Phase 4 Use Cases

Use cases guide development. Development decisions affect use cases.

The use cases listed here are best effort predictions of how Phase 4 radios will be used. The list will not be perfect or exhaustive, but will guide decisions that must be made in order to produce real hardware.

We are assuming operational radios for these use cases. Radios comply with our current understanding of the radio and policy environment.

Emergency Communications

We are beginning with emergency communications for two reasons. First, emergency operations must not differ from normal amateur operations unless absolutely necessary. Therefore, anything necessary to emergency communications has immediate relevance to any other use case. Second, providing emergency communications demonstrations and support is a primary justification of the project. Emergency communications is therefore the fundamental use case.

Phase 4 radios must “just work”. This is understood to be that Phase 4 radios must work with a minimum of configuration and setup in general, and either minimal or completely eliminated differences between normal and emergency operation.

Phase 4 radios in an emergency must be able to respond to authorization. This is understood to mean that satellite access may be controlled in an emergency, and Phase 4 radios must comply with this uplink access control.

Phase 4 radios fall into a category of non-voice-centric (NVC) telecommunications devices. This expands the use case from voice-centric telecommunications devices that many amateur radio operators are familiar with or have trained to provide service with. The addition of images, text, and data enhances emergency communications, but also places additional demands and complexities on operations. It is the operator that must properly use the radio given the challenges of any particular deployment. It is our job to make that operator’s decisions as easy as possible.