

# Comments on Cabinet Submission Relating to Licence-Exempt Spectrum

July 1, 2005

#### 1. Introduction

1.1 Advances in technology leave resulted in intelligent devices which have the capability to access spectrum in a manner such that compatible terminals can operate satisfactorily within interfering range of each other. Given these developments the Minister has seen it fit to reconsider the current licensing policy with a view to creating licence-exempt bands of spectrum. The proposed bands for exemption are 902-928 MHZ; 2.4 – 2.48 35 GHZ and 5.725 – 5.850 GHZ. Having reviewed the Cabinet Submission and the attached technical and operational rules the Staff of the Fair Trading Commission now provides its comments. Note however, that these comments represent an attempt to raise some of the issues relating to the impact of the implementation of licence-exempt spectrum bands, as the time-scale within which this review was carried out did not allow for a competitive impact assessment of the issues raised.

### 2. Issues Arising Out of the Proposed Move to Licence-Exempt Bands

- 2.1 Some of the main issues which arise out of the decision to move to licence-exempt spectrum bands are:
  - the possibility of interference to existing users;
  - the quality of the services which will be offered; and
  - the implications of competition between operators using licence-exempt spectrum and those using licensed spectrum.

#### Possibility of interference to existing users

2.2 The principle of non-protection of users within licence-exempt bands is a globally accepted policy. When spectrum becomes un-licensed it ceases to be scare and more users will jostle for access to spectrum in an uncoordinated manner. Changing from the status quo therefore to licence-exempt bands means that

- current licensees in those bands may find that their devices face increased instances of interference, thus causing these devices to function less reliable. It is noted however, that while the use of licence-exempt spectrum is on a no-protection basis, users will still be expected to adhere to the standards developed by the Spectrum Management Authority. This is a welcome decision, as in the absence of operational and technical standards users' equipment can become increasingly vulnerable to interference.
- 2.3 Given the possibility of interference to existing licensees all licensees who wish to shift to exclusive licensed bands should be guaranteed space within these bands. Further, in light of the fact that by migrating operators will incur expenses they should be given a reasonable time frame within which to migrate prior to the introduction of licence-exempt spectrum.

#### The quality of service which will be offered

In the Cabinet Submission one of the benefits of licence-exempt spectrum listed is its use by current licensees to provide retail services such as Internet access. When spectrum is exclusive, both the licensee and the consumers of its products can have confidence in the quality of services the licensee can provide. Given that the spectrum in exempt bands is not exclusive, activity in these bands will be unpredictable as use of the spectrum in any one area cannot be coordinated. Licensees using these bands will therefore be providing consumers with services, not on a quality of service guarantee but rather on a "best effort" basis. Assuming that the quality of service available from licence-exempt providers is likely to be of a lower standard then that of licensees using licensed spectrum, there should be mandatory disclosure of this fact to potential consumers. This will allow consumers to make a decision between providers using licensed spectrum and those using un-licensed spectrum, based on the quality of service they require.

## Competition between operators using licensed spectrum and those using licence-exempt spectrum

2.5 Currently all providers of public communications services who rely on the use of spectrum to provide these services hold a spectrum license. If use of license-exempt spectrum is allowed in the provision of public communications services, it opens up the door for providers using licensed-spectrum to compete in the same market as those using unlicensed spectrum. A consideration in such a scenario is the extent to which providers using licence-exempt spectrum could resort to "cherry-picking" thus jeopardizing the ability of those using licensed spectrum to comply with licence obligations relating to universal access/service obligations or network coverage.

#### 3. Conclusion

3.1 One the one hand, the proposed exemption is expected to increase the market potential for broadband communications in Jamaica as well as act as a stimulus for innovative radio technologies. On the other hand, maintaining the status quo of 100% licensing runs the risk of missing the potential for development associated with using new technologies which can operate effectively in licence-exempt bands, to address congestion problems in areas where there is a high demand for broadband services. In light of the benefits which the innovative and ubiquitous use of spectrum engenders the Staff shares the sentiment aired in the Submission, that the introduction of licence-exempt spectrum bands is likely to deliver significant economic benefits. Further under a "quick look" analysis it seems unlikely that the introduction of licence-exempt bands will adversely interfere with competition.