OFFICE OF THE SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

REVIEW OF THE ADVANCED FIRST RESPONDER NETWORK

SIGIR-06-020
JULY 28, 2006

SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

July 28, 2006

MEMORANDUM FOR U.S. AMBASSADOR TO IRAQ
DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT OFFICE
COMMANDING GENERAL, MULTI-NATIONAL FORCE-IRAQ
COMMANDING GENERAL, MULTI-NATIONAL SECURITY TRANSITION COMMAND-IRAQ
COMMANDING GENERAL, JOINT CONTRACTING COMMAND-IRAQ/AFGHANISTAN
COMMANDING GENERAL, GULF REGION DIVISION, U.S. ARMY CORPS OF ENGINEERS

SUBJECT: Review of the Advanced First Responder Network (SIGIR-06-020)

We are providing this report for your information and use. We performed the audit in accordance with our statutory duties contained in Public Law 108-106, as amended, which requires that we provide for the independent and objective conduct of audits, as well as leadership and coordination of, and recommendations on, policies designed to promote economy, efficiency, and effectiveness in the administration of such programs and operations and to prevent and detect waste, fraud, and abuse.

We considered comments from the Multi-National Security Transition Command-Iraq, the Iraq Reconstruction Management Office, the Joint Contracting Command-Iraq/Afghanistan, and the U.S. Army Corps of Engineers Gulf Region Division on the draft of this report when preparing the final report. Their comments are addressed in the report where applicable, and copies of their comments are included in the Management Comments section of this report.

We appreciate the courtesies extended to the staff. For additional information on this report, please contact Mr. Joseph T. McDermott at (703) 343-7926, or by email at joseph.mcdermott@iraq.centcom.mil; or Mr. Clifton Spruill at (703) 343-9275 or by email at clifton.spruill@iraq.centcom.mil. For the distribution of the report, see Appendix C.

Stuart W. Bowen, Jr.
Inspector General

cc: Distribution

Special Inspector General for Iraq Reconstruction

SIGIR-06-020 **July 28, 2006**

Review of the Advanced First Responder Network

Executive Summary

Introduction. Recognizing the problematic security environment that existed in Iraq in April of 2004, the Coalition Provisional Authority (CPA) initiated a project to deploy a communications network to enable interoperable communications for Iraqi Ministry of Interior security and safety forces throughout Iraq to improve public safety. This project, commonly referred to as the Advanced First Responder Network, or simply "AFRN", intended to address the limited communication capabilities of Iraq's emergency first responders: the police, firefighters, and emergency medical personnel.

In total, the AFRN design-build project, first responder radio procurement, and subsequent sustainment efforts will cost $218.5 million by the end of Fiscal Year 2006. The funding for this project came from three sources: $181.8 million from the Iraq Relief and Reconstruction Fund (IRRF),[1] $20 million from the Iraq Security Support Fund (ISSF), and $16.7 million from the Development Fund for Iraq (DFI). The AFRN system was transferred to full Iraqi government ownership and control on June 26, 2006.

Objectives. This report addresses whether responsible personnel efficiently and effectively managed the Advanced First Responder Network project that was created to provide Iraqi police, fire, and emergency medical units with a core national public safety communication, command, and control system. More specifically, this report addresses the extent to which:

- AFRN provides effective emergency communications for the citizens of Iraq, the police, fire, emergency medical departments, and related command and control organizations
- radios purchased for distribution to the Iraqi police, fire, and emergency medical organizations were properly accounted for, controlled, supported, and transferred to the Iraqi Ministry of Interior
- U.S. government plans and funding were in place to sustain the Advanced First Responder Network pending the Iraqi government's assumption of those responsibilities; and whether U.S. officials provided the responsible Iraqi Ministry with sufficient information on operations and maintenance support requirements
- AFRN task orders were properly definitized; and related equipment purchases and contractor services were within the scope of the contract

[1] Iraq Relief and Reconstruction Funds included $52.3 million from the fiscal year 2003 appropriation and $129.5 million from the fiscal year 2004 appropriation. These appropriations are commonly referred to as IRRF-1 and IRRF-2, respectively.

Results. The initial assumptions to build the AFRN system upon the existing Iraqi electrical and fiber optic infrastructure exacerbated the extent to which U.S. implementing agencies could efficiently and effectively manage the AFRN project. The conditions limiting the AFRN's effectiveness are fundamental and significant on both the governorate and national levels of the AFRN system, which spans Iraq from Basrah in the south to Mosul in the north. To a large measure, the AFRN limitations are the result of assumptions by U.S. government officials that the existing fiber optic and electrical infrastructure could readily support the communications requirements of the AFRN project.

Effectiveness has been impacted by no connectivity between the three zones of the AFRN system; inability to receive emergency calls from citizens at the majority of first responder dispatch centers; no network performance monitoring for two of the zones; and insufficient backup generators to power the various system elements when commercial power is unavailable. Further, even if the fiber optic and electric infrastructure conditions can be effectively resolved, it would operate inefficiently because of insufficient numbers of trained personnel to fully staff and operate all nine of the first responder dispatch centers.

As a result, the AFRN project has not yet produced:

- an effective nationwide first responder communication, command, and control system
- an efficient means to dispatch and direct first responders at the governorate level
- the ability to escalate incidents to the national level

Although the AFRN project has increased communication capability amongst first responder organizations, Iraqi citizens cannot use their cellular or regular telephones to call into the AFRN system to request police, fire department, or emergency medical assistance from seven of the nine governorate dispatch centers.

There were insufficient property controls to effectively manage over 30,000 radios valued at over $24 million to provide reasonable assurance that all assets were accounted for, controlled, and properly transferred to the Iraqi government. For example, property records show a significant shortage of one type of radio and an even greater overage of another type.

U.S. agencies did not anticipate the operations and maintenance funding requirements to sustain the AFRN until the Iraqi government was prepared to assume this role. However, once identified, corrective action was taken to address the funding shortfall. Contract management officials stated these sustainment funds came from various funding sources (DFI and ISSF). We were also told that this includes funding for future training of additional personnel to staff AFRN dispatch centers. Although there was insufficient funding allocated, the task orders issued from the design/build contract as well as the Integration contract contained provisions to develop the Iraqi government's ability to maintain the AFRN system. In addition, the U.S. agencies provided the Iraqi government with information that an estimated $16.7 million would need to be budgeted for to address annual operations and maintenance costs for the AFRN.

During our review, we were able to determine that the AFRN task orders were properly definitized and related equipment purchases and contractor provided services were within the scope of the contract requirements and terms.

Material Management Control Weaknesses. Our review disclosed a material management control weakness regarding U.S. government property accountability for the 30,000 radios purchased during the AFRN project.

Management Actions. U.S. government officials initiated two actions during the course of this review. First, officials within the Joint Contracting Command-Iraq/Afghanistan (JCC-I/A), the U.S. Army Corps of Engineers Gulf Region Division and Project and Contracting Office (GRD-PCO), and Multi-National Security Transition Command-Iraq (MNSTC-I) included a requirement in the new DFI sustainment contract for the new contractor to assess and provide a "state of the network" report on the AFRN system.

In addition, we notified responsible officials in MNSTC-I's Civilian Police Assistance Training Team (CPATT) that the documentation they provided did not accurately account for the transfer of first responder radios to the Ministry of the Interior. As a result, the officials began action to identify any missing documents evidencing transfers of radios to the Ministry of Interior. CPATT personnel requested and received copies of transfer/receipt documents from the Ministry and, subsequently, provided copies of these records to us. However, the additional documentation did not resolve the accountability issues described in this report.

Recommendations.

We recommend the following management corrective action regarding fiber optic network connectivity and capacity required to achieve inter-zone operation of the Advanced First Responder Network.

1. We recommend that the Commanding General, Multi-National Security Transition Command-Iraq ensure that the contractor conducting the AFRN assessment is required to coordinate with the Iraqi Ministry of Interior and Iraqi Ministry of Communications Iraq Telephone and Postal Company in diagnosing and resolving the specific technical reason or reasons why connectivity between the three AFRN zones does not exist.

We also recommend the following management corrective actions regarding the accountability of radios purchased for the Advanced First Responder Network.

2. We recommend that the Commanding General, Multi-National Security Transition Command-Iraq, direct the appropriate command organization to:
    a. Request the Iraqi Ministry of Interior provide current inventory information, by model type, for the first responder radios in their possession.
    b. Direct CPATT personnel conduct a physical inventory, by model type, of any radios not yet transferred to the Ministry of Interior.
    c. Reconcile the Iraqi Ministry of Interior and CPATT inventories to the record of all radios purchased and document the results.
    d. Initiate actions in accordance with applicable U.S. government property management policies, to properly account for and control all radios.

Management Comments and Audit Response. We received written comments on a draft of this report from MNSTC-I and the Iraq Reconstruction Management Office. We received technical comments from JCC-I/A and the U.S. Army Corps of Engineers Gulf Region Division.

MNSTC-I officials did not concur with the first recommendation (for jurisdictional reasons), but did concur with the second. We agree the IRMO Communications Sector was responsible for the AFRN project, as evidenced by the original CPA tasking order; however, our recommendation was appropriately addressed to MNSTC-I for the following two reasons. First, the AFRN system transferred to control of the Iraq Ministry of Interior on June 26, 2006 and secondly; MNSTC-I assumed responsibility for coalition force liaison to the Ministry of Interior in October, 2005. Although officials did not specifically concur with the first recommendation, we believe the substance of their comments fully satisfy the recommendation's intent. Corrective actions are either in progress or planned. MNSTC-I also provided technical comments for this report. We reviewed those comments and incorporated changes into the final report where appropriate.

The Iraq Reconstruction Management Office suggested we add a recommendation to "get all nine AFRN Governorate Dispatch Centers operating and in service with fully trained staff to realize the full potential of the system". While we recognize the importance of the Governorate Dispatch Centers to the AFRN system, we did not include this recommendation because the DFI Sustainment contract includes training, as discussed in this report.

