



COMMSCOPE®

**CommScope Response to
Innovation, Science and Economic Development
(ISED) Canada**

***Canada Gazette: Consultation on the Technical and
Policy Framework for License-Exempt Use in the 6
GHz Band***

**SMSE-014-20
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1. Introduction and CommScope Background

CommScope is pleased to provide these comments in the above-mentioned proceeding.

CommScope (listed on NASDAQ as COMM) is a leading developer and manufacturer of wireless network equipment. Our portfolio of products includes the critical building blocks that carriers and enterprises need to deploy and operationalize their next generation wireless networks – for each and every part of those networks, including fiber infrastructure and backhaul, macro cells, outdoor small cells, in-building/venue wireless (Wi-Fi and cellular), and spectrum management solutions. Through our Ruckus and ARRIS units, CommScope is a leading provider of unlicensed Wi-Fi infrastructure equipment for the carrier, enterprise, residential, and consumer markets. More broadly, our company is also a key provider of broadband solutions, ranging from innovative technologies to increase the speed and expand the deployment of broadband networks and customer equipment needed to access broadband services.

Through our Comsearch business unit, CommScope has long standing expertise in spectrum management, interference analysis and mitigation, and decades of experience in providing mission critical network infrastructure services. Comsearch maintains state-of-the-art software and comprehensive spectrum databases utilized in the design of complex wireless systems. We offer an extensive array of data and engineering solutions and consulting. We have been gathering data for over 40 years on microwave, broadcast, satellite, PCS, AWS and cellular networks from an abundance of sources. We verify, update and manage our extensive databases daily, and have amassed one of the largest and most accurate private collections of engineering data in the telecommunications industry. Our engineers rely upon these databases to perform thousands of interference analyses and frequency assignments per month. In addition to our in-house capabilities, below is a list of our publicly available offerings:

- FCC-certified Spectrum Access System (SAS) and Environmental Sensing Capability (ESC) provider for the Citizens Broadband Radio Service (CBRS)
- FCC-certified database administrator in the 70/80/90 GHz service
- Support the American Hospital Association for management of the Wireless Medical Telemetry Service (WMTS) registration database

CommScope interacts regularly in the U.S. with the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA), and actively participates in various industry groups such as the Wireless Innovation Forum (WinnForum), the OnGo Alliance (formerly CBRS Alliance), the National Spectrum Management Association (NSMA), the Telecommunications Industry Association (TIA), and the Institute of Electrical and Electronics Engineers (IEEE) to develop rules, industry recommendations, and standards that promote the efficient use of the radio spectrum.

CommScope chairs the WinnForum 6 GHz committee, which was formed to Provide technical input to inform the FCC's 6 GHz rulemaking and facilitate the interpretation and implementation of the rulemaking that allows industry and regulators to collaborate on implementation of a common, efficient and well-functioning 6 GHz ecosystem. CommScope also fills a Vice Chair position for the Wi-Fi Alliance's 6 GHz Automated Frequency Coordination (AFC) Task Group.

We also work with ISED staff within the WInnForum and we collaborate on cross-border microwave frequency coordination issues.

CommScope has two facilities in Canada located in Mississauga, Ontario and Toronto, Ontario.

2. CommScope Comments

CommScope applauds ISED for issuing this consultation seeking comments on the technical and policy framework for license-exempt use of the 5925-7125 MHz frequency band (referred to as the 6 GHz band).¹ CommScope has joined with a number of other industry leaders to offer comment on the broader questions ISED raised in the consultation. We direct these comments specifically to Section 9.2, “General matters related to automated frequency coordination implementation” and the related Questions 16-18 in the consultation related to the AFC.

As noted above, ISED participates in the WInnForum and is active in the 6 GHz Committee. We also note that harmonization on requirements is key to ensuring AFC systems can be introduced quickly and seamlessly. We suggest ISED might be able to use WInnForum and Wi-Fi Alliance recommendations, standards and specifications to exploit synergies in ongoing development and standards discussions.²

A. Q16: ISED is seeking comments on the sample agreement related to the designation and operation of an AFC system in Canada

Paragraph 5 of the Agreement states: *The AFCSA shall not promote its designation status to provide AFC system services beyond the scope of this Agreement, nor indicate that it is an agent or representative of ISED or the Government of Canada.* It is possible that this clause might be interpreted to limit an AFCSA to providing services strictly within scope of the of the Agreement. This could have the effect of not allowing an AFCSA to provide additional value-added services that are not necessarily defined within the Agreement.

