



HARRIS CORPORATION

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<http://www.rfcomm.harris.com/publicsafety/>

Dan Meseke
Facilitator StarCom 21
Illinois State Police
801 South Seventh Street
Springfield Illinois 62794-9461

Dear Mr. Meseke,

Thank you for opportunity to respond to the questions and concerns regarding deployment of Harris P25 mobiles/portables on the Motorola StarCom 21 network. Answers to the questions you and the Subcommittee posed are included below in the document. I am sure Motorola has been aware of the answers to the questions you submitted. Motorola has tested our Harris P25 products within their P25 certification lab. You may wish to also contact Motorola regarding their results.

We at Harris have an approved P25 certification lab within our facility located in Lynchburg VA. Harris has tested and number of competitive P25 products to ensure that the products can be deployed onto our P25 networks. Motorola has recently announced their approved P25 certification facility located in their facility in Schaumburg Illinois. I have attached a copy of the Motorola press release regarding the successful testing by Motorola of 6 vendor's P25 products.

Certifying various vendor product(s) for deployment on the Motorola StarCom 21 network will offer the Public Safety user community the ability to move away from the "Sole Source" mindset. Motorola's P25 StarCom 21 network can support competitive P25 products, IF, Motorola permits the devices to be deployed on their P25 network.

May I suggest the following; each vendor could have a "demo" talk group on StarCom 21 for a minimum monthly fee similar to ITTF fee. P25 vendors would have a talk group with a limited number of P25 portables/mobiles active on StarCom21. The purpose would be for customer (Public Safety) testing and evaluation. The P25 talk group, with a limited number of mobiles/portables would have virtually zero impact on the Motorola StarCom 21 network. Motorola does have the ability to monitor radio usage to verify usage.

Should a competitive radio have network issues, Motorola has the capability to "inhibit" the device just as if it was a Motorola product.

We believe competition does offer the user community P25 alternative(s) which will drive down pricing, additionally; improvements in customer support may result. Motorola P25 StarCom 21 network can support multi vendor products IF Motorola permits the devices to be deployed.

If you have any questions please do not hesitate to contact me at 312 497 3215.

Sincerely,

Paul Marshall
Harris
Area Sales Manager
2580 Foxfield Suite 203
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1. The current radio equipment used on the system has adequate controls against unauthorized cloning and/or programming of radios. How does this manufacturer implement security controls on their radio programming software?

a. Does the programming software use some sort of key or other restriction on programming?

The programming software cannot be executed without a verified license on the machine.

b. Please explain the security controls used by the manufacturer's programming software.

Security Keys (ESK) can be used to control access to specific information with radio personalities. ESK can be enabled on a per system basis. Without the proper security key loaded, data that is relevant to the system(s) containing the key, a user can not view, save, or write the data to the radio.

c. Please explain how distribution of programming software and programming keys (or similar items) is controlled.

Harris Software FX Services Department strictly controls the distribution of programming software and keys. These products are only available to customers that have purchased Harris products, Harris personnel and authorized service shops.

A new instance of the programming tool requires a license to operate. The license is tied to the machine on which it is installed and cannot be used on other machines. The license key will require either an internet connection for authentication, or will require a phone call to Harris Software Services before the software can be operational on that machine.

d. Access and Distribution of programming keys (or their equivalent) should be strictly controlled. Do you agree to only distribute the ability to program radios, on STARCOM21, to entities that have been approved by the system owner? Do you respect the right, of the system owner, to determine who has the ability to program radios onto STARCOM21?

STARCOM21 system information, as well as other system information is available as public knowledge on the internet. However, should STARCOM21 use ESK to program their radios to restrict access, Harris will ensure that these keys are not readily available to personnel not authorized by STARCOM21. As long as an ESK is used to program the radios, the system personality cannot be read or cloned and could not be used by unauthorized users. Harris will respect the right of the system owner to determine who has the ability to program radios on their system.

e. What enforcement actions are you willing to take against a servicer that is caught programming your radios onto STARCOM21 without authorization?

We at Harris comply with all federal, state and local laws.

2. In the event of a lost or stolen radio, an inhibit command can be sent through the network to disable that particular radio. That radio is then basically dead unless it receives an enable command from the network, or the radio is sent to the factory where the radio is reset and must be reprogrammed with the default STARCOM21 configuration.

a. Can this model of radio be inhibited through the network?

Yes, we support a P25 Trunked Standards Enable/Disable feature.

b. Other than an enable command from the network, how else can the radio be brought back into operation?

The radio could be brought back into operation by reloading the P25 software suite into the radio. This would require the radio to be taken to an authorized service shop that has a copy of the P25 Trunking software.

The radio could also be reprogrammed with a different user id, that is inhibited by the network and the radio will function again.

- c. Allowing local technicians with normal programming software to clear and inhibit command at the radio is not acceptable.
A local technician without the approved ESK key will not be able to program the radio or change its parameters. The inhibit and enable can be performed on a radio by the STARCOM21 system administrator using standard P25 Trunking protocol.

 - d. Is the ability to inhibit a radio standard in every shipped radio?
Yes. This feature is a standard P25 Trunked offering with all radios.

 - e. Will you work with the STARCOM21 system operator to enable them to have the ability to inhibit your radios?
Harris will work with the STARCOM21 system operator to enable them to inhibit unauthorized Harris radios on their system.
3. We would like to test the security features of the radios you are planning to add to STARCOM21, would you allow the STARCOM21 Advisory Subcommittee to test these features?
Motorola has a certified P25 testing lab and has tested our products. If additionally tested is required by Motorola we would work with to test our product on Motorola StarCom 21 network