



***TNW Wireless Inc Part 1 Application Regarding Wholesale Roaming  
Agreements required under Telecom Regulatory Policy CRTC 2015-177***

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**Intervention of the**

**Public Interest Advocacy Centre**

4 August 2017

## Introduction

1. The Public Interest Advocacy Centre (“PIAC”) files this intervention regarding the above-referenced Part I application (the “Application”) by TNW Wireless Inc (“**TNW**”).
2. PIAC is a national non-profit and registered charity which provides legal and research services behalf of Canadian consumers, and in particular, vulnerable consumers, concerning the provision of important public services. PIAC advocates for equitable access, choice and affordability of telecom services, as well as for public interest goals such as transparency and accountability of telecommunications service providers.
3. PIAC partially supports TNW’s application but recommends that the Commission resolve TNW’s application through the proceeding launched by TNC 2017-259, by permitting permanent roaming or, at a minimum, allowing wholesale customers to rely on Wi-Fi as a home network.

## The Nature of TNW’s application

4. TNW wishes to offer wireless service across Canada combining network access over Wi-Fi with mobile roaming. The technology TNW Wireless uses to deliver wireless service over Wi-Fi (iPCS) differs from over-the-top voice and text application in that the device disconnects from the mobile network while on Wi-Fi.
5. Bell Canada (“**Bell**”) and Telus Communications Company (“**Telus**”) have refused to enter into wholesale roaming agreements with TNW. Bell and Telus argue that public Wi-Fi networks cannot constitute a home-network for the purposes of roaming, so TNW’s proposed service would effectively allow permanent roaming on their networks.
6. TNW argues that because iPCS disconnects from the mobile network when on Wi-Fi, its users’ use of those mobile networks is only incidental to their primary access to TNW’s public mobile network over Wi-Fi. On that basis, TNW asks the Commission to direct Bell and Telus to provide TNW with wholesale roaming on an interim and final basis.

### Scope of this intervention

7. The Commission, on Direction of the Cabinet,<sup>1</sup> has initiated a proceeding, TNC 2017-259, *Reconsideration of Telecom Decision 2017-56 regarding final terms and conditions for wholesale mobile wireless roaming service*.<sup>2</sup> Through that proceeding, the Commission will reconsider whether carriers should be permitted to rely on public Wi-Fi as a home network for the purposes of accessing wholesale mobile roaming service. Any change of rules resulting from TNC 2017-259 will substantially impact TNW's application: In addition to deciding whether or not to permit reliance on public Wi-Fi as a home network, the decision will consider limiting roaming, subjecting roaming services to a different tariffed wholesale rate, or adopting any other regulatory measures related to wholesale roaming. The proceeding will provide the broad policy and data driven analysis appropriate for reconsidering the wholesale roaming rules. Although TNW frames its application under the existing rules, the final decision on its application may be made under revised rules.
8. This intervention addresses the application of the current rules to TNW's application. PIAC reserves its comments regarding how those rules should be revised, and how those revised rules should apply to TNW, for the proceeding initiated by TNC 2017-259.

### The current rules regarding roaming

9. The Commission has ruled that "wholesale roaming provides incidental, and not permanent, access to the incumbents' networks."<sup>3</sup> The Commission has also ruled that "public Wi-Fi does not form part of a wireless carrier's home network for the purpose of establishing what constitutes incidental use of the visited network pursuant to the relevant wholesale roaming tariff."<sup>4</sup> The Commission uses the term "public Wi-Fi" to refer to home Wi-Fi and public Wi-Fi hotspots.

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<sup>1</sup> See Order in Council PC 2017-0557 (1 June 2017). Online: <http://www.pco-bcp.gc.ca/oic-ddc.asp?lang=eng&Page=&txtOICID=&txtFromDate=2017-06-01&txtToDate=&txtPrecis=&txtDepartment=&txtAct=Telecommunications+Act&txtChapterNo=&txtChapterYear=&txtBillNo=&rdoComingIntoForce=&DoSearch=Search+%2F+List&viewattach=34464&blnDisplayFlg=1>

<sup>2</sup> Reconsidering Telecom Decision 2017-56, *Wholesale mobile wireless roaming service tariffs – Final terms and conditions* (1 March 2017). Online: <http://crtc.gc.ca/eng/archive/2017/2017-56.htm>

<sup>3</sup> Telecom Decision CRTC 2017-56 at para 31.

