

**METRO REGION**  
**800 MHz Trunked Regional Public Safety Radio System**  
**Standards, Protocols, Procedures**

Document Section:	<b>3 Interoperability Guidelines</b>	Radio TOC Recommendation
Sub-Section:	<b>METRO 3.6.0</b>	Date: 5/24/01
Procedure Title:	<b>Use of the METTAC-P and METTAC-A VHF Interoperability</b>	
Date Established:	<b>2/22/01</b>	MESB Approval - Signature:
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### **1. Purpose or Objective**

Establish procedures for use of the METTAC-P and METTAC-A VHF interoperability radio channels for interagency communications when coordination is required between users of VHF radio systems and users of the regional 800 MHz trunked radio system.

### **2. Technical Background:**

#### **▪ Capabilities**

A very large VHF radio system covering the nine metro Minnesota Counties is available for use by personnel of government entities using VHF radio systems. This is to fill the need for VHF users to coordinate communications with personnel of entities that use the regional 800 MHz trunked radio system.

#### **▪ Constraints**

Each of these two channels utilizes multiple remote receiver sites put into a voting comparator with manual (dispatcher selected) transmitter steering. Even though there are multiple transmitter sites, only one can be selected at a time and only one conversation at a time can be supported on each METTAC channel whether the channel is patched or not.

A talk group or conventional channel can only be in one patch.

A patch between an 800 MHz talk group and a VHF conventional repeated channel such as METTAC-P-VHF and METTAC-A-VHF will result in high signal level radio coverage over an area greater than the nine county service area of the regional 800 MHz radio system on the VHF channel. Therefore, whenever an 800 MHz talk group patched to a VHF conventional repeated channel is in use, or whenever the VHF conventional repeated channel is in use by VHF users, no other practical use can be made of that VHF conventional repeated radio channel in the entire regional system.

### **3. Operational Context:**

The METTAC-P VHF channel will be soft/manual patched to an 800 MHz talk group when needed to support coordinated activities between VHF users and regional 800 MHz system users.

METTAC-P-VHF radio channel may not be used for interagency or intra-agency communications between personnel who are all on VHF radio systems.

The METTAC-A VHF channel will be soft/manual patched to an 800 MHz talk group when needed to support coordinated activities between VHF users and regional 800 MHz system users.

**4. Recommended Protocol/ Standard:**

**METTAC-P** – Summary of Recommended Protocol:

<b><u>Cross Patch Standard</u></b>	<b><u>YES/NO</u></b>	<b><u>To Talk Group(s)</u></b>
Soft/ Manual Patch	Yes	Dispatcher determined following guidelines of selected talkgroup
Hard/ Permanent Patch	No	NA

**METTAC-A** - Summary of Recommended Protocol:

<b><u>Cross Patch Standard</u></b>	<b><u>YES/NO</u></b>	<b><u>To Talk Group(s)</u></b>
Soft/ Manual Patch	Yes	Dispatcher determined following guidelines of selected talkgroup
Hard/ Permanent Patch	No	NA

- METTAC-P-VHF will be available for use by public safety agencies only; EMS, Fire, Law Enforcement
- METTAC-A-VHF will be available for use by all public safety agencies, mentioned above along with service agencies of city, county and state.
- VHF radio users that add the METTAC-P and/or the METTAC-A-VHF radio channels to their radios may include the repeater talk around frequency on either or both channels.
    - ✓ Talk around is restricted to portables and mobiles only.
    - ✓ The talk around must use the same CTCSS for n code and d code as used on the repeater.
    - ✓ All other utilization policies and procedures pertaining to METTAC A & P will apply to the use of talk around.

**No personnel in any dispatch center shall soft patch METTAC-P-VHF or METTAC-A-VHF to a RF control station on a regional 800 MHz trunked talk group.** (See Section 3.3b *RF Control Stations & Portables*).

**5. Recommended Procedure:**

- Most of the time, an event that requires interagency coordination will begin on the main dispatch radio channel of one of the public safety dispatch centers. When it becomes apparent that interagency coordination will be needed, and coordinating participants are on both the VHF and the regional 800 MHz system, a regional system dispatch center operator may tell the VHF radio users to switch channels to METTAC-P-VHF or METTAC-A-VHF.

- ✓ The specific channel to be used will be specified by the responsible dispatch center operator.
  - ✓ Radio users must inform the responsible dispatch center operator if they do not have METTAC-P or A-VHF available or if those channels were not programmed into their radios.
  - ✓ Assignment of METTAC-P-VHF or METTAC-A-VHF shall be performed by the Regional System dispatch center operator who started the event.
- Dispatch centers on the regional 800 MHz radio system may be able to steer outgoing messages to any one of ten transmitters from any console in the system on the METTAC-P and -A-VHF channels.
    - ✓ If the responsible dispatch center operator is on the regional 800 MHz radio system, that operator may perform the transmitter steering function, or contact Hennepin County or State Patrol to direct the transmitter steering.
    - ✓ If the responsible operator is on a radio system other than the regional 800 MHz system, the responsible operator may request that a Hennepin County or State Patrol dispatch operator perform the transmitter steering function.
  - The dispatch center operator that started the event will perform ongoing support throughout the event.

## **6. Management**

The Minnesota Department of Transportation will hold the FCC radio licenses for the METTAC-P and METTAC-A frequency pairs. Any government public safety agency in the metropolitan Minneapolis-St. Paul area of Minnesota and in the adjoining Wisconsin Counties using the VHF radio frequency band may obtain a mobile radio license for the METTAC-P VHF channel. Any government agency in the metropolitan Minneapolis-St. Paul region will be able to obtain a mobile radio license for the METTAC-A VHF channel. Any Government agencies that wish to have these VHF radio channels available in radios shall apply to the Office of Electronic Communications in the Minnesota Department of Transportation for authorization to add these channels to their radios.

Responsibility for monitoring performance and for modifying this procedure shall be a function of the Radio Technical Operations Committee of the Metropolitan Emergency Services Board.

The dispatch center managers for agencies on the regional 800 MHz radio system shall insure that there is a procedure for assigning the METTAC-A / P VHF channel to 800 MHz talkgroups in the dispatch center for which they are responsible.

Dispatch center operators shall receive initial and continuing training on the use of this procedure.