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United States Department of State
and the Broadcasting Board of Governors
Office of Inspector General

Report of Inspection

Summary Evaluation of the Regional Information Management Centers

Report Number IT-I-05-05, September 2005

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INTRODUCTION

Four Regional Information Management Centers (RIMC) situated strategically around the world provide telecommunications, network, systems engineering, installation, and maintenance support for embassies and consulates. The Office of Inspector General (OIG) conducted inspections of all four RIMCs during FY 2004. The objectives of this evaluation were to assess the effectiveness of the RIMC program in providing information management support to posts worldwide and to identify systemic issues among the RIMCs.

RESULTS IN BRIEF

In general, OIG found RIMC management to be effective, and constituent posts rated customer support as satisfactory. However, OIG identified several areas where changes in operations would improve overall Department of State (Department) performance. Currently, each RIMC operates under a different organizational and reporting structure, with varying support responsibilities and resources. Standardizing the organization and operations of the RIMCs could improve the overall efficiency and customer support provided through the centers. Additional operations officer positions are necessary to provide adequate operational oversight for constituent posts. The Bureau of Information Resource Management (IRM) needs to take steps to ensure the long-term viability and quality of its technician workforce. Digital technicians at the RIMCs do not have any administrative authority within the Department's network architecture, which creates difficulties in performing remote diagnostics when troubleshooting problems over the phone. Few RIMC technicians use the Universal Trouble Ticket (UTT) system consistently, which hampers the collection of aggregate data. The Department's lack of a telephone switch maintenance contract that allows RIMC telephone technicians direct access to the Nortel help desk hampers their ability to provide timely customer service. Finally, there are no memoranda of agreement between IRM and the Foreign Service Institute (FSI) as to how training centers located at two of the RIMCs are supposed to operate.

BACKGROUND

The four RIMCs are collocated with Embassy Bangkok, Embassy Pretoria, Consulate General Frankfurt, and the Florida Regional Center in Fort Lauderdale. Each center is responsible for providing telegraphic, telephonic, e-mail, and on-site maintenance support for the full range of information systems deployed at all posts within their region. RIMC Frankfurt and RIMC Ft. Lauderdale, in coordination with FSI, operate training centers that offer information systems courses to systems administrators. The RIMCs also support the Department's antiterrorism initiatives by providing emergency telecommunications support to areas of escalating political instability, including the major theaters of the war on terrorism: Iraq and Afghanistan. RIMC locations and regional responsibilities are detailed in the figures below:

RIMC Support Regions



RIMC Headquarters	Branch Offices	Regions Supported	Number of Posts Supported
 RIMC Frankfurt	Berlin, London, Paris, USNATO Brussels, Geneva, Moscow, Vienna, Cairo	EUR, NEA, AF	118
 RIMC Bangkok	Manila, Beijing, Tokyo, Canberra, NewDelhi	EAP, SA	58
 RIMC Ft. Lauderdale	Mexico City	WHA	49
 RIMC Pretoria	Lome*, Harare*	AF	40

**positions to be relocated to RIMC Pretoria Headquarters*

FINDINGS AND RECOMMENDATIONS

OIG found management of the centers to be effective, and customer service surveys sent to the constituent posts of each RIMC indicated a high level of customer satisfaction, though they would like to receive additional support, such as site visits for preventive maintenance. However, the types of service provided and the organizational structures that provide it will have to adapt to changing needs within the Department. IRM's strategic plan is moving towards reduced overseas storage of electronic data and applications, as well as centralized system administration, maintenance, and software application support. The role of on-site information technology (IT) professionals will have to change from that of actively managing networks to being an extension of the central management system, with functions based on central direction, such as swapping out equipment as necessary. Such centralization changes the requirements for full-time IT professionals at post, and also affects the need for regional support personnel in both technical disciplines and operational oversight. These changes may require remodeling the RIMC concept to one of smaller, more widely dispersed regional support centers with more direct oversight responsibility and accountability for smaller sets of posts. IRM's Information Technology Working Group has recently begun to discuss how the RIMCs will fit into the changing IT landscape. The future IT environment and support needs of the Department should be a consideration in all of the findings discussed in this report.

