
MIA Security Systems – O&M Full Support Services

This information is designed to inform the supplier community and the public that Miami-Dade County intends to enter into a non-competitive contract to purchase a product or service.

1. Summary

Scope of work is for site operations, maintenance, and extending warranties for the Airport Security Network ("ASN") systems, as well as continuing support of the Security System Integration. Work will include daily "on-site" support, 24x7x365 "on-call" support, preventative maintenance activities, and extended warranties for the equipment to ensure proper functionality. Tier-1, Tier-2 and Tier-3 level of support will be provided for all systems by or through Vendor ("Service Provider"). Tier-1 and Tier-2 will be "on-site" support by manufacturer certified Service Provider personnel of all ASN systems. Tier-3 support will be available if needed and is to be administered and paid for by Service Provider for the following systems – DVTS (CellStack/Emcom Systems) & DVADTS (Juniper Security Network). Troubleshooting and repair services of ASN peripheral devices such as cameras, UPS, workstations will be included under this agreement on a time and material basis per MDAD request.

1.1 System Component Overview

The Airport Security Network is a fully integrated security solution that utilizes high-speed digital video, bi-directional audio, and data transmission and gateway systems to seamlessly incorporate media services into the MIA access control platform.

1.1.1 Digital Video Transport System (DVTS)

The Digital Video Transport System (DVTS) is made up of hardware and software products from the CellStack product line. The DVTS design is centered upon the CellStack Centauri, 12 Slot, rack mounted chassis. The system is highly modular, expandable and reliable and is fully compatible with the other subsystems in the ASN. The Centauri provides video and bi-directional audio transport for real-time, live communications. Other DVTS hardware includes the intercom and mixer modules developed and manufactured by EMCOM Systems. The EMCOM System components were specifically designed and engineered to meet MIA specifications for the ASN, which was defined by the Miami Dade Aviation Department.

1.1.2 Digital Video, Audio, and Data Transport System (DVADTS)

The Digital Video, Audio, and Data Transport System (DVADTS) is a high-capacity MPLS network that provides dynamic, transparent virtual networks with support for traffic engineering to address the stringent requirements of the ASN. Juniper Networks is the manufacturer of the hardware and software being utilized at Miami International Airport for the ASN. The Juniper MX and EX product lines are used to provide the latest MPLS functionality, scalability for future expansion, and low latency transport for all other ASN systems.

1.1.3 Security System Integration

The Security System Integration at MIA is a proprietary solution built specifically for the functionality required by Miami Dade Aviation Department. The integration includes software development that has been tailored to MDAD Security Specifications. This customization provides seamless communications between the subsystems defined in this section, as well as the integration with the Access Control System (ACS) and Digital Video Recording System (DVRS). All systems are integrated through customized API (application program interface) files to allow integrated and non-integrated applications to run on one single Security Operator Work Station (SOW). The Service Provider must have the special knowledge required of the customized integration to provide the current services and certify all versions of the Security System Integration.

1.2 System Component Support

1.2.1 Digital Video Transport System (DVTS) Onsite Support

Service Provider will provide Tier-1, Tier-2, Tier-3, warranty support, and be responsible for the system hardware and software noted below. This will include day-to-day services as well as troubleshooting, break/fix service, firmware, code, and patches that address known issues. Installation of equipment that is not part of a break/fix issue is considered a MAC. In addition to the firmware and code on the switches the Service Provider is responsible for the following hardware and software applications:

Hardware CellStack Video/Audio Equipment:

- Centauri 14-slot Chassis – Qty. 65
- Centauri AC Power Supply – Qty. 65
- Centauri CNTRL-IP Modules – Qty. 130
- MJPEG TX-4 Video Card – Qty. 396
- High Density Audio Card – Qty. 130
- Expansion REU – Qty. 65

Hardware EMCOM Audio Equipment:

- Audio Interface Mixer Model 844 – Qty. 49
- Intercom Model 842 – Qty. 1115

Software Applications:

- CellStack Operator 6.5 (30 clients) – to the extent that it is functional as to the latest MIA certified version
- CellStack Manager 6.5 (1 server) – to the extent that it is functional as to the latest MIA certified version.
- CellStack Vision+ software (30 clients) - to the extent that it is functional as to the latest MIA certified version.
- CellStack Gateway (1 server) - to the extent that it is functional as to the latest MIA certified version.
- Customized NSS Application - to the extent that it is functional as to the latest MIA certified version.

