

**Achievement of Market-Friendly Initiatives and Results Program
(AMIR 2.0 Program)**

Funded By U.S. Agency for International Development

**Connecting Jordanians Project Management
Spectrum Management Unit**

Final Report

**Deliverable for ICTI Component, Task No. 412.1
Contract No. 278-C-00-02-00201-00**

February 2003

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1. Introduction

Under the amended Telecommunications Law, the regulation of all radio frequencies within the Hashemite Kingdom of Jordan has been brought under the purview of the Telecommunications Regulatory Commission (TRC). This represents a change in the current situation where the TRC's responsibilities have been limited by the lack of information regarding the spectrum used by the armed forces and security agencies. In the past, the first recourse of the TRC in assigning spectrum to service providers was to request a status of the non-civilian use of the band in question from one of the above users. This situation is not uncommon in countries where national security is of primary importance and where clear procedures for the allocation of civilian and non-civilian use of the spectrum have not been put in place.

The revised Telecommunications Law makes it clear that authority to assign spectrum and issue spectrum licenses lies with the TRC. This would be difficult in a situation where the TRC is not in possession of complete information on spectrum usage. The amended Law removes the above anomaly by a provision whereby a joint TRC-armed forces-security agency unit will be established and located in the MoICT for the purpose of maintaining the complete National Register of Frequencies, encompassing both civilian and non-civilian use of the spectrum. This Spectrum Unit (SU) will not be a part of the MoICT, but will report to the Minister directly. However, the housing of the unit in the MoICT will give the necessary assurance to the armed forces and the security agencies that this vital national security information will be safeguarded. Records of the civilian portion of the spectrum will continue to be maintained in the TRC.

At the same time, the MoICT is in the process of developing a Connecting Jordanians initiative, designed to provide broadband connectivity to all of the nation's public primary schools, universities, and eventually community centers and post offices. This will involve assessing several options for the provision of the network, including contracting with Jordan Telecom or with a private provider on an IRU (indefeasible right to use) basis, financing and building a government private network, or some combination of the options. The exact details of the initiative remain to be worked out.

2. Objective of the Consultancy

The agencies involved in spectrum utilization – the TRC, the Royal Signal Corps (RSC), and the General Intelligence Directorate (GID) – are in agreement on the establishment of the unit in the MoICT. The preparation of the physical space to house the SU is the next important step in the process. The consultant will act as the Project Manager for the preparation of the physical space, coordinating the space needs of the three agencies, the preparation of the working architectural drawings, identification of the hardware and software necessary for the task, assistance to the MoICT Procurement Department with tender procedures for the work, and supervision of the work of the contractor(s) selected. The outcome will be a secure physical space located in the MoICT where this important work will be housed.

In addition, the consultant will assist the MoICT in implementing the Broadband Learning Network project. The focus of the work will be to develop and implement a full range of project management functions leading to the design, construction, testing and acceptance of two separate

but eventually integrated networks: the Public University Component and the K-12, College and Telecenter Component.

3. Approach, Methodology and Observations

Spectrum Unit:

- Held briefing with HE Dr. Fawaz Zu'bi and Mr. Roger Guichard, AMIR Program, to define plan of action for the implementation of the SU on the MoICT premises.
- Identified location within the premises of the Ministry of Information and Communications Technology that would be suitable for housing the SU. Other stakeholders were invited to ensure that the location fits security and work process requirements.
- Held meetings between stakeholders, including the Telecommunications Regulatory Commission, Royal Signals/Jordan Armed Forces, General Intelligence Department under the Chairmanship of HE the Minister of ICT to define functions of the SU and the functions of each stakeholder within the broader plan.
- Prepared layout plan for SU with the General Intelligence Department and the procurement department of the Ministry of ICT.

The Plan included:

- Floor plan
 - Civil works plan
 - Electromechanical
 - Electrical
 - Computer Network
 - Fire/Safely systems
 - Monitoring and Security Devices
- Prepared and issued variation order to existing MoICT contract for construction of facilities for the SU.
 - Monitored on an ongoing basis of construction of the space for the SU, currently underway at the Ministry of ICT.
 - Liaised on a regular basis with the Telecommunications Regulatory Commission, General Intelligence Department and the Royal Signals on standardizing processes, including software to be used in the SU.

Broadband Learning Network Project

- In capacity as the interim Program Director, facilitated stakeholder meetings for the Broadband Learning Network project. Stakeholders included:
 - Ministry of ICT
 - Ministry of Education
 - Ministry of Higher Education
 - Ministry of Planning
 - Ministry of Public Works and Housing
 - Municipality of Amman
 - Land and Survey Department
 - Jordanian Public Universities
 - Royal Jordanian Air Force
 - Royal Jordanian Armed Forces

- General Intelligence Department
- Sought and secured support for the Broadband Learning Network project from the above agencies.
- Drafted a scope of work for Connectivity Partners, Inc., the consulting team appointed by the MoICT for the broadband learning network.
- Participated in the development of the business case for a “Broadband Learning Network” as led by Connectivity Partners Inc.
- Participated in, and monitored the completion of the following functions:
 - National GIS mapping for fiber routes to all learning centers
 - Data center location and strategy
 - Program Management Office mandate and organizational design.
 - Draft agreement with NEPCO.
- Participated in policy planning meetings with the Minister of ICT, external consultants, AMIR consultants, and national stakeholders.
- Participated in action planning meetings with the Minister of ICT, external consultants and national stakeholders.
- Managed the development of a draft implementation program for the deployment of the university broadband network.
- Managed the development of a draft implementation program for the K-12 learning network.
- Acting as coordinator for the Ministry of Education’s Task Group for the Learning Network.
- Briefed key government agencies on the broadband learning network.
- Participated in a presentation to all public university presidents on the benefits of a broadband network linking all public universities, and articulated the action plan ahead.
- Assisted in the design of the University network, currently in the planning stages, in coordination with the University IT committee.

4. Recommendations for Continued Assistance to MoICT

The work required in the two areas of this consultancy, the Spectrum Unit in the MoICT and the Broadband Learning Initiative, involves two very different skill sets. The work of preparing the space for the Spectrum Unit is well underway and will have a definite end date. It is anticipated that the physical space for the unit will be ready by the early part of March. The Broadband Learning Initiative, on the other hand, is part of an ongoing national initiative that will require many months, if not years, to complete. The additional work in the MoICT, will therefore involve these two activities:

- Continued monitoring of the implementation of the Spectrum Unit, including the balancing of stakeholder requirements and completion of civil works. As mentioned above, this should be completed in the early part of March. Furnishing of the space, including the necessary software and hardware, may be a part of additional work, depending on the needs of the MoICT and the AMIR Program.
- Continued support for the formation of the Broadband Learning Network Program Management Office (including secondments from other agencies, etc.) for the Learning Network. This will largely consist of implementation of the plans that were drawn up in the earlier part of the consultancy.