June 23, 2014

BY ELECTRONIC MAIL

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Senior Director
Spectrum Planning and Engineering
Engineering, Planning and Standards Branch
Industry Canada
300 Slater Street
Ottawa, ON  K1A 0H5

Dear Sir/Madam,

Re: Canada Gazette Part 1, May 31, 2014, SMSE-011-14,
Consultation on a Policy, Technical and Licensing Framework
for Use of the Bands 2000-2020 MHz and 2180-2200 MHz

Pursuant to the procedures set forth in the above-referenced notice of
consultation, please find attached the comments of Xplornet Communications Inc. and
Xplornet Broadband Inc.

Yours truly,

Christine J. Prudham

CJP/
Enclosure
INTRODUCTION

1. These comments are submitted by Xplornet Communications Inc. and Xplornet Broadband Inc. (collectively, “Xplornet”) pursuant to the directions on procedure set forth in the Department’s Consultation on a Policy, Technical and Licensing Framework for Use of the Bands 2000 – 2020 MHz and 2180 – 2200 MHz (“Consultation Paper”), dated May 21, 2014.

2. Xplornet welcomes this initiative by Industry Canada to extend the reach of mobile wireless services to the one percent of Canadians who do not currently have access to these services. Xplornet applauds the Government’s clear recognition that satellites represent the only cost-effective delivery mechanism to provide mobile services to customers in 80% of Canada’s geographical landmass not currently served by cellular mobile services. Xplornet has long advocated the use of a combination of satellite and terrestrial services, depending on population densities and the economic efficiencies of available terrestrial and satellite facilities, to solve the question of extension of services to rural and remote parts of Canada. It therefore fully supports Industry Canada’s approach of tying the provision of both mobile-satellite services (MSS) and the ancillary terrestrial component (ATC) together in the same, or contractually affiliated, suppliers.

3. In the case of this particular licensing process, Xplornet also supports Industry Canada’s goal of harmonizing Canada’s licensing policy and framework with that of the United States for both the MSS and ATC. Harmonization will encourage the development of a common ecosystem for communications devices. The importance of developing a
common device ecosystem cannot be overstated, as a North American equipment market is key to encouraging manufacturers to support this policy initiative with a variety of terminals and network gear at reasonable prices. Canada simply cannot afford to go it alone. For this reason, a common band plan is also an important element of the proposed policy.

4. Harmonization of this licensing and policy framework will also encourage Canadian and American service providers to share use of satellite capacity, as they have done for fixed Internet services. This will make it more economically efficient to provide MSS and ATC services in low density, rural and remote, areas of Canada. Harmonization will also make it easier to coordinate interference issues between the two countries caused by spillover of satellite signals.

5. Despite its general support for both the policy and the licensing framework, Xplornet does differ with Industry Canada on a few specific elements in the policy.

6. First, Xplornet opposes the proposal to prohibit the sale of a licence to a large incumbent carrier for the life of the licence (proposed at 20 years). While Xplornet has been a strong advocate against spectrum hoarding because of resulting waste of valuable spectrum resources that could be better used by other market participants, it does not rule out the possibility of a large incumbent teaming up with one or more smaller players to offer a service that makes full use of the available spectrum resource. This is, after all, a unique licence that combines satellite and terrestrial mobile services. Xplornet believes that the Minister’s ability to block a sale of spectrum licences by applying the Spectrum Transfer Policy set forth in CPC-2-23, Licensing Procedure for Spectrum Licences for Terrestrial Services, provides the Minister with all of the tools needed to rule on a spectrum transfer application. Given this policy and the associated transfer rules, there is no need for an outright prohibition on transfers based solely on the identity of the transferee for the proposed 20 year licence period.
7. Second, following a catastrophic failure or loss of useful capacity of the satellite, Xplornet disagrees that the licensee should have an obligation to replace the satellite in any particular timeframe. Rather, the operator should be obliged to conclude negotiations for a satellite that can deliver comparable services within 12 months of the failure, and that replacement satellite should be scheduled to begin operations within 36 months of the effective date of the agreement. This will satisfy the requirement to ensure that the licensee remains committed to making necessary infrastructure investments, and will ensure delivery of the specified services in an appropriate timeframe.

