

**South Carolina Interoperability Channel Plan  
For  
Designated Public Safety Interoperability Channels**

**October 19, 2012**

**1. ELIGIBILITY AND LICENSING**

**National Interoperability Channels**

Under FCC Rules, an entity must have a license to operate a base or control station on National Interoperability Channels. Mobile/portable operation, however, is permitted on certain channels without an individual license (*i.e.*, a blanket licensing approach). Public safety licensees who are eligible to hold a Part 90 license, or who are otherwise licensed under Part 90 of the FCC Rules, can operate mobile units on these National interoperability channels without an individual license, except for the 700 MHz band in which case the entity must hold a Part 90 license.

All persons operating mobile or portable units under this authority are responsible for compliance with Part 90 of the FCC rules and other applicable federal laws.

**Licenses**

By executing the attached **Agreement** associated with this Interoperability Channel Plan, eligible public safety entities may operate under these existing State of South Carolina licenses:

<b><u>Radio Band</u></b>	<b><u>FCC License</u></b>
VHF Low Band	WQGV825
VHF High Band	KB36284, WQDZ592, WQGC429, WQGV825, WQGJ822
UHF Band	WQDZ592, WQGC430
700MHz	WPTZ777
800 MHz	WPGJ693, WPFY293

**South Carolina Interoperability Channels**

This Channel Plan describes conditions and guidelines for use of state-licensed interoperability or mutual-aid radio channels by:

- 1) Local government jurisdictions and their associated emergency response agencies
- 2) State Agencies
- 3) Federal agency offices in SC and their associated emergency response organizations
- 4) Private emergency response organizations licensed or eligible to operate in the Public Safety Pool as defined in Part 90 of the FCC Rules.

The State of South Carolina holds licenses for additional interoperability channels. These licenses provide for:

- 1) Operation of VHF Low Band, VHF High Band, UHF, 700 MHz, and 800 MHz radio equipment on interoperability or mutual aid channels
- 2) Operation of mobile, portable and temporary base radios only. Fixed-base stations, such as dispatch points, PSAPs, etc., must be separately licensed by the jurisdiction, agency or private emergency response organization.

## **2. GENERAL CONDITIONS FOR USE OF INTEROPERABILITY CHANNELS**

By executing the **Agreement** associated with this South Carolina Interoperability Channel Plan (SCICP), signatories agree to abide by the following general conditions:

### **Operational**

Interoperability calling channels and tactical channels should be programmed into all mobile, portable, and temporary base radios operated by signatory agencies and organizations. At a minimum, the "Required" channels should be programmed into all radios that can reasonably be expected to be operated by agency or organization leadership (incident commanders, etc) as well as mobile command vehicles, emergency communications vehicles etc. Where radio channel capacity allows, the "Recommended" channels should also be programmed into the radios.

Use of the interoperability channels shall be limited to their designated purpose of coordination between emergency response agencies and resources. Such coordination may occur during routine operations, en-route travel, or on-incident.

The interoperability channels should not be used for routine dispatch operations, but may be used for routine and en-route communications in accordance with local and regional policies and procedures. The "8SCDIR1-5" channels may be used for intra-agency on scene communications.

### **Use of the interoperability channels shall be prioritized as follows:**

- 1) Emergency or urgent operation involving imminent danger to life or property
- 2) Disaster or extreme emergency operation requiring extensive interoperability and inter-agency communications
- 3) Special event, generally of a pre-planned nature
- 4) Joint training exercises
- 5) Inter-agency and en-route communications in accordance with local and regional policies and procedures.

Use of the interoperability channels for on-incident communications shall be in accordance with an Incident Communications Plan established by the on-scene incident commander.

The controlling agency for an incident shall, through its incident commander, assign and/or reassign interoperability channels for each operational period as required to support incident operations.

Radio communications procedures consistent with the National Incident Management System (NIMS) and Incident Command System (ICS) shall be implemented, including:

- 1) Use "plain language" without 10-codes or agency-specific codes/jargon
- 2) Use the calling order, "Agency-Unit #, **this is** Agency-Unit #" calling order, rather than "Unit # to Unit #" (Ex. "**Highway Patrol 1605 this is Spartanburg Sheriff 102**")

Interoperability channels shall be used only for voice traffic. Paging, DTMF signaling and SCADA operations are not permitted on interoperability calling or tactical channels.

To alleviate confusion, the standard channel names listed in this plan should be used in all equipment to refer to individual channels.