To the extent that this the intention of this Clause, we suggest that allowing AFCSAs to provide additional services is important to supporting the robust RLAN ecosystem. Our experiences providing regulator-specified frequency coordination services, such as the CBRS SAS, 70/80/90 GHz Coordination System or WMTS Frequency Coordination indicates that there will likely be demand for additional help and services that are within the scope of our official designations.

To the extent that this limitation is not the intent of this Clause, we suggest that the clause may be re-worded: *The AFCSA shall not promote its designation status to provide AFC system services beyond the scope of this Agreement, nor indicate that it is an agent or representative of ISED or the Government of Canada. This does not limit the AFCSA*

¹ Canada Gazette, November 2020, “Consultation on the Technical and Policy Framework for Licence-Exempt Use in the 6 GHz Band”, SMSE-014-20, (“Consultation”)

² Consultation at ¶81. We note the synergies discussed in the paragraph are related to capitalizing on earlier similar development, such as TV White Space, but we also note that it is desirable to harmonize with ongoing deliberations and developments such as those taking place in the WInnForum.

from providing additional frequency coordination and related services within the scope of this designation.

Paragraph 15 of the Agreement states: *The AFCSA shall permit ISED to examine its repository of incumbent licensee information obtained from ISED's Spectrum Management System to allow for the detection and correction of errors, resulting either from an inadvertent entry of incorrect data or as a result of a deliberate entry of false data.* We fully understand and appreciate the critical need for official and accurate data. However, to the extent that incumbent licensee information as obtained from ISED contains errors or deliberately entered false data, will ISED consider indemnifying an AFCSA from any frequency assignments using that data which may result in interference?

Finally, we note that paragraph 20 contemplates an AFCSA terminating the agreement; however, no provision is made in this clause for transferring its AFC system database to another designated AFCSA, similar to paragraph 18 (f). We suggest the ISED may wish to modify Clause as follows: *The AFCSA and ISED may terminate this Agreement upon joint consent, or upon provision of 90 calendar days' advance notice. In addition, ISED may terminate this Agreement at any time upon confirmation of breach of conditions or terms of this Agreement by the AFCSA, in accordance with paragraph 18 (d) above. Upon termination of this Agreement, the AFCSA shall transfer its AFC system to another designated AFCSA consistent with paragraph 18 (f) above.*

B. Q17: ISED is seeking comments on the proposed approach to incremental implementation of an AFC system in Canada.

We suggest that the incremental approach described in paragraph 80 of the Consultation has several inherent issues. It is critical that the commercial / market opportunity for potential AFCSAs be sufficient to justify the significant development and certification efforts required to operationalize AFCs for the Canadian market. The timing / phases of an incremental approach would need to be clearly laid out and should not cover an extended time period (e.g. greater than 6 months). We also note that the sample AFCSA Agreement does not seem to contemplate any such approach. In addition, ISED may need to make clear to RLAN users of any AFCSA incremental implementations.

In addition, geographic implementation implies the need for some degree of geographic limitation/knowledge in the AFC devices that are accessing such a system, to know which AFC system(s) are appropriate to use.

If limitations are applied on a spectrum basis, this could significantly limit the operational success of 6 GHz for devices which would have to be "squeezed" into a smaller band.

C. Q18: ISED is seeking comments on the objective to maximize the potential for synergies, where possible, in defining the technical and administrative requirements for the respective databases addressing different bands under different technical regimes.

We believe that aligning the technical and administrative requirements and procedures among the various services that may employ database-enabled, dynamic spectrum sharing systems such as an AFC, White Space Database (WSDB) or SAS is helpful. However, as a SAS administrator and prospective AFC administrator, and considering our deep experience in dynamic spectrum development and administration, we suggest that we will endeavor to align our respective development efforts as a matter of course. To the extent the ISED is contemplating a regulatory regime to encourage any synergies, it should be lightweight and allow for maximum flexibility.

3. Summary

CommScope is encouraged that ISED has issued this Consultation that outlines a policy framework for license-exempt use in the 6 GHz band, which also supports the development and provision of AFCs and AFCSAs. We welcome the opportunity to work with ISED and other stakeholders in realizing the benefits of license-exempt use of the 6 GHz band.

/s/ H. Mark Gibson

Director, Business Development
CommScope
mark.gibson@commscope.com
703-585-6249(m)
703-726-5718 (o)

/s/ Dave Wright

Head of Spectrum Policy
CommScope
dave.wright@commscope.com
919-360-9145