STANDARDIZING THE RIMC MODEL TO MEET FUTURE NEEDS

Standardizing the RIMCs and the support services they provide could improve efficiency by ensuring RIMCs are adequately and equitably staffed to meet support requirements of their respective regions. Currently, no two RIMCs are alike in their staffing or services provided, as illustrated in the staffing table below. Each operates under a different organizational and reporting structure, with varying support responsibilities and resources. For example, two of the RIMCs operate training centers in coordination with FSI; the other two do not. Full-time instructors staff RIMC Frankfurt's training center, while RIMC Ft. Lauderdale's instructors perform training as a collateral duty. Their primary responsibility is operations oversight of constituent posts, which is done as part of a unique office among RIMCs called the

Regional Information Technology Support Office (RITSO). The RITSO staff of information management specialists (IMS) provides configuration management support to constituent posts; at the other RIMCs this is a digital technician (information management technical specialist (IMTS)) responsibility. RIMC Frankfurt oversees an IMS rover program that provides operations support for posts during staffing gaps; rover programs for the other regions are managed by the regional bureaus.

RIMC Staffing		Executive Management	Branch Chiefs	Eligible Family Members	Contractors	Foreign Service Nationals	Office Management Specialists	Instructors	IMS Rovers	IMS RITSO	Communications Specialists	Digital Technicians	Telephone Technicians	Radio Technicians	Operations Officers	Total Staff	Number of Posts Supported
B	RIMC angkok	2	3	2	3	3	0	0	0	0	9	3	4	2	31	58	
P	RIMC retoria	2	3	2	1	0	0	0	0	0	4	4	4	0	20	40	
F	RIMC rankfurt	2	4	3	4	5	1	2	8	0	12	7	5	1	54	118	
F	RIMC t. auderdale	2	4	0	3	0	1	0	0	3	1	9	4	5	1	33	49

The RIMCs’ different organizational structures and services provided, as well as inconsistent responsibilities among IMTS disciplines, IMS personnel, and contractors at the RIMCs, contribute to confusion at constituent posts about first responders in different situations, create problems for technicians taking assignments at other RIMCs, and make it difficult to compare staffing across RIMCs. The overlaps in functional responsibilities also keep the technical expertise of IMTS personnel from being fully employed. There is currently no memorandum of agreement between IRM and the regional bureaus that specifies organizational structures or the types of services to be provided by RIMCs to constituent posts, nor adequate performance metrics in place to assess the quality of service provided.

Recommendation 1: The Bureau of Information Resource Management, in coordination with the Bureaus of European and Eurasian Affairs, East Asian and Pacific Affairs, and African Affairs, should develop a memorandum of agreement that, at a minimum, standardizes the organizational structures and services to be provided by Regional Information Management Centers, sets standards of performance, and provides a system of metrics for assessing the quality of service provided. (Action: IRM, in coordination with EUR, EAP, and AF)

Each of the RIMCs operates under a different arrangement for funding and personnel resources. All of the RIMCs receive program funding through IRM, and

the regional bureaus receiving support provide positions to staff three of the RIMCs through a variety of arrangements. For example, the Bureau of Near Eastern Affairs (NEA) transferred their RIMC positions to the Bureau of European and Eurasian Affairs to provide assistance to NEA posts on a fee for service basis from RIMC Frankfurt. The RIMCs' resources are provided by and subject to the needs of regional bureaus, such as assigning technicians from RIMCs to fill temporary positions in Baghdad. As a result, RIMC staffing does not consistently and adequately reflect the support needs of the constituent posts. For example, RIMC Ft. Lauderdale and RIMC Frankfurt have the same number of radio technicians, yet RIMC Frankfurt supports more than twice as many posts as RIMC Ft. Lauderdale. Overall, the ratio of IMTS personnel at each RIMC to the number of posts supported varies from 1:2.7 to 1:4.9, illustrating a wide disparity in how the RIMCs are staffed. A given discipline at one RIMC might be overstaffed, yet a transfer of positions to another RIMC with a shortage in that field is unlikely in the current situation with assets controlled by regional bureaus.

