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 4 watts Mobiles 40 watts)
      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