



**Iowa Statewide Interoperable Communications System (ISICS)
Standards, Protocols, Procedures**

Standard Name:	Cross Spectrum Interoperability		Date Created:	06-13-2018	
Standard Policy #	1.10.0	Section Title:	Interoperability Standards	Status	APPROVED
Approval Authority:	ISICSB		Adopted:	8/9/18	Reviewed 8/9/18

1. Purpose or Objective

The purpose of this standard is to establish procedures for use and patching of VHF/UHF/700/800 (V/U/7/8) MHz interoperability resources. Conventional resources (CR) include local operability resources and interoperability channels in this standard.

2. Technical Background

Capabilities

Conventional resources may include:

- Nonfederal national V/U/7/8 interoperability channels.
 - These are derived from FCC rules, ANSI standards and NTIA rules. These channels can be found in the NIFOG.
- Statewide V/U/7/8 interoperability channels.
 - LEA, Iowa Channel, Point-to-Point and other interoperability channels that are unique to Iowa.
 - Local V/U/7/8 interoperability channels.

Constraints

- Conventional radio users should have the capability to communicate on conventional V/U/7/8 radio channels—e.g., VCALL10, VLAW31, 8CALL90 or 8TAC91—as long as they are approved to transmit on those channels.
- An ISICS talkgroup should only be in one patch at a time.
- A patch between an ISICS talkgroup and a CR will result in the CR being able to reach ISICS users. However, users should not expect the footprint of the CR to expand.

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- The coverage area when patching a simplex channel (e.g. VLAW31, UTAC42D, 7TAC52D, 8TAC92D) will have limited range when compared to a repeated conventional channel. Users of simplex channels and ISICS talkgroups may have to accept interference from other users on that simplex channel that are within range of their radios.

3. Operational Context

These communications pathways may be used for day-to-day coordination, urgent or emergency mutual aid situations, task forces, tactical teams, and for other purposes. While existing conventional subscriber radios can be used, additional equipment may be required for patches.

Patches between CR national interoperability resources, legacy state resources and the corresponding ISICS regional and statewide interoperability talkgroups should only be used when there is a need for communications between personnel that are on conventional radios and personnel that are users of the ISICS Platform. Use must be in compliance with the rules governing the selected frequency on the national mutual aid resource and be authorized by dispatch, the Incident Command (IC) or Unified Command (UC) structure at the scene of the incident or planned event.

A CR national interoperability resource and an associated patched ISICS talkgroup may be used for short-term high intensity events and for long-term extraordinary events.

4. Recommended Protocol/ Standard

Patches are generally allowed between ISICS talkgroups and CR. A soft patch is typically an ad-hoc patch done through a console that is temporary. A hard patch is typically fixed through hardware and is typically intended to be perpetual. Hard patches are discouraged for interoperability talk groups. Audio gateway devices will pass audio from the CR to ISICS talkgroups and vice-versa and may be field deployed or in a public safety communications center. There may be instances where a hard patch is necessary on a local level. The System Administrator should be consulted before any hard patches are created.

5. Recommended Procedure

The national interoperability resources and legacy state resources primarily provide interoperability for a conventional or disparate radio system user that cannot access ISICS trunked system resources. Conventional radio users may be moved onto a separate radio channel for a specific incident.

Once an incident using an ISICS regional or statewide interoperability talkgroup or conventional interoperability channel ends, the local dispatcher should also release this resource on the ISICS StatusBoard Application if available.

6. Management

The development and management of statewide rules for use of statewide interoperability channels are the responsibility of the Iowa Statewide Interoperable Communications System Board (ISICSB).

The System Administrator working with the ISICSB is responsible for managing this standard.

The agencies on the ISICS Platform and CR shall ensure that there is a procedure for use of a patch between CR and the ISICS regional and/or statewide interoperable talkgroups or local resource in the dispatch center for which they are responsible.

System users should receive initial and continuing training on the use of this procedure as part of their regular or routine training.