RIMC Ft. Lauderdale, however, is now under the authority of IRM, with positions staffed accordingly. The increase in customer satisfaction at RIMC Ft. Lauderdale after assets were transferred to IRM points to the benefits possible with program standardization under the functional bureau. Although similar transfers with the other RIMCs would involve costs such as housing and the added burdens of assuming administrative overhead and International Cooperative Administrative Support Services membership, transferring RIMC positions from the associated regional bureaus to IRM could serve to better align staffing to meet needs. It could also ensure a better fit for RIMC within IRM's overall customer support program, including initiatives for regionalization of IT support and forward staging of equipment.

INCREASING OPERATIONS OFFICER POSITIONS

There are not enough operations officer positions within the RIMC program to provide adequate operational assistance to constituent posts. As shown in the staffing table in the previous section, two of the RIMCs have only one operations officer, and RIMC Pretoria's operations officer position has been eliminated. In the case of RIMC Frankfurt, the operations officer is responsible for 118 posts. This position provides advice and support for all aspects of information management (IM) operations, conducts informal inspections, assists in strategic and contingency planning, and in some cases conducts communications security audits. The chief benefit that these periodic visits provide is the consultation to improve manage-

ment and operational controls of information systems at posts. In customer service surveys, posts that received this assistance described the operations officer position as “invaluable.”

With the Department’s transition to more centralized management of information systems, the need for assistance in network configuration and systems administration may diminish; however, the need for assistance in compliance with Federal and Department IT rules and regulations, information assurance, information systems security functions, and other planning and documentation will remain. Increasing the number of operations officers to provide more coverage of each RIMC’s serviced posts would improve the operational and security posture of those posts’ information and communications systems. Additional regional positions such as the operations officer could be realized by redeploying work processes away from posts to regional support centers to address the need for standardized global IT support. Such actions should be considered and implemented within the context of ongoing rightsizing initiatives within the Department.

Recommendation 2: The Office of the Under Secretary for Management, in coordination with the Bureaus of Information Resource Management, Human Resources, European and Eurasian Affairs, East Asian and Pacific Affairs, and African Affairs, should design and implement a plan to increase the Regional Information Management Centers’ operational assistance to constituent posts. (Action: M/P, in coordination with IRM, DGHR, EUR, EAP, and AF)

MAINTAINING THE TECHNICIAN WORKFORCE

The RIMC program is facing a serious problem of attrition among technicians that has resulted in staffing shortages, which hamper the RIMCs’ ability to provide timely and efficient customer service. Insufficient staffing with experienced IMTS personnel means that RIMCs must often operate in a reactive manner, precluding proactive measures such as site visits for preventive maintenance and operational oversight that could serve to correct deficiencies before they become serious problems. The attrition and resulting staffing shortage of technicians has many causes: heavy travel schedules that affect quality of life, insufficient incentive programs for retention of technicians, a perceived lack of promotion potential within the technician skill code that causes technicians to take out-of-cone assignments, and a lack of overseas positions for new hires to gain experience. IRM can

improve the overall effectiveness of the RIMC program by ensuring a continuous workforce of technical and operational personnel with the tools and experience necessary to support the complex IT systems deployed worldwide.

According to RIMC management, the primary reason for technical personnel leaving their skill code is the extensive travel and the burden it puts on their family life. In many cases, post differentials and cost of living allowances make it more advantageous financially and less stressful on the employee and their family to be assigned to nontraveling positions overseas. The Department has no incentive for technician personnel to remain technicians in these instances and has relied on the proposition that there will be enough personnel to fill these ranks just because they enjoy traveling. Also, as an IMS there are a world of possible assignments to bid on, whereas the only overseas positions a technician can bid on are at three of the RIMCs and certain branch offices.

Another cause of overall technician attrition is the perceived lack of promotion potential within the technician skill code. This perception causes technicians to take out-of-cone assignments because it is regarded as a “value-added” assignment that will make them more competitive to promotion panels. While there can be a benefit in technicians gaining operational experience, it is questionable as to the value added over those technicians actually working within their own skill code. Some of the value-added assignments have included general services officer and financial officer positions. RIMC management has found that many technicians lose their technical expertise once they take such out-of-cone assignments.

