United Nations Development Programme
United Nations Development Group Iraq Trust Fund





COMPLETION REPORT FOR PROJECT:

Summary

Participating UN Organisation:

UNESCO

Cluster:

Cluster B: Education and Culture

Project No. and Project Title:

B1-13: Educational Management Information System (EMIS) in Iraq

Project Location/Region/Province:

MoE and 23 Directorates of Education in 18 Governorates

Reporting Period:

11 November 2004 - 31 December 2006

Report Number:

5

Counterpart organisations / implementing partners:

MoE and UNICEF

Project cost:

US \$1,500,000

Abbreviations and acronyms:	Project Duration:
MoE: Ministry of Education.	11 November 2004 – 31 December 2006
DoE: Directorate of Education.	
MDGs: Millennium Development Goals.	Approval Date 11 th Nov-04
EMIS: Education Management Information	Start Date 11 th Nov-04
System.	End Date 30 th Jul-05
EFA: Education for All.	1 st Extension until 31 st Mar-06
WB: World Bank	2 nd Extension until 30 th Jun-06
NDS: National Development Strategy	3 rd Extension until 30 th Sep-06
LAN: Local Area Network.	4 th Extension until 31 st Dec-06
DGEP: Directorate General for Educational	
Planning	
DGCI: Directorate General for	
Communication and Information	

I. Purpose

Main objectives and outcomes expected as per approved Project/Programme/project document:

Development Goal:

To provide the basic IT infrastructure needed for MoE and DoEs and establish an Education Information Management System (EMIS). This is one of the high priority projects of the Ministry of Education as outlined in the new publication "Education in Iraq: Current Situation and New Perspectives".

The project was discussed in detail with senior Government officials during a workshop held in Beirut, Lebanon, at UNESCO's Regional Office and was later discussed and approved by the Director General for Planning of the Ministry of Education. It was also discussed in detail with UNICEF and other Agencies working on EMIS related issues with the Ministry of Education.

Main Objectives:

- Developing and customizing EMIS software for the MoE.
- Training staff and building the capacity of MoE and DoEs to utilize the newly established system.
- Decentralizing data entry of all school census forms at the DoEs.

Project Outcomes:

- Creating the basic infrastructure for decentralizing data entry and data processing to the central MoE and the DoEs at the Governorate level. These units will be equipped with servers, personal computers, printers, scanners, LAN accessories and electricity generators.
- Customizing and developing the basic software package for immediate use by the DoEs for entry of schools data and by the MoE to establish a computerized EMIS.
- Developing the capacity of technical and professional staff at the MoE and the DoEs to utilize the EMIS software.

Reference to how the programme/project related to the UN Assistance Strategy to Iraq and how it aimed to support Iraq national development goals and the Millennium Development Goals:

The Development Goal was to empower MoE and the Directorates of Education at the Governorate level to enter data, analyze results, develop educational indicators, solve educational problems, rationalize the use of resources and reduce inefficiencies in the education system.

The project related to the following UN and Iraqi Development Goals:

- EFA Goals: Progress towards better quality of education.
- NDS: National Development Strategy
- MDGs: Achieve universal primary education.
- NDS: Modernize the outdated education system.
- UN Assistance Strategy for Iraq (2005-2007): Support and inform policy development.

Project Management arrangements I: Organisation and Co-operation

UNICEF was the main international partner in this project. They assisted the MoE in printing and distributing of all school census forms used for the collection of data in 2004/2005 and 2005/2006, an important contribution that facilitated UNESCO's work.

UNESCO also sought the assistance of UNOPS for the provision of several services in the field, such as cash disbursements for the workshops organized in Baghdad, since UNESCO does not have a country office in Baghdad to perform the required tasks.

The capacity building programme, the development of training materials and the development of the EMIS software needed for the project were carried out through contracting experienced international consultants. The training was carried out partly in Baghdad and partly abroad in Jordan, Lebanon and Egypt.

Project Management Arrangements II: Procurement, Transportation and Monitoring

Supplies and equipment were procured through international bidding procedures via Headquarters and delivered through road transport. Commissioning and installation was carried out by contractors and sub contractors. (See Annex 3)

Most activities undertaken in Iraq were supervised by monitors hired by UNESCO to visit all sites within Iraq and submit progress reports on the various activities. Remaining activities continued under the direct supervision of the programme specialist and the management team.

II. Resources

Total approved budget and summary of resources used for the programme/project from the UNDG Iraq Trust Fund (and non-Trust Fund resources where applicable):

UNDG ITF funds received:

Total Project Budget US\$ 1,500,000.00

Total Commitment (end Dec 2006) US\$ 1,462,947.00 (97.53%)
Total Disbursement (end Dec 2006) US\$ 1,413,829.00 (94.26%)

Amount still available to the project as of December 31, 2006 is US\$ 37,053 (2.47% of total budget, see Annex 2 for further details)

In the final budget (Annex 2), it is indicated that major changes to Contracts budgeting were necessary since funds were not initially allocated for this item. During the project implementation it was found to be essential to sub-contract to companies and not only individual consultants, in order to facilitate the implementation of the project, particularly for the delivery mechanism, monitoring and procurement process.

