

**BEFORE THE CANADIAN RADIO-TELEVISION
AND TELECOMMUNICATIONS COMMISSION
IN THE MATTER OF
AN APPLICATION BY TNW WIRELESS INC.**

(APPLICANT)

**PURSUANT TO THE PART 1 OF THE *CANADIAN RADIO-TELEVISION AND
TELECOMMUNICATIONS COMMISSION* RULES OF PRACTICE AND PROCEDURE
AND SECTIONS 24, 25, 32, 47, 55, AND 61 OF THE *TELECOMMUNICATIONS ACT***

**DIRECTED TO
BELL MOBILITY INC.**

AND

TELUS COMMUNICATIONS COMPANY

(RESPONDENTS)

**RELATING TO BELL MOBILITY INC. AND TELUS COMMUNICATIONS
COMPANY REFUSAL TO PROVIDE TNW WIRELESS INC. WITH MANDATORY
WHOLESALE ROAMING AGREEMENTS REQUIRED UNDER TELECOM
REGULATORY POLICY CRTC 2015-177 AND AS SPECIFIED IN THEIR CARRIER
ACCESS TARIFFS, CRTC 15011 ITEM 100 AND CRTC 21642, ITEM 233
RESPECTIVELY**

REPLY MAY 14, 2018

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Appendix 1 submitted separately as Confidential

EXECUTIVE SUMMARY

- ES-1. This Part 1 Application is being brought on behalf of TNW Wireless Inc. (“TNW”). Any capitalized or shorthand terms not defined in this Executive Summary are defined in the balance of the Application.
- ES-2. TNW Wireless Inc. (“TNW”) is providing this document as a response (“Response”) to interventions (the “Interventions”) submitted on or about May 3, 2018 to the Canadian Radio-television and Telecommunication Commission (the “Commission”) pursuant to TNW’s Part 1 Application (“Application”), Commission file 8620-R63-201705675 which was submitted to the Commission on July 3, 2017. The Commission subsequently suspended consideration of TNW’s Application pending the outcome of the Commission’s Notice of Consultation 2017-259 which on March 23, 2018 resulted in the Commission’s decision, CRTC 2018-98
- ES-3. The document addresses several issues that have been raised by the Interventions with respect to TNW’s iPCS technology and compliance within the existing regulatory framework, other wireless carrier’s use of Wi-Fi to deliver mobile services, TNW’s plans for investment in its network and certain corporate issues,
- ES-4. TNW maintains that use of its iPCS technology while on Wi-Fi cannot be deemed roaming on any visited public mobile network (“VPMN”) for the numerous technical reasons given and because all GSM-based services are provided through its home public mobile network (“HPMN”) and with the use of licensed spectrum.
- ES-5. TNW further maintains that iPCS through remote access to its HPMN is not in any way a method of extending its HPMN through Wi-Fi as per CRTC Decision 2018-97 (“2018-97”). Furthermore TNW is a facilities-based wireless carrier and 2018-97 is focused on non-facilities-based carriers which are Wi-Fi first service providers. TNW is not a Wi-Fi first service provider or a mobile virtual network operator (“MVNO”).
- ES-6. TNW provides the Commission with a summary comparison of extension of an HPMN with Wi-Fi first versus remote access using iPCS

Summary Comparison of Wi-Fi First Extension of Home Public Mobile Network Versus iPCS Remote Access

Attribute	Wi-Fi First: Extension of Home Public Mobile Network	iPCS: Remote Access to Home Public Mobile Network
Facilities-based operation	No	Yes
Access to GSM-based services directly on phone device via remote access to licensed spectrum while on Wi-Fi	No	Yes
Use of ISED VPMN ¹ licensed spectrum when on Wi-Fi	Yes	No
Use of HPMN ² ISED licensed spectrum while on Wi-Fi	No	Yes
Use of HPMN licensed spectrum while on VPMN	No	Yes
Use of 3GPP radio licensed spectrum simultaneously when on Wi-Fi	Yes	No
Call handoff from 3GPP radio to Wi-Fi	No ³	Yes
Call handoff from Wi-Fi to 3GPP radio	No ³	Yes
Deregistration from VPMN while on Wi-Fi	No	Yes
Ability to use 3GPP radio while on Wi-Fi (and native phone calling/messaging)	Yes	No
VoIP is primary service provision type	Yes	No
IMSI resides on VPMN while on Wi-Fi	Yes	No
IMSI resides on HPMN while on Wi-Fi	No	Yes
Ability to roam on a VPMN while on Wi-Fi	Yes	No