Compounding the loss of technicians due to out-of-cone assignments is that these personnel are generally still officially counted as technician personnel for years until a skill code change is completed. This creates a lag in hiring authorizations, since the Bureau of Human Resources might regard the technician skill code as being at full complement, while in fact there might be 30 to 40 technician positions in out-of-cone assignments. These value-added assignments come at significant cost to the Department because of turnover of technical personnel into other cones, which in turn necessitates a constant intake of new-hire technical personnel, all needing to be trained. Service agreements currently in place do not fully consider the cost of training technicians and can be waived by career development officers to allow out-of-cone assignments.

Further human resource problems are created when new technicians are hired. In addition to the training expense mentioned above, the new-hire technicians require overseas experience. However, there are limited positions for new-hires overseas. This is because IRM tries to send new-hires to the main RIMC offices or

branch offices with senior technicians present. Finding positions overseas for new-hire technicians often means that an experienced technician would need to take a domestic assignment or hard-to-fill position, both of which they are often unwilling to do. Sometimes the senior technicians are forced into domestic assignments by ceding the overseas position to an entry-level grade. This creates further attrition among seasoned technicians and is tilting the balance of the overall technician workforce towards inexperienced new-hires. For example, almost all of RIMC Pretoria's technicians are on their first or second tour, and 50 percent of RIMC Frankfurt's digital section is made up of entry-level technicians.

Keeping a qualified workforce of technicians has become a dilemma. The lack of incentive for technicians to remain technicians is causing them to leave the technical ranks for other skill codes, and sending new-hire technicians overseas for experience displaces the seasoned technicians that remain, thus causing further attrition and a less experienced workforce. Solving these problems will require IRM to work closely with the Bureau of Human Resources. The emphasis should be to retain experienced technicians rather than continually hiring and training new ones. All of the human resource issues will have to be considered in light of the projected future role of RIMC in the changing IT field.

Recommendation 3: The Bureau of Information Resource Management, in coordination with the Bureau of Human Resources, should design and implement a plan to improve the career track and retention of information management technical specialist personnel, including appropriate incentive packages and training service agreements that specify a minimum period of service be completed within the technician skill code. (Action: IRM, in coordination with DGHR)

GRANTING ADMINISTRATOR ACCOUNTS FOR TECHNICIANS

Digital technicians at the RIMCs do not have any administrative authority within the Department's network architecture, except when they perform site visits. This creates difficulties in performing remote diagnostics when troubleshooting problems over the phone, because they do not have access to utilities such as ping and trace route, which help identify network paths and diagnose problems. The Enterprise Network Management Operations Center is working with one of the RIMCs to permit a limited level of administrator privileges for digital technicians to allow them to perform their duties more effectively.

Recommendation 4: The Bureau of Information Resource Management should provide Regional Information Management Center technicians with a level of administrator access to the Department network infrastructure sufficient to allow them to troubleshoot post problems. (Action: IRM)

USING THE INFOCENTER AND UNIVERSAL TROUBLE TICKET SYSTEM

Few RIMC technicians use the UTT system consistently because many IT professionals at posts prefer to contact RIMC directly. The general perception is that “when it counts, you are going to pick up the phone and call the people you know.” Most customers and technicians prefer to work directly with each other. Although they recognize the value of tracking service calls and collecting aggregate data for analysis, they do not believe that the UTT system effectively performs this task. On a practical level, technicians noted that the system takes too long to be useful during emergency situations and is also tedious to enter information into on a daily basis. However, the system is undergoing improvements and should have increased capability in the future. RIMC technicians should make greater use of the system to build the store of aggregate data.

