

LEBANON RECOVERY FUND PROJECT DOCUMENT COVER SHEET

Participating UN Organisation:	Sector: Education,				
UNESCO	Communication and Information				
Project Manager	Working Group Chair				
Name: George Awad	Name: Abdel Moneim Osman				
Address: UNESCO Office - Beirut	Address: UNESCO Office - Beirut				
Telephone: 01-850013	Telephone: 01-850013				
E-mail: g.awad@unesco.org	E-mail: am.osman@unesco.org				
Programme/Project Title: IT Capacity	Project Location: MEHE - Beirut, MEHE with decentralized				
Development for Education Reform (CaDER)	personnel and activities in the various Lebanese regions.				
Programme/Project Number:					
Programme/Project Description:	Total Programme/Project Cost: \$820,000				
The project aims at building up the MEHE	LRF: \$820,000				
capacity for strategic planning, support and	Government Input: In kind contribution, plus running costs of				
maintenance for all MEHE ICT infrastructures	premises				
(valued currently at 30 millions USD of current	Other: N/A				
Name: Abdel Moneim Osman Address: UNESCO Office - Beirut Telephone: 01-850013 Tail: g.awad@unesco.org Teramme/Project Title: IT Capacity Telephone: 01-850013 Telephone: 01-85001					
\$0000000	Programme/Project Duration: 12 months				
to perform a wide mandate related to the management of all IC existing ICT infrastructure in order to efficiently utilize the curr	T projects in MEHE., particularly the capacity to operationalize the already rent resources, plan for integration of incoming resources, and create synergies				
with the view of incorporating them within the MEHE to ensure 1) Policy and curriculum development to ensure the effective in framework architecture for MEHE to maximize the benefits of towards common goals of efficiency and effectiveness of mana specific, to ensure that new technologies are utilized effectively	e sustainability. The capacity building will address the following areas: incorporation of ICT into education; 2) Design and implementation of a coherent existing ICT investments and coordinate all planned projects and initiatives agement; 3) Developing schemes for continuous training, general and functionary, efficiently and sustainably in MEHE; and 4) Developing an operational plan to				
Working Group Review Date: RRC Review Date Steering Committee/Project Approval Group Approval Date:					
On behalf of: UN Participating Organisation Chair, LRF SC					

2. Logical Framework

Objectives	Measurable indicators	Means of verification	Important assumptions
Development Objectives: Develop capacity of MEHE to integrate ICT tools and methods in teaching and learning processes & in the education system's management.	Increased percentage of course material delivered through utilization of ICT tools Reduced transaction time for select transactions Availability of on-line services	Yearly survey of skills among students and teachers Records on the use of IT in the schools and in the MEHE locations	
Immediate Objectives: 1	Availability of infrastructure at appropriate pc/student ration Adoption of ICT curriculum and teaching methods Availability of teaching staff in appropriate ratios to deliver curricula and integrated systems for MEHE administration	Yearly report on schools conditions published by CERD Yearly survey of skills among students and teachers Project development and implementation reports	
Outputs: 1.1- Policies developed and adopted concerning optimal level of infrastructure needed to support incorporation of ICT in education. 1.2- Survey of existing situation to determine base line infrastructure availability. 1.3- Medium-term procurement plan to ensure that resources and logistics will progressively be in place to complement and upgrade all infrastructures according to Policies. 1.4- Operational plan to provide human resources to ensure that ICT infrastructure in all public schools and Ministry offices is operational. 2.1 Survey of current skills level and ICT literacy of students and teachers in secondary and middle schools.	Operational infrastructure where it exists Comprehensive covering of infrastructure to include all schools and teachers Implementation project-based teaching methods in conventional curricula based on specific percentage of courses delivered	Project reports and publications ECRD surveys CSPS surveys CSPS Surveys Pilot evaluation report Project documents	

