![MOTOROLA SOLUTIONS]

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Motorola Solutions Technical Notification (MTN)

TITLE: **MOTOTRBO™** MTR3000/XPR8400/XPR8380 repeaters potential issue when performing upgrade.

TECHNOLOGY: **MOTOTRBO™** MTR3000/XPR8400/XPR8380 repeaters

SYMPTOMS:
As a result of investigating an isolated field report we have identified a rarely occurring issue that may occur if a set of prior upgrade actions apply.

The purpose of this MTN is two-fold:
1. To outline an upgrade method for repeaters on early firmware that avoids the potential issue in the future.
2. To enable the identification of repeaters which meet the criteria for this failure.

MSI estimates that less than 1% of **MTR3000/XPR8400/XPR8380** repeaters that meet the criteria and may stop working after firmware upgrade.

Details for the criteria:
This issue **only** impacts **MTR3000/XPR8400/XPR8380** repeaters that have been upgraded via IP repeater programming from **R02.08.05.03** and prior firmware to R2.9 release or newer.

Any MTR3000/XPR8400/XPR8380 repeaters that have only been upgraded locally via USB will **not** be impacted by this issue.

This issue **does not** impact any **MTR3000/XPR8400/XPR8380** repeaters that were shipped from the factory with R2.9 release or newer.

This issue **does not impact** SLR repeaters at all.

MODELS / SYSTEM RELEASES / KITS / DATE CODES AFFECTED:
All MTR3000/XPR8400/XPR8380 repeaters shipped from the factory with firmware **R02.08.05.03** or prior firmware.

SEVERITY RECOMMENDATION:
High - Perform before doing any upgrades to the repeaters

ROOT CAUSE / DEFINITIVE TEST:
There is a potential issue for the MTR3000/XPR8400/XPR8380 to stop working after the following upgrade sequence:

1. Remote firmware upgrade from release R2.8.5 (or earlier) to R2.9 (or R2.10).
2. Firmware upgrade (local or remote) from release R2.9 (or R2.10) to any release version.

WORKAROUNDS AND CORRECTIVE ACTIONS:

RM version **RM2.24.200 (M2020.01)** or newer version must be used for all upgrade procedures described below:

Upgrade method for repeaters on early FW:
For repeaters on **R02.08.05.03** firmware or prior versions, download the **R02.08.05.06** (MOTOTRBO R2.8.6 release) repeater

firmware package from Motorola Online (MOL) and upgrade to this version via IP (or locally via USB) first to remove the potential for this issue and then upgrade to the desired version.

Upgrade method for repeaters which meet the criteria:
For repeaters on R2.9 or R2.10 release, to eliminate a chance of occurrence, before upgrading the repeaters perform a device recovery first, reapply the configuration and then upgrade to the desired version.

For critical installations where remote IP upgrade is the only option, it is recommended to contact MSI support who will determine if the potential for this issue exists via a review of your Radio Management (RM) database backup file.

Note that the RM server backup must have been generated by version **R2.18.95.0** or newer.
Note that CPS 1.0 and 2.0 codeplugs **do not** contain the information required.
Note that any repeaters that are identified as having the potential to fail will need to be recovered locally via USB.

RESOLUTIONS AND REPAIR PROCEDURES:

It is recommended to avoid repeater firmware upgrades via USB/IP for **MTR3000/XPR8400/XPR8300** that are at release version **R2.9 (or R2.10)** and if they were upgraded from a **R02.08.05.03** or prior firmware via IP, unless verified to be issue free by MSI via RM database backup verification.

PARTS REQUIRED (HARDWARE/SOFTWARE):

The next scheduled RM release (**M2021.01**) will incorporate detection of the issue and will be available through the MOL website.

ADDITIONAL INFORMATION:

Please call into 1-800-MSI-HELP (1-800-674-4357) and follow the prompts for MOTOTRBO Support to have a ticket opened for MSI to review your Radio Management server backup to determine if you have any impacted repeaters. This issue can only be verified from an RM server backup. Individual repeater codeplugs from CPS 1.0 and 2.0 do not contain the information needed for issue detection.

