



## **iCERT Response to**

### **Public Safety Canada “Consultation on a Governance Framework for a Nationwide Public Safety Broadband Network”**

#### **Introduction and Description of iCERT**

Industry Council for Emergency Response Technologies (“iCERT”) is an industry trade association focused exclusively on emergency response technologies and related equipment, systems, and services.<sup>1</sup> While iCERT is based in the United States, some of its member companies are headquartered in Canada, and many of our U.S.-based companies do business internationally including in Canada. iCERT supports policies that promote the widespread adoption of advanced technologies which improve emergency response and increase public safety. Consequently, iCERT welcomes the opportunity to contribute to the development of public safety broadband networks in Canada and hereby provides its response to the “Consultation on a governance framework for a nationwide Public Safety Broadband Network (PSBN).”<sup>2</sup>

iCERT is dedicated to improving public safety through innovation. We seek to achieve that goal by working closely with our members, policymakers, government agencies, and affected stakeholders, including the public safety community, to advance technologies and public policies that will result in improved communications for emergency response. Consequently, we agree with many of the conclusions reached by the Temporary National Coordination Office (“TNCO”) in its Final Report<sup>3</sup> and the underlying premise of this Consultation that the establishment of a nationwide PSBN, or multiple PSBNs, will improve communications for emergency responders in Canada.

As the TNCO Final Report and Consultation each describe, a nationwide PSBN has been implemented in the United States under the oversight of the First Responder Network Authority (“FirstNet or FirstNet Authority”), an independent federal government agency under the U.S. Department of Commerce. Established as a public-private partnership between the U.S. Government and a commercial network provider, FirstNet has brought greater attention to the needs of the public safety community and increased investments in advanced communications systems,

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<sup>1</sup> For more information on iCERT, see <https://theindustrycouncil.org>

<sup>2</sup> Public Safety Canada. (2024). *Consultation on a governance framework for a Nationwide Public Safety Broadband Network (PSBN)*. <https://www.canada.ca/en/services/policing/emergencies/consultation-governance-framework-psbn.html>

<sup>3</sup> Public Safety Canada. (2022). *A Public Safety Broadband Network (PSBN) for Canada*. Final Report of the Temporary National Coordination Office (“TNCO”). <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2021-psbn/index-en.aspx>.

services, and applications for emergency responders. In addition to implementing a nationwide PSBN, it incentivized others to implement comparable solutions. Today, there are three nationwide PSBNs available in the United States for emergency responders to use; one provided by FirstNet and its contractor AT&T,<sup>4</sup> one provided by Verizon,<sup>5</sup> and one provided by T-Mobile.<sup>6</sup> Other PSBN offerings may be introduced in the future.

This competition provides substantial benefits to the public safety community in the form of lower pricing, increased innovation, broader coverage, and improved reliability and resiliency. However, it also raises important questions about how the U.S. Government supports an exclusive arrangement with a single provider while also ensuring fair and effective competition. How can the government ensure there is no bias in favor of FirstNet and its network provider that would unfairly disadvantage competitors? What impacts do certain policies and practices implemented by FirstNet and the U.S. Government have on the competitive marketplace? These are important questions the U.S. Government faces today, and Canada is likely to face similar questions as it develops its own PSBN. iCERT believes information about the FirstNet approach to implementing a PSBN in the United States can offer valuable insights to Public Safety Canada as it pursues the implementation of a PSBN, or multiple PSBNs, in Canada. We encourage an approach that promotes competition and fully leverages the expertise and significant investments of all mobile service providers, satellite service providers, traditional broadband fiber providers, equipment manufacturers, application developers, and other technology companies that are working to improve emergency response and first responder communications.