Inputs Through the UNDG: The implementation of the various activities of the project depends essentially on the personnel to be hired throughout it. Thus, it is quite unrealistic to try to determine the input necessary for each activity. Through the Government: The MEHE will provide in-kind contribution constituted by the provision of premises for the project, storage of equipment and training facilities; telephone lines, internet access in main offices, meeting spaces, office space for consultants, and utilities.
ew hucation chance on indings astructure set on set
Research international standards and new methodologies of integrating ICT in education Develop policy document in view of Lebanese curriculum requirements 2: Determine base line infrastructure by Review existing survey and amend based on results from first 20% sample Complete survey of schools, prepare findings report Conduct gap analysis to determine infrastructure needed to implement policies in 1.1 3: Procurement plan Develop a five-year procurement cycle for new infrastructure and upgrading of existing infrastructure based on 1.1.b and 1.2 above
sed on indings astructure is for new g g bove
sed on indings astructure sfor new g bove
ey and amend based on sample chools, prepare findings to determine infrastructure policies in 1.1 rocurement cycle for new grading of existing in 1.1.b and 1.2 above
utput 1.3: Procurement plan a- Develop a five-year procurement cycle for new infrastructure and upgrading of existing infrastructure based on 1.1.b and 1.2 above

c- Review and advise MEHE on executing HW and SW maintenance agreements to reduce cost where possible	Output 2.1: Survey of students' and teachers' skills a- Design basic skills survey for each level of education b- Manage nilot study to test survey and commile	Output 2.2: Support to Plan for schools' access to the Internet a- Support provided in pilot designated areas	Output 3.1:Development and application of data standards a- Analyze existing data bases in the selected areas and advise on data standards needed for integration b- Perform pilot for new standards c- Evaluate pilot d- Implement data migration to ensure that standards are adopted	Output 3.2: Integration of applications/systems a- Acquire capacity for systems architecture and application development b- Develop plan to increase MEHE adoption of integrated software for data management	output 4.1:Training policies and plans a- Review all existing training offerings at MEHE and ECRD, Including PIL, WebLinks, Intel Training, and Cisco Academies curriculum b- Review ECRD training database and course content c- Prepare overall MEHE training plan for basic skills, specific courses, and staff training modules d- Undertake TOTs training in selected areas.

3. Programme/Project Justification

3.1 Background

The Ministry of Education and Higher Education made a commitment, documented in the strategic plan, to improve the quality of education utilizing ICT tools and methods. Several projects were developed and implementation started to provide infrastructure in the schools to meet two of the four strategic goals, namely:

- A- Education for a society of knowledge: increasing ICT-delivered course content as well as implementing a basic skills curriculum in education at the intermediate and secondary levels; and,
- B- Enhancement of the Governance of education: The school Information System (SIS) began deployment in secondary schools and a bid was launched to develop an Education Management Information System that utilizes SIS data to provide decision support capabilities to MEHE.

In order to manage the various initiatives and projects, a restructuring plan was developed to build MEHE capacity for the management of the reform. This plan is currently in the last round of discussions internally before being sent to the Council of Ministers for approval.

Due to the war last July, this effort was delayed and approvals that should have been in place were delayed. The reform plan is back on track and the strategic plan has been delivered to the Council of Ministers. Of interest to this proposal is the decision, by H.E. Minister Kabbani, to start the process of building capacity for ICT-related projects, in the form of establishing the Information Management Unit (IMU). This unit was set up, temporarily, through funding from the current World Bank funded Education Development Project (EDP), and is charged with exploring means of building MEHE capacity for utilization of ICT tools, methods, and skills to promote the Ministry's reform agenda. This proposal aims at providing technical assistance to the MEHE to build capacity in the IMU, and develop a road map for institutionalization of this capacity.