For Project Assets see Annex 3

III. Results

An assessment of the extent to which the programme/project component / programme /project has achieved the outcomes and outputs expected

The establishment of a computerized Educational Management Information System (EMIS) has always been an important objective of many Ministries of Education in developing countries. The first World Conference on 'Education for All' in Jomtien, Thailand 1990, recommended the establishment of EMIS at the Ministries of Education. The purpose was to help countries analyze educational data and develop educational indicators that would help identify the strengths and weaknesses of the education system and assist in developing national plans to overcome deficiencies. The joint UN/WB Assessments listed this project as one of the priority projects for the MoE.

The present project was designed as Phase I. The main objective was defined to develop the basic infra-structure at the MoE as well as at each Directorate of Education in all Governorates needed to collect school census data from all schools, enter the data and consolidate it all data into one Iraq database. These processes were to be carried out using customized software designed specifically for MoE in Iraq.

All planned activities which focussed on:

- Establishing the infra-structure at MoE and all DoEs
- Ensuring that processes and responsibilities for key staff at MoE and all DoEs were fully implemented, thus enabling the Iraqi MoE to produce a timely, accurate and reliable educational database for all of Iraq and a sub-databases for each DoE.

These databases are the essential pre-requisites for producing the statistical information that is needed for national planning. A core team of Iraqi Programmers at MoE in Baghdad was trained to use the developed software and acted as trainers for DoE staff. This achievement makes Iraq as one of few countries in the Arab Region that possess such a system.

In addition to the achievements of Phase I, the project designed and implemented several activities that were supposed to be carried out in a second follow-up phase. These were techniques used to analyze educational data, produce statistical reports and develop educational indicators. A core team of educational planning and statistics staff at MoE in Baghdad were also trained to perform all these processes and to train other staff including DoE staff.

The clear advantage of having such a system at the MoE with trained staff is to enable Iraq to produce annual educational statistics and educational indicators a few months after collection of statistics for the first time. These results will be readily available and will enable Governorates and MoE to develop reliable educational plans and make rational decisions about the educational needs in disadvantaged areas and qualitative or quantitative disparities. The results will also address EFA and MDG objectives. The time taken to enter data and produce results during the second cycle will be much shorter than the first. When all DoEs are functioning properly under normal conditions it will take only weeks compared with previous practices that used to require at least 18 months.

Main activities undertaken and achievements/ impacts:

- Workshop conducted in Beirut for the Director-General of Planning and 5 officials from the respective Directorate to design and develop the school census forms.
- Technical Training for 2 programmers and system analysts was conducted in Beirut on various programming languages and tools.
- Two Training workshops on LAN Administration were organized in Baghdad and Alexandria for 50 LAN administrators at the MoE and DoEs.
- Training workshops were also organized for MoE and DoE staff on data entry and training of 5 key IT personnel on SQL Reporting.
- Training of 33 statisticians on EFA statistics organized in Dead Sea/Jordan during 1 – 13 April 2006 in collaboration with UNICEF.
- Training of 30 MoE and DoE high level officials on the Planning and Management of the Education Sector held in Amman from 15 27 April 2006.
- Installation of IT Equipment at MoE and DoEs and establishment of LANs at 22 out of 23 governorates.
- Training of a Core Team of 5 Officials from MoE on the management and maintenance of Microsoft SQL Server 2000, the database structure of the EMIS Software and the use of queries and Reporting Services to extract reports and output out of the database.
- Training workshop targeting 17 Statisticians from DoEs and the core team from MoE on the use of SPSS in the production of statistical reports and indicators from the EMIS database.
- Training workshop in Baghdad on the use of the SPSS Software for 21 Statisticians following the previous one in Amman and undertaken by MoE staff who were trained in Amman.

Implementation constraints, lessons learned from addressing these and knowledge gained from assessments, evaluations and studies that have taken place during the project:

The MoE and the DoEs have acquired adequate training to perform all the technical work needed to collect and enter data at decentralized level, to process data, analyze it and produce technical work.

However, the division of labour between the two DGs in relation to EMIS field offices, has resulted in a lack of coordination and cooperation between the DG of Communication and Information (established during the project) and various divisions of the MoE. Control and monitoring of EMIS related activities between the MoE and DoE ought to be institutionalized and better coordination must be established in order to develop a National Database.

The challenge now is for the MoE and DoE team to complete a full cycle of these activities. Sufficient practice needs to be sustained in order for the training to be effective and the acquired skills through training to be sustained.

Furthermore, MoE needs to establish a mechanism to ensure regular and periodic follow up of EMIS activities between central MoE and DoEs so as to ensure the establishment of a consolidated Database for data covering all Governorates.

Key partnerships and inter-agency collaboration, impact on results:

The key partners in this project are MoE and UNICEF with whom the project is jointly implemented and activities undertaken by each agency are closely inter-linked and complementary to each other. The Planning Unit of the Ministry of Education has been assigned the responsibility to organize the data collection and analysis at the governorate level.

An EMIS Coordination Group including UNICEF, UNESCO, USAID and WB is meeting on a regular basis in order to coordinate the efforts of all stakeholders working on the EMIS in Iraq. AN EMIS Matrix in which the main actions to be taken for establishing the EMIS are indicated, together with the responsible partner for each action has been developed and is regularly updated.