### **PSBN Principles and TNCO Recommendations**

The TNCO Final Report notes the benefits of establishing a nationwide PSBN to provide emergency responders with advanced communications capabilities that will enhance emergency response and improve community safety. It outlines various recommendations regarding a governance approach, guiding principles, service delivery, and approaches to achieving robust coverage and capacity and suggests next steps for advancing a PSBN. iCERT provides here some comment on the TNCO's recommendations prior to answering the specific questions included in the Consultation, as doing so will provide important context to iCERT's submission. These comments are based on lessons learned from the implementation of a PSBN in the United States by the FirstNet Authority.

*Overview of FirstNet Approach.* FirstNet was established by the United States Congress in 2012 to provide emergency responders with more advanced, reliable, and interoperable communications. The fundamental challenge faced in the United States was the same as that faced by government and public safety officials in Canada. Private dedicated public safety networks are often not affordable, financially sustainable, interoperable, or technologically capable of meeting the expanding needs of emergency responders. Conversely, commercial networks typically possess such attributes but often do not provide the coverage, reliability, resiliency, or priority of use required to meet public safety's mission critical requirements. FirstNet was established as a public-private

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<sup>4</sup> See FirstNet Built by AT&T @ <https://www.firstnet.com>

<sup>5</sup> See Verizon Frontline @ <https://www.verizon.com/business/solutions/public-sector/public-safety>

<sup>6</sup> See T-Mobile T-Priority @ <https://t-mobile.com/business/t-priority>

partnership between the U.S. Government and a commercial network provider to leverage the benefits of these two different service models.

In 2017, FirstNet signed a contract with AT&T to provide its PSBN. Rather than implement a fully dedicated public safety network, FirstNet opted to leverage AT&T's commercial wireless network. AT&T implemented a dedicated Public Safety LTE Network Core, limited to serving its FirstNet customers, and integrated FirstNet's 700 MHz Band 14 spectrum into its nationwide Radio Access Network (RAN). All network components, including the Network Core, are owned by AT&T, and the company provides all network operations, service provisioning, billing, and customer support services for its FirstNet customers. The benefits of this approach are considerable. By fully leveraging AT&T's commercial network, FirstNet reduced the cost of implementing a PSBN and substantially accelerated the availability of PSBN services. The Public Safety Network Core and the availability of Quality of Service (QoS) Priority and Preemption (QPP) capabilities on the LTE network allow AT&T to provide its FirstNet customers with the priority communications they require. This PSBN approach has been adopted by Verizon and T-Mobile as well and has become the standard for providing wireless broadband communications services to first responders.

*Guiding Principles.* iCERT supports the refined PSBN Principles outlined in the Final Report.<sup>7</sup> Each of these principles is encompassed within the governance framework established by the FirstNet Authority in establishing a PSBN in the United States, and many of them were identified as specific challenges in providing emergency responders with effective communications prior to the establishment of FirstNet. The lack of interoperability of traditional land mobile radio systems, the lack of ubiquitous coverage of commercial networks, and the lack of "mission critical grade" resiliency and robustness, for example, were each given as reasons for creating a PSBN.

Whether or not FirstNet and its contractor, AT&T, are meeting each of these requirements is subject to further scrutiny. The U.S. Department of Commerce Office of Inspector General (OIG) has issued more than a dozen reports over the past six years identifying failures on the part of FirstNet to exert effective oversight over its contract with AT&T and the operation of the network used to serve emergency responders.<sup>8</sup> Problems identified by OIG range from coverage, network availability, and security problems to inappropriate and unauthorized changes to the FirstNet-AT&T contract. While

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<sup>7</sup> The Final Report identifies ten PSBN principles: (1) Interoperability; (2) Equitable Service; (3) Affordability; (4) Sustainability; (5) Coverage; (6) Deliver Mission Critical Services; (7) Network Access Always; (8) Security; (9) Resiliency and Robustness; and (10) Use of Spectrum.