¹ Visited Public Mobile Network ² Home Public Mobile Network ³ Depending on system used

- ES-7. TNW provides several concrete examples of the ubiquitous use of public Wi-Fi (not carrier Wi-Fi”) by one incumbent
- ES-8. TNW provides the Commission in confidence, certain details on its Alaska Highway Project.
- ES-9. TNW clarifies certain corporate issues raised by the Interventions

ES-10. TNW requests the same final relief as sought in its original submission and does not abandon its request for split relief, should this be necessary.

1.0 RESPONSE TO INTERVENTIONS

1.1 The Response and the Confidentiality Claim

1. TNW Wireless Inc. (“TNW”) is providing this document as a response (“Response”) to interventions (the “Interventions”) submitted on or about May 3, 2018 to the Canadian Radio-television and Telecommunication Commission (the “Commission”) pursuant to TNW’s Part 1 Application (“Application”), Commission file 8620-R63-201705675 which was submitted to the Commission on July 3, 2017. The Commission subsequently suspended consideration of TNW’s Application pending the outcome of the Commission’s Notice of Consultation 2017-259 which on March 23, 2018 resulted in the Commission’s decision, CRTC 2018-98
2. This document is the fourth submission of its Application. TNW requests that all previous submissions by the company be considered in their entirety as part of the Application.
3. Unless otherwise specified, nothing contained in this Application and any attachments are confidential.

2.0 Key Issues Raised in the Current Round of Interventions

4. In this section we will highlight the key issues raised by intervenors in response to TNW’s Application follow-up submission of April 13, 2018. The intervenors themselves fell into two broad categories; incumbent (Bell Mobility Inc. (“Bell”), Rogers Communications Canada Inc. (“Rogers”) and Telus Communications Inc. (“Telus”)), and regional wireless carriers which collectively remain against the Application and the Public Interest Advocacy Centre (“PIAC”) which was generally supportive of the Application.
5. We acknowledge the ferocity of the opposition by the incumbents and regional carriers to TNW’s Application. This is not surprising given that the incumbents and regional carriers are fiercely opposed to any notion of additional competition. However much of the basis for their opposition is based on inaccuracies related to the service, selective interpretations of the regulatory framework and more egregiously, severely contradictory and self-serving positions related to use of Wi-Fi in general.
6. In the sections that follow, TNW will address the key issues raised, both positive and negative and relate them to what we believe are the relevant regulatory issues.

2.1 What Constitutes Roaming?

7. The incumbents and regional carriers continue to argue in their recent interventions that iPCS while on Wi-Fi is a form of roaming. Yet they still have not explained how this can be the case (from a technical or regulatory perspective) when the iPCS phone deregisters from any visited network and removes the IMSI from the phone and in all cases, uses TNW's core network and licensed spectrum. Rather than providing technical or regulatory facts, they have relied on non-technical anecdotal terminology such as "loophole", "technological-smokescreen", "artificial", etc. and individual interpretations of CRTC 2018-97.
8. Furthermore, they have failed time and again to state which network TNW would be roaming on while TNW through iPCS on Wi-Fi is accessing its own network and providing GSM-based services to its subscribers through that network.
9. TNW therefore maintains that iPCS while on Wi-Fi cannot be viewed as roaming. As PIAC correctly points out in its intervention¹:

9. *TD CRTC 2018-97 indicates that public Wi-Fi does not constitute a home network for the purpose of determining whether roaming is incidental when the device remains permanently connected to the mobile network, but did not address:*