8. Third, Xplornet believes that the band plan and licence should permit the use of both mobile and fixed services on a co-primary basis. Given that the licence is targeted at the provision of services in remote and rural parts of Canada that do not enjoy access to the level of service enjoyed in larger urban areas, it is important to ensure that the licensee is able to offer a broad range of services, such as voice and data, on a bundled basis to enhance the experience of consumers. Being able to make use of both mobile and fixed services will give the licensee flexibility to make the overall service economically viable. For these reasons, there should not be any restriction on the licensee to provide only mobile services.

9. Finally, while Xplornet supports the ATC Deployment Obligations in Annex C, it proposes that these be strengthened with a requirement to demonstrate actual use of the spectrum by providing evidence that a service using the spectrum is being offered to customers. In addition, Xplornet would propose the minimum population coverage for Northern Ontario be lowered to 30% to be more consistent with other low density areas of Canada and the coverage requirements for this area in other spectrum bands.

10. The remainder of Xplornet’s comments address the specific points raised by Industry Canada in its Consultation Paper.
COMMENTS ON SPECIFIC ISSUES RAISED BY THE DEPARTMENT

A-1 Industry Canada proposes to adopt the 2 GHz band plan and the block pairing shown in Figure 2.

11. Xplornet supports the proposed block pairing plan. Harmonization of the Canadian band plan with the U.S. band plan is essential to achieving a viable wireless ecosystem for the licences that the Department plans to issue. Without this common ecosystem, the Canadian service is unlikely to be economically viable and sustainable. The Department’s band plan is harmonized with the US plan.

B-1 Industry Canada proposes to maintain the provision of MSS in this band.

12. Xplornet agrees with the proposal to maintain the provision of MSS in this band, while extending to the incumbent licensees the right to use the same spectrum in connection with subordinated ATC applications. Xplornet has long-advocated the use of a combination of satellite and terrestrial services, depending on population densities and the economic efficiencies of available terrestrial and satellite facilities, to solve the issue of extending services to rural and remote parts of Canada. It, therefore, fully supports the Department’s approach of offering the mobile-satellite service licensees the ability to offer an ancillary terrestrial component (ATC) together in the same licences. This will also enable interference issues to be readily addressed in a practical manner.

13. As indicated above, Xplornet believes that the band plan and licence should not be restricted to the provision of only mobile services and should permit the use of fixed services as well on a co-primary basis. Given that the licence is targeted at the provision of services in remote and rural parts of Canada that do not enjoy access to the level of service experienced in larger urban areas, it is important to ensure that the licensee is able to offer a broad range of services, such as voice and data, on a bundled basis to enhance the experience of consumers. Being able to make use of both mobile and fixed services will give the licensee flexibility to make the overall service economically viable. For these reasons, there should not be any restriction on the licensee to provide only mobile services.
B-2 Industry Canada proposes to remove the dual-mode requirement in the 2 GHz band, and to modify RP-023 and RSS-170 accordingly.

14. Xplornet supports the proposal to allow terrestrial-only terminals for mobile broadband. Although offering dual mode terminals throughout the license area for the provision of MSS would ensure that MSS customers have ready access to the ATC component of the service and vice versa, permitting terrestrial-only terminals will allow for greater variety of handsets to be made available to consumers, including most cost-efficient ones that are produced for the larger terrestrial-only marketplace.

B-3 Industry Canada proposes to modify the spectrum and licensing policy principles on the implementation of ATC mobile services in RP-023 with regard to the 2 GHz band.

15. Xplornet supports the proposal to modify the spectrum and licensing policy principles on the implementation of ATC mobile services. Removing such regulatory barriers would promote increased terrestrial deployment in support of the overall MSS, thereby augmenting the capacity in such a network for the benefit of consumers.

B-4 Industry Canada proposes that the deployment of ATC service not constrain the deployment of MSS.