JCC-I/A and the U.S. Army Corps of Engineers Gulf Region Division also provided technical comments for this report. We reviewed these comments and incorporated changes into the final report where appropriate.

All comments received were fully responsive.

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Introduction

Background

In March of 2004, the Department of the Army awarded contract W914NS-04-D-0005 to restore Iraq's communication infrastructure. Under that contract, the Coalition Provisional Authority (CPA) Program Management Office and its successor organizations would issue task orders for specific projects within the communications sector. The only task orders issued under this contract were for the Advanced First Responder Network (AFRN).[2] In total, the AFRN project and subsequent sustainment efforts has amounted to $218.5.1 million. The AFRN contract ended on May 2, 2006. The Iraq Relief and Reconstruction Fund (IRRF) budget for the AFRN project included $30.6 million for first responder radios and $151.2 million for the design-build task orders. Subsequent contracts to sustain the system and address conditions limiting full operating capability received $20 million from the Iraq Security Support Fund and remaining monies from the $16.7 million DFI allocation. The latter of which will provide sustainment for the remainder of calendar year 2006. The AFRN system was transferred to full Iraqi government ownership and control on June 26, 2006. Table 1 summarizes the source of funds and their use.

Table 1: AFRN Funding Sources and Application (Dollars in Millions)

Contract Purpose	IRRF[3]	Iraq Security Support Fund	DFI	Total By Contract
First Responder Radios	***$ 30.6***	***0***	***0***	***$ 30.6***
AFRN Design Build Contract				
Design/Build	$ 147.4	0	0	$ 147.4
Operations and Maintenance	$3.8	0	0	$ 3.8
Contract Total:	***$ 151.2***	***0***	***0***	***$ 151.2***
AFRN Integration Contract				
Construction	0	$ 18.9	0	$ 18.9
Operations and Maintenance[4]	0	$ 1.1	$ 2.9	$ 4.0
Contract Total:	***0***	***$ 20.0***	***$ 2.9***	***$ 22.9***
DFI Bridging Contract; Operations and Maintenance	***0***	***0***	***$ 2.3***	***$ 2.3***
DFI Sustainment Contract				
Operations/Maintenance and Training	**0**	**0**	**$ 11.5**	**$ 11.5**
Contract Total:	***0***	***0***	***$11.5***	***$ 16.7***
Total By Fund Source	**$ 181.8**	**$ 20.0**	**$ 16.7**	**$ 218.5**

Source: SIGIR Analysis of AFRN Project Costs as of July 23, 2006.

[2] There were six task orders issued under this contract. Task Order 1 ($2.5 million) pertained to the contractor's mobilization and Task Order 3 ($16.2 million) provided contractor life support. Task Orders 2 ($2.5 million), 4 ($1.4 million), 5 ($53.3 million), and 6 ($75.3 million) pertained to the design and construction of the AFRN system, to include sustainment contained in Task Order 5.

[3] This column includes total funds from the fiscal years 2003 and 2004 IRRF appropriations. These appropriations are commonly referred to as IRRF-1 and IRRF-2, respectively.

[4] The $2.9 million of DFI funding was pending and not yet committed on this date.

Recognizing the problematic security environment in Iraq, a CPA Communications Sector[5] tasking[6], issued April 1, 2004, through the CPA Program Management Office, directed initiation of the "National Security Emergency Communications Network: First Responder Network" (commonly referred to as the Advanced First Responder Network or "AFRN"). AFRN is a communications network designed to enable interoperable communications for Iraqi Ministry of Interior security and safety forces throughout Iraq to improve public safety. The Communications Sector tasking stated Iraqi first responders such as police, border patrol officers, firefighters, emergency medical personnel, and civil defense agencies, had only limited voice communications capabilities to conduct their respective missions.

The Communications Sector tasking also stated the project objective, intended scope of work, assumptions regarding the Iraq construction environment, the project start date of May 1, 2004, and a desired completion date of November 15, 2005. One of the Communications Sector tasking elements was to "…maximize the use of existing common infrastructure (especially long haul fiber, microwave links, towers, etc.) but not to the point where integration adds undue risk, cost, limits flexibility or data handling capabilities, impacts performance or causes safety concerns." Tasking assumptions included the statement that, "Iraq is a harsh environment for electrical equipment due to temperature extremes, frequent power outages, heavy rains and flooding, severe dust, high winds and sand storms. Looting, sabotage, and vandalism also remain prevalent throughout Iraq. "

On May 6, 2004, CPA and Combined Joint Task Force 7, which was the top Coalition military command in Iraq until May 2004; in cooperation with the Iraqi Ministries of Communications and Interior, published a Concept of Operations for the AFRN. The concept of operations stated the need for a nationwide first responder communication, command, and control system; and defined final operational capability as a digital communications system delivering national knowledge to individual first responders anywhere, anytime within seconds. The intended scheme of construction was to first establish functional, reliable networks in Baghdad and quickly establish comparable networks in the target cities connected to Baghdad.

Department of Defense Program Responsibilities. The CPA was created in May 2003 to oversee and operate the interim governing authority in Iraq. In addition to providing a temporary government for Iraq, CPA also had the duty to oversee the reconstruction and rehabilitation of Iraq's infrastructure. CPA prioritized its efforts into five general areas, which included security and the provision of essential services, such as energy, to the Iraqi people. Reconstruction and rehabilitation activities to address these priorities were divided into ten categories, or CPA offices, pursuant to Public Law 108-106 to support the Iraqi provisional ministries. These ministries were advised by CPA personnel. The CPA Senior Advisors to the Ministry of Communications and Ministry of Interior provided guidance to the ministries for developing the AFRN Concept of Operations; and determining user (i.e. Ministry of Interior) requirements, use of the communications infrastructure in Iraq, and funding for AFRN. The CPA was dissolved on June 28, 2004, and replaced by the United States Ambassador to Iraq, as the Chief of Mission-Iraq, with

[5] Public Law 108-106, November 6, 2003, specified Iraq reconstruction funding by reconstruction sectors.
[6] CPA Program Management Office Task Order Transportaton/Communications-001, First Responder Network, April 1, 2004. Not to be confused with task orders issued under a contract, during this period of time, the CPA Program Management Office issued task orders to implementing agencies. A task order is an administrative management tool. To avoid confusion, we refer to the administrative task orders in this report as "taskings".

the CPA advisory responsibilities being subsumed into the Department of State's Iraq Reconstruction Management Office (IRMO).

The Multi-National Security Transition Command-Iraq (MNSTC-I) is a subordinate command of the Multi-National Force-Iraq, which is the top coalition military command in Iraq. MNSTC-I provides support in training police and other security forces. MNSTC-I's mission is to organize, equip, and mentor Iraqi security forces in order to support Iraq's ultimate goal of a unified, stable, and democratic Iraq, which provides a representative government for the Iraqi people. On October 1, 2005, the responsibility for Ministry of Interior liaison transferred from IRMO to MNSTC-I. The MNSTC-I mission to provide training support to the Ministry of Interior is performed by its Civilian Police Assistance Training Team (CPATT). The MNSTC-I Directorate of Communications, Ministry of Interior Support Division provided management control and accountability of the first responder radios purchased for the AFRN project from the point in time they were removed from a U.S. Government controlled warehouse until such time as the radios were transferred to the Iraqi Government.

The Joint Contracting Command-Iraq/Afghanistan (JCC-I/A) was established in 2004 to consolidate contracting activities and reports through the Deputy Assistant Secretary of the Army (Policy and Procurement) to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology. As part of this mission, JCC-I/A issued and managed all contracts and task orders associated with the AFRN project, and also had responsibility for records administration for all records of U.S. property obtained through JCC-I/A contracts. With regards to the AFRN project, the Commanding General, JCC-I/A was designated as Program Executive Officer, in June of 2005, to increase overview and focus management of the basic AFRN contract as well as the contract providing the AFRN first responder radios.

The U.S. Army Corps of Engineers, Gulf Region Division (GRD) and the Project and Contracting Office (PCO) merged on December 4, 2005 to create an organization known as GRD-PCO. PCO was a temporary organization created under the Department of Defense on May 11, 2004, by National Security Presidential Directive 36, United States Government Operations in Iraq, which replaced the CPA Program Management Office. The Deputy Secretary of Defense established PCO within the Department of the Army and directed PCO to provide support for all activities associated with financial, program, and project management for both construction and non-construction IRRF activities. Both PCO and the Program Management Office provided AFRN project management support for the implementation of the AFRN project.

Department of State Program Responsibilities. The U.S. established the Iraq Reconstruction Management Office (IRMO) on May 11, 2004, pursuant to National Security Presidential Directive 36. IRMO, a temporary office within the Department of State and the U.S. Mission to Iraq, was established to facilitate the transition to a democratically elected, sovereign government of Iraq. IRMO executes its mission by assisting the U.S. Ambassador in setting reconstruction policy and provides expertise and operational assistance to Iraqi ministries in the reconstruction process. IRMO is organized into sectors to support the current Iraqi ministries much in the same manner as the CPA had been. IRMO responsibilities relative to IRRF include strategic planning, prioritizing requirements, monitoring spending, and coordinating with the applicable military commander. The CPA Project Management Office task order initiating the AFRN project assigned responsibility to the Senior Consultant, Communications Sector, to liaise with the Ministry of Communications. However, the intended user and ultimate the "owner" of AFRN was the Ministry of Interior. Until October 1, 2005, IRMO was responsible for liaison with both the Iraqi Ministry of Communications and the Ministry

of Interior. After October 1, 2005, the IRMO Senior Consultant to the Ministry of Communications also functioned in an advisory role for implementation of the AFRN.

Design of the Advanced First Responder Network. First responder networks essentially have three main elements: The public telephone system; a communication, command, and control system; and radios in the hands of first responders and their parent organizations such as police stations and fire departments. In that respect, AFRN is a typical first responder system. The AFRN project was to design and construct the second element and procure equipment for the third element.

