



Subject: Microwave (Wi-Fi) Radios	
Date: Feb 16, 2016	Author: Steve Drew
Bulletin Number: TE-2016-07 Bulletin Type: Requirement	Effective Date: Feb 16, 2016
Audience	Standards Affected
Ministry Managers, Electrical Services; all users of the Electrical and Traffic Engineering Manual; all Ministry Traffic Engineers; all Electrical and Traffic Designers	Electrical & Traffic Engineering Manual, Electrical & Signing Materials Standards, Standard Specification for Highway Construction

Background:

Microwave (Wi-Fi) Radios provide a cost effective means of communications where high data rates are required, and can be used as an effective alternative to a hard-wired data link. Microwave Radios are used in many applications including intelligent transportation systems, public safety communications, and public utilities. These radios operate in the 2.4, 4.9, and 5.8 GHz frequency bands and do not require licensing by Industry Canada.

Policy:

Microwave (Wi-Fi) Radios shall only be installed in locations approved by the Electrical Engineering Centre.

Approved installations shall be documented on electrical drawings with TE numbers assigned by the Ministry Electrical Engineering Centre. All designs shall be in accordance with the *Electrical and Traffic Engineering Manual* and the *Standard Specification for Highway Construction*, and approved by the Electrical Engineering Centre. The drawings shall convey all pertinent electrical information, including the location, configuration, mounting details and power source.

Microwave (Wi-Fi) Radios shall operate within all limitations stipulated by Industry Canada.

Only products listed on the Ministry Recognised Products List may be used.



Procedure:

An application shall be made to the Electrical Engineering Centre for approval to install Microwave (Wi-Fi) Radios. Once approved the Electrical Engineering Centre will review the design and stipulate any required documentation updates.

Microwave (Wi-Fi) Radio programming and commissioning shall be documented and retained by the Electrical Engineering Centre, the Manager Electrical Services and the Electrical Maintenance Contractor.

The Manager, Electrical Services will be contacted to arrange the installation, and the devices will be added to the electrical infrastructure inventory.

The Manager, Electrical Services shall notify the appropriate power authority of the increased loading if the Microwave (Wi-Fi) Radios are connected to a non-metered electrical service.

All costs for the design, documentation, and installation of Microwave (Wi-Fi) Radios will be borne by the originator of the request for the installation of the device.

Contact:

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