

 MARCS IT Policy Radio Patching	No: MPP-22.0
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1.0 Introduction

This policy establishes the terms and conditions for patching 2 way voice radio equipment into the Multi-Agency Radio Communication System (MARCS) infrastructure.

2.0 Purpose

The purpose of this policy is to establish protocols for the use and deployment of radio patching utilizing the MARCS system, ensuring the most effective system usage while maintaining the high grade of service (GOS) necessary for all users of the system.

3.0 Definitions

Radio Patching is one of several terms used to define the connection of an Ohio MARCS radio to another radio or radios, resulting in the ability to establish Interoperable communications between radios and systems not compatible with each other directly.

Some of the other terms used to define this process include “cross-connect”, “interconnect”, or “bridging”.

Of the six levels of Interoperability as originally defined by APCO, patching is defined as Level Four (4). Patching is also defined in the “Statewide Communications Interoperable Plan” published December 1, 2007.

Disable is the term used to define a change in status of a radio operating on the MARCS system. Disabling a radio on the MARCS system results in removing the ability of the radio to transmit on MARCS.

Gateway Patch allows users to communicate on MARCS from another radio system’s frequency or talkgroup when needed, without the assistance of a dispatcher or radio operator. The patch is available when needed, while creating no additional usage of airtime resources until the need to communicate arises. There shall be no gateway patches without the expressed written permission of MARCS.

4.0 Background

Ohio MARCS is a performance rated system based on channel and frequency usage at any given time. The performance of MARCS is directly related to how efficiently it is utilized by subscriber agencies. The patching of other radio systems and frequencies over to MARCS directly affects the resources available to all users.

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Patching a radio system over to MARCS is the equivalent of adding the same number of radios in use on that system, onto MARCS. In certain situations, this adversely affects the ability of other MARCS users to access the system. Every time a radio is patched over to MARCS, even for “monitoring” purposes, a channel may be used at one or more tower sites on the system. The result may minimize resources available to other agencies on MARCS.

5.0 Administrative Responsibilities

MARCS is responsible for but not limited to the following:

- 5.1 MARCS is responsible for ensuring the necessary network throughput is available at all times for MARCS primary customers.
- 5.2 MARCS provides trunked voice system maintenance and administration services including, but not limited to software or configuration updates and security vulnerability information when received from the vendor and a centralized tracking mechanism for addressing software issues associated with the vendor.
- 5.3 MARCS performs preventive system maintenance and administration per vendor’s recommendations.
- 5.4 MARCS is responsible for ensuring the necessary network throughput is available for only the prescribed or authorized product and affiliated modules.
- 5.5 MARCS is responsible for establishing a process to patch essential radio communication systems through MARCS to optimize emergency communications.
- 5.6 MARCS is responsible for monitoring the use of patches in place and their impact on the MARCS network.
- 5.7 MARCS provides 24/7 Helpdesk support. Call 1-866-OHMARCS (646-2727) or use the “HELPDESK” talkgroup on MARCS radios.
- 5.8 MARCS provides 24/7 on call technical staff support, as well as 24/7 call out response to the Ohio Fire Chiefs Association and the Ohio Law Enforcement Response Plan.
- 5.9 MARCS Retains the right to shut down a patch at any time.

6.0 Customer Responsibilities

*Customers **MUST** be aware of the need for justification of patching and conservation of MARCS system resources.*

- 6.1 Agencies employing radio patch capabilities shall advise MARCS of the type of equipment utilized and its intended purpose. This includes defining mobile or fixed capabilities and the systems available to be patched. The responsible agency should contact the MARCS Network

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Operations Center (NOC) Helpdesk via radio – HELPDESK talkgroup or call 1-866-646-2727 if contemplating a standard emergency type patch to MARCS.

- 6.2 Agencies shall be required to provide a single point of contact (Incident Commander or the appointed Communications Unit Leader [COML]). This person shall be in direct control of the patching equipment. If necessary, the talkgroup “MARCSNET” shall be utilized to maintain contact with MARCS. Local Emergency Use Only (LEUO) devices using “MARCSNET” as described above WILL NOT be billed as outlined in the MPP 20.0 LEUO policy.
- 6.3 During an incident or exercise, the decision to patch shall be made at the Incident Commander level if possible. The availability of the patch shall be dependent upon MARCS system resources, and shall be continually monitored by MARCS.
- 6.4 When the event has terminated or the use of the patch is no longer needed, the patch shall be discontinued.

7.0 Gateway Patch

- 7.1 MARCS recognizes the benefit of gateway patches due to the fact they can be set up without requiring human intervention.
- 7.2 MARCS does not allow gateway patches without prior notification and permission from MARCS. The administrator of any gateway patch currently in place must immediately report the radio ID and location of the patched device.
- 7.3 MARCS has the right to disable the gateway if it affects system performance.

8.0 Prohibitions

- 8.1 Utilizing MARCS as a means for monitoring a patched radio system from outside the subscribers daily response region is prohibited.
- 8.2 Utilization of any of the statewide mass interoperability talkgroups (MCALL/MCOMM, SO-CEN, SO-NE, SO-NW, etc.) for patching purposes is strictly prohibited.
- 8.3 ECOMM talkgroups shall not be used for the purpose of patching without the expressed permission of Ohio EMA. Ohio EMA shall be reached 24/7 at 1-614-889- 7150.
- 8.4 Utilization of agency specific talkgroups (those used internally by OSHP/DNR/EMA tactical or dispatch talkgroup, local police/fire/EMS) is strictly prohibited without express permission from the owning agency. (E.g. If an OSHP dispatcher needs to patch her radio to a county sheriff dispatcher, the OSHP dispatcher must first ask the county sheriff dispatcher if it can be done and precisely which talkgroup can be used for the patch.) Exceptions shall be made only if the incident lies within the command jurisdiction of the owning agency. It is up to the talkgroup owning agency to decide which talkgroup to use for the patch. Utilization of the agency specific

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dispatch talkgroup is still prohibited.

9.0 Enforcement

- 9.1 Violation of above rules shall result in thorough administrative investigation by agents of the MARCS program office.
- 9.2 Violations of this policy shall result in the affected device being disabled by MARCS. Disabling a radio results in the device not being able to transmit on MARCS.
- 9.3 If a patch is detected that is found to be adversely affecting the performance of MARCS, and the means to contact the Communication Unit Leader (CUL) fails, then MARCS reserves the right to remotely “inhibit” or turn off the radio that is being used to patch to other systems. This means shall be used as a last resort to preserve MARCS system performance for all other users.
- 9.4 It is not the intention of MARCS to deter the use of radio patching capabilities but rather, maximize usage of the system statewide. MARCS is responsible for ensuring system performance is maximized at all times for all users.

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