



Use of “Nationwide Low Power” Frequencies Standing Operating Procedures

1 Purpose

To establish standard operating procedures regarding permitted use of the three low power (“LP”) 700 MHz radio frequencies¹ established by the Federal Communications Commission (“FCC”) and available for public safety² services anywhere in the United States and its territories.

2 Scope

This standard operating procedure applies to Maryland FiRST system users who must conduct official business outside of the State.

3 Authority

The Statewide Interoperability Radio Control Board has the authority to establish Standard Operating Procedures, Quality of Service Standards and Maintenance Guidelines for the Maryland FiRST Radio System in accordance with the Annotated Code of Maryland, Public Safety Article, § 1-501-1-503.

4 Users

This policy applies to persons using the LP frequencies under authority of the State’s FCC license.

5 Policy Statement

When it is necessary to use nationwide LP 700 MHz radio frequencies in the conduct of official business outside the borders of Maryland, the rules of the FCC and technical protocols of this policy shall be followed.

6 Supporting Rules/Procedures

The State’s nationwide FCC license, obtained through the Department of Information Technology (“DoIT”), is [WRAG702](#). Use of the nationwide frequencies is non-exclusive and they are potentially subject to interference from other authorized users. The nationwide channels are

¹ See 47 CFR §90.531 (b)(4).

² See 47 USC §337(f)(1). The term “public safety services” means services the sole or principal purpose of which is to protect the safety of life, health, or property.



designated for LP public safety communications use and on-scene incident response purposes using mobiles and portables. There is no exclusivity for the use of these LP frequencies; however, by virtue of their low permitted power, operational use is typically limited to small geographical areas which may be further affected significantly by terrain and/or buildings proximate to the area of operation.

Recognizing that the requirement for “out-of-state” public communications is atypical, State agencies, departments, and other Maryland FiRST primary users operating on the nationwide LP 700 MHz frequencies may adopt such supplemental and appropriate protocols regarding public safety communications use as may be required provided that use is consistent with FCC rules.

7 Technical Issues

The LP channels are licensed for nationwide itinerant, or temporary operation. Transmitter power may not exceed two (“2”) watts of effective radiated power (“ERP”)³. There is not a nationwide naming nomenclature for the use of these low power frequencies nor is there defined nationwide technical requirements for operation.

For the purposes of the State of Maryland, these low power (“LP”) frequencies are designated as:

USA LP1 – 769.05625 MHz

USA LP2 - 769.06875 MHz

USA LP3 - 774.99375 MHz

LP channels may be used in the analog or digital mode depending upon the needs of the Maryland user. When operated in the analog mode, the continuous tone squelch frequency for transmitting shall be 156.8 Hz. Because others may be using these frequencies, it is recommended that tone squelch not be used when receiving radio transmissions.

If digital operation is employed, the transmitting Network Access Code (“NAC”) shall be \$293 with a receiving code of \$F7E. The \$F7E NAC is intended to ensure that the transmissions of other authorized users can be heard. The emissions scheme to be used out of state may be selected by the using agency.

Encrypted operations are permitted on LP frequencies when necessary. However, the broadcast of license call letters WRAG702, may not be encrypted.

³ See 47 CFR §90.541(e).



State of Maryland
Statewide Interoperability Radio Control Board

LARRY HOGAN
Governor

BOYD K. RUTHERFORD
Lieutenant Governor

MICHAEL G. LEAHY
Chairman of the Board

8 Responsibilities

- All Maryland FIRST users are responsible for following the policy/procedures contained in this SOP.
- The Director of the Radio Control Board may approve temporary changes or modifications to this policy to ensure the security of the system or to accommodate an emergency condition. Any permanent changes to this policy require the approval of the Radio Control Board.

9 Contact Information

The Maryland FIRST Agency Coordinator/Customer Liaison may be contacted at:
md-first.radio@maryland.gov

The Maryland FIRST System Manager may be contacted at:
MDFirstSystem.Manager@maryland.gov

10 Approval

This SOP was reviewed by the Maryland FIRST Operations Group on, November 28, 2018 and was approved by the Statewide Interoperability Radio Control Board, by majority vote on, December 12, 2018.

Norman J. Farley
Director of the Board

Michael G. Leahy
Chairman of the Board