<sup>8</sup> U.S. Department of Commerce, Office of Inspector General. *FirstNet's Lack of Contract Oversight for Device Connection Targets Puts the NPSBN at Risk of Impacting First Responders' Use of the Network*, (June 2024). *FirstNet Authority's Lack of NPSBN Contract Oversight for Coverage Puts at Risk First Responders' Ability to Serve the Public Effectively*, (June 2024). *FirstNet Authority Did Not Ensure the Nation's First Responders' Needs Were Continuing to be Met Timely When Modifying Key Objectives of the NPSBN Contract*, (May 2024). *Management Alert: The NPSBN Band 14 Signal Strength Does Not Consistently Provide Adequate Band 14 Service for First Responders*, (May 2024). *FirstNet Authority Failed to Provide Adequate Contract Oversight for its Initial Two Reinvestment Task Orders*, (March 2023). *FirstNet Authority Could Not Demonstrate Investment Decisions Were the Best Use of Reinvestment Funds or Maximized the Benefits to Public Safety*, (November 2022). *FirstNet Authority Did Not Have Reliable Cost Estimates to Ensure It Awarded Two Reinvestment Task Orders at Fair and Reasonable Prices*, (August 2022). *FirstNet Authority Must Increase Governance and Oversight to Ensure NPSBN Security*, (December 2021). <https://www.oig.doc.gov/Pages/First-Responder-Network-Authority.aspx>

some of these problems might be attributed to “growing pains” associated with the implementation of a new approach for providing public safety communications services, iCERT believes they underscore two important points that Canada should consider in advancing its own PSBN, or multiple PSBNs, in the future. First, effective oversight is important and should be adequately addressed in the governance framework established. Second, Canada should avoid reliance on a single network or network provider to meet the needs of emergency responders. Even the best network will experience outages, coverage challenges, or security breaches at some point. Hopefully, they will be relatively rare occurrences and network operators will have effective strategies for addressing them in a timely manner. However, iCERT believes it is important for the Canadian Government to promote a multi-network, multi-provider approach to meeting public safety’s communications needs. An “all-hands-on-deck” effort that leverages the expertise and investments of the entire industry is what is needed to ensure Canada’s public safety and national security requirements are adequately addressed.

*Other Recommendations.* The TNCO Final Report makes other recommendations regarding governance, spectrum utilization, service delivery, and approaches to achieve robust coverage and capacity. iCERT offers additional input here regarding these recommendations.

With regard to spectrum utilization, iCERT agrees with TNCO that a Shared Network approach (public safety and commercial) will be most effective. As already noted, such an approach is used by all three PSBNs providing services in the United States. Each provides priority access and preemption for public safety use, while also providing services to commercial users. The only significant difference is only one of these PSBNs, the one overseen by FirstNet, has access to spectrum explicitly allocated and licensed for public safety use. This distinction, however, does not create an impediment to the delivery of effective public safety communications services by alternative network providers. The two PSBNs not affiliated with FirstNet utilize spectrum licensed for commercial use to serve its public safety customers, while providing them with priority and preemption comparable to FirstNet/AT&T. In fact, AT&T’s RAN uses commercial spectrum and FirstNet’s Band 14 spectrum to provide services to its public safety and commercial customers without regard to the particular spectrum band used. iCERT believes this model works effectively. However, access to specific public safety spectrum should be managed in a way that is pro-competitive. iCERT provides more information regarding how to best ensure a pro-competitive framework in its more detailed responses to the Consultation’s questions.

With regard to service delivery, iCERT agrees with TNCO that Canada’s approach should “encourage innovative solutions that will meet and exceed the needs of public safety,” and that it “must not be limited by any particular solution nor to any specific offeror.” However, iCERT does not agree that either delivery model A or D would best achieve these goals. Each of these approaches relies on a single network and network provider to meet the nation’s public safety communications needs. iCERT does not believe such an approach is in the best interests of the first responder community or Canada’s national interests. A multi-network, multi-provider approach would be a more effective means for leveraging the benefits of a competitive market and ensuring more effective, reliable, and resilient communications for the nation’s first responders. iCERT provides more detailed information regarding service delivery options and corresponding benefits in the next section.

