Subject: MSWIN Interoperability Patching	Number: 12012011
Adopted Date: December 1, 2011	Effective Date: December 1, 2011

1.0 Policy

The purpose of this policy is to define a Mississippi Wireless Information Network (MSWIN) Interoperability Patch and establish operational procedures. Patching the MSWIN system for normal operations creates a high risk of degrading the availability of both the MSWIN and agency's resources. Patching to MSWIN will be strictly monitored and controlled. The implementation and operation of the patch hardware, interface, radio, labor, etc. is the responsibility of the requesting agency.

The MSWIN network manager will assign talk groups during large events, including training sessions, requiring more talk group resources than is available from the regional special event talk groups, including the state-wide special event talk group.

2.0 Definitions

- 2.1 A MSWIN Patch is defined as an interface between the MSWIN system and any non-MSWIN radio or audio source to provide audio communications between disparate systems, or connecting two or more MSWIN talk groups.
 - 2.1.1 Patching can interconnect the MSWIN to a PBX or other telephone system, cell systems, the internet, satellite phones or another agency's communication system.
 - 2.1.2 In most cases network patches can be accomplished through dispatch consoles or external gateway devices.

2.2 Approved MSWIN Patches

- 2.2.1 Temporarily Established Patches
 - 2.2.1.1 A patch for a specific event and disconnected at the conclusion of that event.
 - 2.2.1.1(a) Example 1: Patching a channel from an agency responding from out of state to a MSWIN agency talkgroup.
 - 2.2.1.1(b) Example 2: A high speed pursuit crossing jurisdictional line requiring talkgroups from different law enforcement agencies to be patched to MSWIN.

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2.2.2 Permanently Established Patch

2.2.2.1 Patch set up without regard to an event, designed to remain in place with no time frame for disconnecting.

3.0 Network Patching Procedures

- 3.1 Any agency or private sector emergency response organization desiring to operate on MSWIN or having access to Special Event talk groups, will, through an authorized representative, execute the Mississippi Interoperability Channel Plan (MICP) Memorandum of Understanding prior to the issuance of system identification numbers.
- 3.2 The MSWIN network manager will be notified prior to the use of the state-wide special event talk groups. In the event of an emergency the network manager will be notified as soon as possible.
- 3.3 Depending on the event regional MSWIN special event talk groups should be utilized prior to state-wide MSWIN special event talk groups.
- 3.3 Temporarily Established Patches
 - 3.3.1 No prior approval is required for MSWIN member agencies establishing a temporary patches to their own talk groups.
 - 3.3.2 The MSWIN network manager will be notified of any temporary patch in place for more than twelve hours.
 - 3.3.3 The patch must function in a technically and operationally consistent manner.
 - 3.3.3.1 The release time between messages should be less than 4 seconds.
 - 3.3.3.2 The audio quality should be a close representation of the original audio as heard on a typical subscriber radio.
 - 3.3.3.3 The audio shall be free of hum, clicks, or other extraneous noise.
 - 3.3.3.3 There shall be no clipping of the first syllables or loss of audio through the patch.
 - 3.3.4 The agency will continuously monitor and respond to calls on the patch.
 - 3.3.5 Although necessary, patches have the ability to degrade the performance of the MSWIN system, as such; agencies are requested to disconnect temporary patches as soon as possible.

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3.4 Permanent Patches

- 3.4.1 The MSWIN network manager must approve permanent patches prior to implementation. The possible impact on the MSWIN Grade of Service (GOS) and other users will be considered prior to the approval.
- 3.4.2 Permanent patches are to remain active at all times on the talk groups specified within the MOU. This requirement is to provide the users with a consistent and functioning communications path.
- 3.4.3 When utilizing external patching devices or bridging equipment such as an ACU 1000, only one talk path will be programmed into a permanently patched MSWIN interface radio
- 3.4.5 The patch must function in a technically and operationally consistent manner. Guidelines in section 3.3.3 are applicable for permanent patches.
- 3.4.6 MSWIN Special Event talk groups MAY NOT be permanently patched.
- 3.5 Network Patch Communications Request
 - 3.5.1 Agency to MSWIN
 - 3.5.1.1 When an agency needs to perform a temporary/permanent patch patch lasting more than twelve hours to MSWIN, requiring no MSWIN assistance, the agency must provide the MSWIN network manager the following:
 - Agency requesting network patch.
 - Contact information for the requesting agency.
 - Reason for request/event type description.
 - Details of the patch including the types of systems, frequencies, or talk groups.
 - All involved agencies requiring interoperability
 - Expected duration of event
 - Bridging equipment physical locations.
 - 3.5.2 Agency to MSWIN requiring MSWIN assistance
 - 3.5.2.1 Agencies may request use of the technical resources from MSWIN by providing the information as required in Section 3.5.1.1

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- 3.5.3 The National Incident Management System (NIMS) procedures should be followed by the Incident Commander and MSWIN personnel:
 - 3.5.3.1 Avoid using an agency's primary dispatch channel.
 - 3.5.3.2 Require participating agencies to check in at the command post and provide portable radios and frequency/talk group channels for use during the incident to the Communication Unit Leader (COML).
 - 3.5.3.3 Assign radio call sign/designator information to connected agencies.
 - 3.5.3.4 Instruct MSWIN on where to setup and operate the tactical equipment if assigned.
 - 3.5.3.5 Inform MSWIN personnel which agencies are participating.
 - 3.5.3.6 Provide MSWIN with agency provided radios and an Incident Command Structure (ICS)
 - 3.5.3.7 Confer with MSWIN personnel concerning what command level or other specific talk groups should be patched.

4. 0 Network Patch Deactivation

- 4.1 When interoperable communications are no longer required, agencies should follow these guidelines:
 - 4.1.1 The Incident Commander or designee shall:
 - 4.1.1.1 Make an announcement on the command channel to all A supervisor advising them the network patch is being deactivated.
 - 4.1.1.2 Contact the MSWIN or console operator to shut down the network patch
 - 4.1.2 Individual agencies are responsible for retrieving the portable radios and associated equipment provided during the operation.

5.0 Problem ID and Resolution

5.1 If an issue or problem is identified during the network patch, the MSWIN network manager will determine who will take corrective action. If the issue or problem cannot be identified, the network manager shall contact the appropriate technical personnel.

6.0 Network Patch Test Procedures

6.1 To ensure that equipment components of the network patch operate properly, each agency will test their resources according to their agency's individual policies and procedures. Below are recommended procedures:

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- 6.1.1 Representatives from each agency should meet on a regular basis to test communications
- 6.1.2. Testing should include deployment, setup, operation, and deactivation of the network patch
- 6.1.3 Agency representatives should arrive at the test location to test their ability to communicate with other agencies utilizing the patch.

7.0 Grade of Service

- 7.1 If a patch negatively impacts the MSWIN GOS, MSWIN may remotely disable a patch after attempting to rectify the problem and in the case of a permanent patch only after 30 days written notice.
- 7.2 In the event of an emergency, as determined by the MSWIN network manager, the patch radios will be immediately disabled. The MSWIN network manager will make a good faith effort to notify the agency.