

Notice No. SMSE-002-17 – Consultation on the Technical and Policy Framework for Radio Local Area Network Devices Operating in the 5150-5250 MHz Frequency Band

Reply to Comments

Gazette Notice SMSE-002-17

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“Nay-sayer” Argument	WBA Counter Argument
<p>The alleged demand is inflated, especially in light of Canada’s population and size:</p> <ul style="list-style-type: none"> • Stated demand for RLANs is inflated – do not believe in the correctness of extrapolating the results of studies and spectrum requirements to Canadian requirements give Canadian population and the area (CSA pg 4). • Superimposing projections from other parts of the world into the Canadian market leads to over-inflated demand. Delaying of decision until competition of WRC-19 would not be expected to pose any shortage of spectrum or communication services for Canadians. There has been no concrete evidence of high demand by Canadians (PARSCOM pg 1 and 2). 	<p>The comment provided shows that that CSA ignores that all research and data analysis in the field shows that Wi-Fi demand is high at the global level, both in developed as well as developing countries. There is no counter-evidence to point to specific aspects of the published studies that it disagrees with.</p> <p>Congestion can be a localized issue, but it is a reality that congestion already appears in Canadian urban areas, and that in these areas spectrum shortage is already a reality. Delay of any decision would prolong the shortage, and also ignores the fact that other countries are (in advance of WRC-16) already preparing to launch additional spectrum allocations in 5 Ghz.</p>
<p>Optics / Canada’s image and its “signal” to the world / sending the signal that Canada is pre-judging the results of studies for WRC-19:</p> <ul style="list-style-type: none"> • Canada’s general policy is to harmonize its spectrum usage and technical requirements with the international community (CSA pg 4). • We would be signaling that Canada has developed its position prior to WRC-19, when Canadian Preparatory Committee has not developed its position yet. ITU-R has only just started doing studies (Globalstar pg 1). • Allowing reform now would “pre-judge” results of studies within Canadian Preparatory Committee and would pre-judge Canadian proposals and positions for the Conference, as 	<p>In the U.S., as evidence shows, American consumers and service providers are already taking on the benefits of the reforms.</p> <p>Awaiting the outcome of WRC-19 will simply put Canada several years back, in comparison to the U.S., and will result in a fragmented device ecosystem and the risk that devices from the U.S. will make their way into the Canadian market anyway.</p> <p>The arguments mentioned by CSA, Globalstar, PARSCOM, NAV and ECCCare procedurally based, and again ignore global spectrum developments in the 5Ghz that are already taking place and that other contries are already taking steps to increase spectrum availability before WRC-19</p> <p>Taking the appropriate steps today is also in line with the objective of ISED’s spectrum</p>

<p>well as the outcome of the conference (CSA cover letter) (PARSCOM pg 2). Moving forward would be premature and would fail to fully take into account the results of important technical studies that have to be completed with ITU (NAV Canada pg 1).</p> <ul style="list-style-type: none"> • We should apply the “precautionary principle” and not implement this reform until technical studies are completed and international regulations are agreed to by ITU (ECCC email). • This would precede agreement on international regulations with the risk that future international rules could conflict with any national rules adopted now (NAV Canada pg 1). • Not useful to change domestic regs now noting that they are most likely going to be re-visited after WRC-10 (CSA pg 6) 	<p>management program is to “maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource”.</p>
<p>Interference concerns in context of other bands:</p> <ul style="list-style-type: none"> • Out of band emissions in 5250-5350: Para 21 of the Consultation implies the use of at least part of the 5250-5350 band (CSA pg 5). Permitting use of outdoor devices with no regulatory control over deployment levels will increase out of band emissions into 5250-5350; aggregate interference could cause increase in noise seen by an EESS (Earth Exploration Satellite Service, which uses Radar-sat), resulting in unusable images (CSA pg 4). There is risk of harm from interference to incumbent services, including out of band emissions into 5250-5350 and this risk outweighs any benefit (CSA pg 4) . The nature of interference to incumbent services is unknown and CSA is concerned that Canada would reach the point of no return and, per para 21 of the 	<p>The possibility of out of band emissions from the 5150-5250 band into 5250-5350 band would be much lower than current in-band emissions from RLANs already operating in the 5250-5350 band.</p> <p>In the US, no evidence has been found to support the claims of out of band emissions and interference, and no complaints have been filed to-date.</p> <p>If any risk of interference would appear, this can be mitigated with protective measures similar to those adopted in the US, including an elevation mask for outdoor deployments, and the requirement that devices operated on a “no interference no protection basis”.</p>