Public Telephone System

The starting point in a first responder network is the public telephone system, including cellular phone systems, which provides the public with a means to request emergency services or report emergency information. In Iraq, the public telephone system is owned, operated, and maintained by the Iraq Telephone and Postal Company (ITPC), which is an agency of the Iraqi Ministry of Communications. The existing communications infrastructure of the ITPC includes the public telephone system and a fiber optic network that runs from Basrah in southern Iraq, through Baghdad, and terminates at Kirkuk in the north. The AFRN system design specified using the existing fiber optic network where available and would need a transmission capacity of 88 "E1s"[7] from the fiber network throughout the three AFRN "zones". The southern zone runs from Basrah in the south to Hillah, just to the southwest of Baghdad; a distance of approximately 300 miles. The northern zone runs from Mosul in the north to Baqubah, just to the northeast of Baghdad, a distance of approximately 225 miles. The central zone runs about 25 miles and is comprised of the area in and immediately surrounding Baghdad.

Communication, Command, and Control System

The second element in a first responder network is the infrastructure system that receives emergency requests from the public and ultimately dispatches first responder resources. The AFRN contract task orders 5 and 6 were to provide that system but, for reasons explained below, resulted in a smaller first responder system than originally intended. The AFRN system includes:

- the national coordination center
- network communications center
- 9 governorate dispatch centers
- 3 mobile switching offices
- 66 base transceiver stations (equipment shelters and towers used to receive and transmit radio calls between the first responder and the dispatch center)
- 104 high frequency radios for an emergency back up system

Although all of the existing AFRN components are important, the governorate dispatch centers, mobile switching offices, and the network communication center are critical to the functioning of all other components. Of the preceding three, the governorate dispatch centers are the heart of the AFRN system.

[7] An "E1" is a communications circuit which provides 30 megabits of transmission capacity and delivers 28 voice channels (with an additional two channels for transmission control).

Governorate Dispatch Centers

The governorate dispatch center (GDC) is the point where an Iraqi citizen's request for emergency services or report of emergency information reaches the Ministry of Interior's first responder resources. As the primary first responder dispatch organization, the GDCs contain the support personnel who receive calls from the public and dispatchers who determine the proper first responder resources to dispatch. The AFRN network includes communication equipment and software that accepts the incoming emergency call from the ITPC public telephone system. Once the AFRN system accepts the emergency call from the public phone system, a "call taker" in the GDC receives the call. After the call is received, the dispatcher determines the first responder assistance needed (police, fire, or medical) and then views a terminal that uses computer assisted dispatch software to display the location of available first responder resources. Radios used by the police, firefighters, or medical personnel transmit global positioning system data to the AFRN network. In addition, radios can belong to one or more "talk groups".[8] For example, all radios used by a city's police department would likely be in one talk group while all of the fire department radios would constitute another talk group. Dispatchers typically monitor talk groups to stay abreast of unfolding events.

Mobile Switching Office

The mobile switching office[9] receives and routes all communications from and to first responders and the applicable governorate dispatch center and provides the link to the public telephone system, to include communication protocols compatible with that used in the public telephone system. As built, the AFRN network has three mobile switching offices (one in each of the three AFRN zones) that use the ITPC fiber network to establish connectivity between the mobile switching offices in the other zones. This is especially important because the central zone (Baghdad) contains the national-level command and control functions and, more importantly from a system operation and maintenance standpoint, the AFRN system network communication center.

AFRN Communications Center

The AFRN Communications Center provides the vital function of monitoring and managing the entire communications network such as the mobile switching offices, base stations, transmission links, as well as all systems responsible for supporting the network such as servers. This includes network surveillance and alarm monitoring, disaster recovery, performance management and monitoring, and security management. Essentially, the communications center overseas all major components of the AFRN system. Due to its system-wide or "national-level" function, the communications center is co-located in Baghdad (the central zone) with the AFRN National Coordination Center, both of which are within the Iraqi Ministry of Interior building.

First Responder Radios

The third element of a first responder network consists of communication devices such as handheld or vehicle mounted radios used by police, fire, and emergency medical

[8] Groups of radios can be programmed to appear as a private radio network even though they share a common radio system. A radio may belong to more than one talk group. Dispatchers can scan several talk groups if needed.

[9] The term mobile switching office comes from terminology used in cellular phone communications and refers to a central switch that controls the entire operation of a cellular system. The AFRN system is a cellular Terrestrial Trunked Radio network commonly used in Europe.

personnel; or desktop radios for the police stations, fire departments, and emergency medical units. The radios purchased for the AFRN project, funded with $30.6 million from the IRRF Security and Law Enforcement Sector under a separate contract,[10] ultimately provided over 30,000 radios at an actual cost of $24 million. MNSTC-I's Civilian Police Assistance Training Team (CPATT) Communications Directorate was responsible for the management of the AFRN radios and developed written guidance and procedures to account for, control, and transfer the first responder radios.

Radio Models and Quantities

The purchased a total of 30,297 radios, including 140 spares, consisting of 4 models:

- 25,149 handheld (for issue to first responder personnel)
- 4,140 mobile (for first responder vehicles)
- 609 Gateway mobile (vehicle mounted unit to improve localized reception of handhelds)
- 399 desktop consoles (for police stations, firehouses, and medical units)

The mobile radios included the "Gateway" models that are used to increase the effective local area transmission/reception range of the handheld radios. For example, if emergency personnel were responding to a situation in a large building, a Gateway model mounted in one of the vehicles would improve the effective range of the radios used inside the building.

AFRN Construction, De-scoping, Integration, and Deployment.

Construction of the AFRN system primarily involved rehabilitating or remodeling existing buildings for the various command and control facilities such as the national-level facilities in Baghdad, the nine governorate dispatch centers, three mobile switching offices (normally collocated with a dispatch center). For the 66 base transceiver stations, leases and site access were required whenever a communication tower already existed in the required radio coverage area but was not owned by the Ministry of Interior. Sites without an existing tower required the erection of a new one and, again, if not a site owned by the Ministry of Interior, site access was required. However, to appreciate the otherwise straightforward task of remodeling existing facilities and erecting base transceiver station towers, it is important to recognize that the AFRN construction "site" stretched across Iraq, from Basrah in the south to Mosul in the north, and required site access to locations in nine different governorates and facilities often owned or operated by entities other than the ultimate user, the Ministry of Interior. Further, AFRN required the coordination and support of at least four different Iraqi government ministries.[11] The construction and deployment commenced with Task Order 5, in the Baghdad region; and continued with Task Order 6 for the remaining five regions.[12] Table 2 provides a chronology of significant events during the course of the two task orders.

[10] The Project and Contracting Office awarded contract W914NS-05-D-9008 on November 23, 2004, to obtain handheld, mobile, and desktop radios.

[11] These included the Ministry of Interior, the Ministry of Communication for the fiber optic network, the Ministry of Electricity for the commercial power supply, and the Ministry of Oil for the refueling of backup generators for AFRN.

[12] The remaining five regions were Basrah, Hillah, Mosul, Ramadi, and Tikrit.

Table 2: AFRN Task Orders 5 and 6 Chronology

Date	Project Event
August 10, 2004	The U.S. Project and Contracting Office issues notice to proceed for AFRN Task Order 5, Region 5 (Hillah) deployment of the AFRN system.
August 24, 2004	Delivery of AFRN design (completed under Task Order 2). User requirements specify AFRN deployment per region beginning with Region 5 (Hillah).
September 14, 2004	JCC-I/A and PCO receive a requested rough order of magnitude cost estimate for entire AFRN system (less first responder radios).
October 7, 2004	MNF-I issues memorandum to PCO stating a need to change the priority of AFRN installation to support January 2005 Iraq National Referendum resulting in a scope change to pending Task Order 5.
October 12, 2004	Contractor delivers definitized task order response reflecting change in Task Order 5 deployment priority.
November 30, 2004	JCC-I issues Task Order 6 notice to proceed.
December 26, 2004	Contractor provides Task Order 6 proposal for expansion to the remaining five regions.
February 2005	In response to JCC-I/A request, contractor provides revised Task Order 6 reflecting de-scoping the Governorate Dispatch Center (GDC) and nine base transmission stations from Basrah region.
June 2005	Stop work order issued for Ramadi sites due to security concerns. Ramadi de-scoped.
June 2005	JCC-I/A requests contractor to provide a "Top Down" estimate on completing and sustaining the AFRN project.
August 2005	Basrah GDC and seven base transceiver stations added back to scope
August 2005	JCC-I/A seeks funding for "Integration" of the AFRN system
August 22, 2005	JCC-I/A issues awards ISSF-funded contract W914NS-05-C-0066, the AFRN "Integration" contract.
June 2006	JCC-I/A awards the DFI-funded sustainment contract for AFRN.

Source: SIGIR analysis of JCC-I/A contract files

AFRN Scope Reductions. In September of 2004, PCO requested the AFRN prime contractor provide a rough order of magnitude cost estimate for the designed AFRN system. The subsequent $242 million estimate for the intended deployment of the system, which did not include the required radios for emergency personnel, vehicles, and stations ($30.6 million); exceeded the IRRF allotment by $91 million. Additional programming and/or contracting actions to reduce the scope of the AFRN system resulted in significant changes in the capability of the system as originally designed and as it exists today. Table 3 provides an overview of the net effect de-scoping.

Table 3: AFRN Net Effect of De-Scoping

Feature	AFRN Original Design	Actual Construction Subsequent To De-Scoping	Net Effect
Mobile Switching Offices	6	3	(3)
Switch Redundancy	1 in Hillah to backup Baghdad	None	(1)
Governorate Dispatch Centers	19 (2 for Baghdad)	9 (1 for Baghdad)	(10)
Regional Dispatch Centers[13]	6	0	(6)
Incident Coordination Centers	6	1	(5)
National Control Center	1	1	0
Communications Center	1	1	0
Base Transceiver Stations	172	66	(106)
Population Served	18,589,700	13,049,600	(5,540,100)

Source: SIGIR analysis of JCC-I/A contract files, as of June 3, 2006.