### **Standardized Tone Squelch or Network Access Codes**

#### **Analog Operation:**

The use of **CTCSS Tone 156.7 Hz** has been adopted for analog operations on Interoperability Channels:

- 1) All (fixed and subscriber) analog transmitters **will** encode 156.7 Hz except for "8SCDIR1-5" which will encode 100.0 Hz.
- 2) Subscriber receivers should be set for carrier squelch operations unless conditions in the area require the use of tone to mitigate adjacent channel interference or noise. In those cases, receivers will decode 156.7 Hz except for SCDIR1-5 which will decode 100.0 Hz.

#### **Digital Operation:**

The use of Network Access Code (NAC) \$293 has been adopted for all digital operations on Interoperability Channels:

### **Standardized Naming Format**

Each FCC-designated Interoperability Channel in the Public Safety Radio Services (47CFR Part 90) will have a unique name developed according to a standardized format. The list of National Interoperability Channels for Mutual Aid shows the FCC designated Interoperability Channels and the related Channel Common Name. This format consists of a maximum of eight characters. The list of South Carolina Interoperability Channels for Mutual Aid follows a similar naming format.

## **Agreement**

The *South Carolina Interoperability Channel Plan* is incorporated into the attached **Agreement** in its entirety. The SCICP may be revised by from time to time, and revisions will be provided to agencies. To apply, submit two signed copies of the Agreement to:

Robert D. Steadman  
SC Statewide Interoperability Coordinator  
Division of State Information Technology  
4430 Broad River Road  
Columbia, SC 29210  
rsteadman@cio.sc.gov

Notice of withdrawal from the Agreement shall be submitted in writing to the Statewide Interoperability Coordinator.

**Interoperability Frequency Use Agreement**  
*Between the State of South Carolina and the Applicant Agency*

**Applicant Agency**

**Date Submitted:** \_\_\_\_\_

Agency Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Contact: \_\_\_\_\_ Tel \_\_\_\_\_ Email: \_\_\_\_\_

**Is the Applicant a State Agency?**      Yes \_\_\_\_\_      No \_\_\_\_\_

**What type of Agency are you? (Check all that apply)**

- |  |  |
|--|--|
| <input type="checkbox"/> Law Enforcement           | <input type="checkbox"/> Fire              |
| <input type="checkbox"/> Emergency Medical         | <input type="checkbox"/> Search and Rescue |
| <input type="checkbox"/> Emergency Management      | <input type="checkbox"/> Military          |
| <input type="checkbox"/> Other Governmental (Type) |  |
- \_\_\_\_\_

**What is your geographical area of responsibility?**

- |  |                                    |
|--|------------------------------------|
| <input type="checkbox"/> Local (City/Town) | <input type="checkbox"/> County    |
| <input type="checkbox"/> Regional          | <input type="checkbox"/> Statewide |

<b><u>Frequency Band</u></b>	<b><u># of Temp Bases</u></b>	<b><u># of Mobiles</u></b>	<b><u># of Portables</u></b>
VHF- Low Band	_____	_____	_____
VHF- High Band	_____	_____	_____
UHF Band	_____	_____	_____
700 MHz Band	_____	_____	_____
800 MHz Band	_____	_____	_____

**Applicant Agency Requestor**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Tel: \_\_\_\_\_ Email: \_\_\_\_\_

**State of South Carolina Approval**

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Agency: \_\_\_\_\_ Date: \_\_\_\_\_

**VHF LOW BAND MUTUAL AID CHANNELS**  
(National and State Channels)

<b>LABEL</b>	<b>MOBILE TRANSMIT</b>	<b>MOBILE RECEIVE</b>	<b>TONE</b>	<b>MODE</b>	<b>USE</b>
<b>SCLTAC1</b>	47.5000	47.5000	156.7	Wide	<b>REQUIRED</b>
<b>LLAW1</b>	45.8600	39.4600	156.7	Wide	<b>REQUIRED - LAW</b>
<b>LLAW1D</b>	39.4600	39.4600	156.7	Wide	
<b>LFIRE2</b>	45.8800	39.4800	156.7	Wide	<b>REQUIRED - FIRE</b>
<b>LFIRE2D</b>	39.4800	39.4800	156.7	Wide	
<b>LLAW3</b>	39.4600	45.8600	156.7	Wide	<b>REQUIRED - LAW</b>
<b>LLAW3D</b>	45.8600	45.8600	156.7	Wide	
<b>LLAW4</b>	39.4800	45.8800	156.7	Wide	<b>REQUIRED - FIRE</b>
<b>LLAW4D</b>	45.8800	45.8800	156.7	Wide	

- Channel names that begin with "S" are licensed for South Carolina use only.
- Default operations should be carrier squelch receive, CTCSS transmit. If the user can enable/disable without reprogramming the radio, the indicated CTCSS tone could also be programmed for receive.