3.2 Project approach

3.2.1 Problems addressed by proposal:

This project proposal seeks to build the capacity of IMU-MEHE, in relatively record time (12 months) to create a comprehensive framework for adoption, deployment, and sustainability of all ICT-based investments, current and planned, in MEHE. The need to adopt a very speedy approach to build capacity, not afforded by other means of funding, is due to three main factors:

- A- MEHE has been the recipient of significant aid, in the aftermath of the July war, to reconstruct schools and equipment. A portion of this aid went to ICT equipment, and this is in risk of loosing its value by the time capacity is built as per the conventional route.
- B- There is an existing investment in the amount of upwards of 30 million USD in ICT infrastructure, decentralized to all MEHE schools and satellite offices. This infrastructure remains un-operational due to the lack of MEHE capacity to install, connect, maintain, and upgrade it. The useful life of ICT infrastructure is 3-5 years maximum, after which it needs to be replaced. A significant portion of MEHE ICT infrastructure is now in its third year of life, but has yet to be put to proper use. A study done by IMU on a sample of 18% of schools (300) in all of Lebanon, shows that the average age of PCs in surveyed

- schools is 4.4 years (close to end of useful life), and close to 61.7% of them are not connected (no LAN). Furthermore, there is also no capacity at the schools or at MEHE to provide minimal systems administration to ensure that these remain useful until they could be upgraded.
- C- Education has been traditionally, and continues to be, a major focus of donors. At this stage, and in the aftermath of the July war, a significant amount of aid is starting to flow. Most donors are very interested in the status of ICT in the educational system and better integrating it in the curriculum. MEHE needs to demonstrate, immediately, that it has the capacity not only to obtain resources but to develop plans, manage projects, and sustain results in order to benefit from this current window of opportunity. The MEHE is at serious risk of losing credibility among donors who often insist on full utilization of existing ICT assets as a pre-requisite for additional investments.

3.2.2 Outputs/activities planned to solve them:

This project seeks to invert conventional wisdom: it proposes an initiative directed towards up-front (or parallel) creation of means of sustainability *as a precondition* for implementing reforms, and as a necessary credibility-building measure towards capitalizing on further potential donor funding. This will give the MEHE the ability to provide a comprehensive support for the current ICT assets and future ICT investments. It will also create synergies to maximize the value of current ICT assets, and provide support and guidance for future ICT investments to ensure their utility, as well as compatibility with reform strategy in a sustainable fashion.

3.2.3 Institutional set up in proposal's operating environment:

As mentioned earlier, the MEHE has already produced a draft restructuring plan to address the capacity issues dictated by its reform strategy. A manager and two junior staff were hired, and have been working closely with two Ministerial advisors to start the process of building capacity for management of ICT goods and services in MEHE. A decision was issued by Minister Kabbani to centralize all ICT-related policy and projects as well as initiatives through the IMU.

3.2.4 Alternative approaches:

Prior to submission of this proposal, two other options were explored internally:

- A- Using government resources to build capacity: There are several issues that make this option not viable in short term. The specific skills needed are not part of the current civil service code, which requires to seek cabinet approval for every post. If that is granted in a reasonable time, separate approval is also needed from cabinet for a salary scale that can attract talent. The current ceiling of salary scales approved is not enough to attract expertise of high calibre, but of medium calibre that will require on the job training. It took MEHE 9 months to approve the principle of hiring 8 entry level positions in ICT. The MEHE estimates that it needs another 6-9 months to get them hired, assuming cabinet approval on the choices and salary scales.
- B- Outsourcing ICT service: After a quick ballpark estimate, the MEHE concluded that this option is very expensive, in addition to its risk of putting the Ministry at a disadvantage vis-à-vis the potential supplier. The MEHE has a large work force and a wide geographic spread. It does make sense to contract out a portion of the required services, namely helpdesk and maintenance of hardware, but only after this HW is operational. The current numerous unknowns, and the aging status of the HW, will

cause any potential interested party to attach a high risk factor that will add to expenses substantially. Furthermore, It is imperative that the MEHE become a savvy ICT resources manager before being able to manage external contracts, which may entail detailed assessments, setting of goals, and exploration of various means of packaging the services that is most advantageous to MEHE as a contracting authority. MEHE needs to be in control of its infrastructure and its uses, and at this stage, it is not possible to seek outside resources until the internal requisite knowledge is created and institutionalized.

