



DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

DATE: February 22, 2017

TO: MERA Governing Board

FROM: Pat Echols, Operations Officer

SUBJECT: Errata Sheet #1 to Agenda Item C-1, Radio Communications System Contract with Motorola Solutions, Inc.

You are hereby advised of the following revisions and/or clarifications for said Contract covering the period of February 14 through February 21:

1. The following sections are revised to read as follows (revised pages posted to web site):

Section 5.2, page 5-19: Last two sentences deleted.

Section 5.3, page 5-37: Text revised to reflect that NICE system is included as part of the SUAII.

Section 5.14.12, page 5-128: Language regarding system acceptance revised to conform with definition in contract document.

Sections 10.12 and 12.5 are added regarding microwave support services.

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5.2 B.) RADIO DISPATCH CONSOLES

Motorola is proposing its state-of-the-art, high-tier radio dispatch IP console system. The MCC 7500 meets the trunked dispatching needs of MERA with an industry-leading feature set. This advanced feature set, ease of operation, and ability to customize the MCC 7500 dispatch console will improve first responder safety, decrease dispatch operator workload, all while maintaining strict security of voice communications. MCC 7500 operator positions connect directly to the radio system's IP transport network. Audio processing, encryption, and switching intelligence for dispatch are performed within each software-based operator position, without additional centralized electronics.

The proposed MCC 7500 Dispatch IP Consoles and sites consist of the following elements:

- HP Z440 Workstation PC, keyboard and mouse.
- 22" Touch-screen LCD monitors.
- Voice Processing Module (VPM).
 - Telephone Headset Port (for radio & telephone on one headset)
- Two Headset Jacks.
- Two Dual Muff Headsets.
- Two Speakers (can be expanded to a total of eight speakers).
- Dual Pedal Footswitch.
- Network Equipment.
- Conventional Channel Interface Equipment.

These components are connected together and to the rest of the ASTRO 25 system on an IP network via console site gateways and Ethernet switches. The MCC 7500 Dispatch Console functions as an integrated component of the total radio system, fully participating in system level features, such as end-to-end encryption and agency partitioning.

The MCC 7500 Dispatch Console has been robustly engineered to provide 24/7/365 dispatch capabilities with redundant and/or fault-tolerant systems should any failures occur. Every dispatch center has two GGM8000 routers connecting the site and the central controller. If one of the routers fails the other router will automatically take over with no disruption to dispatch or communications. For connectivity to the core, a single site link can be used, but will not provide for dual path redundancy. Motorola recommends dual site links to provide the highest level of redundancy at console sites, as well as seamless fallback between the routers. If both site links are lost between a dispatch location and the central controller, the console will go into fallback operation. Every dispatcher at the site experiencing connectivity issues are notified by an indication in the status bar at the bottom of the dispatch GUI that the dispatch console is in fallback operation. Figure 5-7 shows a typical dispatch site configuration with backup control stations and conventional channels connected to the site via Motorola's Conventional Channel Gateways (CCGW).

The Master site equipment is colocated with a dispatch location and 2 Simulcast Prime sites. It is expected that existing fiber within the facility will be re-used as the network connection between all of the equipment.

5.3 C.) VOICE LOGGING RECORDER AND INTEGRATION

(Option for local agency purchases)

Based on new requirements provided by MERA during negotiations, Motorola is proposing to provide a NICE IP-based logging solution to capture radio traffic from the trunked system and any conventional channels that are tied into the new system via Conventional Channel Gateways (CCGW).

Motorola has evaluated MERA's needs for a logging solution for their radio traffic. Motorola has partnered with NICE Systems to provide MERA with an IP logging recorder solution.

The IP logging recorder works in conjunction with a Motorola Archiving Interface Server (AIS) and a NICE INFORM server. The AIS and NICE IP Logger sit inside the Radio Network, while the INFORM server sits on the MERA network. These networks are separated by a firewall.

The AIS is configured to provide radio audio to the NICE IP Logger. The IP Logger stores the audio on the INFORM server. When users need to recall captured audio, they use a web browser to access the INFORM server.

The IP Logger DOES NOT capture telephone audio.

If MERA needs to also capture telephone audio, NICE has their NRX product which interfaces to the telephone network. The NRX telephony logger sits at each specific agency since phone lines are not consolidated at a central point like the radio system's Master site. The NRX server was not proposed. The INFORM server allows users the ability to store and recall telephone and radio audio from a single interface.

The existing Voice Print International logger will remain operational to capture telephone audio as it currently functions. No changes to the VPI logger are proposed.

NICE equipment is a certified solution for Motorola systems and is part of the Motorola maintenance plan (years 1-3). NICE equipment will be upgraded as part of the SUAIL program. Pricing is provided for the SUAIL.

All logging configuration and client terminals are web based.



Configurational changes, such as code plugs on subscribers or console resources, are not considered major system failures and will not impact the results of the 30 day operational test.

Responsibilities and deliverables for Motorola and MERA are defined in Table 5-33.