16. MSS should be protected from interference created by ATC deployments. The MSS component of this licence is the element that is currently missing from the existing landscape and the element in the most need of interference protection. XCI agrees that protection of the MSS services, and coordination of satellite and terrestrial operations would be best accomplished by a single commercial entity operating these two services.
C-1 Industry Canada proposes to extend the spectrum assigned in existing 2 GHz MSS licences and ATC authorization to 2000-2020 MHz and 2180-2200 MHz.

17. Xplornet agrees with the proposed spectrum assignment and related authorization. As stated above, this should lead to more efficient delivery of mobile wireless services in remote and rural parts of Canada. It should lead to the most efficient technology being used to deliver services to customers in any given scenario.

C-2 Industry Canada proposes to issue new spectrum licences to incumbent 2 GHz licensees, with terms commencing on April 1, 2015, that reflect the proposed revisions to the band plan and new conditions of licence if a letter indicating interest is received from both incumbents.

18. Xplornet believes it is appropriate to issue the new licences to the incumbent on April 1, 2015 and has no reason to disagree with the proposal.

C-3 Industry Canada proposes that the ATC licensee be allowed to decide if the use of the band 2000-2020 MHz will be for uplink or downlink operations and notify Industry Canada by May 20, 2016; and further proposes that the decision apply to all of Canada and for the rest of the licence term.

19. Xplornet agrees that the licensee should be allowed to decide whether the 2000 – 2020 MHz block should be used for uplink or downlink operations, and that this decision should apply for the duration of the license term. This will provide licensees with maximum flexibility and will enable them to coordinate use of the spectrum in Canada and the United States.

C-4 Industry Canada proposes a Tier 1 Service Area for the MSS and ATC spectrum licences.

20. Xplornet agrees that the MSS and ATC licenses should be for a Tier 1 service area, as this will provide the foundation for services to be provided across the country. This also makes sense given the attributes of the satellite-based service component.
C-5 Industry Canada proposes that spectrum licences in the 2 GHz band have a licence term of 20 years.

21. Xplornet agrees that the license term should be 20 years as this is consistent with the expected lifetime of satellite infrastructure. This will also provide a more stable environment for investment in the services being offered. A term of less than 20 years would leave potentially useful assets idle when they could otherwise be providing services to Canadians.

C-6 Industry Canada proposes that the licensees not be permitted to transfer any of the ATC spectrum to a large wireless service provider for the term of the licence. For any other transaction, the transferability and divisibility provisions outlined in Section 5.6.4 of CPC-2-1-23 will apply to any ATC spectrum transfers.

22. Xplornet does not agree with making it a term of the licence that the ATC licenses could not be transferred to a “large wireless service provider” during the term of the licence.

23. Xplornet has been a strong advocate of spectrum transfer rules that guard against spectrum hoarding because of the resultant waste of valuable spectrum that could be better used by other market participants, and Xplornet has encouraged Industry Canada to make more spectrum available for rural usage. However, Xplornet does not believe a large incumbent carrier should be prevented from using specific technologies, such as satellites, or from teaming up with one or more smaller players to offer a service that makes full use of the available spectrum resource simply because they are “large”. This is, after all, a unique licence that combines satellite and terrestrial mobile services. Xplornet believes that the Minister’s ability to block a sale of spectrum licences by applying the Spectrum Transfer Policy set forth in CPC-2-23, Licensing Procedure for Spectrum Licences for Terrestrial Services, provides the Minister with all of the tools needed to rule on a spectrum transfer application. The policy permits the Minister to refuse an application to transfer spectrum licence if a party is seeking to purchase the spectrum for a purpose inconsistent with the licensed use or if a party is seeking to obtain
an undue concentration of spectrum in a specific area. Given this policy and the associated transfer rules, there is no need for an outright prohibition on transfers to specific parties for the proposed 20 year licence term. It would be preferable to maintain the flexibility to respond to the specifics of any application that is made, particularly given the longer licence term envisaged for these licences.