<p>Consultation, and expand use of devices in the 5250-5350 band – it may later be proved that the interference caused by RLAN devices is excessive and harmful (CSA pg 3). Out of band interference on satellites will have major impact on Canadians relying on such information in carrying out personal and commercial activities (PARSCOM pg 2).</p> <ul style="list-style-type: none"> • Negative impacts on Canada from interference, including to Radarsat: Future user needs for high-resolution imaging will require the use of the complete 320 MHz (5250-5570) C-band range of frequencies currently allocated to EESS (Earth Exploration Satellite Service, which uses Radar-sat) [...] If interference causes wide band spectrum in C-band to no longer available for Space-based Earth Observation, Canada would face economic, operational, scientific and policy development impacts. Canada would also be forced to buy satellites or data services from foreign providers, resulting in a loss of autonomy. Radarsat is crucial for flood detection, oil spills, providing information to first-responders, etc (CSA pg 5). • Deviation from ITU Regs: to ensure protection of Radarsat, must refrain from deviating from ITU-R Resolution 229. • ECCC: they use radarsat data and are concerned about out-of-band emissions (ECCC email) • Transport Canada: concerned about tracking of aircraft with Radarsat. 	
<p>Interference concerns generally:</p> <ul style="list-style-type: none"> • Satellite networks must be protected from interference (CSA cover) • There is a risk of harm from interference to incumbents (CSA pg 4). • If there is a proliferation of unlicensed 	<p>No technical basis has been provided to support these arguments. No evidence has been provided demonstrating harmful interference and the usage in the US has not demonstrated any harmful interference.</p> <p>As stated earlier, if a risk of interference would</p>

<p>outdoor and indoor device, there will be no practical means of removing devices from the market should interference become an issue (CSA pg 5) (PARSCOM pg 2). There is no regulatory control over deployment levels (Transport Canada pg 1).</p> <ul style="list-style-type: none"> • We should wait until studies are conducted in connection with WRC-19 (PARSCOM pg 1). Without such studies there are insufficient assurances that proliferating of HPODs will not cause harmful interference (NAV Canada pg 2) • Section 4.10 of the ITU Radio Regulations states that radionavigation and other safety services require special measures to ensure their freedom from harmful interference. Concerned about Unmanned Aircraft Systems. (NAV Canada). 	<p>appear, this can be mitigated with protective measures similar to those adopted in the US, including an elevation mask for outdoor deployments, and the requirement that devices operated on a “no interference no protection basis”.</p> <p>The argument regarding proliferation of ‘potentially harmful devices’ and the capability to remove devices from the market is a non-issue. Devices can be tracked and identified. The risk is much larger – if Canada delays its decision till after WRC-19 - that US devices might come (illegally) into the Canadian market, and tracking of these devices is then virtually impossible.</p>
<p>Interference concerns stemming from lack of international harmonization:</p> <ul style="list-style-type: none"> • Globalstar requires internationally harmonized regulations that set power levels and antenna mask restrictions followed by all countries around the world. These restrictions ensure the protection of current and future satellite networks. [...] incumbent users require protection of current and future satellite operations (Globalstar pg 1/2) • Issue should be addressed at the conference - the WRC will result in new ITU Regulations which all countries around the world will follow and which will provide Globalstar with a harmonized set of technical and regulatory rules to be implemented by a majority of countries (Globalstar pg 1). 	<p>Deviation from ITU rules by countries is more common than not, and is actually allowed by the ITU rules in ITU resolution 229.</p> <p>Even within the comment stated by Globalstar on Page 1, they state that they “a harmonized set of technical and regulatory rules will be implemented by a <u>majority of countries.</u></p>