With regard to coverage and capacity, iCERT agrees with the TNCO that multiple approaches are needed to address the challenges of providing robust coverage and capacity for any PSBN. This is likely to include strategic partnerships, implementation strategies that include use of deployable assets and satellite networks, and targeted government investments in rural, and other challenging areas, where network deployment has been cost prohibitive. With regard to the latter, government investments should be directed to areas that provide the greatest benefit to first responders and the public, while promoting a competitive environment.

## **Responses to Specific Consultation Themes/Questions**

iCERT provides responses to various questions included in the Consultation. In most cases, these responses are narrowly tailored to issues related to competition in the provision of PSBN services.

### **Theme #1: Priorities for Realizing a Nationwide PSBN**

#### **1.1 What measures can be taken before a PSBN is deployed to facilitate the achievement of a national approach?**

iCERT believes the most important consideration for Canada in planning its approach for a PSBN is to thoroughly evaluate the pros and cons of a multi-provider versus a single-provider approach. A multi-provider approach that employs multiple PSBNs has inherent benefits because it can provide improved resiliency and redundancy over a single provider network. The increased competition resulting from a multi-provider approach will also help to drive down costs and increase innovation. If Canada were to choose a single-provider approach, it should carefully evaluate how such an approach would impact competition; both for public safety wireless communications services and for wireless services offered to consumers and businesses. Implementation of a single-provider approach will also likely require greater government oversight and a higher degree of regulation to prevent harmful monopolistic practices.

#### **1.2 Are there existing public assets or investments that may be integrated into a future PSBN? How can they be leveraged in the interim?**

Public assets at the national, territorial, provincial, and/or municipal levels might certainly be leveraged to reduce network costs and/or improve network redundancy and resiliency. This might include access to public lands and buildings for construction of cell sites or other network facilities, as well as use of existing government-owned communications network assets (e.g., dark fiber or fiber ring networks). iCERT urges caution, however, in allowing the PSBN to leverage existing public-owned assets if they could be used in a manner that undermines competition. For example, access to public-owned lands and/or buildings may help to substantially reduce the costs incurred by a network provider to build-out the network in remote areas. However, if a shared network approach is employed, i.e., one in which the network and spectrum are used to serve both public safety and commercial users, then access to public-owned assets by only a single network provider could have a substantially harmful impact on competition. When considering the allowance of access to public-owned assets, Canada should seek to develop arrangements that promote competitive parity.

#### **1.3 What are some potential sources of start-up funding that could support timely implementation? What partners and/or mechanisms could be leveraged to offset start-up and deployment costs?**

iCERT believes some level of government funding will be needed to implement a PSBN, or multiple PSBNs, that achieves previously stated principles and objectives. Adherence to a Shared Network approach, outlined by the TNCO, will certainly help to reduce the amount of funding needed. iCERT believes start-up and long-term deployment costs can be minimized by adopting a multi-provider approach and creating incentives for network operators to both leverage their existing wireless networks and enhance them to meet the rigorous requirements of the first responder community. Leveraging existing mobile broadband networks is crucial to reducing deployment costs and

accelerating the availability of PSBN services. As already noted, FirstNet's contract with AT&T allows the network operator to fully leverage its commercial network in providing services to public safety users. This includes an extensive RAN that already covered significant portions of the United States, utilizing spectrum from various commercial bands licensed to AT&T. While AT&T was required to construct a dedicated Public Safety Network Core to support the FirstNet PSBN, its ability to leverage its RAN, backhaul, and other network assets enabled the company to offer PSBN services years sooner than the timeframe required for a new build.