AFRN Integration Contract. In June of 2005, the JCC-I/A, in conjunction with PCO, began efforts to determine the remaining costs associated with completing and sustaining the AFRN project pending eventual turnover to the Iraqi government. Although the resulting estimate was not located during this audit, a June 20, 2005 "Funding Recommendation Paper" prepared by the Multi-National Force-Iraq stated an assessment of the AFRN project had established that the extension of the network was at risk. The paper included an estimate that $22 million was needed to continue progress and fund such things as needed training and support. In August 2005, JCC-I/A issued a second contract[14] funded with $20 million from the Iraq Security Support Fund provided by MNSTC-I. This contract included both costs to complete the system, such as additional costs for back-up generators; as well as operations and maintenance costs , such as physical repairs, software updates , and refueling of generators to ensure electrical power. The contract ended on May 2, 2006.

[13] The Regional Coordination Centers were removed from the design early on as redundant to the Incident Coordination Centers, which were subsequently reduced in number as well.
[14] Contract number W914NS-05-C-0066, August 22, 2005.

Besides operations and maintenance[15] provisions, the contract statement of work included the following:

- Install backup generators for 22 base transceiver stations sites.
- Develop and install software to convert the first responder radios' global positioning system data into the AFRN computer-assisted dispatch software program.
- Plan and execute AFRN database development, populate the database for all 15 AFRN cities, verify compatibility with the computer assisted dispatch software and conduct operational capability testing.
- Provide requirements for AFRN intercity connectivity and capacity, assess existing infrastructure [ITPC fiber optic network], and identify any shortfalls.
- Operations and maintenance of the AFRN system to include daily reporting of system performance management, to include AFRN reliability and availability.
- Train and certify 889 Ministry of Interior personnel, to include 765 governorate dispatch personnel.

Objectives

This report addresses whether responsible personnel efficiently and effectively managed the Advanced First Responder Network project that was created to provide Iraqi police, fire, and emergency medical units with a core national public safety communication, command, and control system. More specifically, this report addresses the extent to which:

- AFRN provides effective emergency communications for the citizens of Iraq, the police, fire, emergency medical departments and related command and control organizations
- radios purchased for distribution to the Iraqi police, fire, and emergency medical organizations were properly accounted for, controlled, supported, and transferred to the Iraqi Ministry of Interior
- U.S. government plans and funding were in place to sustain the Advanced First Responder Network pending the Iraqi government's assumption of those responsibilities; and whether U.S. officials provided the responsible Iraqi Ministry with sufficient information on operations and maintenance support requirements
- AFRN task orders were properly definitized; and related equipment purchases and contractor services were within the scope of the contract

For a discussion of the scope, methodology and a summary of prior coverage, see Appendix A. For definitions of the acronyms used in this report, see Appendix B. For a list of the report's distribution, see Appendix C. For a list of the audit team members, see Appendix D.

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[15] For the purposes of this report and as it relates to sustainment, "operations and maintenance" refers to activities related to the performance of routine, preventive, predictive, scheduled, and unscheduled actions aimed at preventing equipment failure or decline with the goal of increasing efficiency, reliability, and safety.

Effectiveness of the AFRN

As of June 15, 2006, the AFRN project had not resulted in an effective nationwide first responder communication, command, and control system for the Iraqi citizens or the Iraqi police, fire, and emergency medical services. Specifically,

- Communication connectivity did not exist between the three "zones" of the AFRN the system.
- Only two of nine governorate dispatch centers could receive emergency phone calls from the public.
- None of the nine GDCs can identify the locations of the various first responders.
- The AFRN Communications Center could only monitor system performance and health for the Baghdad zone.
- Reduced and unstable commercial electrical supply is causing higher than anticipated usage and failure of backup generators and associated automatic transfer switches.

Communication Connectivity. The three AFRN zones cannot communicate with each other. Specifically, the May 5, 2006, AFRN status report stated a system requirement of 84 E1s[16] with only 33 available. Although it has been well documented that sufficient connectivity and capacity does not exist to support communications between the three AFRN zones, determining why that has not happened is not clear. We did not identify any action being taken to address the causes. Further, in our discussions with representatives from GRD-PCO, IRMO, and CPATT present differing opinions on causes ranging from ITPC has not provided sufficient E1s; ITPC has provided sufficient E1s but they either fail or do not operate properly; to the AFRN construction may not have established proper connections between the AFRN equipment and the ITPC nodes. Further, physical damage to the ITPC fiber network resulting from either adjacent construction activity or deliberate interdiction periodically prevented connectivity regardless of network E1 capacity. Because connectivity could not be established, a full operational capability test (specified as a task order deliverable) of either the AFRN system installed under Task Order 6 or the entire AFRN system as a whole was not conducted at the time of this audit.

Despite the nationwide connectivity problems, the additional 30,000 radios purchased under the AFRN project have increased the communication capabilities, within each AFRN zone, for the Iraqi police, firefighters, and emergency medical responders and their applicable police, fire, and medical departments. Although subject to interrupted service associated with electrical supply, the first responder radios do allow a wider range of communication within the AFRN zones and shared access between the police, fire, and medical first responders and agencies.

[16] An "E1" provides 30 megabits of transmission capacity, delivers 28 voice channels (with an additional two channels for transmission control), and requires both system software and hardware on both the ITPC and AFRN sides of the "connection". The total requirement was 88 E1s on January 1, 2006 and was revised downward to 84 in the contractor's May 7, 2006 E1 requirement report.

Governorate Dispatch Centers (GDCs). When completed, the AFRN was to have nine fully operational and staffed GDCs. With the exception of Baghdad and Kirkuk, none of the dispatch centers are operational. To illustrate:

- At least seven of the GDCs cannot receive emergency phone calls, including those from cellular phones, from the public.
- None of the nine GDC dispatcher consoles provide the intended computer assisted dispatch function.
- With the possible exception of Baghdad, a sufficient number of trained personnel are no longer available to fully staff the remaining eight GDCs.
- Seven of the GDCs could not monitor radio network talk groups.

Table 4, below, provides a summary of the limitations reflected in the last AFRN status report provided to the GRD-PCO project manager (May 5, 2006). Discussions with GRD-PCO and CPATT representatives in June 2006 indicated the information in the May 2006 report is a fair representation of the AFRN operational status.

Table 4: AFRN configuration discrepancies by type (X denotes discrepancy by location and category).

GDC Location	Cannot Receive Emergency Phone Calls	Required Computer Assisted Dispatch Upgrade	Network Talk Groups Not Loaded	GDC Staffing Shortage	Total Discrepancies for Each GDC
Baghdad		X			**1**
Kirkuk		X		X	**2**
Tikrit	X	X	X	X	**4**
Basrah	X	X	X	X	**4**
Samawa	X	X	X	X	**4**
Diwaniyah	X	X	X	X	**4**
Hillah	X	X	X	X	**4**
Al Kut	X	X	X	X	**4**
Mosul	X	X	X	X	**4**
Total	**7**	**9**	**7**	**8**	**31**

Source: SIGIR analysis of PCO AFRN Status Report, May 5, 2006

Emergency Phone Calls

Seven of the nine GDCs cannot receive emergency calls from the Iraqi public. It appears the AFRN network was not designed for the communication protocol used by the ITPC public phone system. The exception to this is the Baghdad GDC. Based on statements obtained from CPATT and GRD-PCO personnel, the problem did not occur in the Baghdad GDC because the ITPC either was already using a compatible protocol system or was otherwise able to provide a compatible protocol. For calls made in the other eight GDC locations, the alternative is that the ITPC public phone system automatically routes emergency calls either to individual police, fire, or medical locations or to one of the

Provincial Joint Command Centers[17] where the information is then relayed to applicable first responder organizations. Although these alternative procedures will provide first responder help, the ability to do so quickly, efficiently, and effectively is diminished.

Computer-Assisted Dispatch

None of the nine GDCs can use computer-aided dispatch features. For example, one feature displays up-to-the-minute locations of the various first responders on the dispatcher's terminal screen. An upgraded version of the software required to provide computer-assisted dispatch had not been successfully loaded at any of the nine GDCs as of May 5, 2006. Further eight GDCs required an additional software upgrade to be able to display the computer-aided dispatch information in Arabic. As a result, without the computer-aided dispatch software, the one GDC that can receive emergency calls directly from the public (the Baghdad GDC) cannot readily identify the current location of first responders that may be near by to render assistance.

Radio Network Talk Groups

Dispatchers in seven of the nine GDCs cannot monitor radio calls from the various first responder talk groups in the GDC service area. Network talk groups are assigned by software that identifies which individual radios that belong to a specific talk group or groups. For example, the police officers within a defined jurisdiction and their assigned police station or city would constitute a talk group. Similarly, medical personnel and their associated medical facilities would be another talk group. Without the talk group identifiers loaded on individual radios, dispatchers cannot monitor radio talk groups, and hence manage the resources (i.e., Police officers) to resolve an incident.

GDC Staffing

Without a sufficient number of trained staffs, the GDCs, even if otherwise fully operational, will remain partially inoperable. The AFRN Integration contract included a requirement for training 710 GDC call takers and dispatchers; an average of 78 personnel per each of the nine GDCs. However, both CPATT and GRD-PCO personnel stated that although approximately 450 Iraqi nationals had received the training, the delays encountered in standing up the GDCs likely resulted in some people seeking employment elsewhere. CPATT personnel who have visited the GDCs estimated that as of June 1, 2006, there were approximately 9 employees in the Tikrit GDC, 7 in Mosul, and 30 in Bagdad. Estimates were not available for the remaining GDCs but were believed to be not staffed or, if so, understaffed because the GDCs were not operational. Without personnel to take emergency calls and dispatchers to locate, direct, and monitor first responder resources, functionally, a dispatch center does not exist.