1. *Whether a remote connection to the carrier's public mobile network constitutes a connection to the home network for the purpose of determining [sic] whether roaming is incidental;*
2. *Whether public Wi-Fi constitutions [sic] a home network for the purpose of determining whether roaming is incidental when the device disconnects from any mobile network.*

These differences are legally significant. [emphasis added] *Unlike a Wi-Fi First provider, TNW is a carrier, its customers are using its facilities, and its customers will not permanently roam.*

¹ PIAC Intervention - *TNW Wireless Inc Part 1 Refiled Application Regarding Wholesale Roaming Agreements required under Telecom Regulatory Policy CRTC 2015-177, para 9.*

10. In its intervention of May 3 2018², Shaw actually supports this notion and TNW’s position by stating:

20. *The definition of “home network” determines eligibility for roaming. If TNW’s service **does not provide its customers with access to a licensed Radio Access Network or other access facilities that TNW owns and operates**, [emphasis added] then its subscribers’ roaming on the incumbent carriers’ host networks is permanent and not incidental.*

11. In its intervention of May 3, 2018 Rogers also supports TNW’s position on roaming³:

Rogers does not dispute the fact that a TNW iPCS customer is not considered roaming on a visited mobile network.

12. However in its intervention, Rogers states that TNW’s technology is “artificial” and “contradicts common sense”. Again these are neither technical nor regulatory arguments. They are simply statements indicating that it is unlikely that Rogers would take the same approach. As such, whether a technical approach makes sense or not is a decision to be made by TNW and not Rogers and has nothing to do with the matter at hand.

13. Also, in citing the determinations of 2018-97 Rogers (and others) have failed to point out that the Commissions determinations were geared very specifically to non-facilities-based services (defined and referred to throughout 2018-97 as MVNO-type “Wi-Fi first service providers”) and not facilities-based carriers. This is stated very clearly:

*The effect of broadening the definition of “home network” to include other forms of connectivity, including Wi-Fi, would allow any company to access the wholesale roaming tariff **as if they were a wireless carrier**, [emphasis added] without the necessity of having invested and built one’s own wireless network.⁴*

We repeat the fact that TNW is a wireless carrier.

14. Further considerations of GSM services and roaming are given in the following section.

2.2 Provision of GSM Services: Remote Access versus Extension of a Home Network

² Shaw intervention May 3 2018, paragraph 20

³ Rogers intervention May 3 2018 para 22

⁴ CRTC 2018-97 paragraph 69

15. In 2018-97, the Commission reaffirmed its position that Wi-Fi cannot be used to extend a home public mobile network. This reaffirmation is at the core of much of the incumbent and regional carriers' 'opposition to iPCS notwithstanding their own extensive use of Wi-Fi to deliver services which is elaborated on later in this document.
16. The incumbents and regional carriers contend that there is no regulatory distinction between remote access and extension of a home network and rather than provide rational technical and regulatory positions on this issue have instead dismissed the distinction in a fairly disparaging way as already noted.
17. If we get down to its base, the fundamental issue here is which entity is providing GSM-based services as defined by the GSM Association. GSM-based services consist of the following:
 - 1) The ability to make/receive voice calls from any country on a wireless device with a wireless phone number
 - 2) The ability to send/receive text messages (SMS, MMS)
 - 3) Provision of access to GPRS (General Packet Radio Service) services
18. In order to deliver GSM-based services, the provider needs to be a licensed operator.
19. TNW is a licensed operator and provides GSM-based services at all times and therefore is in compliance with GSM rules.
20. iPCS users while on Wi-Fi receive their GSM-based services from TNW's network and licensed spectrum only. Roaming partners in this mode do not provide or enable any GSM-based services to TNW subscribers which would require that the 3GPP radio be turned on and connected to the roaming partner.
21. iPCS subscribers cannot in any way enable the native 3GPP functions on their phone.
22. Therefore when Wi-Fi is used by iPCS, it is used to remotely access TNW's home network to provide GSM-based services.
23. Extension of a home network is on the other hand, a very different concept from both a technical and regulatory perspective.
24. The extension of a home network through Wi-Fi using for example, an over-the-top application, continues to provide subscribers with full GSM-based services capability

when within the range of a visited network through the phone's 3GPP radio. Subscribers can make voice calls, send SMS/MMS messages and access GPRS functions through the phone's native interface via the roaming partner. Therefore the service provider effectively "extends" the reach of its home network through a combination of Wi-Fi and roaming partner GSM-based services which ultimately creates a permanent roaming situation.