<sup>4</sup> Telecom Decision CRTC 2017-56 at para 31.

10. The key considerations for the Commission, in coming to these determinations, were that carriers cannot assure the availability, quality, or reliability of public Wi-Fi and that if carriers could offer service to customers where they did not have facilities, they would have less incentive to invest in facilities.<sup>5</sup>

### Application to TNW

11. TNW can only use wholesale roaming to serve customers who rely primarily on a TNW home network.
12. Obviously, customers residing in TNW's mobile footprint rely primarily on a TNW home network. TNW should be able to use wholesale roaming tariffs to provide roaming service to such customers.
13. Outside of TNW's mobile footprint, TNW's customers rely primarily on Wi-Fi. Use of mobile networks is incidental in several senses:
- i) **Mobile use is secondary:** The device prefers Wi-Fi over the mobile network for all traffic.<sup>6</sup>
  - ii) **Mobile use is minor and limited:** Roaming is disabled if a subscriber exceeds mobile usage considered to be incidental roaming.<sup>7</sup>
  - iii) **Mobile use is intermediary:** Roaming networks are only being used to deliver to data (including voice and SMS as data) to TNW's public mobile network,<sup>8</sup> and
  - iv) **Mobile use is transitory:** Mobile cellular networks are only connected to the user's device when Wi-Fi is not available.<sup>9</sup>
14. Given that TNW's iPCS solution relies primarily on Wi-Fi and only makes incidental use of mobile network, the real question before the Commission is the circumstances under which a Wi-Fi network can constitute a home network.
15. Under Telecom Decision CRTC 2017-56, public Wi-Fi does not count as a home network. The status of carrier Wi-Fi was explicitly unsettled.<sup>10</sup>

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<sup>5</sup> Telecom Decision CRTC 2017-56 at para 28, 29.

<sup>6</sup> TNW, Application at para 52-53.

<sup>7</sup> TNW, Application at para 62a.

<sup>8</sup> TNW, Application at para 56.

<sup>9</sup> TNW, Application at para 52-53.

<sup>10</sup> Telecom Decision CRTC 2017-56 at para 28.

16. In determining whether a carrier Wi-Fi network, the Commission should consider its goals of ensuring carriers can assure the availability, quality, or reliability of the network and incentivizing investment in facilities.
17. In light of these principles, PIAC submits that a Wi-Fi network should be considered a home network when:
  - i) It is operated by TNW, or
  - ii) The operator of the network has agreed to serve TNW customers under contract or other arrangements.
18. Under these circumstances, TNW can assure customers of the availability, quality, or reliability of the wireless facilities.<sup>11</sup> TNW has incentives to invest in extending its network or negotiating access to additional Wi-Fi facilities on behalf of its customers. These investments may significantly improve the capacity of the mobile network to deliver data traffic, whether by increasing capacity or better utilizing existing capacity.
19. In most cases, TNW customers will primarily rely on their home Wi-Fi, which is owned and operated by the customer. PIAC submits that if a customer agrees, as part of their wireless contract with TNW, to offer Wi-Fi access from their home network to all TNW customers, then the customer's home Wi-Fi should be considered an eligible home network. This would allow TNW to provide an assurance as to the availability, quality, and reliability of that network. It would also incentivize opening private Wi-Fi networks to allow the better offloading of data traffic.

### Conclusion

20. PIAC recommends that the Commission resolve TNW's application through the proceeding launched by TNC 2017-259.
21. However, in the interim or should the rules remain unchanged, TNW should be permitted to offer roaming via a wholesale roaming agreement to customers who:
  - i) Primarily rely on TNW's mobile network,
  - ii) Primarily rely on a Wi-Fi network which TNW operates, or
  - iii) Primarily rely on a Wi-Fi network whose operator has agreed to serve TNW customers under contract or other arrangements.

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<sup>11</sup> Telecom Decision CRTC 2017-56 at para 28.

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