Table 5-33: Responsibility Matrix

Task	Responsibility	Deliverable
Motorola and MERA will define critical faults.	Motorola and MERA	Critical fault list
30 day operational test commences. All critical faults are captured	County	Fault list
Correction of any critical faults	Motorola	Remediation plan and correction of fault
Sign off on 30 day operation test result	County	30 Day test sign off

Completion Criteria

This task is considered complete when no critical faults have occurred over a 30 day period and MERA has signed off on the 30 day Operational test results.

5.14.12 System Acceptance

System acceptance will occur upon successful completion of the acceptance tests. Upon system acceptance, the Motorola and MERA will memorialize the event by promptly executing a system acceptance certificate. If the Acceptance Test Plan includes separate tests for individual subsystems or phases of the system, acceptance of the individual subsystems or phases will occur upon the successful completion of the Acceptance Tests for the subsystem or phase, and the parties will promptly execute a acceptance certificate for the subsystem or phase.

If MERA believes the system has failed the completed acceptance tests, MERA will provide Motorola a written notice that includes the specific details of the failure. Minor omissions or variances in the System that do not materially impair the operation of the System as a whole will not postpone system acceptance or subsystem acceptance, but will be corrected according to a mutually-agreed schedule.

Motorola understands that MERA will have some users on the system during our testing and training periods. A mutual written agreement between Motorola and MERA will define which users may be on the system during the testing and training period. Beneficial use is defined as using the system for operational purposes and specifically excludes usage associated with testing and training.

5.14.13 Project Finalization

The finalization phase of the project consists of ensuring that all criteria for final project completion have been met. Responsibilities and deliverables for Motorola and MERA are defined in Table 5-34.

Table 5-34: Responsibility Matrix

Task	Responsibility	Deliverable
Motorola will resolve punchlist items documented at System Acceptance.	Motorola	Approved Punchlist Resolution
Motorola will ensure that the project team and the Service organization work closely together to provide a seamless transition to the warranty phase of the project.	Motorola	Service Transition Certificate and Customer Support Plan



10.12 NOKIA MICROWAVE SERVICES AND WARRANTY

Motorola has selected Nokia to provide the microwave backhaul to connect all sites to the core. As part of the services and warranty package for the microwave, the following services will be provided by Motorola in relation to the microwave system.

The microwave network is composed of the 9500 MPR microwave radio and its associated lines, dishes and dehydrators. The TSM8000 is the microwave network management system which reports detected issues to the Unified Event Manager (UEM).

The microwave network warranty is for years 1 – 3, with extended warranty for years 4 – 15.

Two full network refreshes, which involves a complete replacement of all 9500 MPR microwave radios (dishes, lines, dehydrators are excluded), have been priced into the proposal for MERA/Marin County. This would bring all equipment to the latest release at the time the refresh occurs. These microwave network refreshes are not part of Motorola's SUA2 program. The network refresh is independent of the SUA2 program.

Microwave Services and Warranty are handled through Motorola's Customer Support Center.

10.12.1 TECHNICAL SUPPORT (9500 MPR, TSM 8000)

The microwave network is monitored by the TSM 8000. Any issues with the microwave network will be displayed on the UEM.

In the event that an issue arises, MERA will contact Motorola's Customer Support Center and a ticket will be opened and tracked. Phone support is provided to troubleshoot problems via phone down to MPR9500 or TSM8000 component level, or sufficiently to exclude these items as the root cause.

Any patches or maintenance releases associated with the microwave network will be provided to MERA to allow their technical personnel to install the patches.

The 9500 MPR and TSM8000 technical support also provides 24x7 access to product specific Customer Support content of the Alcatel-Lucent.com web site. Customer Support content may include technical product support information, subscription services, and other self-help facilities.

Technical support does not include preventive maintenance of the microwave network.

10.12.2 ADVANCED REPLACEMENT

The Advanced Replacement program allows MERA/Marin County to receive a replacement component of the microwave network within one day of determination that a MPR9500 or TSM8000 component has failed.

After a ticket has been opened, technical support will work with MERA/Marin County to troubleshoot the issue. If it is determined that a specific 9500 MPR or TSM8000 component is the root cause, Motorola and Nokia will immediately ship a replacement part to MERA/Marin County for delivery in one business day. Once the replacement part is placed into operation, MERA/Marin County will send, at Motorola's expense, the defective part back to Nokia.

10.12.3 SOFTWARE SUBSCRIPTION PLAN

The Software Subscription Plan provides MERA/Marin County with the latest software release that is applicable to the 9500 MPR and TSM 8000 components. The SSP includes feature releases as well as patch releases and maintenance releases, and may include third party software if supported and licensed through Alcatel-Lucent.

All feature releases will be provided to MERA/Marin County via Internet download, CD, DVD, tape, or file transfer protocol (FTP).

If needed, the SSP will provide new/upgraded firmware for control card.

Note: if a feature release contains a new feature for which an additional license/activation fee is required, this must be purchased separately.

12.5 NOKIA MICROWAVE SERVICES AND WARRANTY

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