**VHF HIGH BAND MUTUAL AID CHANNELS**  
**(National and State Channels)**

<b>LABEL</b>	<b>MOBILE TRANSMIT</b>	<b>MOBILE RECEIVE</b>	<b>TONE</b>	<b>MODE</b>	<b>USE</b>
<b>VCALL10</b>	155.7525	155.7525	156.7	Narrow	<b>REQUIRED – Calling Channel</b>
<b>VTAC11</b>	151.1375	151.1375	156.7	Narrow	<b>REQUIRED</b>
<b>VTAC12</b>	154.4525	154.4525	156.7	Narrow	<b>REQUIRED</b>
<b>VTAC13</b>	158.7375	158.7375	156.7	Narrow	<b>REQUIRED</b>
<b>VTAC14</b>	159.4725	159.4725	156.7	Narrow	<b>REQUIRED</b>
<b>VFIRE21</b>	154.2800	154.2800	156.7	Narrow	<b>REQUIRED - FIRE</b>
<b>VMED28</b>	155.3400	155.3400	156.7	Narrow	<b>REQUIRED - EMS</b>
<b>VLAW31</b>	155.4750	155.4750	156.7	Narrow	<b>REQUIRED - LAW</b>
<b>VTAC33</b>	151.1375	159.4725	136.5	Narrow	<b>OPTIONAL</b> Deployable Repeaters Only
<b>VTAC34</b>	154.4525	158.7375	136.5	Narrow	<b>OPTIONAL</b> Deployable Repeaters Only
<b>VTAC35</b>	158.7375	159.4725	136.5	Narrow	<b>OPTIONAL</b> Deployable Repeaters Only
<b>VTAC36</b>	159.4725	151.1375	136.5	Narrow	<b>OPTIONAL</b> Deployable Repeaters Only
<b>VTAC37</b>	158.7375	154.4525	136.5	Narrow	<b>OPTIONAL</b> Deployable Repeaters Only
<b>VTAC38</b>	159.4725	158.7375	136.5	Narrow	<b>OPTIONAL</b> Deployable Repeaters Only
<b>SCVTAC1</b>	155.9550	155.9550	156.7	Narrow	<b>REQUIRED</b>
<b>SCVTAC2</b>	155.1600	155.1600	156.7	Narrow	<b>REQUIRED</b>
<b>SCVTAC3</b>	155.5350	155.5350	156.7	Narrow	<b>REQUIRED IN:</b> Chester, Lancaster, Union, York
<b>SCVTAC4</b>	155.5500	155.5500	156.7	Narrow	<b>REQUIRED IN:</b> Clarendon, Kershaw, Lee, Sumter
<b>SCVTAC5</b>	155.0100	155.0100	156.7	Narrow	<b>REQUIRED IN:</b> Georgetown, Horry, Williamsburg
<b>SCVTAC6</b>	155.0700	155.0700	156.7	Narrow	<b>REQUIRED IN:</b> Berkeley, Charleston, Dorchester
<b>SCVAG1</b>	155.4450	155.4450	156.7	Narrow	<b>REQUIRED FOR AIR/GROUND</b>

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**UHF MUTUAL AID CHANNELS**  
**(National and State Channels)**

<b>LABEL</b>	<b>MOBILE TRANSMIT</b>	<b>MOBILE RECEIVE</b>	<b>TONE</b>	<b>MODE</b>	<b>USE</b>
<b>UCALL40</b>	458.2125	453.2125	156.7	Narrow	<b>REQUIRED – Calling Channel</b>
<b>UCALL40D</b>	453.2125	453.2125	156.7	Narrow	
<b>UTAC41</b>	458.4625	453.4625	156.7	Narrow	<b>REQUIRED</b>
<b>UTAC41D</b>	453.4625	453.4625	156.7	Narrow	
<b>UTAC42</b>	458.7125	453.7125	156.7	Narrow	<b>REQUIRED</b>
<b>UTAC42D</b>	453.7125	453.7125	156.7	Narrow	
<b>UTAC43</b>	458.8625	453.8625	156.7	Narrow	<b>REQUIRED</b>
<b>UTAC43D</b>	453.8625	453.8625	156.7	Narrow	
<b>SCUTAC1</b>	460.2500	460.2500	156.7	Narrow	<b>REQUIRED IN:</b> Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro
<b>SCUTAC2</b>	453.4500	453.4500	156.7	Narrow	<b>REQUIRED IN:</b> Abbeville, Edgefield, Greenwood, Laurens, McCormick, Saluda
<b>SCUTAC3</b>	460.0500	460.0500	156.7	Narrow	<b>REQUIRED IN:</b> Fairfield, Lexington, Newberry, Richland
<b>SCUTAC4</b>	453.1500	453.1500	156.7	Narrow	<b>REQUIRED IN:</b> Aiken, Allendale, Bamberg, Barnwell, Calhoun, Orangeburg
<b>SCUTAC5</b>	460.275	460.275	156.7	Narrow	<b>REQUIRED IN:</b> Beaufort, Colleton, Hampton, Jasper