AFRN System Performance Monitoring. The Communications Center, located in the central (Baghdad) system zone, cannot monitor the AFRN system performance in either of the two other AFRN system zones. As a result, system performance indicators, or system alarms, that could alert managers to potential system degradation do not exist for the majority of the AFRN system. GRD-PCO management personnel stated that the contractor had either planned or taken steps to install monitoring capability at one GDC in both the northern and southern zones. However, we believe either the equipment installation was not completed or trained personnel capable of monitoring the system at the two additional GDCs were not available because none of the required AFRN

[17] The Provincial Joint Command Centers have representatives from both the Ministry of Defense and Ministry of Interior to coordinate provincial resources and provide more complete assessments to the National Joint Coordination Center (NJCC). The NJCC is not part of the AFRN system or project.

performance reports we reviewed provided a comparable level of system performance detail as contained in the central zone reports.

Electrical Supply. There are an insufficient number of backup generators to ensure uninterrupted electrical power to the AFRN facilities. In spite of the documented problems with maintaining constant, and stable, electrical supply in Iraq; the AFRN design and subsequent construction task orders 5 and 6 assumed the availability of commercial power. For these sites, the task orders included the installation of backup generators. However, in addition to sporadic electrical supply, the Iraq electrical grid is unstable and voltage spikes frequently occur. The combined effects of the reduced availability and "on again-off again" nature of commercial power and voltage spikes have caused: (1) premature failure of the automatic transfer switches that serve to detect interruption of power and switch to a backup generator and (2) accelerated wear on the backup generators, which were not intended to provide power over long periods of time.

The AFRN "Integration" contract included a requirement to install an additional 22 generators in the AFRN system. At contract end in May 2006, only 12 of the additional generators were installed. As a result there is an increased risk of loss of both power sources, effectively shutting down portions of the network.

Management Actions

During the course of this audit, management officials within JCC-I/A, GRD-PCO, and MNSTC-I included a requirement in the new DFI contract for the new contractor to assess and provide a "state of the network" report on the AFRN system.

First Responder Radios

Accountability and Transfer of First Responder Radios

To their credit, the Office of the Chief of Staff, CPATT, issued written policy and procedures for receipt and issuance of AFRN radios. The guidance contained specific procedures and documents for transferring the assets from CPATT to the AFRN contractor for programming, from the contractor back to CPATT, and then from CPATT to representatives of the Iraqi Ministry of Interior.

However, CPATT personnel did not properly account for, control, and transfer all first responder radios. Specifically, the number of radios transferred to the Iraqi Ministry of the Interior and on-hand with CPATT[18] exceeded the total number documented as purchased. On the last recorded date of a signed receipt from a representative of the Ministry of Interior (January 22, 2005), the total of all radios transferred by CPATT representatives to the Iraqi government was 28,417 radios. On March 27, 2006, the AFRN contractor transferred 4,444 residual first responder radios of various models to CPATT representatives. Our reconciliation of available documents for the total radios purchased to the total quantities transferred to the ministry or on-hand disclosed CPATT did not maintain proper accountability over the radios. As noted in Table 5, the total number of handheld radios transferred or on-hand (28,481) exceeded the quantity purchased (25,149) by over 3,300 radios.

Table 5: Reconciliation of First Responder Radios

Model Type	Purchased	Received	CPATT Transfers To Ministry of Interior	Residual Radios Received from Contractor	Total On-Hand or Transferred	Difference (Purchased less On-Hand/ Transferred)
Handheld	25,149	25,149	24,831	3,650	28,481	+3,332
Mobile	4,140	4,140	3,282	161	3,443	-697
Gateway	609	609	0	609	609	0
Desktop	399	399	304	24	328	-71
Total	**30,297**	**30,297**	**28,417**	**4,444**	**32,861**	**N/A**

Source: CPATT and Contractor Transfer and Inventory Records, as of March 27, 2006.

This condition brings into question the accuracy of the quantities[19] listed on all transfer and inventory documents. Although there is no way to make a specific determination, it is possible that discrepancies occurred when radios were returned from the Ministry of

[18] The contractor responsible for programming the radios transferred all remaining radios to CPATT officials on March 27, 2006. Our reconciliation included a review of available documents for all transfers to the Ministry of Interior prior to that date and all on-hand radios received on that date.

[19] In addition to the 30,297 radios purchased under the contract there were many thousands of associated accessories purchased as well; for example carrying cases, antennas, spare batteries and re-chargers. Our reconciliation was limited to the radios which had the highest dollar value per item and were most subject to pilferage.

Interior to CPATT and then on to the various contractors[20] for either warranty work, upgrades, or retrofitting; and subsequently back the Ministry of Interior. Under these circumstances, it is possible that radios previously transferred to the Ministry of Interior were once again documented as transfers and receipted again by ministry officials. The CPATT procedures did not include guidance on the accountability, control, and transfer of radios returned from the Ministry of Interior to be worked on. However, we must note that there was insufficient documentation, either in the form of signed receipts transferring radios to the Iraqi government or remaining balances received[21] from the contractor, to account for 697 mobile and 71 desktop radios. For those two models (valued at over $700,000), either the Ministry of Interior transfer receipts or the actual radios are missing. Further, we could not determine why CPATT did not issue any of the 609 Gateway model radios (valued at over $900,000) to the Ministry of Interior for use in the AFRN system. Regarding the 3,332 handheld radios that exceeded the actual quantity purchased and received, we can only speculate that this occurred as a result of radios issued to the Ministry of Interior and subsequently returned and later reissued again.

Management Actions

Upon detection of the radio accountability issues we notified responsible CPATT officials. The officials began action to identify any missing documents evidencing transfer of radios to the Ministry of Interior. CPATT personnel requested copies of transfer and receiving documents from the ministry and, to that end, did receive and provide to us the copies they received. However, this additional documentation did not provide any new information on radio transfers or resolve the accountability issues described in this report.

[20] There were two contractors: (1) the vendor responsible for warranty work and (2) the AFRN contractor who performed programming and retrofitting required to add each radio to the AFRN system.
[21] DD Form 1149, Requisition and Invoice/Shipping Document, March 27, 2006, transferring residual assets from the AFRN contractor to CPATT.

Sustainment of the AFRN

U.S. funding for sustainment of the AFRN, to include typical operations and maintenance activities, is inadequate to maintain the system over time. Although U.S. government officials developed plans to sustain the AFRN system and U.S. officials provided the responsible Iraqi Ministry with sufficient information on operations and maintenance support requirements , the $180.1 million IRRF budget for AFRN , combined with the ultimate cost to field the system , was insufficient to provide sustainment pending the Iraqi government's assumption of those responsibilities. Specifically, only one of the AFRN task orders contained statement of work elements for operations an maintenance of the system. The AFRN "Integration" contract, funded from the Iraq Security Support Fund as discussed earlier, was a follow-on contract that contained operations and maintenance provisions for the AFRN through the end of January 2006. Consequently, U.S. officials sought sustainment support to fund an operations and maintenance contract from the Iraqi Ministry of Interior. However, the time required for writing, soliciting, and awarding the resulting contract eventually necessitated extending the AFRN Integration contract, and eventually the use of a separate "bridging" contract to cover the period between the "Integration" contract and the eventual Iraq contract, awarded with DFI funds. Although there was insufficient funding, the task orders issued from the design/build contract as well as the Integration contract contained provisions to develop the Iraqi government's ability to maintain the AFRN system.

Task Orders 5 and 6 – Operations and Maintenance Provisions. In contrast to AFRN Task Order 5, which included operations and maintenance of the AFRN Baghdad Region, the work scope for Task Order 6 specifically did not include any such provision, even though the size[22] of the Task Order 6 infrastructure deployment was nearly twice that (approximately 173%) of the AFRN infrastructure deployed under Task Order 5. Although Task Order 6 included the provisioning of required tools for end-user personnel to perform maintenance it did not include the actual performance of operations and maintenance activities such as making repairs or refueling generators. In effect, U.S. agencies were installing additional infrastructure during Task Order 6 with no provisions to provide associated operations and maintenance for the AFRN system. However, the task orders did include training the system users (the Iraqi government) for both operations and maintenance personnel, to include equipment manuals.

Iraqi Ministry of Interior Sustainment Support. U.S. officials recognized the shortfall in sustainment funding. On August 1, 2005, the Commanding General, JCC-I/A sent a memorandum to the Iraqi government's Minister of the Interior requesting assurance that the Iraqi government would provide adequate funds for operations and maintenance of the AFRN system during 2006. The memorandum provided an estimated sustainment cost of $15.3 million[23] for the period of February through December of 2006. The Minister's response was that the Ministry's budget for calendar year 2006 could not support operations and maintenance funding following completion of the AFRN Integration contract on January 31, 2006. As a result, on August 6, 2005, MNSTC-I and JCC-I/A decided to request financial support from the Ministry of Interior by obtaining approval to use $15.3 million of uncommitted DFI money to supplement the ministry's

[22] This is a SIGIR computed estimate based on the number of "facilities" in each task order. This included switching offices, command/control/system monitoring facilities, and base transmission tower sites; a total of 30 facilities for Task Order 5 and 52 facilities for Task Order 6.

[23] Our extrapolation of the figure results in an annualized estimate of $16.7 million.

calendar year 2006 budget for AFRN sustainment. On December 24, 2005, the Iraqi Minster of Finance signed a memorandum providing $20 million of uncommitted DFI funds "solely for the purpose of operation and maintaining the Advanced First Responder Network." The memo also extended to December 31, 2006, the authority for JCC-I/A to monitor, make payments, and otherwise administer DFI funded contracts. The approval to use DFI money would allow sustainment through December 31, 2006, for example the cost of refueling generators, various lease expenses, and maintenance of the system components.

Extension of the AFRN "Integration" Contract. The Integration contract was also extended to address the shortfall in sustainment funding and included additional tasks to build the Iraqi government's abilities to take over system operations. For example, the contract included an on-the-job training program to transfer technical operations and maintenance knowledge that would enable Iraqi engineers and technicians to conduct operations and maintenance activities. In addition, all documentation created for the operations and maintenance program was provided in English and Arabic, and in both hard and soft (electronic) copies. On January 15, 2006, pending solicitation and award of the DFI funded contract for the Iraqi government, JCC-I/A extended the performance period on the Integration contract line item for generator refueling and operations maintenance at an additional cost of $2.9 million. The cost to extend the contract caused the total contract costs to exceed the $20 million obtained from the Iraq Security Support Fund. The additional $2.9 million needed was funded from the $16.7 million allotment received from the DFI and was intended to ensure continued sustainment support.