System Warranty on the CellStack Database/Manager/Gateway software includes integration testing with all sub-systems that are part of the current ASN. Any additions or changes to the aforementioned hardware or software applications other than bug fixes or update releases is considered outside of the System Warranty scope and is viewed as a MAC (move/add/change). Any addition or deletions with the exception of user/database management of systems will be done as a MAC and will have warranty pricing to include the additional scope into this extended warranty.

1.2.2 Digital Video, Audio, and Data Transport System (DVADTS) Onsite Support

System Service Provider will provide Tier-1, Tier-2, Tier-3, warranty support, and be responsible for the DVADTS consisting of Juniper Network hardware. This will include day-to-day services as well as troubleshooting, break/fix service, firmware, code, and patches that address known issues. Installation of equipment that is not part of a break/fix issue is considered a MAC. In addition to the firmware and code on the switches the System Warranty provider is responsible for the following hardware.

Hardware Juniper Network Equipment:

- Redundant EX8208 system bundle: 8-slot chassis with passive backplane - Qty. 4
- 8-port 10GbE SFP+ line card; requires SFP+ optics sold separately - Qty. 10
- MX80 chassis with 2 MIC slots, 4x10GE XFP built-in ports - Qty. 4
- 2x10G MIC for MX, requires optics sold separately - Qty. 4
- EX4200, 24-port 10/100/1000BaseT with Dual PS - Qty. 42
- EX4200, 48-port 10/100/1000BaseT with Dual PS - Qty. 16
- EX4200, 24-port 1000BaseX SFP with Dual PS - Qty. 7
- EX4200 2-Port 10G SFP+ / 4-port 1G SFP Uplink Module - Qty. 54
- EX4300, 48-port 10/100/1000BaseT with Dual PS - Qty. 7
- EX4300, 4-Port 10G SFP+ Uplink Module - Qty. 7

Any additions or changes to the aforementioned hardware or software applications other than bug fixes or update releases is considered outside of the System Warranty scope and is viewed as a MAC (move/add/change). Any addition or deletions with the exception of user/database management of systems will be done as a MAC and will have warranty pricing to include the additional scope into this extended warranty.

1.2.3 Camera and UPS Hardware Support

System Service Provider will provide troubleshooting and repair services for the system hardware noted below. This will include day-to-day services as well as troubleshooting, break/fix service, firmware, code, and patches that address known issues. Installation of equipment that is not part of a break/fix issue is considered a MAC. The System Warranty provider is responsible for the support services of the following hardware:

Hardware Equipment:

- Analog Cameras - Qty. 2200
- IP Cameras - Qty. 400
- Uninterrupted Power Supplies (UPS) - Qty. 200

The System Service Provider will only be responsible for the labor services related to the hardware listed above. MDAD will be responsible for the hardware cost of any replacement parts related to cameras and UPS hardware. Any additions or changes to the aforementioned hardware or software applications other than bug fixes or update releases is considered outside of the System Warranty scope and is viewed as a MAC (move/add/change). Any addition or deletions with the exception of user/database management of systems will be done as a MAC and will have warranty pricing to include the additional scope into this extended warranty.

In case of a HIGH priority (P1) emergency response, Service Provide will receive a work order number from the Airport Building Systems Manager ("ABSM") as a notice to proceed with repair services. In the case of LOW priority (P2) support, Service Provider will submit a written proposal to the ABSM for approval. Upon written acceptance, Service Provider will commence repair services.

