training sessions will begin on **07/01/04** and end on **31/01/04**. The attached schedule will provide you with dates, sequence and the number of training session that will be required for every District.

Please provide transportation from 4th January up to the last date of training in your province. The Provincial Statistician assigned to participate in the training should come to Lusaka on the 4th of January with the provincial vehicle to attend training prior to the launch of the training programme and to pick-up questionnaires for your province.

Fuel to facilitate transportation from Lusaka and during training throughout your respective province has been budgeted for, and will be allocated to Headquarter's officers assigned to conduct training in your province.

District Training

The training will provide school staff with detailed information on how to complete the school questionnaire. **Given the start date for the training DEBS should make every effort to inform all schools of the training as soon as possible. DEBS should also make arrangements to secure the District Resource Centres as the venue for training.** If the location is to be different from the district resource center, then the training team should be informed in advance so that they can prepare accordingly. During the training questionnaires will be distributed to the participants from each school.

The number of training sessions required for each district is based on the number of schools, basic, secondary, community and IRI centres in the district. Each training session should have 50 participants or more if possible. Below is a table showing the number of training sessions to be completed for each District based on the number of Basic, Secondary, Community and IRI Centres in each. The table also indicates the training schedule to be followed. **Each training session will be 4 hours long. Morning session should begin at 8:00 hrs and afternoon session will begin at 13:00hrs.**

A) District Training

Northwestern	Total schools and IRI Centres	Number of training session	Training date
Solwezi	256	5	7/01 – 8/01
Kasempa	69	2	10/01
Mufumbwe	46	1	12/01
Kabompo	97	2	14/01
Zambezi	59	2	16/01
Chavuma	35	1	18/01
Mwinilunga	112	3	20/01 – 21/01
Sub-total	561	16	15 Days
Luapula			
Samfya	103	3	7/01 – 8/01
Mansa	135	3	10/01 – 11/01
Milenge	40	1	13/01
Mwense	63	2	15/01
Kawambwa	106	3	17/01 – 18/01
Nchelenge	52	1	20/01
Chiengi	39	1	21/01
Sub-total	513	14	16 Days
Northern			
Mpulungu	60	2	2/01
Mungwi	116	3	4/01
Mpika	233	5	7/01 – 9/01
Chinsali	135	3	11/01 – 12/01
Isoka	91	2	14/01
Nakonde	60	2	16/01
Kasama	155	3	18/01 – 19/01
Chilubi	66	2	23/01
Luwingu	112	2	21/01
Mporokoso	90	2	25/01
Kaputa	74	2	27/01
Mbala	112	3	30/01 – 31/01
Sub-total	1187	31	30 days

Lusaka			
Lusaka	349	7	7/01 – 10/01
Kafue	99	2	11/01
Chongwe	111	2	13/01
Luangwa	26	1	15/01
Sub-total	460	12	9 days
Central			
Mumbwa	87	2	7/01 – 8/01
Chibombo	129	3	10/01 – 11/01
Kabwe	41	1	13/01
Kapiri			
Mposhi	115	3	15/01 – 16/01
Mkushi	77	2	18/01 – 19/01
Serenje	96	2	21/01
Sub-total	483	13	15 days

Allowances and Distribution of Training Funds:

School staff who take part in District training will receive their allowances during the training sessions. The funds for this activity will be deposited to the District bank accounts and will be distributed by District accounting officers. School staff will receive lunch allowance of K50,000 and transportation reimbursement equaling K20,000. The training budget for this programme has been included for your interest.

The Provincial Education Officers and the District Education Board Secretaries are requested to support this programme as it will go a long way in improving the quality of data collection from all schools.

This information should be faxed to all DEBS. If you have any questions related to this exercise please feel free to contact my office at any time.

Dr. L. Musonda,
 Director of Planning and Information Directorate,
 For Permanent Secretary

Cc: All DEBS

Attn: Senior Planning Officers
 Community School Coordinators
 IRI Centre Coordinators

**Total Cost for Training Facilitators
and Transport**

166,416,560

B) District

Training

**Lunch and
Transportation
allowance**

Northwestern	No. of staff	Lunch rate	Transport rate	Total
Zambezi	59	50,000	20,000	4,130,000
Kabompo	97			6,790,000
Kasempa	69			4,830,000
Mwinilunga	112			7,840,000
Chavuma	35			2,450,000
Mufumbwe	46			3,220,000
Solwezi	256			17,920,000
Sub-total	674			47,180,000
Luapula				
Nchelenge	52	50,000	20,000	3,640,000
Kawambwa	106			7,420,000
Mansa	135			9,450,000
Samfya	103			7,210,000
Chiengi	39			2,730,000
Mwense	63			4,410,000
Milenge	40			2,800,000
Sub-total	538			37,660,000
Northern				
Chinsali	135	50,000	20,000	9,450,000
Isoka	91			6,370,000
Kasama	155			10,850,000
Mbala	112			7,840,000
Chilubi	66			4,620,000
Mporokoso	90			6,300,000
Mpika	233			16,310,000
Nakonde	60			4,200,000
Mungwi	116			8,120,000
Mpulungu	60			4,200,000
Luwingu	112			7,840,000
Kaputa	74			5,180,000
Sub-total	1304			91,280,000
Copperbelt				
Chililabombwe	54	50,000	20,000	3,780,000
Kalulushi	102			7,140,000
Kitwe	156			10,920,000
Luanshya	91			6,370,000
Ndola	211			14,770,000
Chingola	92			6,440,000
Mpongwe	90			6,300,000
Mufulira	72			5,040,000
Masaiti	73			5,110,000

Sub-total	1146			80,220,000
Western				
Senanga	95	50,000	20,000	6,650,000
Kaoma	151			10,570,000
Kalabo	104			7,280,000
Sesheke	73			5,110,000
Shangombo	84			5,880,000
Lukulu	80			5,600,000
Mongu	157			10,990,000
Sub-total	744			52,080,000
Southern				
Livingstone	55	50,000	20,000	3,850,000
Gwembe	55			3,850,000
Siavonga	66			4,620,000
Namwala	59			4,130,000
Kalomo	168			11,760,000
Choma	157			10,990,000
Kazungula	73			5,110,000
Monze	156			10,920,000
Mazabuka	116			8,120,000
Chikuni	39			2,730,000
ItezHITEZHI	21			1,470,000
Sinazongwe	84			5,880,000
Sub-total	1049			73,430,000
Eastern				
Lundazi	201	50,000	20,000	14,070,000
Chipata	206			14,420,000
Nyimba	64			4,480,000
Chadiza	62			4,340,000
Chama	88			6,160,000
Mambwe	53			3,710,000
Petauke	161			11,270,000
Katete	106			7,420,000
Sub-total	941			65,870,000
Lusaka				
Luangwa	26	50,000	20,000	1,820,000
Lusaka	349			24,430,000
Chongwe	111			7,770,000
Kafue	99			6,930,000
Sub-total	585			40,950,000
Central				
Kabwe	41	50,000	20,000	2,870,000
Serenje	96			6,720,000
Mumbwa	87			6,090,000
Kapiri Mposhi	115			8,050,000
Mkushi	77			5,390,000
Chibombo	129			9,030,000