3.2.5 Expected benefits:

Per above options, this proposal was designed to bridge an urgent gap and provide information support for strategic decision-making in MEHE. If approved, the project would move immediately to hire both entry and competent level skills, in the areas of need, that could be trained further. It is expected that this complement of human resources will be moved to government payroll in groups, starting as early as 9-12 months from the time of hiring based on availability of government funds. During this period, the IMU would utilize these human resources to make available and serviceable the existing MEHE ICT assets and the planned investments. In addition, the IMU will develop scenarios as to the potential workable policies within the constraints of financial resources but retaining adequate knowhow for operations and maintenance of ICT assets past and future.

3.2.6 Beneficiaries and vulnerable populations:

The direct beneficiaries of this proposal would be the students of the public schools of Lebanon, a population of close to 450,000 students, 60% female, who represent all social classes with particular high representation from the most disadvantaged classes. It is expected, as elsewhere has been demonstrated time and again, that most benefit to the students comes from putting the existing ICT assets to use directly, in extracurricular activities outside conventional curriculum. Another critical impact from making available the existing ICT assets is the operational testing of the ICT literacy courses, that were designed two years ago, but could not be implemented in 100% of territory due to lack of capacity. Other benefits will include capacity development and completion of surveys and assessments which when completed will enable servicing and availability of ICT assets for use in 100% of territory. Finally, the proposal also suggests producing periodic surveys of skills and resources to create a baseline and ensure a feedback loop is maintained for monitoring and improvement.

Other direct beneficiaries are the teachers of MEHE, who will get the opportunity to learn new teaching skills and apply them in their work. This is a significant group of beneficiaries (30,000 teachers) who have already been receiving training in various ICT-related capacities. But to date, such training has had limited use, depending on the situation in their place of work. This project seeks to work with other interested stakeholders, namely the Council for Educational Research and Development (CERD) and the national Committee in Support of Public Schools, to institutionalize a continuous education program capable of improving the capabilities and performance of teachers in the medium and long term.

Finally, an internal target has been placed pledging to try and meet, assuming full transparency and applicability of rules and regulations of competitive hiring, an aim consisting of filling 40% of the staff positions with female experts. This goal, if achieved, is in concurrence with the aim of encouraging the female population, which is a majority among the students, to consider ICT as a career choice in the future, by setting example in the management team.

3.2.7 Environmental Issues:

In the long term, a national strategy should be developed to dispose of the obsolete computers in a friendly environmental way. In the short term, the old computers will continue to be used for different purposes as new computers are bought.

3.2.8 Lessons drawn from other projects:

It is very important to note that the design of this proposal has benefited from lessons learned from another successfully implemented reform project: the REFM at MoF, which has been viewed as a particularly shining example of sustainable reform. In that project, stability of the project unit, its ability to attract competencies and institutionalize them, and its relative independence, helped foster relations with MoF staff and management and sustained the project through 6 councils of ministers and three parliaments. This implementation knowhow, and core competence will be the cornerstone of the current project from the start.

4. Management Arrangements

• Project implementation and supervision arrangements:

MEHE Capacity: MEHE has completed a restructuring project to modernize its apparatus. The IMU was set up and given a mandate to provide ICT support for the MEHE goal of integrating ICT in the education curriculum. This proposal seeks to build the capacity of IMU in the immediate and short term to face the existing tasks of maintenance and support of current and planned projects, and support strategic planning for future initiatives.

The UNESCO Office in Beirut has extensive experience implementing regular programme and extra-budgetary ICT projects in Lebanon and in the Arab Region. It will assign, as project officer, a programme specialist to oversee the implementation of the project.

At the collective supervisory level, the project foresees cooperation with the ministry of Education as well as its IMU that will be establishment through the process of the project.

In addition, the budget proposed foresees the nomination of a full-time coordinator of the activities. This person will be chosen among the persons who have wide-ranging experience in the management of ICT projects. The coordinator will be assisted by a team with ICT as well as ICT in Education experiences.