2. Warranty Service Description

2.1 Scope of Services

The scope of this agreement is limited to equipment and software described in this document and locations listed below.

- SER#1 (A3820)
- SER#2 (A3129)
- SER#3 (A3105)
- SER#4 (B3192)
- SER#5 (C4121)
- SER#6 (D3917)
- SER#7 (D3078)
- SER#8 (D3084)
- SER#9 (E1502/3)
- SER#10 (E1803)
- SER#11 (S1558)
- SER#12 (F1540)
- SER#13 (F1770)
- SER#14 (G1107)
- SER#15 (G1764)
- SER#16 (H1472)
- SER#17 (H3730)
- SER#18 (J1B25)
- SER#19 (J3038)
- E1316
- B3030 (Integration Facility)
- B3030 (B203)
- Police Station (PS214)
- Heliport (7th floor)
- Finger Print (Flamingo Garage, 1st floor)
- SOW & OWS locations
- E1316
- CCE OCR
- North Side Fire
- Video Shop
- GAC Facility
- Midfield Fire
- B3047 Fuel Farm
- Central Control Plaza
- SE Gate
- Landside Ops
- Opa Locka Airport
- Bldg. 5A
- Bldg. 100
- E2089
- F3445
- G3325
- H3003
- J2218
- N1038
- N1054
- N2026
- N2034
- N2048

Service Provider will function as Tier-1, Tier-2, and Tier-3 support as outlined in this scope.

Tier-1 System Warranty will consist of daily services of the ASN, trouble identification and trouble reporting with a minimum level of troubleshooting. The Service Provider will report directly to MIA's Airport Building Systems Manager or his designee. Note that Service Provider will rely upon MDAD IT, Telecom and Facility Maintenance departments as well as other Service Providers for trouble identification and trouble reporting.

Tier-2 System Warranty will consist of preventive maintenance, corrective maintenance, and corrective actions. In addition, Tier-2 System Warranty will include trouble identification, advanced trouble isolation, advanced trouble resolution, testing and implementation. If resolution cannot be achieved, then Tier-2 will escalate the trouble to the appropriate Tier-3 OEM resource and manage the Tier-3 resource until resolution is achieved.

Tier-3 services will consist of the OEM resources remote and/or on-site services to address issues that were not resolved by Tier-1 or Tier-2 efforts. The Service Provider is responsible for all cost associated with the engagement and execution of services required by OEM resources for both the DVTS and DVADTS systems. For all other systems, the Service Provider will only escalate issues to the appropriate OEM groups, as described in the paragraph above.

2.2 Level of Effort

This level of effort is specifically for the existing "ASN Systems." Should other systems or other MDAD facilities become integrated with the existing ASN, Service Provider may be required to increase their level of effort in order to provide a consistent level of onsite performance for MDAD. In addition, a significant increase of supported hardware or deployments of new logical networks (i.e. new routing instances, VRFs, client networks, etc.) may also trigger a LOE evaluation. In the event that any of these events occur, the Service Provider will submit a written explanation to the ABSM for their review. The increase in LOE and resulting costs will be mutually agreed upon by Service Provider and MDAD before its implementation.

3. DETAILED SERVICE DESCRIPTION

3.1 System Warranty Procedures

As described in a previous section of this document, System Warranty for the ASN will be defined in three tiers of support:

- Tier-1: Service Provider
- Tier-2: Service Provider
- Tier-3: ASN OEM Vendors

Service calls for the ASN will originate from MDAD Service Desk. If the issue cannot be resolved within Tier-1 support, the Service Provider will escalate to Tier-2 support (Service Provider). If escalation to a ASN OEM vendor is needed, Tier-2 will open a ticket with the appropriate Tier-3 vendor Technical Assistance Center (TAC). The Tier-2 personnel will be responsible for keeping MDAD up to date on any developments with the OEM vendor.

There may be situations where Tier-2 (Service Provider) discovers a problem with the ASN during the normal course of network operations. In such a case, the Tier-2 group will notify MDAD. The Tier-2 organization will be responsible for driving the open issue to closure.

