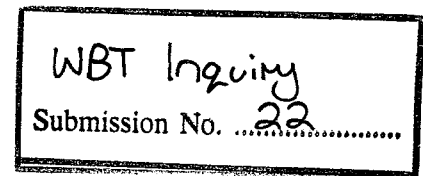


Submission for House of Representatives Inquiry into Wireless Broadband



Background

In 1999 I looked into the possibility of providing internet services for small rural communities using 2.4 GHz DSSS wireless networking equipment. My concept was that wireless links could be used to bypass poor quality phone lines, and in conjunction with a local ISP or Telecentre, provide high speed data access to the internet.

My tests indicated that distances of 10 kilometres could easily be obtained with modest equipment, as long as there was unobstructed line of site between the sites. Greater range could be achieved by linking consecutive sites to create a trunk route. Manufacturers specifications indicate that up to 50 kilometres should be possible with suitably elevated sites.

The Problem

In 1999 the setup costs for hardware was approx. \$1000 per site. There was however an additional requirement, to be licensed as Telecommunications Carrier. The associated costs (\$10,000 to apply + \$10,000 per annum fee) and conditions of which made such projects untenable.

I presented several scenarios to the ACA for comment but was advised:
quote:

“
It appears that in each scenario described in your email the POP closest to the customer would include a radiocommunications facility which would be used to transmit signals to and from the customer equipment located at the customer premises. Such a facility would appear to fall within the definition of a designated radiocommunications facility in the Telecommunications Act 1997. Section 34 provides that a designated radiocommunications facility includes a base station that is part of a terrestrial radiocommunications network if:

- (a) the base station is part of a telecommunications network; and
- (b) the base station is not for the sole use of supplying broadcasting services
- (c) the base station is used, or for use, in connection with the supply of carriage service; and
- (e) the service is wholly or principally used, or wholly or principally for use, by each end-user:
 - (i) at premises occupied or used by the end-user; or
 - (ii) in the immediate vicinity of these premises; and
- (f) the network does not have intercell hand-over functions.

These characteristics would appear to apply to the facility described in each of your scenarios. The consequence of this would require you to obtain a carrier licence for the use of the radiocommunications facilities attached to the POP (but not for the POP in so far as the POP only provides routing or caching services), unless an exemption was given by the Minister under section 51, or a nominated carrier declaration was given in respect of the network units.
“

I attempted to secure legal advice on gaining an exemption but could not find legal counsel locally or on a statewide basis with experience in such matters. I approached the Communications Law Group (**Error! Reference source not found.**) for assistance but none was forthcoming.

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My Suggestion

Where wireless technology using equipment covered by a 'spectrum license', such as 2.4 & 5.8 Ghz (802.11) DSSS network cards operating in the associated ISM frequency bands, is used by community groups or ISPs to provide internet services, then those groups should be exempt from registering as a Telecommunications Carrier. Such internet services would include, WWW, email, messaging, video conferencing and telemetry/security services.

The Minister could issue such an exemption in much the same way as is currently done to allow "spectrum licensed" radio equipment.

Where such equipment is used to provide VOIP telephony services, and the associated telephone numbers are accessible directly from the PSTN network, then registration as a Telecommunications Carrier would still be required.

Faithfully
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