Competitors to AT&T have developed their own PSBN offerings in response to the FirstNet contract. Like AT&T, they use a Public Safety Network Core reserved for first responders and a nationwide RAN and spectrum that are shared with commercial customers. While these PSBNs and their associated services are comparable, only AT&T's has access to FirstNet's 700 MHz Band 14 spectrum or to any government-provided funding.

Despite the similarities between these PSBNs and the benefits they bring to first responders, the disparities in terms of support from the U.S. Government create competitive disadvantages that could ultimately harm competitors and the customers they serve. The competitive issues raised by the PSBN approach used in the United States helps to underscore the importance of Canada fully evaluating the impact on the competitive market and the nation's broader economic and policy objectives before implementing its own PSBNs. iCERT urges Canada to consider PSBN implementation approaches that satisfy the nation's need for effective, reliable, and interoperable public safety communications but in a way that promotes competition and creates incentives for multiple network operators to participate.

#### **1.4 What measures would both support the long-term financial sustainability of a national PSBN while also realizing the TNCO's Affordability Principle ([Annex C](#))? What ways could be considered to balance private sector and public safety interests in establishing investment priorities for the network?**

iCERT believes the competitive marketplace provides the best guidepost for ensuring the financial sustainability of a national PSBN. Admittedly, public safety communications require adherence to rigorous standards for availability, reliability, and resiliency not always satisfied by commercial wireless networks. However, dedicated "public safety grade" networks come at a higher cost, which would require substantial public funding in perpetuity. To minimize the need for such public funding, while also ensuring the long-term financial sustainability of multiple PSBNs, iCERT recommends leveraging commercial networks and prioritizing public investments in areas that provide the greatest benefit across multiple PSBNs.

Here's an example. In the case of FirstNet, the U.S. Government provided public funds to support the expansion of AT&T's existing RAN and the integration of FirstNet's Band 14 spectrum. These funds increased coverage for the FirstNet/AT&T network but, at the same time, created a competitive disadvantage for AT&T's competitors, which did not have access to public funds. A better approach would be to use public funds to build out areas where network deployment is cost prohibitive, e.g., cell sites in extremely remote areas, while enabling all network providers to use the site on a competitively neutral basis. This alternative would not only avoid the creation of competitive biases but would also improve communications availability, reliability, and resiliency to a greater number of users (first responders, consumers, and businesses).

iCERT believes there are likely other examples where public investments can be used to promote both public safety and competitive goals, and we encourage Canada to seek out such alternative arrangements as it implements its national PSBN strategy.

**1.5 What other kinds of approaches should be adopted to establish coverage and capacity targets, as well as measure progress toward PSBN implementation? Should coverage, resiliency and user adoption targets be mandated?**

iCERT believes that PSBN operators should meet minimum coverage and resiliency requirements, though any mandates should be closely tied to incentives that are applied fairly to all providers. We strongly discourage user adoption targets, especially if they are applied in a biased manner. FirstNet's contract with AT&T, for example, requires AT&T to meet strict user adoption requirements over the 25-year term of the contract. While this provision was clearly designed to maximize use of a government-funded network, it creates a government bias in favor of one network provider over its competitors and, thus, undermines competition. Canada's goal should be to have all emergency responders served by a PSBN that is effective, reliable, and interoperable, and it should not be concerned about what number or percentage of responders are served by a particular PSBN.

**1.6 What measures can be taken to accelerate deployment plans and mitigate delays to implementation following the establishment of a PSBN governance structure?**

As already noted, PSBN deployment and service delivery can be accelerated by leveraging commercial wireless networks and establishing partnerships with commercial network providers. See responses to questions 1.3 and 1.4.

