

**Appendix A**  
**Table of Interoperability Channels**  
**For Specific Uses/Services<sup>1</sup>**  
**(Adopted by the FCC in the 4<sup>th</sup> MO&O, WT Docket 96-86 dated March 5, 2002)**

**Television Channels 63/64**  
**Note: Only Base Transmit Side of Channel Pairs is Shown**

<b>CHANNEL SETS</b>	<b>DESCRIPTION</b>	<b>LABEL</b>
<i>Channel 23 &amp; 24</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7GTAC05<sup>2</sup></i>
<i>Channel 103 &amp; 104</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7GTAC07</i>
<i>Channel 183 &amp; 184</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7GTAC09</i>
<i>Channel 263 &amp; 264</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7GTAC11</i>
Channel 39 & 40	Calling Channel	7CALLA
Channel 119 & 120	General Public Safety Service	7GTAC13
Channel 199 & 200	General Public Safety Service	7GTAC15
Channel 279 & 280	General Public Safety Service (Data Only <sup>3</sup> )	7DTAC17
Channel 63 & 64	Emergency Medical Service	7ETAC19
Channel 143 & 144	Fire Service	7FTAC21
Channel 223 & 224	Law Enforcement Service	7LTAC23
Channel 303 & 304	Mobile Repeater	7MTAC25
Channel 79 & 80	Emergency Medical Service	7ETAC27
Channel 159 & 160	Fire Service	7FTAC29
Channel 239 & 240	Law Enforcement Service	7LTAC31
Channel 319 & 320	Other Public Service	7OTAC33

*Trunking is permitted on the 4 channel sets indicated in italics. The two channels immediately below each of these channels are reserve channels that may be combined with these channels for trunking systems that use 25 kHz channel bandwidths.*

<sup>1</sup> Channel nomenclature and reserving specific channels for first responders (EMS, Fire & Law Enforcement) were subjects of Petitions for Reconsideration to the 4<sup>th</sup> Report & Order in Docket 96-86. While these Petitions were denied by the FCC for codification into its Rules, the FCC nonetheless recognized the importance of such standardization if it was implemented at the State and/or Region Level.

<sup>2</sup> Tactical channel numbering was started at "5" to avoid confusion with TAC 1 through TAC 4 in the 800 MHz NPSPAC Band.

<sup>3</sup> Only ANSI/TIA/EIA 102 (Project 25) data standard compliant equipment is permitted to use the data channels.

### Television Channels 68/69

**Note: Only Base Transmit Side of Channel Pairs is Shown**

CHANNEL SETS	DESCRIPTION	LABEL
<i>Channel 657 &amp; 658</i>	<i>General Public Safety Services (secondary trunked)</i>	7GTAC35
<i>Channel 737 &amp; 738</i>	<i>General Public Safety Services (secondary trunked)</i>	7GTAC37
<i>Channel 817 &amp; 818</i>	<i>General Public Safety Services (secondary trunked)</i>	7GTAC39
<i>Channel 897 &amp; 898</i>	<i>General Public Safety Services (secondary trunked)</i>	7GTAC41
Channel 681 & 682	Calling Channel	7CALLB
Channel 761 & 762	General Public Safety Service	7GTAC43
Channel 841 & 842	General Public Safety Service	7GTAC45
Channel 921 & 922	General Public Safety Service (Data Only <sup>2</sup> )	7DTAC47
Channel 641 & 642	Emergency Medical Service	7ETAC49
Channel 721 & 722	Fire Service	7FTAC51
Channel 801 & 802	Law Enforcement Service	7LTAC53
Channel 881 & 882	Mobile Repeater	7MTAC55
Channel 697 & 698	Emergency Medical Service	7ETAC57
Channel 777 & 778	Fire Service	7FTAC59
Channel 857 & 858	Law Enforcement Service	7LTAC61
Channel 937 & 938	Other Public Service	7OTAC63

*Trunking is permitted on the 4 channel sets indicated in italics. The two channels immediately below each of these channels are reserve channels that may be combined with these channels for trunking systems that use 25 kHz channel bandwidths.*

### **Interoperability Channel Technical Parameters ANSI/TIA/EIA-102 (Project 25) Common Air Interface**

Certain common Project 25 parameters need to be defined to ensure digital radios operating on the 700 MHz Interoperability Channels can communicate. This is analogous to defining the common CTCSS tone used on NPSPEC analog Interoperability channels.

## **Network Access Code**

In the Project 25 Common Air Interface definition, the Network Access Code is analogous to the use of CTCSS and CDCSS signals in analog radio systems. It is a code transmitted in the preamble of the Project 25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to and maintain access to a receiver. It is also used to block nuisance and other co-channel signals. There are up to 4096 of these NAC codes. For ease of migration in other frequency bands, a NAC code table was developed which shows a mapping of CTCSS and CDCSS signals into corresponding NAC codes. Document TIA/EIA TSB102.BAAC contains NAC code table and other Project 25 Common Air Interface Reserve Values.

Recommendation: Since NPSPAC Interoperability Channels use CTCSS tone 156.7 Hz (5A), use of corresponding NAC code \$61F is recommended for the 700 MHz Interoperability Channel NAC code.

## **Talkgroup ID**

In the Project 25 Common Air Interface definition, the Talkgroup ID on conventional channels is analogous to the use of talkgroups in trunking. In order to ensure that all users can communicate, all units should use the default Talkgroup ID of \$0001.

## **Manufacturer's ID**

The Project 25 Common Air Interface allows the ability to define manufacturer specific functions. In order to ensure that all users can communicate, all units should not use a specific Manufacturer's ID, but should use the default Manufacturer's ID of \$00.

## **Message ID**

The Project 25 Common Air Interface allows the ability to define specific message functions. In order to ensure that all users can communicate, all units should use the default Message ID for unencrypted messages of \$00000000000000000000.

## **Encryption Algorithm ID and Key ID**

The Project 25 Common Air Interface allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption is prohibited on the Interoperability Calling Channels; all units should use the default Algorithm ID for unencrypted messages of \$80 and default Key ID for unencrypted messages of \$0000. These same defaults may be used for the other Interoperability channels when encryption is not used.

The FCC permits the use of encryption on all Interoperability channels except the two Calling Channels. Regional Planning Committees need to define appropriate Message ID, Encryption Algorithm ID, and Encryption Key ID to be used in the encrypted mode on Interoperability channels.