REFERENCE THE FOLLOWING DOCUMENTS/PROCESSES FOR INSTALLATION PROCEDURES:
N/A

WHEN TO APPLY RESOLUTION:
After reboot __
After (re)installation __
After upgrade __
After power cycle __
After database restoration __
After failure __
On FRU replacement __
During maintenance __
Immediately __
As instructed __ **X**
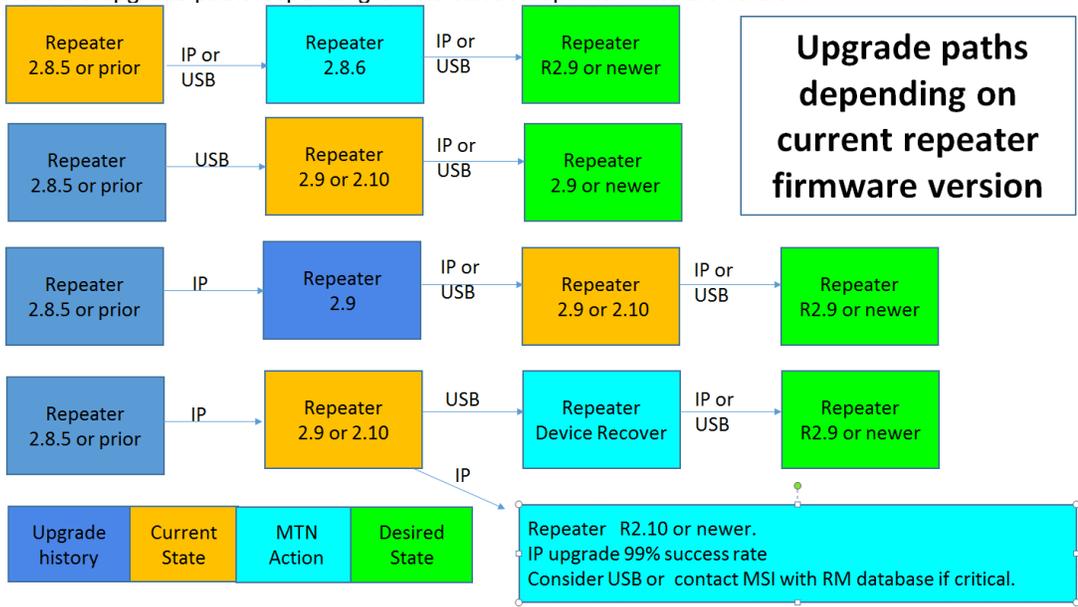Information only __

LABOR ALLOWANCE:
This is an informational bulletin. No labor warranty is implied, intended or authorized for U.S. Domestic Partners/Customers. Other regions should follow their own standard procedures.

For assistance with this bulletin please contact your MSI Technical support center
https://www.motorolasolutions.com/en_us/support.html

APPENDIX A: Upgrade Paths

Possible upgrade paths depending on the current repeater firmware version:

| Repeater 2.8.5 or prior | —IP or USB→ | Repeater 2.8.6 | —IP or USB→ | Repeater R2.9 or newer |

| Repeater 2.8.5 or prior | —USB→ | Repeater 2.9 or 2.10 | —IP or USB→ | Repeater 2.9 or newer |

| Repeater 2.8.5 or prior | —IP→ | Repeater 2.9 | —IP or USB→ | Repeater 2.9 or 2.10 | —IP or USB→ | Repeater R2.9 or newer |

| Repeater 2.8.5 or prior | —IP→ | Repeater 2.9 or 2.10 | —USB→ | Repeater Device Recover | —IP or USB→ | Repeater R2.9 or newer |

Repeater 2.9 or 2.10 —IP→ Repeater R2.10 or newer. IP upgrade 99% success rate. Consider USB or contact MSI with RM database if critical.

Upgrade paths depending on current repeater firmware version

| Upgrade history | Current State | MTN Action | Desired State |

Legend:
Dark blue = Historical version,   *Orange* = Current firmware version,
Light blue = Action required by this MTN,   *Green* = Target firmware version