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**700 MHz MUTUAL AID CHANNELS**  
**(National Channels)**  
**12.5 KHz – DIGITAL MODE ONLY**

<b>LABEL</b>	<b>MOBILE TRANSMIT</b>	<b>MOBILE RECEIVE</b>	<b>NAC</b>	<b>MODE</b>	<b>USE</b>
<b>7CALL50</b>	799.24375	769.24375	\$293	N/D	<b>REQUIRED Calling Channel</b>
<b>7CALL50D</b>	769.24375	769.24375	\$293	N/D	
<b>7TAC51</b>	799.14375	769.14375	\$293	N/D	<b>REQUIRED</b>
<b>7TAC51D</b>	769.14375	769.14375	\$293	N/D	
<b>7TAC52</b>	799.64375	769.64375	\$293	N/D	<b>REQUIRED</b>
<b>7TAC52D</b>	769.64375	769.64375	\$293	N/D	
<b>7TAC53</b>	800.14375	770.14375	\$293	N/D	<b>REQUIRED</b>
<b>7TAC53D</b>	770.14375	770.14375	\$293	N/D	
<b>7TAC54</b>	800.64375	770.64375	\$293	N/D	<b>REQUIRED</b>
<b>7TAC54D</b>	770.64375	770.64375	\$293	N/D	
<b>7TAC55</b>	799.74375	769.74375	\$293	N/D	<b>REQUIRED</b>
<b>7TAC55D</b>	769.74375	769.74375	\$293	N/D	
<b>7TAC56</b>	800.24375	770.24375	\$293	N/D	<b>REQUIRED</b>
<b>7TAC56D</b>	770.24375	770.24375	\$293	N/D	
<b>7GTAC57</b>	800.99375	770.99375	\$293	N/D	<b>REQUIRED</b>
<b>7GTAC57D</b>	770.99375	770.99375	\$293	N/D	
<b>7LAW61</b>	800.39375	770.39375	\$293	N/D	<b>REQUIRED - LAW</b>
<b>7LAW61D</b>	770.39375	770.39375	\$293	N/D	
<b>7LAW62</b>	800.49375	770.49375	\$293	N/D	<b>REQUIRED - LAW</b>
<b>7LAW62D</b>	770.49375	770.49375	\$293	N/D	
<b>7FIRE63</b>	799.89375	769.89375	\$293	N/D	<b>REQUIRED - FIRE</b>
<b>7FIRE63D</b>	769.89375	769.89375	\$293	N/D	
<b>7FIRE64</b>	799.99375	769.99375	\$293	N/D	<b>REQUIRED - FIRE</b>
<b>7FIRE64D</b>	769.99375	769.99375	\$293	N/D	
<b>7MED65</b>	799.39375	769.39375	\$293	N/D	<b>REQUIRED - EMS</b>
<b>7MED65D</b>	769.39375	769.39375	\$293	N/D	
<b>7MED66</b>	799.49375	769.49375	\$293	N/D	<b>REQUIRED - EMS</b>
<b>7MED66D</b>	769.49375	769.49375	\$293	N/D	