With regard to the impact on results, the EMIS project will contribute to the decentralization of the education sector through the empowerment of governorates. Each DoE will be fully equipped with relevant hardware and software and provided training for 2 technicians and 20 data entry staff.

Highlights and cross cutting issues pertinent to the results e.g. gender disaggregation, policy engagement and participation of the public:

DoE staff was given preliminary training to collect, enter and consolidate their data into a Governorate level database. They were also trained to perform reporting services and analysis of their own data and when able to do this efficiently, they will be achieving real decentralization. The impact of such skills will be reflected in addressing existing geographical disparities and addressing the issues of universalization of basic education,

raising enrolment rates and reducing gender disparities.

IV. Follow up actions and sustainability

Priority actions that should be supported/implemented following completion of project to build on achievements and partnerships rectify shortcomings encountered and use the lessons learned during the project with strong emphasis on achieving sustainability of the outcomes:

To ensure the sustainability of project outcomes, the MoE ought to take serious decisions to require ALL DoEs to complete the data entry process for 2004/2005 to establish the first educational database in Iraq. Subsequently, the collected data for the last academic year 2005/2006 and the current year 2006/2007 can be entered by updating the first database. Thus Iraq will have three consecutive years of data. The process of data entry for these two years will take only a fraction of the original time taken to establish the database for the year 2004/2005.

While this process is being completed, MoE should mobilize and coordinate the human resources who acquired the necessary skills through this project at the Central and to some extent Governorate level, produce educational indicators which can then be used to identify system problems. This will enable MoE and DoEs to develop strategies and address problems. Only then will the outcomes of the project be realized. This action will be a necessary first step towards the institutionalization and sustainability of the new system.

These efforts can be supported by follow up actions from UNESCO Iraq Office when the MoE trained personnel complete one cycle of the above mentioned processes; including the publication of annual educational statistics and education indicators for every Governorate and for all Governorates combined. Further training is needed at Governorate level in the analysis of data, report generation, development of indicators and development of educational plans to address identified educational problems or disparities. This type of training should be provided to a large number of persons when the working conditions at MoE and DoEs return to normal.

MoE staff will also need additional technical and advanced training on the developed EMIS software to enable them to modify the source code. Also, educational planning personnel will need further training in utilizing output of the EMIS system in developing educational plans and solving educational problems.

Another critical action needed for program sustainability is the functioning of an EMIS system. At present, there seems to be no clear definition of responsibilities and accountability system regarding the role of the key units at MoE who are in charge of EMIS activities, namely the DGEP and DGCI. Also there seems to be no clear responsibility and accountable relationship between these two units and the DoEs in the field. This requires a serious review to ensure compliance with EMIS schedules and operations. The absence of a clear division of labour and accountability was a major reason for observed delays in many project activities, especially the data entry and data validation activities at the DoEs and between DoEs and MoE.

Indication of major adjustments in the strategies, targets or key outcomes and outputs:

It was mentioned earlier that various Phase II activities were implemented during Phase I using surplus funds. Such actions facilitate the achievement of project outcomes when additional technical and capacity building activities are implemented.

Estimated Budget required:

It is difficult at this time to estimate the funds needed for the follow up actions until the DoEs determine the number of trainees who need the above-mentioned training. The cost will also depend on whether the training is carried out in Iraq or outside Iraq, as was the case in the present project. However, an initial estimate for the cost of a moderate training program is between \$ 300,000 and \$ 400,000.

It is recommended here that institutional and organizational issues related to EMIS functioning mentioned above in Section IV be addressed before a decision is made to develop follow up actions for this project.

Annex 1 Key Performance Indicators – Log Frame Matrix

Objectives	Measurable indicators	Means of verification	Outcomes
Assisting the central Ministry of Education (MoE) and the Directorates of Education (DoEs) in Iraq to improve the accessibility, relevance, quality and efficiency of education through the institutionalization of a system to support informed decision making. Develop EMIS at the MoE and empower MoE and the Directorates of Education (DoE) at the Governorate level to enter data, analyze results, develop educational indicators, solve educational problems, rationalize the use of resources and reduce inefficiencies in the education system	The establishment of an Educational Database at the MoE for use in educational planning, distribution of resources to all Governorates, identification of gender and regional disparities and other necessary indicators.	MoE receives from each DoE its database either electronically or on CDs. Educational Reports in the form of educational statistical tables and lists of educational indicators can be readily available when the database is analyzed at National, Governorate, district and subdistrict level.	The MoE and the DoEs in Iraq have been provided with a system capable of providing timely, accurate and reliable data to produce educational indicators needed to develop rational planning and solving major educational problems at national as well as subnational levels. General Educational indicators, including EFA indicators will be improved when the developed educational plans are implemented and issues of access and equity in Basic and General education will be addressed.