DFI Bridging Contract. Due to the time required to solicit and award the DFI funded AFRN sustainment contract it was necessary to find a temporary vehicle to continue operations and maintenance support when the AFRN "Integration" contract expired on May 2, 2006. As a result, JCC-I/A awarded a short duration "bridging" contract[24] to span the period until award of the DFI contract. The bridging contract period ended on June 10, 2006, and used an additional $2.3 million of the $16.7 million allocation from the Development Fund for Iraq. This allowed the U.S. and Iraqi governments to continue AFRN sustainment support.

DFI Sustainment Contract. JCC-I/A awarded DFI sustainment contract[25] began on June 11, 2006. The contract will provide operations and maintenance support through December 31, 2006, at which time the Iraqi government's budget will begin for calendar year 2007. The contract also includes training of Iraqi personnel. The net amount of the original DFI allotment of $16.7 million, after deducting the sustainment support received from that allotment on the "Integration" and bridging contracts funded the DFI Sustainment Contract at $11.5 million.

[24] Contract number DFIFAC-06-C-0001, May 3, 2006.
[25] Contract number DFIFAC-06-C-0003, June 11, 2006.

Contract Definitization and Propriety of Equipment Purchases and Contractor Services

Contracting officials properly managed the undefinitized contract actions issued under both the IRRF funded design-build contract and the subsequent ISSF-funded "Integration" contract. These were the only contracts related to the AFRN project that we reviewed which were subject to definitization. Specifically, and in accordance with Defense Federal Acquisition Regulation criteria, each task order for the design-build contract or contract line item for the "Integration" contract established a not to exceed value at the time of notification to proceed; each undefinitized contract action was definitized within the 180 day time limit; and none of these exceeded the 50% obligation limit prior to definitization. As a result, U.S. officials took appropriate actions to definitize both contracts containing undefinitized contracting actions.

For the definitized contracts, our review did not identify any equipment or contractor services that indicated expenses not reasonably expected for the design and installation of a communications system. Specifically, our review of the definitized cost proposal schedules of the most significant costs for equipment (predominantly communications-electronics equipment items) and services (security, design and installation) did not reveal planned equipment or services that would not be consistent with the design, procurement, and installation of a communications system. For example, the most significant single item equipment cost estimate contained in the pricing schedules was for the three switches for the mobile switching offices (estimated at approximately $3 million per item). Contractor services included system engineering, installation, and the life support and security platform of Task Order 3; with the latter estimated at $16 million over the life of the design-build contract.

Conclusion and Recommendations

Conclusion

The initial assumptions to build the AFRN system upon the existing Iraqi electrical and fiber optic infrastructure exacerbated the extent to which U.S. implementing agencies could efficiently and effectively manage the AFRN project. The combined effects of the concept of operations; scope assumptions regarding existing infrastructure; project budget; and the political and security environment in which the system would be built and operated resulted in a project fraught with risk. As a result, the Advanced First Responder Network project has not provided the Iraqi citizens or the Iraqi government with a fully functioning and effective first responder communication, command, and control capability.

The conditions limiting the effectiveness are fundamental and significant on both the governorate and national levels of the AFRN system. To a large measure, the AFRN limitations are the result of assumptions that the existing fiber optic and electrical infrastructure could readily support the AFRN project. Assuming the infrastructure conditions can be effectively resolved, sufficient trained personnel are not available to man the first responder dispatch centers. Although the AFRN project has increased communication capability amongst first responders, at the governorate level, Iraqi citizens cannot use their telephones to access the AFRN system to request police, fire department, or emergency medical from seven of the nine governorate dispatch centers.

- None of the dispatch centers can use the AFRN systems computer-assisted dispatch features while dispatchers at seven of the centers cannot monitor radio communications of the first responders. Assuming the preceding problems did not exist, sufficient trained personnel to fully staff all of the dispatch centers are likely not available.

- At the national level, there is no AFRN connectivity between the three zones of the system. Consequently, the escalation of incidents to and visibility of first responder resources by the national coordination center is not possible for eight of the nine governorates. Located in and isolated to Baghdad as well are the systems monitoring functions of the AFRN communication center. As a result, monitoring the performance and health of the AFRN system is limited to the Baghdad zone.

Accountability was not maintained for the 30,000 radios, valued at over $24 million, purchased for the Iraqi police, fire, and emergency medical organizations. Our reconciliation of the thousands of radios purchased to the total number of radios transferred to the Iraqi government or from the contractor to the Civilian Police Assistance and Training Team pending transfer to the Iraqi government disclosed accountability had been lost. The reconciliation indicated 9% more radios transferred to the Ministry of Interior than the number purchased. On one hand, our reconciliation indicated two different radio models with a combined shortage (i.e. number purchased greater than number transferred or on hand) totaling 768 radios; while the records for a third model reflected 3,332 more radios than were ever purchased. The reconciliation variances bring the accuracy of all inventory and transfer records into question.

Sufficient U.S. funds were not available to sustain the AFRN system until the Iraqi Ministry of Interior could budget for and obtain the necessary funds to sustain the AFRN

system. When U.S. officials determined sufficient funding was not available they took effective actions to seek and obtain the needed funding from other sources.

Material Management Control Weaknesses. Our review disclosed a material management control weakness regarding U.S. Government property accountability for the 30,000 radios purchased during the AFRN project.

Recommendations

We recommend the following management corrective action regarding fiber optic network connectivity and capacity required to achieve inter-zone operation of the Advanced First Responder Network.

1. We recommend that the Commanding General, Multi-National Security Transition Command-Iraq ensure that the contractor conducting the AFRN assessment is required to coordinate with the Iraqi Ministry of Interior and Iraqi Ministry of Communications Iraq Telephone and Postal Company in diagnosing and resolving the specific technical reason or reasons why connectivity between the three AFRN zones does not exist.

We also recommend the following management corrective actions regarding the accountability of radios purchased for the Advanced First Responder Network.

2. We recommend that the Commanding General, Multi-National Security Transition Command-Iraq, direct the appropriate command organization to:
    a. Request the Iraqi Ministry of Interior provide current inventory information, by model type, for the first responder radios in their possession.
    b. Direct CPATT personnel conduct a physical inventory, by model type, of any radios not yet transferred to the Ministry of Interior.
    c. Reconcile the Iraqi Ministry of Interior and CPATT inventories to the record of all radios purchased and document the results.
    d. Initiate actions in accordance with applicable U.S. government property management policies, to properly account for and control all radios.

Management Comments and Audit Response

We received written comments on a draft of this report from MNSTC-I and the Iraq Reconstruction Management Office. We received technical comments from JCC-I/A and the U.S. Army Corps of Engineers Gulf Region Division.

MNSTC-I did not concur with the first recommendation (for jurisdictional reasons), but did concur with the second. We agree the IRMO Communications Sector was responsible for the AFRN project, as evidenced by the original CPA tasking order; however, our recommendation was appropriately addressed to MNSTC-I for the following two reasons. First, the AFRN system transferred to control of the Iraq Ministry of Interior on June 26, 2006 and secondly; MNSTC-I assumed responsibility for coalition force liaison to the Ministry of Interior in October, 2005. Although management did not specifically concur with the first recommendation, we believe the substance of their comments fully satisfy the recommendation's intent. Specifically, their comments state

the contractor has in fact assessed the connectivity situation, is working with the Iraq Telephone and Postal Company to address the connectivity issues, and that a formal meeting is planned between the Ministry of Interior and Ministry of Communication to discuss system requirements and the way ahead. In addition to concurring with recommendation two, MNSTC-I stated corrective actions are either in progress or planned. MNSTC-I also provided technical comments for this report. We reviewed those comments and incorporated changes into the final report where appropriate.

The Iraq Reconstruction Management Office suggested we add a recommendation to "get all nine AFRN Governorate Dispatch Centers operating and in service with fully trained staff to realize the full potential of the system". While we recognize the importance of the Governorate Dispatch Centers to the AFRN system, and discuss this on pages 12-13, we did not include this recommendation in our report because the DFI Sustainment contract depicted in Table 1, page 1 and discussed on page 18 notes the subject contract includes training.

The Joint Contracting Command-Iraq/Afghanistan and the U.S. Army Corps of Engineers Gulf Region Division also provided technical comments for this report. We reviewed those comments and incorporated changes into the final report where appropriate.

All comments received were fully responsive.

Appendix A. Scope and Methodology

This audit was initiated on February 23, 2006 (Project No. 6008) to determine whether responsible personnel efficiently and effectively managed the Advanced First Responder Network (AFRN) project which was created to provide Iraqi police, fire, and emergency medical units with a core national public safety communication, command, and control system. More specifically, this report addresses the extent to which:

- AFRN provides effective emergency communications for the citizens of Iraqi, the police, fire, emergency medical departments, and related command and control organizations
- radios purchased for distribution to the Iraqi police, fire, and emergency medical organizations were properly accounted for, controlled, supported, and transferred to the Iraqi Ministry of Interior
- U.S. government plans and funding were in place to sustain the Advanced First Responder Network pending the Iraqi government's assumption of those responsibilities; and whether U.S. officials provided the responsible Iraqi Ministry with sufficient information on operations and maintenance support requirements
- AFRN task orders were properly definitized; and related equipment purchases and contractor services were within the scope of the contract

In the performance of the audit, we interviewed key management officials in Joint Contracting Command-Iraq/Afghanistan, U.S. Army Corps of Engineers Gulf Region Division and Project and Contracting Office , Iraq Reconstruction Management Office , and Multi-National Security Transition Command-Iraq .