**Theme #2: Oversight and Decision Making**

**2.1 What should the national governance structure for a Public Safety Broadband Network (PSBN) look like?**

iCERT believes the governance structure should balance the needs and responsibilities of federal, provincial, territorial, indigenous, and municipal government entities, as they all have a shared responsibility in emergency management. Moreover, each of these different levels of government is supported by a range of frontline public safety experts in the areas of law enforcement, fire service, and emergency medical services. Effective governance of the PSBN, or multiple PSBNs, will require significant coordination between all levels of government and the public safety community to ensure effective emergency response.

iCERT agrees with the recommendations of the TNCO that a national governance approach should include both centralized and distributed functions. We also agree with the TNCO that a centralized structure is necessary, not only to ensure nationwide interoperability and adherence to all PSBN principles, but also to ensure the policies, management, and operations of the PSBN(s) align with Canada's economic and competitive goals, as well as its public safety and national security goals. A PSBN strategy focused solely on the latter may create competitive harms that would be more far reaching over the longer term.



**2.2 How should the nomination, authority and control of a Board of Directors be determined (e.g., nominations by the Minister if a Crown corporation model is chosen, a committee of experts, membership, etc.)?**

iCERT urges Canada to ensure the authority and control of any governance entity (e.g., Board of Directors) aligns with, and is supportive of, Canada's broader national goals including those related to promoting competition and economic growth. In the United States, the FirstNet Authority is governed by a Board of Directors that includes public safety representation and senior officials of the United States Government, e.g., the Secretary of Homeland Security and the U.S. Attorney General. While this board composition seems appropriate, given FirstNet's public safety mission and statutory authority, its focus on only one PSBN (network operated by AT&T) creates an unfair government bias in favor of one competitor. It also does not adequately represent the needs of all first responders, since more than half are served by alternative networks. A broader FirstNet focus, i.e., one that includes all PSBNs, all network operators, and all first responders, would provide a more effective, more inclusive framework that benefits all responders. iCERT encourages Canada to pursue such an approach.

**2.3 Are there specific powers or limitations that should be considered (e.g., consult with governments and local public safety entities)?**

See response to question 2.2.

**2.4 Should multiple public safety Advisory Committees be established to support a Board of Directors? If so, what should each of their roles be and what issues should they cover? How should Advisory Committees be constituted?**

iCERT does not offer a response to this question.

**2.5 Are there any barriers to participation in PSBN governance to consider? What are some strategies for ensuring that a Board of Directors and its public safety Advisory Committee have representation from a diverse range of stakeholders?**

iCERT does not offer a response to this question.

**Theme #3: Public Reporting and Accountability**

**3.1 What are some measures that should be taken into account for ensuring the transparency and accountability of the Board and PSBN Authority? It is important to note that a Crown Corporation would be subject to transparency and accountability measures set out in the [Financial Administration Act \(FAA\)](#), in addition to other elements included in the enabling legislation.**

iCERT recommends full transparency in the treatment of all national PSBN plans, contracts, and partnering agreements. In the United States, FirstNet contracts and agreements are exempt from the Freedom of Information Act (FOIA) and, thus, have been prohibited from public disclosure. While

this is consistent with FirstNet's Congressional mandate, it has also raised questions and concerns from some public safety officials.<sup>9</sup>

**3.2 Are there minimum requirements for distributed/regional governance functions to address local operational challenges and requirements that should be mandated to ensure consistency, accountability, and transparency?**

iCERT does not offer a response to this question.

**3.3 Are there any statutes, regulations, policies, and/or initiatives that would impact a nation-wide PSBN, if any? How can a PSBN governance structure mitigate these impacts to facilitate timely implementation?**

iCERT does not offer a response to this question.

**Additional Considerations**

**4.1 What are some other considerations that need to be taken into account in establishing a national governance structure for the PSBN?**

iCERT does not offer a response to this question.

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<sup>9</sup> **Public Safety Officials Pen Open Letter Regarding IG Report on FirstNet**, Letter claims the IG report raises serious doubts about whether FirstNet is fully meeting its legal obligation and congressional mandate to serve first responders, Feb. 27, 2023. <https://firehouse.com/tech-com/press-release/53026718/public-safety-officials-pen-open-letter-regarding-ig-report-on-FirstNet>.