and the same of the second			
and thus achieve EFA goals and MDGs in both			
quantitative and			
qualitative terms.			
Immediate Objectives:			
Establish basic	The developed	Testing the proper	MoE and DoEs adopted the
infrastructure needed for	software was	functioning of the	specifically customized EMIS
data collection and data	tested and	developed	software.
processing as follows:	approved was	software.	
	used in entering		MoE and DoEs possess
Customize operational	captured data from all schools	Designing proper and relevant	operational infrastructure for
computer software for immediate use by the	in Iraq for the	workshops for the	processing data in a fraction of the time that they used to
MoE in Iraq.	year 2004-	required training	need.
Provide computers and	2005.	and enrol	need.
needed software to		adequate number	Capability exists now at the
MoE 21 DoEs	LANs were	of participants.	MoE and DoE to utilize the
	established at		customized software and
Train 48 local trainers	all 23 DoEs.	Testing trainees	process data in a timely
and prepare them to ensure the internal	Training was	and certifying that they have	manner.
training of MoE and	done for	acquired adequate	More trained staff were
directorates staff on data	technical and	skills.	provided with training than
entry	Educational		planned.
	planning staff at	Measuring time	
Enable DoEs to collect	MoE and DoEs.	needed to gather	Training from Phase II of the
school census data		and process data	project was done during this
starting in the year 2004/2005 and annually		using the EMIS software	phase, thus enabling staff to acquire necessary skills to
after that.		compared to that	analyze data and produce
		used previously by	reports and indicators.
		MoE staff.	·
Outputs:			
The best of contract	F	D. Z. P. d. d. d.	The Market Darket and
The basic infrastructure for decentralizing the	Forms	Periodic checking of the work done	The MoE and DoEs have
functions of data entry	developed for collecting data	by the trained staff	been enabled to produce timely, accurate reliable
and data processing has	from schools	at MoE and DoEs.	educational databases. These
been established at the	were being		databases are the essential
central MoE and the	distributed and	Use of specific	pre-requisites for producing
DoEs at the Governorate	collected data	software designed	the statistical information
level.	entered at the	to check the	needed for national planning.
A basic software	DoE level.	accuracy of entered data.	A core team of Iraqi
package was designed	Completion of	ontorou data.	Programmers and
for Iraq and developed	data entry at	Assess the degree	Planners/statisticians at MoE
for immediate use by the	DoEs and	to which	in Baghdad were trained to
DoEs for the entry of	verification of	participants in the	use the developed software
schools data as well as	data entry being	training activities	and acted as trainers for DoE
by the MoE to establish	done	acquire the	staff.
a computerized EMIS.	accurately.	required skills.	In addition to what was
The capacity of	Capability of technical Staff		supposed to be achieved in
Technical and	at MoE to		Phase I, the present project
professional staff of the	respond to		designed and implemented
MoE and the DoEs to	requests for		several activities that were
H - (42) 1 2 - (-2 - 4)	accompant frame	1	auppaged to be done in a
utilize and maintain the EMIS software was	support from DoE staff during		supposed to be done in a second follow-up phase.

developed.	data entry.	These activities were
		techniques used to analyze
	Completion of	educational data; produce
	data entry task	statistical reports develop
	in a few months	educational indicators.
	rather than	
	more than a	Annual educational statistics
	year.	and educational indicators can
		now be produced by MoE staff
		in a few months (or weeks)
		These results will be readily
		available and will enable
		Governorates and MoE to
		develop reliable educational
		plans and make rational
		decisions to addressed the
		educational needs of
		disadvantaged areas and
		address issues of qualitative
		and quantitative disparities,
		thus addressing the objectives
		of EFA and MDGs.

Annex 2 Project Costs

Category	UNDG ITF approved budget	Actual Cost	Percentage of Approved	Budget Revision approved	Percentag e of revision
1. Personnel including staff and consultants *	220,943	143,517.69	65%	146,619.00	98%
2. Contracts including companies, professional services and rants	0	154,500.00		155,064.82	100%
3. Training	91,185	176,982.46	194%	177,902.18	99%
4. Transport					
5. Supplies and commodities	70,300	8,300.00	12%	8,300.00	100%
6. Equipment	916,950	868,225.15	95%	869,950.00	100%
7. Travel	14,650	12,482.30	85%	13,185.00	95%
8. Security	18,972	3,611.00	19%	28,038.00	13%
9. Miscellaneous	92,000	28,321.09	31%	30,848.00	92%
10. Agency Management Support	75,000	67,008.04	89%	70,093.00	96%
Total Expenditure	1,500,000.00	1,465,490.32	98%	1,500,000.00	98%

^{* 2} International and 8 National staff members were used for this project

Annex 3 List of Contract (by procurement method)