To determine whether the AFRN system provided effective emergency communications to the Iraqi citizens, first responders, and associated command and control elements we identified first responder network requirements contained in the CPA Program Management Office, Communications and Transportation Sector Task Order TC-001 , the final AFRN Concept of Operations , and the user requirements contained in the applicable contract task orders . In addition, we reviewed applicable contract and project administration records for AFRN task orders 2, 4, 5, and 6 ; and the follow-on contract for indications of scope or user requirement changes , associated cost estimates, and cost to complete information .

To determine if the AFRN system was effective we reviewed the most recent AFRN status report, charts depicting system performance, and discussed the operational status of the system with U.S. government officials knowledgeable with the project and current status. In addition, we visited the Ministry of Interior where we observed AFRN Communications Center, the central zone mobile switching office, and discussed the AFRN system with officials of the ministry.

To determine if the radios purchased for the AFRN system were properly accounted for, controlled, supported, and transferred to the Ministry of the Interior we reviewed the pertinent contract and related purchase orders; U.S. government receiving documents; documents used to transfer and evidence receipt of radios transferred to Iraqi government representatives; and receiving documents used to transfer residual AFRN radios and accessories to CPATT. We computed and reconciled the totals of radios orders, received, transferred to the Iraqi government representatives, and the residual assets transferred to

CPATT. We also reviewed the CPATT policy and procedures to maintain control and accountability of the AFRN radios to the point of transfer to the Government of Iraq.

To determine if government officials effectively and efficiently managed the AFRN contract to include the definitization of the task orders we reviewed each of the six task orders issued under the design-build contract and compared the date of task order issue to the date each respective task order was definitized. To determine if AFRN task orders were properly definitized, we reviewed and compared the applicable independent government estimates, notices to proceed, not to exceed funding documents, and related definitization documents to criteria contained in SUBPART 217.74 of the Defense Federal Acquisition Regulation Supplement, May 12, 2006.

To determine whether plans and funding were in place to sustain the first responder radios and AFRN, we identified and reviewed pertinent contracts for sustainment efforts (operations and maintenance) in the statements of work. We identified and reviewed U.S. documents used to develop sustainment cost estimates in order to determine whether U.S. officials had developed and provided to representatives of the Iraqi government sufficient information detailing the estimated funding needed to operate and sustain the AFRN system.

To determine whether equipment purchases and contractor services were within the scope of the contract, we reviewed the definitized contractor and subcontractor estimated cost exhibits for both equipment and services and compared high dollar equipment items and services to the applicable task order or contract line item work scopes.

We conducted this audit from February 2006 to July 2006, in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. During the course of this audit we used computer-processed contract payment data for radios purchased under contract number W914NS-05-D-9008 obtained from Corps of Engineers Financial Management System. Although we did not assess the general or application controls of the system, we determined the accuracy of the data through comparison to applicable invoices and purchase order pricing documents. Our tests disclosed the data were sufficiently reliable to support audit conclusions and recommendations.

Prior Coverage. We did not identify any prior audit or inspection reports addressing the effectiveness of AFRN, definitization of AFRN task orders, control and transfer of first responder radios, or U.S. government plans and funding to sustain AFRN.

Appendix B. Acronyms

AFRN	Advanced First Responder Network
CPA	Coalition Provisional Authority
CPATT	Civilian Police Assistance Training Team
DFI	Development Fund for Iraq
GDC	Governorate Dispatch Office
GRD-PCO	U.S. Army Corps of Engineers Gulf Region Division - Project and Contracting Office
JCC-I/A	Joint Contracting Command-Iraq/Afghanistan
IRMO	Iraq Reconstruction Management Office
IRRF-1	Iraq Relief and Reconstruction Fund, Fiscal Year 2003 Appropriation
IRRF-2	Iraq Relief and Reconstruction Fund, Fiscal Year 2004 Appropriation
ISSF	Iraq Security Support Fund
ITPC	Iraq Telephone and Postal Company
MNSTC-I	Multi-National Security Transition Command-Iraq

Appendix C. Report Distribution

Department of State

Secretary of State
    Senior Advisor to the Secretary and Coordinator for Iraq
U.S. Ambassador to Iraq
    Director, Iraq Reconstruction Management Office
    Mission Director-Iraq, U.S. Agency for International Development
Inspector General, Department of State

Department of Defense

Secretary of Defense
Deputy Secretary of Defense
    Director, Defense Reconstruction Support Office
Under Secretary of Defense (Comptroller)/Chief Financial Officer
    Deputy Chief Financial Officer
    Deputy Comptroller (Program/Budget)
Inspector General, Department of Defense
Director, Defense Contract Audit Agency
Director, Defense Finance and Accounting Service
Director, Defense Contract Management Agency

Department of the Army

Assistant Secretary of the Army for Acquisition, Logistics, and Technology
    Principal Deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology
    Deputy Assistant Secretary of the Army (Policy and Procurement)
    Director, Project and Contracting Office
    Commanding General, Joint Contracting Command-Iraq/Afghanistan
Assistant Secretary of the Army for Financial Management and Comptroller
Chief of Engineers and Commander, U.S. Army Corps of Engineers
    Commanding General, Gulf Region Division
Auditor General of the Army

U.S. Central Command

Commanding General, Multi-National Force-Iraq
    Commanding General, Multi-National Security Transition Command-Iraq
    Commander, Joint Area Support Group-Central

Other Federal Government Organizations

Director, Office of Management and Budget
Comptroller General of the United States
Inspector General, Department of the Treasury
Inspector General, Department of Commerce
Inspector General, Department of Health and Human Services
Inspector General, U.S. Agency for International Development
President, Overseas Private Investment Corporation
President, U.S. Institute for Peace

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

U.S. Senate

Senate Committee on Appropriations
- Subcommittee on Defense
- Subcommittee on State, Foreign Operations and Related Programs

Senate Committee on Armed Services

Senate Committee on Foreign Relations
- Subcommittee on International Operations and Terrorism
- Subcommittee on Near Eastern and South Asian Affairs

Senate Committee on Homeland Security and Governmental Affairs
- Subcommittee on Federal Financial Management, Government Information and International Security
- Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia

U.S. House of Representatives

House Committee on Appropriations
- Subcommittee on Defense
- Subcommittee on Foreign Operations, Export Financing and Related Programs
- Subcommittee on Science, State, Justice and Commerce and Related Agencies

House Committee on Armed Services

House Committee on Government Reform
- Subcommittee on Management, Finance and Accountability
- Subcommittee on National Security, Emerging Threats and International Relations

House Committee on International Relations
- Subcommittee on Middle East and Central Asia

Appendix D. Audit Team Members

This report was prepared and the review was conducted under the direction of Joseph T. McDermott, Assistant Inspector General for Audit, Office of the Special Inspector General for Iraq Reconstruction. The staff members who contributed to the report include:

Samuel Gonite

Walt Keays

Larry T. Monson

Jason Venner

Management Comments
Multi-National Security Transition Command-Iraq

MULTI-NATIONAL SECURITY TRANSITION COMMAND-IRAQ
BAGHDAD, IRAQ
APO AE 09316

CONCUR

27 July 2006

MNSTC-I ACoS, DIRECTOR OF COMMUNICATIONS/J6

MEMORANDUM FOR SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

SUBJECT: Draft Audit Report on Review of the Advanced First Responder Network (SIGIR-06-020)

1. This Multi-National Security Transition Command-Iraq (MNSTC-I) response to the subject audit will be addressed in 4 areas. The first area will contain responses to recommendations and findings (paragraphs 2 and 3), the second area will contain additional management comments not identified in the report (paragraph 4), the third area will contain inaccuracies noted within the report (paragraph 5) and the fourth will contain a general Command recommendation as a result of the deficiencies noted in this program (paragraph 6):

2. MNSTC-I does not concur with recommendation #1 which was to: *"ensure that the contractor conducting the AFRN assessment is required to coordinate with the Iraqi Ministry of Interior and Iraqi Ministry of Communications Iraq Telephone and Postal Company in diagnosing and resolving the specific technical reason or reasons why connectivity between the three AFRN zones does not exist."* The US implementing agencies for all AFRN contracts, prior to the O&M contract let in June 2006, did not include MNSTC-I as a responsible agency. While the O&M contractor has agreed to do an assessment of the status of AFRN, the full completion of this recommendation does not fall within the scope of the existing O&M contract. Additionally, the resolution of such a solution would almost certainly involve millions of dollars that are not part of this contract or programmed for on any budget. When IRMO transferred ownership of the program to the MOI, MNSTC-I agreed to do Operation and Maintenance of the system from June 2006 to December 2006 with the money available in the program. IRMO had final responsibility for the contracts that built this program and produced these deficiencies and should be responsible to ensure any deficiencies recommended for US correction are resolved.

a. The first part of this action has been completed, in that the contractor has assessed the connectivity situation, and produces a weekly report for the MoI and MNSTC-I on connectivity status. The contractor is also working with ITPC to address connectivity issues. A formal meeting is planned between MoI and MoC to discuss system requirements and the way ahead.

b. The Command would add, however, that since AFRN was an Iraqi Reconstruction Management Office (IRMO) project, that the IRMO Office of Communications (OOC), who are responsible for interfacing with the Ministry of Communications, and who were responsible for working to coordinate and provision of ITPC connectivity during the build phase, be engaged in the effort to "diagnose and resolve" connectivity issues that existed and still exist under their contract.

3. Recommendation #2: Although IRMO was responsible for this contract and therefore the accountability of the radios under it, the J6/CPATT Support Division did assist them with the distribution of those radios and has the current O&M contract that started 10 Jun 06. Therefore, the Command concurs with this recommended action to correct the deficiencies as follows:

a. Item 2a: *"Request the Iraqi Ministry of Interior provide current inventory information, by model type, for the first responder radios in their possession."* **Concur:** This action is in progress.

b. Item 2b: *"Direct CPATT personnel conduct a physical inventory, by model type, of any radios not yet transferred to the Ministry of Interior."* **Concur:** This item is also in progress. All radios received were transferred to the MoI. However, since that time, many have been returned to the J6/CPATT Support Division's possession for repair and retrofit. As noted in the report, sufficient processes did not exist at the time to maintain 100% positive accountability of returned radios. The CPATT Support Division is currently performing physical inventories of those radios in their possession and those which are out for repair. Procedures to accommodate radios and other equipment being transferred back to the CPATT Support Division, and then again to the MoI, as well as to and from the contractors are being developed.

c. Item 2c: *"Reconcile the Iraqi Ministry of Interior and CPATT inventories to the record of all radios purchased and document the results."* **Concur**: This action will commence immediately upon completing the actions cited under Recommendations 1 and 2.

d. Item 2d: *"Initiate actions in accordance with applicable U.S. government property management policies, to properly account for and control all radios."* **Concur:** As stated under Recommendation 2, appropriate procedures are being developed. It should be noted, that procedures are also being developed within the MoI to manage and account for the radios and other equipment they now own.