Finally, based on previous experience of UNESCO, and as foreseen in the proposed budget, the implementation of the various activities will appeal to national specialized experts who, in general, have already worked on ICT-related issues during recent years with one or the other of UN organizations.

 Specific delivery mechanism chosen reflecting security conditions and in particular detailing proposed use of international staff in Lebanon both from private contractors and NGOs:

The project foresees to involve in the implementation some UN international staff members based in Lebanon, UN national staff based in Beirut, relevant NGOs with experience in ICT and its relation to Education, university experts, and other independent consultants. Many of the

potential implementation partners have already worked with UNESCO and other agencies on related matters.

The implementation of the project will mainly be conducted in Beirut. However, the project foresees surveys, training sessions, and services to the MEHE locations and schools in the various Lebanese regions encompassing the whole Lebanese territory. This close partnership with the regional MEHE authorities will enable us to reach the target groups and achieve project objectives with minimum security risks and taking into consideration the sensitivities of the local communities.

• Line ministry counterpart and extent of cooperation:

The Ministry of Education has been the main counterpart of this endeavour. It has provided full cooperation and has been fully supportive of all activities related to this issue. It will provide full political support and logistics according its capacities. In particular, the MEHE will host the IMU and its antennas in the regions and provide it with premises, furniture, and logistical support for its functioning.

On the other hand, the National Committee in Support of the public Schools has expressed an interest to be involved in the process and it can provide the ways and means to achieve some activities. Other Ministries need to be involved in this project, such as the Ministry of Telecom.

• Intra-sector cooperation and what goods/services other agencies are supplying or intend to supply including proposed utilisation of common services:

This project encompasses different areas of concern to the Education system. Thus, it will involve the main components of the MEHE, i.e. the Directorates General and the MEHE regional antennas and public schools, as well as CERD. At the UN level, in addition to UNESCO, the project will profit from the experience other agencies, such as ESCWA and UNDP, have gained in Lebanon and the Arab Region.

 Indicate the overall timeframe for the programme/project, work plan, and timetable for specific activities:

The project is planned to be implemented in a 12 months period, starting immediately after the availability of the funds to the implementing agency.

Reliability of the costing of programme/project inputs and comparability with other UN
organisations; arrangements for procuring and transporting programme/project inputs, to
ensure local appropriateness and acceptability, as well as security and value-for-money
under the circumstances:

Most of the inputs are human resources. Costing is based on current UN rates according to level of expertise needed and duration of services requested for each type of expertise.

Costing has used UN parameters in all aspects of the project, in close coordination with the main national counterpart, i.e. the Ministry of Education. In addition, all phases of the project are to be implemented with the close participation of the Government counterpart, and the benefits of the project are progressively transferred to these counterparts.

 Systems for programme/project monitoring (including financial tracking and accounting audit), quality control (including lesson learning, and corrections), and impact assessment; methods for data collection and monitoring:

The hiring of all staff for this project will follow UNESCO guidelines for hiring of local and international staff as appropriate as well as all other short-term expertise. In addition, goods and services will also follow UNESCO guidelines. MEHE will provide equipment needed for the unit operation including office space, PCs, telephone lines etc. Data collection standards and evaluation of surveys will be done based on preset criteria in collaboration with the National Committee in Support of public Schools who supports this proposal and will provide resources to augment the funding once approved.

A mechanism will be set for continuous monitoring of progress towards set objectives and the quality of the work undertaken, consisting of a Steering Committee with representation from UN and the MEHE. This Committee will exercise the overall monitoring on the project.

The impact of this project will be assessed by the integration of ICT tools and methods in teaching and learning processes & in the education system's management.

Monitoring financial matters will be exercised through the usual UNESCO channels and according to its established rules and regulations.