2.3 iPCS is Not a Wi-Fi First Service

25. The incumbents and regional carriers keep referring to iPCS as a Wi-Fi first service – likely because Wi-Fi first services are against the determinations made in 2018-97. Although in its March 23, 2018 submission TNW already addressed the fact that iPCS by the Commission's own definition is not a Wi-Fi first service, we provide some additional information here.
26. The underlying technology behind Wi-Fi first relies on 2 simultaneously active radios, the 3GPP radio using licensed spectrum and the Wi-Fi radio using unlicensed spectrum. Wi-Fi first refers to the use of an over-the-top application which uses "Wi-Fi first" to provide all services while both radios are operating, defaulting back to 4G/LTE when Wi-Fi is unavailable – hence the term "Wi-Fi first". The only licensed spectrum that is ever used by these providers is that of a roaming partner.
27. iPCS is a Wi-Fi *or* 4G/LTE service whereby the 3GPP radio is off when on Wi-Fi. The concept of 2 active radios while on Wi-Fi does not exist under iPCS and so there is no concept of "first" or "second".
28. The entire debate is perhaps best summarized in the PIAC intervention of May 3, 2018, paragraph 31:

These differences between iPCS and Wi-Fi first providers are significant. TNW customers will always be connecting with TNW's public mobile network and using TNW's facilities. When on Wi-Fi, the devices' connection with the wholesale roaming partners is severed, such that the device is only connected to TNW's public mobile network (remotely over the internet) and therefore is not permanently roaming. The restrictions on mobile data use imposed by TNW ensure that roaming is incidental in terms of the quantity of data used so that most data is not routed over wholesale roaming.

2.4 Incumbent's and Regional Carriers' Use of Wi-Fi

29. In its April 13, 2018 submission, TNW noted that the incumbents were making significant use of Wi-Fi for voice calling. Regional carriers have also implemented or have plans to implement their own Wi-Fi calling service. Yet in their various interventions, they dismiss, rationalize or simply ignore this point. While CRTC 2017-56 acknowledges that carrier Wi-Fi can be an efficient and appropriate technical model by which to provide wireless service, the reality is that carriers which offer the service do not in any way limit their use of Wi-Fi to “carrier Wi-Fi”. Instead, as TNW showed per their own terms of service, Wi-Fi calling is available through any accessible Wi-Fi connected to the Internet – public, private or carrier – and this can occur regardless of whether a subscriber is within an in a wireless carrier’s licensed spectrum footprint or not.

30. We note for example, that in the intervention of Rogers paragraphs 28 and 29 state:

28. TNW’s supplemental application includes a lengthy digression on Wi-Fi calling.⁵ In particular, TNW equates Wi-Fi calling with its iPCS service since, in TNW’s opinion, both act as extensions of a carrier’s home network.⁶ However, TNW completely mischaracterizes the role that Wi-Fi calling plays in the mobile wireless marketplace.