4. Additional MNSTC-I comments relative to the report's findings, for which no recommendations were cited:

a. In reference to the opening paragraph in the conclusions: *"U.S. implementing agencies did not efficiently and effectively manage the AFRN project."* **Command recommendations:** that the implementing agencies develop, enforce and/or overhaul policies and procedure to ensure effective and efficient management. In the case of AFRN, these deficiencies are most notable in the lack of qualified technical oversight, ineffective or non-existent design review and approval procedures, and inadequate or no formally appointed program management. Although the report contends that insufficient funding was allocated for the project, the Command maintains that funding was more than adequate to build the system, without the numerous residual technical defects and *with* an adequate number of sufficiently trained personnel ***if*** there had been adequate and qualified technical and managerial oversight.

b. A lack of adequate design review is the singularly most significant factor in the failure of AFRN to achieve the stated objective. Evidence of this can be seen in numerous quotes from the audit report:

(1) "...assumptions by U.S. government officials that the existing fiber optic and electrical infrastructure could readily support the communications requirements."

(2) "...no connectivity between the three zones of the AFRN system...and insufficient backup generators"

(3) "There are an insufficient number of backup generators to ensure uninterrupted electrical power to the AFRN facilities. In spite of the documented problems with maintaining constant, and stable, electrical supply in Iraq; the AFRN design and subsequent construction task orders 5 and 6 assumed the availability of commercial power."

c. A lack of qualified technical oversight was also a significant factor in the failure of AFRN to achieve the stated objective as partially noted in the report quotes in italics below:

(1) "It appears the AFRN network was not designed for the communication protocol used by the ITPC public phone system." (Page 12)

(2) The section pertaining to ***Mobile Switching Offices*** (Page 5) states in part: *"The mobile switching office ... provides the link to the public telephone system, to include communication protocols compatible with that used in the public telephone system."* However, during the build phase, the switches were configured with a different communications protocol that is used in Iraq. As a result, specialized converters were installed in the system to compensate, incurring additional cost, time and complexity. These converters have been a continuous source of problems in the system, in that they throw off system timing. The original problem could have been solved – and still can be – through use of specialized communication cards installed in the GDCs; which would correct the protocol disparity without creating timing issues.

(3) "None of the nine GDCs can identify the locations of the various first responders." (Page 11)

(4) Under **Governate Dispatch Centers** (Page 5), the report states "the dispatcher...then views a terminal that uses computer assisted dispatch software to display the location of available first responder resources." The original computer aided dispatch software (ProCAD) was entirely in English. When an attempt was made to upgrade to an Arabic-enabled, the effort utilized approximately $1.4M, was unsuccessful, and the contractor was unable to revert to the previous version. As a result, the GPS capability of the system was inoperable for several months. Once the appropriate technical resources were engaged, the problem was rectified in a matter of days.

d. Inadequate program management was a significant contributing factor in the failure of AFRN to achieve the stated objective, specifically as noted in the report quotes in italics below and our comments thereto:

(1) "...insufficient numbers of trained personnel to fully staff and operate all nine of the first responder dispatch centers." **AND** *"Although there was insufficient*

funding allocated, the task orders issued from the design/build contract as well as the Integration contract contained provisions to develop the Iraqi government's ability to maintain the AFRN system." It further warrants mention that the DFI fund secured form Operation and Maintenance until the end of CY06 may not, in the end analysis, provide sufficient funding for some of the training required - and decidedly insufficient to fund correction of any of the outstanding technical deficiencies (generators, incorrect communication protocols, etc.) - as much of the funding was absorbed to defray overruns from the previous contracts.

(2) *"In contrast to AFRN Task Order 5, which included operations and maintenance…Task Order 6 did not include any such provision, even though the size of the Task Order 6 infrastructure deployment was nearly twice that of the AFRN infrastructure deployed under Task Order 5."*

(3) It should also be noted that, although the report correctly notes, at several junctures, that *"the...budget for AFRN, combined with the ultimate cost to field the system, was insufficient to provide sustainment pending the Iraqi government's assumption of those responsibilities;"* it does ***not*** note that, in the end analysis, the funding also proved insufficient to adequately complete the system and bring it to an acceptable level of operation.

(4) As can be seen from the report, many of the efforts that were supposed to be executed under the AFRN contract(s) were only partially completed or not completed at all. The principal reason for this lies with the nature of the contract. AFRN was establish as a Level of Effort endeavor…which, in essence, means that once the funding is gone or the contract period is over, the contractor has fulfilled their obligation, regardless of the status of the system. Ergo, provisions such as those listed under "**AFRN Integration Contract**" (Page 8) – many of which were not fully executed – remain incomplete; there is no requirement for the contractor to finish the job; or for a specified level of functionality or quality. *"The AFRN "Integration" contract included a requirement to install an additional 22 generators in the AFRN system. At contract end in May 2006, only 12 of the additional generators were installed."* The Integration Contract also provided for building out the AFRN data base, and *"on-the-job training program to transfer technical operations and maintenance knowledge that would enable Iraqi engineers and technicians to conduct operations and maintenance activities."* These efforts were, in truth, barely even started. What was executed, however, was an extensive and costly Integration Study that accomplished virtually nothing toward correcting the known issues in the AFRN system.

5. Administrative inaccuracies noted within the report:

   a. The last sentence in the second paragraph on page 3 reads "the CPATT Directorate of Communications was responsible for program management of the radios purchased for the AFRN project." Additionally, the last paragraph under *First Responder Radios:* (on page 6) states MNSTC-I's Civilian Police Assistance Training Team (CPATT) Communications Directorate was responsible for the management of the AFRN radios…). These statements are incorrect in two ways: First, such an office does not

exist. There is a MNSTC-I J6 CPATT Support Division working within the CPATT building that has 8 personnel in it who are on the J6 JMD. One of those personnel worked with distribution of the AFRN radios. There was and is also an IRMO person working at the same location with this J6 person to help with the AFRN program. Second, and more importantly, the CPATT Support Division did not have program management responsibility for the radios or any other part of the program. This contract was let on behalf of IRMO and as no formal Program Manager seems to ever have been appointed, they are responsible for the program and the equipment, which includes the radios, under it. The IRMO employee, working with the AFRN radios at the CPATT building, was never given management responsibility of the radios or program.

b. Under **Design of the First Responder Network,** ***Communication, Command, and Control System:"*** The term "network communications center" should read Network Operation Center (NOC). The list does not include the Incident Control Center (ICC) – which is not now, and for all practical purposes has never been, operational. The discussion following this list includes reference to an ***"AFRN Communications Center"*** – there is actually no such entity. From the discussion, I believe this is actually the Network Operation Center (NOC). In addition, the National Coordination Center (NCC) is not addressed, nor are the 104 HF radios for emergency backup…which were never actually used for their intended purpose.

c. Based on the clarification in item 5a above, when the report mentions "CPATT personnel" as having provided statements under pages 12 and 13, this should be changed to reflect either the J6 CPATT Support Division person or the IRMO employee, they were the only two assisting IRMO with this program.

d. Under Acronyms on page 24: *GDC* is listed as *Governate Dispatch Office*, it should be Governate Dispatch Center.

6. Command Recommendation: Procurement practices should be developed, enforced or overhauled to ensure that the type of contract and manner of award are commensurate with the type of work to be done. The Federal Acquisition Regulation contains extensive guidance on these subjects, and although all the right signatures and approvals were obtained to award the AFRN contract, it is evident that exceptions or deviations were made which has directly resulted in the system not delivering the expected level of functionality or capabilities.

7. POC is LTC Glenn Botkin, MNSTC-I J6, Chief, CPATT Transition Support Division, DSN 318-239-7745.

GEORGE W. HAYS,
COL, USAF

5

Management Comments
Iraq Reconstruction Management Office

Embassy of the United States of America
Baghdad, Iraq

23 July 2006

INFORMATION MEMORANDUM
UNCLASSIFIED

TO: SIGIR

THROUGH: Chargé d'Affaires – Margaret Scobey

FROM: IRMO Chief of Staff – William Lynch

SUBJECT: Comments for SIGIR Review of the Advanced First Responder Network

Recognizing the prevailing security environment of Iraq in April 2004, the Coalition Provisional Authority initiated the Advanced First Responder Network (AFRN) in order to improve public safety. The AFRN is a communications network enabling interoperable communications for the Iraqi Ministry of Interior security and safety forces throughout Iraq. The cost of the AFRN design-build project, first responder radio procurement, and subsequent sustainment effort will total $220.1 million by the end of 2006.

Special Inspector General for Iraq Reconstruction (SIGIR) conducted a review of the AFRN project and published a draft report with recommendations to improve the performance of the AFRN.

The report touched on some of the shortfalls of the AFRN projects, specifically:

- the lack of fiber capacity to connect the three regional AFRN sub-networks;
- seven out of nine nonworking Governorate Dispatch Centers (GDC);
- missing radio handsets;
- insufficient training.

However, the recommendations were only made to improve the fiber network connectivity and account for all the radios. It is very critical to include recommendations to get all nine GDCs operating and in service with fully trained staff in order to realize the full potential of the system.

All recommendations are directed to the Commanding General, Multi-National Security Transition Command – Iraq team. None are directed to IRMO.

Attachment:
Draft Review of the Advanced First Responder Network

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