5. Analysis of risks and assumptions

 Main potential causes of failure, their likelihood of occurrence, and the seriousness of consequences that would be suffered:

The main risk of failure is from the instability of the situation in Lebanon which, if it escalates to a security risk, will prevent us from meeting deadlines in hiring and training resources needed. This proposal relies mostly on local staff, so the risk inherent to the current political instability will not impact much unless they develop into a life threatening security level. Another potential risk is the change of government, but this can be mitigated by the fact that the proposal is technical and narrow in focus, which affords it a non-political status and lessens the likelihood of it being overturned by a mere change of government. Of course, this remains a possibility, but lessons learned from the MoF experience prove that relative autonomy and technical nature of project can go a long way towards ensuring sustainability in face of turbulent political climate.

 Options considered and the steps taken in project design and implementation to address, and minimise or mitigate the potential risks:

This proposal is designed to provide a level of autonomy of management of resources to ensure delivery of promised services. By associating the MEHE with UNESCO, the Ministry will be able to take advantage to the presence of an impartial partner with transparent laws and regulations of selection of staff, goods and services that are not subject to local regulations that are time consuming and not as transparent. Also, the UNESCO will afford the project a wider mandate to overcome institutional obstacles in performing tasks expediently. Association with the National Committee in Support of the Public Schools will give this proposal the resources needed in short term basis to move expediently on the ground and complete geographically disparate tasks of surveying students in public schools across the country.

• Any undertakings or agreements made with partners which impact on project implementation:

The Committee in Support of Public School, chaired by H.E. Deputy Bahia Hariri, has expressed its willingness to support the implementation of this project.

6. Estimated Budget

CATEGORY	ITEM	UNIT COST	NUMBER OF UNITS - M/M	TOTAL COST	
	Project Coordinator	\$ 3,500/month	1 x 12	\$42,000	
1. Personnel	System Architect	\$ 4,000/month	1 x 10	\$40,000	
	Database specialist	\$ 3,500/month	1 x 10	\$35,000	
	System Developer (2)	\$ 2,000/month	2 x 10	\$40,000	
	Operations & Maintenance personnel (12)	\$ 1,500/month	12 x 11	\$198,000	
	Survey coordinator	\$ 1,200/month	8	\$9,600	
	Administrative Assistance (2)	\$ 900/month	2 x 11	\$19,800	
	Driver	\$ 600/month	1 x 11	\$6,600	
	Total Personnel			\$391,000	
2. Contracts	Surveys			\$25,000	
	Networking support at national level			\$40,000	
	ICT in Education Applications			\$60,000	
	Software licenses	\$5,000	4 persons	\$20,000	
	Publications			\$10,000	
	Total Contracts				
	Local & Wide Area Networks			\$15,000	
3. Training	Internet servers (Web, proxy, exchange)			\$10,000	
	ICT in Education for school users			\$20,000	
	ICT in Education TOT workshop			\$15,000	
	Total				
4. Transport	Transport related to the regional personnel	\$120/month	12 x 11	\$15,840	

	Total			\$15,840	
ente aux post	Internet Access	\$60/month	10 x 11	\$6,600	
5. Supplies and	Communication Costs	\$150/month	12	\$1,800	
commodities	Total			\$8,400	
	PCs	\$1,000	20	\$20,000	
6. Equipment	Servers	\$5,000	2	\$10,000	
	Printer	\$250	12	\$3,000	
	Scanner	\$125	2	\$250	
	LCD projector + Laptop + screen	\$6,000	1	\$6,000	
	ICT in Education Model Lab	\$25,000	1	\$25,000	
	Vehicle (to be given to MEHE at the end of the project)	\$25,000	1	\$25,000	
	Total			\$89,250	
7. Travel	Study tours for MEHE officials	\$4,000	5	\$20,000	
	Total			\$20,000	
8. Miscellaneous	Hospitality (General and for Ceremonies) and meeting expenses			\$26,865	
	Others (Stationary, office suppliesetc)				
	Total			\$26,865	
Total Project				\$766,355	
9. Agency Management Support	7% of total above			\$53,645	
Grand Total requested from LRF				\$820,000	