Recommendation 5: The Bureau of Information Resource Management should ensure that technicians at Regional Information Management Centers employ the Universal Trouble Ticket system in their interactions with constituent posts and that actions taken by technicians are appropriately recorded in the system database. (Action: IRM)

PURCHASING NORTEL MAINTENANCE CONTRACTS

The Department does not currently have a telephone switch maintenance contract that allows RIMC telephone technicians direct access to the Nortel help desk. This differs from the type of support technicians were accustomed to under the Mitel contract, and they are finding it difficult to find sources of information to troubleshoot problems. Currently, there is a single individual in the Foreign Post Telephone (FPT) help desk who has direct access to Nortel engineers and acts as a

liaison for all RIMC locations. RIMC technicians must work through this Department contact. Having only one point of contact for much needed technical assistance creates delays and frustration in providing assistance to RIMC customers. FPT recognizes the need for RIMC telephone technicians in the field to have direct access to the Nortel help desk and has been pursuing funding for such access for two years. The Department may be able to find a more cost-effective solution through other companies that provide similar advanced technical assistance for Nortel products at more competitive rates.

Recommendation 6: The Bureau of Information Resource Management should provide the necessary funding for purchase of a telephone maintenance contract to allow Regional Information Management Center technicians access to a help desk for technical assistance with Nortel products. (Action: IRM)

STANDARDIZING OPERATIONS OF TRAINING CENTERS

The lack of standardization among RIMCs also applies to training centers. Two of the four RIMCs have training centers that operate in coordination with FSI. However, there are no memoranda of agreement between IRM and FSI as to how these centers are supposed to operate. The training centers have no formal budgets. Funding for training materials is provided by FSI, while the RIMCs cover incidental operating expenses. The question still remains as to whether the current model of having training centers hosted by RIMCs is the most efficient means to provide instruction, despite the argument that RIMC technicians with field experience make ideal instructors. Also, the current location of the two training centers in Frankfurt and Ft. Lauderdale may not be the most accessible to students. While RIMC Frankfurt's location in central Europe keeps their training schedule and classrooms full, the training center in Ft. Lauderdale has been underused--during the OIG inspection, a class had only three students, one of whom was a Foreign Service national from Embassy Kathmandu.

There have been problems with students being enrolled in RIMC training centers without the training center being notified, as well as problems identifying the funding source for students and whether they have met course prerequisites. Since FSI is unable to extend Student Training Management System access to remote sites due to technical limitations, or assume responsibility for registering students in classes held at remote locations, these difficulties are likely to persist.

Recommendation 7: The Bureau of Information Resource Management, in coordination with the Foreign Service Institute, should develop a standard training center to be implemented at Regional Information Management Centers. (Action: IRM, in coordination with FSI)

FORMAL RECOMMENDATIONS

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ABBREVIATIONS

AF	Bureau of African Affairs
DGHR	Office of the Director General of the Foreign Service and Director of Human Resources
EAP	Bureau of East Asian and Pacific Affairs
EUR	Bureau of European and Eurasian Affairs
FPT	Foreign Post Telephone Branch
FSI	Foreign Service Institute
IM	Information management
IMS	Information management specialist
IRM	Bureau of Information Resource Management
IT	Information technology
M/P	Office of Management Policy
NEA	Bureau of Near Eastern Affairs
OIG	Office of Inspector General
RIMC	Regional Information Management Center
RITSO	Regional Information Technology Support Office
SA	Bureau of South Asian Affairs
USNATO	U.S. Mission to the North Atlantic Treaty Organization
UTT	Universal Trouble Ticket
WHA	Bureau of Western Hemisphere Affairs

APPENDIX A - SCOPE AND METHODOLOGY

To meet its evaluation objectives, OIG reviewed findings developed during the inspections of the four RIMCs, as well as additional supporting documentation collected during those inspections. OIG met with various Department officials in Washington, DC, to get additional information.

OIG's Office of Information Technology performed this review in Washington, DC, between February 4 and 25, 2005. OIG held additional discussions on the report during August 2005. It is based on an analysis of inspection work at RIMC Bangkok, Thailand, between February 2 and 23, 2004; RIMC Pretoria, South Africa, between February 12 and March 19, 2004; RIMC Frankfurt, Germany, between May 24 and June 9, 2004; and RIMC Ft. Lauderdale, Florida, between July 12 and 22, 2004. The major contributors to this report were Lynn Allen, Mary S. Heard, and Matthew J. Ragnetti.