#	Contractor (Supplier)	Contract No.	Brief description of Goods/Services	Total Amount (USD)	Goods/Services delivered to
1	ZAK Solutions for Computer Systems SafatKuwait	C1-13 – EMIS Computers	23 Servers, 470 PCs, 118 Printers, 2 UPSs, 46 Scanners, LAN Accessories	\$ 640,043	Ministry of Education – Iraq Central warehouse of MoE
2	ZAK Solutions for Computer Systems SafatKuwait	IRQ/CON/05/89	2 Servers, 40 PCs, 6 Printers, 42 UPSs, 4 Scanners	\$ 68,569	Ministry of Education – Iraq Central warehouse of MoE
3	Al-Mustafa Iraq Baghdad	IRQ/PO/05/151	Office Equipment (200 computer tables and 200 chairs)	\$ 12,600	Ministry of Education – Iraq Central warehouse of MoE
4	New Horizons Computer Learning Centers Alexandria Egypt	IRQ/PO/06/01	Microsoft Training on Network Administration	\$ 20,800	52 Officials from MoE and DoEs
5	New Horizons Ltd Baghdad Iraq	IRQ/PO/06/20 & IRQ/PO/06/21	Installation of PCs and Servers	\$ 20,950	MoE and DoEs
6	Compubase International Amman Jordan	IRQ/PO/06/44	Visual Studio and SQL Training	\$ 2,260	10 MoE Officials
7	Nahj Tech Co. Baghdad Iraq	IRQ/PO/06/065	Installation of PCs and Servers	\$ 18,000	9 DoEs
8	AlGaith Center Baghdadlraq	IRQ/PO/06/066& IRQ/PO/06/131	Installation of PCs and Servers	\$ 15,150	8 DoEs
9	New Tech. Co. Baghdad Iraq	IRQ/PO/06/069	Office Equipment (50 Computer Desks and 50 Chairs)	\$ 2,750	Ministry of Education – Central Warehouses – Baghdad Iraq
1 0	NahjTech. Leading Technology Baghdad Iraq	IRQ/PO/06/072	Local Area Network Training	\$ 13,000	52 Officials from MoE and DoEs
1	Al-Thakira for IT & Software Co. Ltd. Baghdad Iraq	IRQ/PO/06/124	VSAT Satellite Terminal	\$ 8,650	Ministry of Education – Baghdad Iraq

Output 1: The basic infrastructure for decentralizing the functions of data entry and data processing will be established at the central MoE and the DoEs at Governorate level. These units will be equipped with servers, personal computers, printers, scanners, LAN accessories and electricity generators.

Description of the Performance Indicators	Base Lines	Targets	Data / Information to be collected	When (should data /information be collected)	Methods of data / information collection	Responsible person (for data / information collection)	Comments (including 'why' collect this data)
PI 1.1.1 Provide MoE's General Directorate for Statistics and Planning (GDSP) and the General Directorate of Information Technology (GDIT) with Servers and Personal Computers.	00	GDSP and GDIT at the Ministry of Education (MoE)	1 Main Server for GDSP and 1 main server for GDIT 50 PCs for DGSP and 50 PCs for GDIT	Upon delivery of equipment from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI 1.1.2 Provide GDSP and GDIT with printers, scanners, UPSs consumables.	00	GDSP and GDIT at the Ministry of Education(MoE)	2 HP Laser jet 2430t Printers for GDSP and GDIT 2 HP Laser jet 1320 Printers 2 Deskjet Printers 100 UPS 500 VA 2 UPS 1500 VA 2 Scanners	Upon delivery of equipment from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI 1.1.3 ProvideGDSP and GDIT with LAN accessories and consumables.	00	GDSP and GDIT at the Ministry of Education(MoE)	2 Set of LAN accessories Toners for printers	Upon delivery of equipment from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI. 1.1.4 Provide 1 electricity generator to the MoE.	00	GDSP and GDIT at the Ministry of Education(MoE)	1 Generator for MoE	Upon delivery of generator from supplier	Observe generator when received and installed	Project Manager	Information to be used for progress reporting
PI 1.1.5 Installation of Hardware	00	GDSP and GDIT		When	Site visit and	Project	Information to

in the GDSP and GDIT.		at the Ministry of Education(MoE)	installation is completed	checking of installation	Manager	be used for progress reporting
PI 1.1.6 Installation of Software in the GDSP and GDIT.	00	GDSP and GDIT at the MoE	When software is completed and installed	Site visit and checking of installation	Project Manager	Information used for progress reporting

Output— 1: The basic infrastructure for decentralizing the functions of data entry and data processing will be established at the central MoE and the DoEs at the Governorate level. These units will be equipped with servers, personal computers, printers, scanners, LAN accessories electricity generators.

Description of the Performance Indicators	Base Lines	Targets	Data / Information to be collected	When (should data /information be collected)	Methods of data / information collection	Responsible person (for data / information collection)	Comments (including 'why' collect this data)
PI 1.2.1 Provide 23 DoEs at the Governorate level with servers and personal computers.	00	21 DoEs at the Governorate level	1 Main Server and 20 PCs for each DoE	Upon delivery of equipment from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI 1.2.2 Provide 23 DoEs at the Governorate level with printers, scanners, UPSs and consumables.	00	21 DoEs at the Governorate level	EACH DoE receives: 2 HP Laser jet 1320 Printers, 2 Deskjet Printers, 20 UPS 500 VA, 1 UPS 1500 VA -1 Scanner	Upon delivery of equipment from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI 1.2.3 Provide 23 DoEs at the Governorate level with LAN accessories and consumables.	00	21 DoEs at the Governorate level	Each DoE receives: 1 Set of LAN accessories Toners for printers	Upon delivery of equipment from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI. 1.2.4 Provide 1 electricity generator to the MoE.	00	4 DoEs at 4 Governorates	1 Generator each for 4 DoEs	Upon delivery of generators from supplier	Count items when received and installed	Project Manager	Information to be used for progress reporting
PI. 1.2.5 Installation of Hardware at the 23 DoEs.	00	21 DoEs at Governorate level		When installation is complete and software is completed and installed	Site visit and checking of installation	Project Manager	Information to be used for progress reporting
PI. 1.2.6 Installation of Software at the 23 DoEs.	00	21 DoEs at Governorate level		When installation is done and software is completed and installed	Site visit and checking of installation	Project Manager	Information to be used for progress reporting

Output— 2: A computerized EMIS package will be customized and developed for immediate use by the DoEs for the purpose of preserving schools data.

