

West Virginia
Statewide Interoperable Radio Network

S I R N



A Step-By-Step Guide
For Initial Users
For Participation on the SIRN

1. Participation

- a. Determine if you are listed as a participating agency
 - i. Many agencies at the county and municipal level have already been registered as a participating agency via the county Point of Contact “umbrella application” process.
 - 1. You can view the current and update-to-date agency list at www.sirn.wv.gov website.
- b. If your agency is not listed as a participating agency, visit the SIRN website and fill out an *Application For Participation*. Submission information is listed on the application form.

2. Purchasing Considerations

- a. State Contract
 - i. Contract issued by the state purchasing division and is made available to all state agencies and other governmental entities
- b. State Agency Contract
 - i. Contract issued by the state purchasing division and is made available only to agencies specifically listed in the contract as well as all local government entities
- c. Bid Specifications and Purchasing Requirements
 - i. Equipment must be listed on the Approved Equipment List (available on the SIRN website) or a waiver must be obtained from the SWIC
- d. Manufacturer Model Information Acquisition
 - i. Reach out to the local RIC Chair to seek guidance
 - ii. Contact the Statewide Interoperability Coordinator via e-mail at swic@wv.gov
- e. Radio Requirements
 - i. 9600 Baud Trunking
 - ii. UHF covering at least 400 Mhz to 470 Mhz
 - iii. Listed on the Approved Equipment List (available at sirn.wv.gov)
- f. End of Life Date For Radio Model
 - i. Inquire with vendor
- g. Handheld or Vehicle Mobiles
 - i. User Application (Which do you need?)
 - 1. Handheld – capable of being carried on a person with its own self-contained power source
 - 2. Mobile Radio – vehicle permanently mounted in a vehicle requiring a vehicle power source and separately mounted antenna
 - ii. Power Output (Portable 4watts Mobiles 40watts)
 - iii. SIRN system is designed for *mobile* coverage
 - iv. Other accessories and features are available depending on brand and model

- h. Single Band
 - i. Ultra High Frequency (UHF)- SIRN Digital Radio Band
 - 1. SIRN Operates most sites in the UHF frequency of 400 MHz to 470 MHz
 - ii. Very High Frequency (VHF) - High Band or Low Band
 - 1. SIRN does not use any frequencies other than UHF
 - i. Dual Band/Multi-Band
 - j. Optional if the agency wishes to spend the money; Radio must contain UHF trunking and be listed on the Approved Equipment List
 - k. Encryption
 - i. Not required; Agency purchase optional; AES is the only *supported* interoperable encryption algorithm
 - 1. Other encryption types may be in use at a local level
 - ii. Agencies are encouraged to purchase multikey encryption capability
 - l. Multi-Line Alpha Numeric Display Screens
 - i. Display model would certainly be recommended but not mandated; Non-display models with correct hardware can work; Consider difficulty in training, usage, configuration, et cetera
3. Purchase the Radios
- a. Agencies should study the SIRN SOP's in order to make an educated purchase. Caution should be taken on the sole reliance of a vendor to recommend what an agency needs.
 - b. All equipment must be listed on the Approved Equipment List
 - i. Equipment purchased that is not on the Approved Equipment List will not be activated on the system
4. SIRN Radio Activation - You will need to activate your radios on the SIRN system before programming them.
- a. Agency SIRN Point of Contact (POC). Find out who your agency POC by looking at the online list *SIRN Point of Contact (POC) for Radio Programming*. Then have your agency POC send your new radio identification information to the system administrators for activation.
 - i. Radio Information that you will need to send include:
 - 1. Radio Manufacturer Name.
 - 2. Model Name and/or Number.
 - 3. Serial Number.
 - 4. Agency assigned to.
 - 5. Agency assigned system ID number.
 - 6. Alias for entry purposes.
5. Programming
- a. View the SIRN website for the latest Standard Operating Procedures available on line at <http://www.sirn.wv.gov/information/Programming/Pages/default.aspx>
 - i. Multiple policies may cover the information you need and thus you may not find everything in a single document

- b. Are you going to have someone trained and SIRN certified from your agency to program radios or are you going to outsource the programming of your radios?
 - i. SIRN Radio Programmer Certification and Training
 - 1. Background Check is required for all programmers
 - 2. Forms that need to be filled out and approved:
 - a. SIRN Programming Security Agreement Form
 - i. Must be signed off by county 911 Director or county Emergency Manager or State or Federal agency head
 - b. SIRN Programmer Application Form
 - c. Radio Programmer Training Certification Form
 - 3. Programmer recertification required every 2 years
 - ii. Outsource Radio Programming?
 - iii. All programmers must be approved. To check the status of a programmer visit the SIRN Approved Programmers List online at <http://www.sirn.wv.gov/information/Programming/Pages/default.aspx>
 - c. Hardware Required For Programming:
 - i. Radio
 - ii. Laptop computer for code plug building and programming of radios
 - 1. Computer user requires administrative rights in order to install required software to program the radio
 - iii. Cables specific to Manufacturers to connect laptop to individual radios
 - iv. SIRN does not provide programming cables
 - d. Software Required
 - i. Manufacturers Programming Software (You may have to purchase a license from the manufacturer to obtain this software)
 - ii. SIRN does not provide programming software
 - e. Code Plug Development- Frequency & Channel Designations
 - i. Obtain written authorization from the appropriate agency head or county point of contact from agencies that you want to program in your radio for conventional channels and/ or SIRN talkgroups
 - ii. Other talkgroup considerations
 - 1. Tactical, Regional & Special Event Talkgroups
 - 2. Statewide Talkgroups
 - 3. National Interop Channels
 - 4. Neighboring jurisdictions
 - iii. Program with the use of standardize channel/talkgroup nomenclature.
 - f. Firmware Updates
 - i. Extremely important for the continued safe operation of the end user equipment
 - ii. Agencies should work with their programmer or RIC to keep current on firmware versions
6. Training for End User
 - a. Conduct in-house training drills
 - i. Encompassing all levels of users (Beginners to Advanced Operators)

- b. Conduct hands-on exercise
 - i. Get users to actively participate in using the radio out in the field performing such functions as
 - 1. Changing zones
 - 2. Changing talkgroups
- c. Incorporate radio usage and training into other trainings that are being conducted by the agency