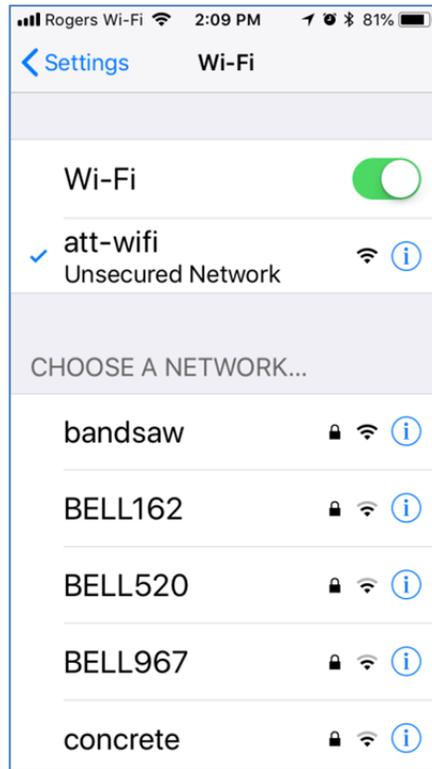
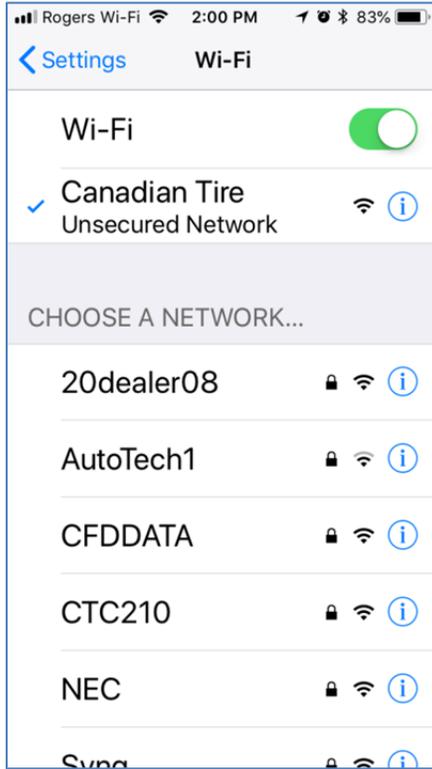
*29. Rogers and other facilities-based service providers use Wi-Fi to extend the effective range of their mobile wireless networks into areas that **are otherwise difficult to serve, like basements and tall buildings** [emphasis added]. However, Rogers does not rely on public Wi-Fi connectivity as a substitute for its mobile wireless network.*

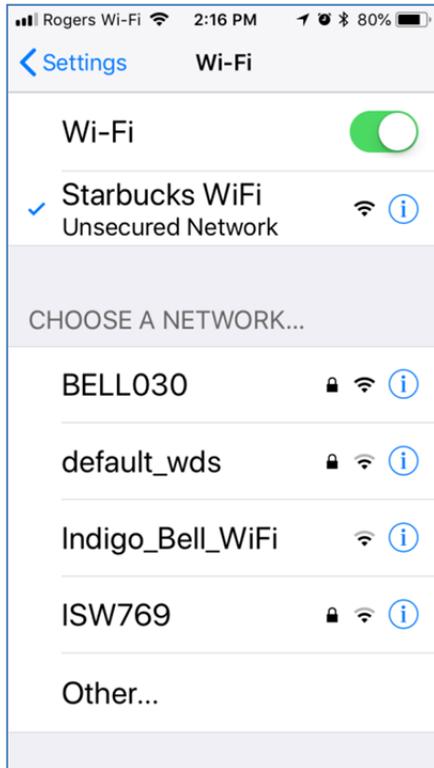
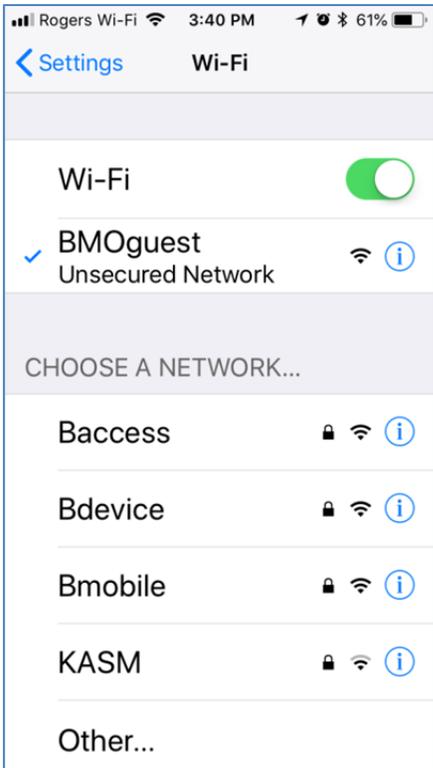
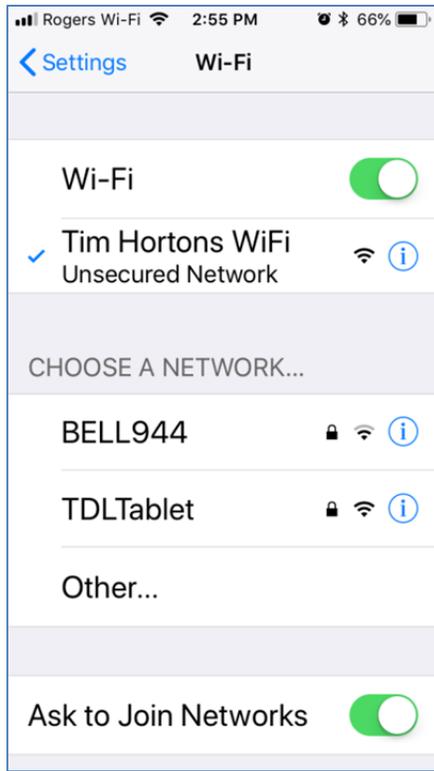
That Rogers uses Wi-Fi to extend the effective range to areas that are otherwise difficult to serve is simply not the case and Rogers is trying to persuade the Commission that its use of non-carrier Wi-Fi is somehow a “last resort” for provision of service. The Rogers service in fact defaults to any Wi-Fi connection in any location within 30-45 seconds of being connected to Wi-Fi