Description of the Performance Indicators	Base Lines	Targets	Data / Information to be collected	When (should data /information be collected)	Methods of data / information collection	Responsible person (for data / information collection)	Comments (including 'why' collect this data)
PI 2.1 Assist MoE to develop a codebook for statistical data	00	GDSP at MoE	Software developed and delivered	At beginning of project implementation	Obtain electronic copy of completed codebook	Project manager	Information to be used for progress reporting
PI 2.2 Assist MoE in developing new School data collection instruments for all types of schools and teacher training institutions	00	GDSP. at MoE	Forms prepared and printed	At beginning of project implementation	Obtain electronic copy of completed forms	Project manager	Information to be used for progress reporting
PI 2.3 Develop customized EMIS software for data entry and for production of reports and development of educational indicators.	00	GDSP, GDIT and 21 DoEs	Software developed and delivered	Software completed and tested	Obtain electronic copy of completed software	Project manager	Information to be used for progress reporting

Output – 3: Develop the capacity of Technical and professional staff of the MoE and the DoEs to utilize and maintain the EMIS software

Description of the Performance Indicators	Base Lines	Targets	Data / Information to be collected	When (should data /information be collected)	Methods of data / information collection	Responsible person (for data / information collection)	Comments (including 'why' collect this data)
PI 3.1.1 Training key staff from GDSP to develop coding system for statistical data and develop school census forms	00	5 GDSP staff at MoE	4 GDSP officials trained	At beginning of project	When workshops are being conducted	Project staff/Trainers	Information to be used for progress reporting
PI 3.1.2 Conduct training workshops for Key staff from GDIT and 2 staff from each DoE on "Dot Net" programming techniques and applications, utilization of the EMIS software and on networking and database management skills	00	5 GDIT staff at MoE 2 staff from each DoE	5 GDIT officials trained	When training is completed during project implementation	When workshops are being conducted	Project staff/Trainers	Information to be used for progress reporting
PI .3.1.3 Conduct a training of trainers for data entry and LAN Administration for GDIT staff and for 2 staff from each DoE	00	5 GDIT staff from MoE 2 staff from each DoE	4 from GDIT trained	After software is developed and installed at DoEs	When workshops are being conducted	Project staff/Trainers	Information to be used for progress reporting

Output – 4: Develop the capacity of Technical and Professional staff of the MoE and the DoEs to utilize and maintain the EMIS software

Description of the Performance Indicators	Base Lines	Targets	Data / Information to be collected	When (should data / information be collected)	Methods of data / information collection	Responsible person (for data / information collection)	Comments (including 'why' collect this data)
PI 3.2.1 Conduct training workshops for 20 data entry staff from each of the 23 DoEs to utilize the EMIS software and perform data entry.	00	20 data entry staff from each DoE	21 x20 data entry staff from the 23 DoEs	After software is developed and installed at DoEs	After software is developed and installed at DoEs	Project staff/Trainers	Information to be used for progress reporting
PI 3.2.2 Conduct Training workshops for staff of GDSP, GDIT and the 23 DoE in the utilization of the software and analysis of data and production of statistical reports.	00	Key staff from GDSP	4 staff from GDSP 5 staff from GDIT 1 person from each DoE	Towards the end of the project when samples of data are collected	After software is developed and installed at DoEs	Project staff/Trainers	Information to be used for progress reporting
PI 3.2.3 Conduct training workshops for 2 staff from each DoE on "Dot Net" programming techniques and applications, utilization of the EMIS software and on networking and database management skills	00	2 staff from each DoE	2x21 staff from DoEs	After software is developed and installed at DoEs	After software is developed and installed at DoEs	Project staff/Trainers	Information to be used for progress reporting

Data and Information Collection Sheet for M&E for Outputs: EMIS

Output – 1: Establish the basic infrastructure for decentralizing the functions of data entry, data processing and data analysis at the 23 Directorates of Education.

Description of the Performance Indicators	Planned (Targets)	Actual	Comments
PI 1.1.1 Provide MoE's General Directorate for Statistics and Planning (GDSP) and the General Directorate of Information Technology (GDIT) with Servers and Personal Computers.	Nov – Dec 2004	June 2005	
PI 1.1.2 Provide GDSP and GDIT with printers , scanners, UPSs and consumables.	Nov – Dec 2004	June – July 2005	
PI 1.1.3 Provide GDSP and GDIT with LAN accessories and consumables.	Nov – Dec 2004	June 2005	
PI. 1.1.4 Provide 1 electricity generator to the MoE.	Nov – Dec 2004	June 2005	
PI 1.1.5 Installation of Hardware in the GDSP and GDIT.	Nov – Dec 2004	May 2006	Distribution of Equipment to Governorates was delayed due to security situation in Iraq
PI 1.1.6 Installation of Software in the GDSP and GDIT.	March 2005	May 2006	Correction and debugging of software was delayed by programmers in Saudi Arabia

Data and Information Collection Sheet for M&E for Outputs: EMIS

Output – 1: Establish the basic infrastructure for decentralizing the functions of data entry, data processing and data analysis at the 23 Directorates of Education.