- "N" = Narrowband Mode
- "D" = Digital Mode

**700 MHz MUTUAL AID CHANNELS**  
**(State Channels)**  
**12.5 KHz - DIGITAL MODE ONLY**

LABEL	MOBILE TRANSMIT	MOBILE RECEIVE	NAC	MODE	USE
7SCTAC1	803.03125	773.03125	\$293	N/D	REQUIRED
7SCTAC1D	773.03125	773.03125	\$293	N/D	
7SCTAC2	803.28125	773.28125	\$293	N/D	REQUIRED
7SCTAC2D	773.28125	773.28125	\$293	N/D	
7SCTAC3	803.53125	773.53125	\$293	N/D	REQUIRED
7SCTAC3D	773.53125	773.53125	\$293	N/D	
7SCTAC4	803.78125	773.78125	\$293	N/D	REQUIRED
7SCTAC4D	773.78125	773.78125	\$293	N/D	
7SCTAC5	804.03125	774.03125	\$293	N/D	REQUIRED
7SCTAC5D	774.03125	774.03125	\$293	N/D	
7SCTAC6	804.28125	774.28125	\$293	N/D	REQUIRED
7SCTAC6D	774.28125	774.28125	\$293	N/D	
7SCTAC7	804.53125	774.53125	\$293	N/D	REQUIRED
7SCTAC7D	774.53125	774.53125	\$293	N/D	
7SCTAC8	804.78125	774.78125	\$293	N/D	REQUIRED
7SCTAC8D	774.78125	774.78125	\$293	N/D	
<b>South Carolina 700 MHz Portable Repeater/Aviation Mutual Aid Channels</b>					
7SCPRT1	803.05625	773.05625	\$293	N/D	REQUIRED
7SCPRT1D	773.05625	773.05625	\$293	N/D	
7SCPRT2	803.30625	773.30625	\$293	N/D	REQUIRED
7SCPRT2D	773.30625	773.30625	\$293	N/D	
7SCPRT3	803.55625	773.55625	\$293	N/D	REQUIRED
7SCPRT3D	773.55625	773.55625	\$293	N/D	
7SCPRT4	803.80625	773.80625	\$293	N/D	REQUIRED
7SCPRT4D	773.80625	773.80625	\$293	N/D	
7SCPRT5	804.05625	774.05625	\$293	N/D	REQUIRED
7SCPRT5D	774.05625	774.05625	\$293	N/D	
7SCPRT6	804.30625	774.30625	\$293	N/D	REQUIRED
7SCPRT6D	774.30625	774.30625	\$293	N/D	
7SCPRT7	804.55625	774.55625	\$293	N/D	REQUIRED
7SCPRT7D	774.55625	774.55625	\$293	N/D	
7SCPRT8	804.80625	774.80625	\$293	N/D	REQUIRED
7SCPRT8D	774.80625	774.80625	\$293	N/D	

- Channel names that have an "S" are licensed for South Carolina use only.
- "N" = Narrowband Mode
- "D" = Digital Mode

**800 MHz MUTUAL AID CHANNELS**  
(National and State Channels)

LABEL	MOBILE TRANSMIT	MOBILE RECEIVE	TONE	MODE	USE
8CALL90	806.0125	851.0125	156.7	W/A	<b>REQUIRED</b> Calling Channel
8CALL90D	851.0125	851.0125	156.7	W/A	
8TAC91	806.5125	851.5125	156.7	W/A	<b>REQUIRED</b>
8TAC91D	851.5125	851.5125	156.7	W/A	
8TAC92	807.0125	852.0125	156.7	W/A	<b>REQUIRED</b>
8TAC92D	852.0125	852.0125	156.7	W/A	
8TAC93	807.5125	852.5125	156.7	W/A	<b>REQUIRED</b>
8TAC93D	852.5125	852.5125	156.7	W/A	
8TAC94	808.0125	853.0125	156.7	W/A	<b>REQUIRED</b>
8TAC94D	853.0125	853.0125	156.7	W/A	
8SCTAC1	806.2250	851.2250	156.7	W/A	<b>REQUIRED</b>
8SCTAC1D	851.2250	851.2250	156.7	W/A	
8SCTAC2	806.6875	851.6875	156.7	W/A	<b>REQUIRED</b>
8SCTAC2D	851.6875	851.6875	156.7	W/A	
8SCTAC3	807.7750	852.7750	156.7	W/A	<b>REQUIRED</b>
8SCTAC3D	852.7750	852.7750	156.7	W/A	
8SCTAC4	808.6375	853.6375	156.7	W/A	<b>REQUIRED</b>
8SCTAC4D	853.6375	853.6375	156.7	W/A	
8SCTAC5	808.9750	853.9750	156.7	W/A	<b>REQUIRED</b>
8SCTAC5D	853.9750	853.9750	156.7	W/A	
8SCDIR1	851.2250	851.2250	100.0	W/A	<b>REQUIRED - On Scene</b>
8SCDIR2	851.6875	851.6875	100.0	W/A	<b>REQUIRED - On Scene</b>
8SCDIR3	852.7750	852.7750	100.0	W/A	<b>REQUIRED - On Scene</b>
8SCDIR4	853.6375	853.6375	100.0	W/A	<b>REQUIRED - On Scene</b>
8SCDIR5	853.9750	853.9750	100.0	W/A	<b>REQUIRED - On Scene</b>
8SCDTAC4	853.6375	853.6375	\$293	W/D	<b>OPTIONAL</b>
8SCDTAC5	853.9750	853.9750	\$293	W/D	<b>OPTIONAL</b>

- Channel names that have an "S" are licensed for South Carolina use only.
- "W" = Wideband Mode
- "A" = Analog Mode "D" = Digital Mode