⁵ TNW Supplemental Application, paras. 34 – 45.

⁶ TNW Supplemental Application, para. 43.

31. We present the following tests carried out on May 7, 2018. The following screenshots were taken on an iPhone 7 with a Rogers SIM and show the results of the phone connected to public Wi-Fi at ground level at Canadian Tire, Home Depot, Walmart, Tim Hortons, Bank of Montreal and Starbucks respectively:





In all cases, the “Rogers W-Fi” calling feature was activated within 45 seconds of connecting to Wi-Fi and in some cases as quickly as 30 seconds. It is also very clear from these screenshots, that the LTE signal in all cases is **at or near full strength** and so the phone is not in an area that is “otherwise difficult to serve” and therefore obviates the need for Wi-Fi under this rationale.

32. In another test, we looked at whether the Rogers Wi-Fi calling feature was functional in “airplane mode” with Wi-Fi (3GPP radio turned off, Wi-Fi radio on). As shown in the example below, Rogers Wi-Fi calling was fully functional on the Bank of Montreal public Wi-Fi service and calls could be sent / received.



29. So, while Rogers may not rely on Wi-Fi for its service, it will certainly use it whenever and wherever possible given the technical default to Wi-Fi, including locations as Bell stated in its intervention, like a “downtown Toronto Starbucks”, or in a location thousands of miles from Canada. The incumbents and regional carriers argue that this use of public Wi-Fi (and to reiterate, this is not carrier Wi-Fi) is somehow permitted, yet the approach uses no licensed spectrum, is completely independent of a subscriber’s location and is not needed to provide wireless call service.
30. At the same time, unless a subscriber is in fact in a difficult to serve area, the subscriber **accrues no real benefit** for defaulting away from the carrier’s wireless resources. In fact, quite the opposite as quality is not guaranteed and plan usage (minute consumption)

under Wi-Fi calling is typically treated the same way as if the subscriber were on the carrier's wireless network.

31. The cost of "first mile" under Wi-Fi calling is therefore paid for by whichever entity provides the Wi-Fi service. If it is not the wireless carrier, it may be the subscriber themselves, other third parties (e.g. friends) or in the cases above, the commercial entities providing public Wi-Fi access. So in essence, Wi-Fi calling is more than an efficient method of offloading traffic, it is an efficient method of offloading wireless carriers' costs to their subscribers or 3rd parties where these parties provide and pay for the Wi-Fi service access and whereby none of these providers benefit financially from this financial offloading or necessarily consent to such offloading.
32. We raise these points not because we believe that Wi-Fi calling is inherently against the current regulatory framework, but to point out for example, the contradictions in Rogers' (and others) arguments on the matter whereby they can selectively justify taking full advantage of a phone's embedded Wi-Fi calling capability under public Wi-Fi (under the pretext of providing service in difficult to serve areas) but detract from iPCS' remote access technology. They cannot have it both ways.
33. It is clearly in any carrier's best interest, and carriers have a strong incentive to provide and promote the use of Wi-Fi for calling services to their own subscribers as it has no effect on revenues (since subscriber use is treated as if they were on the carrier's network), reduces operating costs (as 3rd parties are paying for the first mile) and it reduces the need to invest in wireless infrastructure. We predict therefore that the continued adoption of Wi-Fi calling will continue to be promoted and will certainly translate to higher profits rather than a lowering of prices – which is what should happen.