3.2 Service Level Agreement Matrix

The service levels defined below will be applicable to all trouble resolution services described in this document and will be available 24 hours a day, 7 days a week, and 365 days a year.

Service Level Agreement (Response Time Matrix):

Priority	Action	Normal Hours	After Hours
Low (P2)	Tier 1 Response to MDAD	60 min after initial notification	4 hrs after initial notification
	Tier 1 Troubleshooting up to:	8 hrs after notification	8 hrs after notification
	Tier 2 Dispatch to MIA	N/A	4 hrs after notification
	Escalation to Tier 3	after Tier 2 has troubleshot for 8 hrs	after Tier 2 has troubleshot for 8 hrs
	Tier 3 Dispatch to MIA	none	none
High (P1)	Tier 1 Response to MDAD	30 min after initial notification	60 min after initial notification
	Tier 1 Troubleshooting up to:	2 hrs after notification	3 hrs after notification
	Tier 2 Dispatch to MIA	N/A	2 hrs after notification
	Escalation to Tier 3	after Tier 2 has troubleshot for 4 hrs	after Tier 2 has troubleshot for 4 hrs
	Tier 3 Dispatch to MIA	after Tier 3 has troubleshot for 8 hrs	after Tier 3 has troubleshot for 8 hrs

Priority Definition:

HIGH priority (P1 Event)

- Multiple equipment failure that results in an out-of-service scenario
- Any device failure affecting the safe operational status of the airport
Examples:
 - Camera outage affecting aircraft movement on the AOA
 - Equipment failure affecting building controller communications to OCR
- Any device failure that impacts airport security
Examples:
 - Camera outage affecting proper operation of the TSA screening areas
 - Equipment outage affecting the communication(s) to Security Door(s)
 - Equipment failure affecting access control communications

LOW priority (P2 Event)

- Any device or equipment failure that is not considered a HIGH priority event
Examples:
 - Device outage affecting an operational camera status
 - A single operator experiencing issues launching applications on their workstation

Hours of Operation Definition:

Normal business hours:

Monday through Friday, 8:00am to 5:00pm

After normal business hours:

Any hours that fall outside the Normal business hours defined above

3.3 Moves / Adds / Changes

MACs will require additional funding by MDAD and are considered outside the scope of this SYSTEM WARRANTY. All MAC's and additional work will be quoted to MDAD.

The first step for a MAC would be for the requester to contact non-Service Provider support to determine if the MAC can be performed without engaging Service Provider. If the MAC impacts the ASN in any way, MDAD will first consult with Service Provider – and any appropriate sub-system provider with the coordination of Service Provider – to formulate a Method of Procedure (MOP) for successful implementation of the MAC. Then a MAC request will be submitted to Service Provider. Service Provider will then work with MDAD to produce a work order estimate. MDAD will evaluate the work order estimate and decide whether or not to issue a work order. If a Work Order is issued Service Provider will then design the MAC and transmit to MDAD. MDAD will review the MAC design and transmit acceptance back to Service Provider via an IPON. Service Provider will then test and implement the MAC, engaging the sub-system providers where necessary. Finally, the MAC will be closed and MDAD notified that the MAC is complete.

3.4 Spares Policy

Spares are the responsibility of MDAD. Spares are to be kept at the Integration Facility location and under MDAD supervision. When spares are used the Service Provider will work through the respective vendor's support organization to coordinate a replacement.

3.5 Special Considerations

In the case of a High Priority (P1) event that requires a lift or boom to perform repair or replacement of supported hardware, MDAD will provide the Service Provider a lift or boom. Service Provider will notify the Airport Building Systems Manager (ABSM), then contact and coordinate the use of the lift or boom with the appropriate MDAD personnel.

In the case of a Low Priority (P2) event, Service Provide will submit to the ABSM a MAC proposal to cover the lift or boom rental cost. Upon MDAD approval of the proposal, the Service Provider will proceed with the repair services.