C-7 Industry Canada is proposing deployment obligations for MSS licensees, within 5 years, to ensure that MSS is available and being offered throughout Canada.

24. Xplornet supports a deployment obligation of 5 years to deliver MSS to all of Canada. Five years is a reasonable amount of time to deploy the requisite satellite service. Once launched, it should be able to cover all of the Tier-1 service area.

C-8 In case of an emergency leading to the lack of availability of the satellite for the provision of the MSS, Industry Canada proposes to give the satellite operator 48 months to replace the satellite in order to continue MSS operations.

25. Following a catastrophic failure or loss of useful capacity of the satellite, Xplornet proposes that the licensee should not have an obligation to replace the satellite in any timeframe. Rather, the operator should be obliged to conclude negotiations for a satellite that is capable of delivering the specified services within 12 months of the failure, and that replacement satellite should be scheduled to begin operations within 36 months of the effective date of the agreement. This will satisfy the requirement to ensure that the licensee remains committed to making necessary infrastructure investments, and will ensure continued delivery of the specified services in an appropriate timeframe.
C-9 Industry Canada proposes that the ATC licensee be required to demonstrate that, within 5 years, MSS is available and being offered in the Tier 1 area; this condition would apply for the term of the licence provided that the EchoStar T1 satellite or its replacement is operational.

26. Xplornet agrees with this proposed condition of licence for ATC licensees, subject to certain qualifications. While it is important to ensure that the MSS service remains operational for the term of the ATC licence in the Tier 1 area so as to ensure Canadians are receiving service, future demand of MSS service could require satellite infrastructure beyond that of EchoStar T1. Consequently, this condition should not be tied specifically to one satellite, its replacement or any specific third party provider of telecommunications infrastructure. The licensee should be able to use any satellites that will provide the intended MSS service.

27. In addition, given the Tier 1 area is the entire country, there may be areas of Canada where it is more appropriate to offer services using ATC licences and not MSS. As long as MSS is meeting the deployment requirements in the Tier 1 area, the ATC licensee should not be required to demonstrate MSS is available in the specific Tier 2 area of the ATC licence.

C-10 Industry Canada is proposing deployment obligations for ATC licensees, within 5 years and 10 years, as specified in Annex C.

28. Xplornet supports the ATC Deployment Obligations in Annex C. However, Xplornet proposes that these obligations be strengthened with a requirement to demonstrate actual use of the spectrum by providing evidence that a service using the spectrum is being offered to customers. Empty broadcasting of radio signals in a spectrum frequency without a bona fide service being offered to Canadian consumers should not constitute “deployment” for the purpose of a licence. In the interests of good public policy, Industry Canada should insure the spectrum is in use for the public good.

29. Xplornet would also propose that the minimum population coverage for Northern Ontario be lowered to 30% to be more consistent with other areas of Canada that have similar low population densities spread out over an expansive area. A 30% coverage requirement in
Northern Ontario would also be more consistent with the coverage requirements in place currently for Northern Ontario in other spectrum bands such as the 3.5 GHz band.

**C-11 Industry Canada** proposes that an interim site licensing procedure be used for radio stations operated by the ATC licensees until a spectrum licence fee is finalized.

30. The interim site licensing procedure makes sense until a spectrum licence fee is finalized. The public consultation to establish the spectrum licence fee ought to be pursued with diligence by Industry Canada so that the ultimate licence fees are known by the industry participants as early as possible in the deployment process.

**D-1 Industry Canada** proposes to develop technical rules for the 2 GHz band, harmonizing with the U.S. rules to the extent feasible and to issue the applicable SRSP and RSS.

31. Xplornet agrees that technical rules should be harmonized with those of the FCC to every extent feasible. Again, the Department should be diligent in pursuing the development of these technical rules. Sharing satellite infrastructure on a North American basis allows for cost efficient deployment of telecommunications services and keeps the cost of these services down for Canadians.

**CONCLUSION**

32. Xplornet thanks Industry Canada for seeking comments from interested parties through its consultation process.

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