2.5 Reinvestment and the Alaska Highways

34. In its intervention of May 31, 2018, TELUS makes an attempt to trivialize and dismiss TNW's plans for service along the Alaska Highway⁷, further stating that any reinvestment would come from "improper sale of TELUS' and Bell's networks". These statements are again designed to place a cloud over the organization without factual basis and thereby distract from the matter at hand. We would therefore like to address both these points.

⁷ Telus Intervention May 3, 2018 paragraph 13

35. With respect to the Alaska Highway project, this is something the company has always believed in, both as a business opportunity and as a technological showpiece. To date as far as we know, no other carrier has shown any short term interest in this project.
36. TNW has developed a full technical and financial plan for the project which pre-dates the TNW's Part 1 Application. The company has already consulted with the 3 levels of government required to give their respective approvals and rights of way and have received favourable responses from all three.
37. We provide the Commission as part of this document on a confidential basis, a technical summary of the project and sample correspondence with government (Appendix 1).
38. As to Telus' preemptive statement that TNW would fund this project from the improper resale of Telus' and Bell's networks, TELUS appears to have already decided the outcome of this Application and is attempting without any basis, to lead the Commission into believing that TNW will proceed with some improper action regardless of the Commission's decision. Notwithstanding that TNW has made repeated affirmations in the course of this Application that it will fully to comply with all rules and regulations, any incidental use of Telus' and Bell's network by TNW that may occur in compliance with a decision made by the Commission is, *de facto*, proper usage. At the same time we note that in the CCTS⁸ 2016-2017 Annual Report, Telus itself accrued some 17 confirmed breaches of the CRTC TWC (The Wireless Code), up 41.7% from the previous year while across all carriers, breaches were down 65% from the previous year.

2.6 Corporate Issues

39. Both Bell and Telus in their May 3, 2018 interventions have made a number of inaccurate or misleading statements regarding TNW as a company. We assume that this has been done to lay a foundation for refusing service on a commercial basis should the Commission decide in favour of TNW at a regulatory level. While we will not address all the allegations made, we will address some of the key statements.
40. Contrary to the statement and appendices provided by Telus, the shareholder of TNW is not in receivership nor is it insolvent.
41. TNW is owned by Investel Capital Corporation (Canada), a Canadian company in good standing which can be verified on the Corporations Canada web site.

⁸ Commission for Complaints for Telecom-Television Services, 2016-17 Annual Report p. 14

42. Investel Capital Corporation (Canada) purchased RuralCom Corporation from RuralCom Capital Corporation in December 2012 and the name was changed to TNW Wireless Inc. in February 2017. While the deemed transfer process is not complete, TNW has been in regular contact with ISED and has been told that the transfer is “in the queue”. Delays are not uncommon and we note for example that the CRTC BITS licence name change (from RuralCom Corporation to TNW Wireless Inc.) was received only on March 28, 2018
43. TNW received spectrum licence renewals from ISED and paid them in full on March 30, 2018.
44. Bell asserts that TNW holds 5 spectrum licenses including 3 for a company called Navigata Communications Ltd. This is incorrect. TNW holds the 2 spectrum licences as identified in its Application and as referenced in the Commission’s communications on the Application.
45. Telus has attempted to link TNW to the CCAA Proceedings related to 8640025 Canada Inc. *et al.* (the “Proceedings”). Telus is aware that TNW is not in any way involved in the Proceedings. There are no actions against the company outside the course of normal business.
46. TNW acknowledges that some of its promotional material is out of date and this needs to be updated.
47. TNW also acknowledges that Bell and Telus are entitled to mitigate any real credit risk and TNW has offered to provide deposits for services as long as the deposits are at appropriate levels for the service to be provided. As noted by PIAC, these companies have provisions in their tariffs to deal with this and should not be a basis for refusal of service.