Description of the Performance Indicators	Planned (Targets)	Actual	Comments
PI 1.2.1 Provide 23 DoEs at the Governorate level with servers and personal computers.	Nov – Dec 2004	June 2005	
PI 1.2.2 Provide 23 DoEs at the Governorate level with printers, scanners, UPSs consumables.	Nov – Dec 2004	June – July 2005	
PI 1.2.3 Provide 23 DoEs at the Governorate level with LAN accessories and consumables.	Nov – Dec 2004	June 2005	
Pl. 1.2.4 Provide 4 electricity generator to 4 DoEs.	Nov – Dec 2004	June 2005	
PI. 1.2.5 Installation of Hardware at the 23 DoEs.	Nov – Dec 2004	May 2006	Distribution of Equipment to Governorates was delayed due to security situation in Iraq
PI 1.1.6 Installation of Software in the 23 DoEs.	Nov – Dec 2004	May 2006	Correction and debugging of software was delayed by programmers in Saudi Arabia

Data and Information Collection Sheet for M&E for Outputs: EMIS

Objective – 2: Customize operational computer software for immediate use by the MoE and the DoE for entry of schools data for establishing a computerized EMIS.

Description of the Performance Indicators	Planned (Targets)	Actual	Comments
PI 2.1 Assist MoE to develop a codebook for statistical data	Sept 2004	Oct 2004	
PI 2.2 Assist MoE in developing new School data collection instruments for all types of schools and teacher training institutions	Sept 2004	Oct 2004	
PI 2.3 Develop customized EMIS software for data entry and for production of reports and development of educational indicators.	Dec. 2004	March 2005 July 2006	In April 2006, MoE requested several revisions and corrections to be made on Software. Development was completed in July 2006

Data and Information Collection Sheet for M&E for Outputs: EMIS

Objective – 3: Develop the capacity of Technical and professional staff of the MoE and the DoEs to utilize and maintain the software

Description of the Performance Indicators	Planned (Targets)	Actual	Comments
PI 3.1.1 Training key staff from GDSP to develop coding system for statistical data and develop school census forms	Sept 2004	Oct 2004	
PI 3.1.2 Conduct training workshops for Key staff from GDIT and 2 staff from each DoE on "Dot Net" programming techniques and applications, utilization of the EMIS software and on networking and database management skills	Oct 2004 Jan 2005	Oct 2004 Jan 2005 Feb 2006 July, Aug. 2006	Additional training activities were organized due to changes in staff and addition of activities from Phase II
PI .3.1.3 Conduct a training of trainers for data entry and LAN Administration for GDIT staff and for 2 staff from each DoE	Dec 2004	Feb 2006 May 2006	Technical training was delayed awaiting the corrections to the software

Monitoring and Evaluation Plan for Outputs: EMIS

Output – 3: Develop the capacity of Technical and Professional staff of the MoE and the DoEs to utilize and maintain the EMIS software

Description of the Performance Indicators	Planned (Targets)	Actual	Comments
PI 3.2.1 Conduct training workshops for 20 data entry staff from each of the 23 DoEs to utilize the EMIS software and perform data entry.	Sept 2004	June 2006	Training was delayed in the DoEs due to security situation in Iraq
PI 3.2.2 Conduct Training workshops for staff of GDSP, GDIT and the 23 DoE in the utilization of the software and analysis of data and production of statistical reports.	Oct 2004 Jan 2005	July 2006	Technical training was delayed awaiting the corrections to the software.
PI 3.2.3 Conduct training workshops for 2 staff from each DoE on "Dot Net" programming techniques and applications, utilization of the EMIS software and on networking and database management skills.	Dec 2004	Oct. 2004 Jan. 2005 Feb 2006 May 2006	Additional training activities were organized due to changes in staff and addition of activities from Phase II of the project.

Output – 1: The basic infrastructure for decentralizing the functions of data entry and data processing will be established at the central MoE and the DoEs at the Governorate level. These units will be equipped with servers, personal computers, printers, scanners, LAN accessories and electricity generators.

Description of the Performance Indicators	Planned	Actual	Assess ment (A, B, C)	Reasons for Deviations	Corrective Action (Steering)	Responsib le person (for steering)	Comments (including 'why' steer)
PI 1.1.1 Provide MoE's General Directorate for Statistics and Planning (GDSP) and the General Directorate of Information Technology (GDIT) with Servers and Personal Computers.	2 servers + 100 PCs	All Equipment received	A	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI 1.1.2 Provide GDSP and GDIT with printers, scanners, UPSs and consumables.	4 HP Laser + 2 deskjet Printers+ 102 UPS+ 2 scanners	All Equipment received	A	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI 1.1.3 Provide GDSP and GDIT with LAN accessories and consumables.	2 sets of LAN accessories+ Toners for printers	All Equipment received	A	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI. 1.1.4 Provide 1 electricity generator to the MoE.	1 Generator for MoE	All Equipment received	A	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI 1.1.5 Installation of Hardware in the GDSP and GDIT.	All Hardware was in place as scheduled	All hardware was installed on time	А	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI 1.1.6 Installation of Software in the GDSP and GDIT.	Software was supposed to be completed and installed before July 2005	Initial version was installed in March 2006, but final was done in May 2006	В	Installation of final version delayed until all problems were resolved	Not Applicable	Not Applicable	Not Applicable

Output 1: The basic infrastructure for decentralizing the functions of data entry and data processing will be established at the central MoE and the DoEs at the Governorate level. These units will be equipped with servers, personal computers, printers, scanners, LAN accessories and electricity generators.

Description of the Performance Indicators	Planned	Actual	Assess ment (A, B, C)	Reasons for Deviations	Corrective Action (Steering)	Responsible person (for steering)	Comments (including 'why' steer)
PI 1.2.1 Provide 23 DoEs at the Governorate level with servers and personal computers.	21 servers + 420 PCs	21 servers + 460 PC	A	No. of Directorates of Education (DoE) was increased from 21 to 23	Not Applicable	Not Applicable	Not Applicable
PI 1.2.2 Provide 23 DoEs at the Governorate level with printers , scanners, UPSs and consumables	21Printer 2430+ 42 Printe 1320 +420 UPS 500 +21 UPS 1500 + 21 scanners	21 HP Printer 2430+46 Printer 1320 +420 UPS 500+ 23 UPS 1500	А	No. of Directorates of Education (DoE) was increased from 21 to 23.	Not Applicable	Not Applicable	Not Applicable
PI 1.2.3 Provide 23 DoEs at the Governorate level with LAN accessories and consumables.	21 sets of LAN Accessories and consumables	21 sets of LAN Accessories and consumables	A	No. of Directorates of Education (DoE) was increased from 21 to 23.	Not Applicable	Not Applicable	Not Applicable
PI. 1.2.4 Provide 4 electricity generator to 4 DoEs.	4 generators for 4 DoEs	4 Generators for 4 DoEs	А	Not Applicable	Not Applicable		
PI. 1.2.5 Installation of Hardware at the 23 DoEs.	Dec 2005	May 2005	В	Delay due to security in Iraq	Not Applicable	Not Applicable	Not Applicable
PI 1.1.6 Installation of Software in the 23 DoEs.	March 2005	May 2006	С	Delay in revising software	Not Applicable	Not Applicable	Not Applicable

M & E Report for Outputs: EMIS

Output – 2: Customize operational computer software for immediate use by the MoE and the DoE for entry of schools data for establishing a computerized EMIS.

Description of the Performance Indicators	Planned	Actual	Assessm ent (A, B, C)	Reasons for Deviations	Corrective Action (Steering)	Responsible person (for steering)	Comments (including 'why' steer)
PI 2.1 Assist MoE to develop a codebook for statistical data	Sept. 2004	Oct. 2004	А	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI 2.2 Assist MoE in developing new School data collection instruments for all types of schools and teacher training institutions	Sept. 2004	Oct. 2004	А	Not Applicable	Not Applicable	Not Applicable	Not Applicable
PI 2.3 Develop customized EMIS software for data entry and for production of reports and development of educational indicators.	Dec. 2004	March 2005 May 2006	В	Revision and corrections to be made to software	Not Applicable	Not Applicable	Not Applicable

Output – 3: Develop the capacity of Technical and Professional staff of the MoE and the DoEs to utilize and maintain the EMIS software

Description of the Performance Indicators	Planned	Actual	Assessme nt (A, B, C)	Reasons for Deviations	Corrective Action (Steering)	Responsible person (for steering)	Comments (including 'why' steer)
PI 3.1.1 Training key staff from GDSP to develop coding system for statistical data and develop school census forms	Sept. 2004	Oct. 2004	А	Not Applicable			
PI 3.1.2 Conduct training workshops for Key staff from GDIT and 2 staff from each DoE on "Dot Net" programming techniques and applications, utilization of the EMIS software and on networking and database management skills	Oct. 2004 Jan. 2005	Oct. 2004 Jan.2005 Feb. 2006 July, Aug 2006	В	Additional Training was provided due to changes in Staff and addition of activities from Phase II			
PI .3.1.3 Conduct a training of trainers for data entry and LAN Administration for GDIT staff and for 2 staff from each DoE	Dec. 2004	Feb. 2006 May 2006	В	Training delayed due to revision of software			

Output – 3: Develop the capacity of Technical and Professional staff of the MoE and the DoEs to utilize and maintain the EMIS software

Description of the Performance Indicators	Planned	Actual	Assessmen t (A, B, C)	Reasons for Deviations	Corrective Action (Steering)	Responsible person (for steering)	Comments (including 'why' steer)
PI 3.2.1 Conduct training workshops for 20 data entry staff from each of the 23 DoEs to utilize the EMIS software and perform data entry.	Sept. 2004	June 2006	С	Due to delay in finalizing software	Not Applicable		
PI 3.2.2 Conduct Training workshops for staff of GDSP, GDIT and the 23 DoE in the utilization of the software and analysis of data and production of statistical reports.	Oct. 2004 Jan. 2005	July 2006	В	Technical Training delayed awaiting finalization of Software	Not Applicable		
PI 3.2.3 Conduct training workshops for 2 staff from each DoE on "Dot Net" programming techniques and applications, utilization of the EMIS software and on networking and database management skills	Dec. 2004	Oct. 2004 Jan.2005 Feb. 2006 May 2006	A	Additional training was provided due to staff changes and addition of activities from Phase II.	Not Applicable		