3.0 Summary and Conclusions

48. TNW’s general conclusions remain as with its previous submissions related to its Application. While the arguments against the Application have been somewhat repetitive with each intervention, answers, then subsequent intervention, we have attempted in our submissions, to minimize repetition and to emphasize certain technical and regulatory aspects of the Application where they have been challenged by certain intervenors and to build on certain points with new information as appropriate and in response to the intervenors.

49. We therefore again urge the Commission to view our Application in its entirety as there has been a great deal of information provided in our 4 submissions where we have addressed technical and regulatory issues related to the key areas of roaming, remote access to HPMN versus extending an HPMN, iPCS and the provision of GSM-based services as well as various non-technical and non-regulatory corporate issues.

50. We provide below, a table summary comparison of some of the key considerations.

Summary Comparison of Wi-Fi First Extension of Home Public Mobile Network Versus iPCS Remote Access

Attribute	Wi-Fi First: Extension of Home Public Mobile Network	iPCS: Remote Access to Home Public Mobile Network
Facilities-based operation	No	Yes
Access to GSM-based services directly on phone device via remote access to licensed spectrum while on Wi-Fi	No	Yes
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Use of HPMN licensed spectrum while on VPMN	No	Yes
Use of 3GPP radio licensed spectrum simultaneously when on Wi-Fi	Yes	No
Call handoff from 3GPP radio to Wi-Fi	No ³	Yes
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Ability to use 3GPP radio while on Wi-Fi (and native phone calling/messaging)	Yes	No
VoIP is primary service provision type	Yes	No
IMSI resides on VPMN while on Wi-Fi	Yes	No
IMSI resides on HPMN while on Wi-Fi	No	Yes
Ability to roam on a VPMN while on Wi-Fi	Yes	No

¹ Visited Public Mobile Network ² Home Public Mobile Network ³ Depending on system used

51. While we respect and appreciate the need for regulatory certainty within the wireless industry, the wireless carriers' narrow definition of regulatory certainty should not be used by them as a catch-all for restricting new entrants and reducing competition.

4.0 Relief requested

4.1 Final relief

52. TNW's request for final relief remains the same as in its previous submissions.

53. Despite Telus' statement to the contrary, TNW has not at any time abandoned its request for split relief and TNW has at no point made any statements that would support Telus' claim. This is yet another attempt by Telus to make TNW's application all or none, per their procedural request of August 17, 2017 which was refuted in TNW's response on August 21, 2017, and is again an attempt by Telus to lay the foundation for refusal of services to TNW of any kind. In Telus' own terminology, this is nothing more than regulatory gaming through procedural tactics.

5.0 NOTICE

54. This Application is made by TNW Wireless Inc., c/o Lawry Trevor-Deutsch, 468 Pleasant Park Road, Ottawa ON K1H 5N1 [email: regulatory@tnwcorp.com]

A copy of this application may be obtained by sending a request to regulatory@tnwcorp.com.

TAKE NOTICE that pursuant to section 25, and, as applicable section 26 of the Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure, any respondent or intervenor is required to mail or deliver or transmit by electronic mail its answer to this application to the Secretary General of the Canadian Radio-television and Telecommunications Commission ("Commission"), Central Building, 1 Promenade du Portage, Gatineau (Québec) J8X 4B1, and to serve a copy of the answer on the applicant within 30 days of the date that this application is posted on the Commission's website or by such other date as the Commission may specify. Service of the copy of the answer on the applicant may be effected by personal delivery, by electronic mail, or by ordinary mail. In the case of service by personal delivery, it may be effected at the address set out above.

If a respondent does not file or serve its answer within the time limit prescribed, the application may be disposed of without further notice to it.