

Telecom Notice of Consultation CRTC 2026-47
Developing an Indigenous Stream of the Broadband Fund

Executive Summary

1. This intervention is filed jointly by Bill Murdoch, Executive Director, Clear Sky Connections; Michel Mersereau, Faculty of Information, University of Toronto; Kate Blackman, Faculty of Information, University of Toronto; and Joel Templeman, Executive Director, Internet Society Manitoba Chapter.
2. Bill Murdoch of Clear Sky Connections participates as a co-intervenor and contributes practical First Nations telecommunications experience, regional broadband planning context, technical implementation knowledge, and program design expertise.
3. Michel Mersereau and Kate Blackman file in an academic and public interest research capacity concerning the legal, policy, and regulatory foci of the Indigenous Stream of the Broadband Fund.
4. Joel Templeman participates as a co-intervenor in a community and public interest capacity. He contributes experience in digital equity advocacy, community based broadband development, and the practical implementation of community governed telecommunications infrastructure through his work with Internet Society Manitoba Chapter and as Technical Project Manager for North End Connect, an Indigenous led nonprofit community network serving Winnipeg's North End.
5. For the purposes of the analysis and commentary below, the parties identified above are collectively referred to as the Intervenor. The Intervenor jointly advance the recommendations and relief requested in this intervention, except where a specific position is expressly attributed to one intervenor.
6. The Commission's own record establishes the need for more than administrative streamlining. CRTC 2026-47 reports that 96% of Canadian households have access to broadband Internet service meeting the universal service objective, compared with 61% of households on First Nations reserves. This disparity shows that reliance on market forces, private investment, and fragmented public funding has not resulted in broadband availability consonant with the objectives of the Telecommunications Act in many First Nations communities (CRTC 2026-47, para. 2 and footnotes 1-2).

7. The Commission's own record establishes the failure of market mechanisms to deliver broadband outcomes for First Nations communities comparable to more populated regions. This problem is compounded when funding rules prevent shared regional transport and local distribution from being planned and assessed together. The Indigenous Stream must correct the funding and sequencing rules that problematize entry, access and long-term economic sustainability.
8. The central program design problem turns on a structural logic that assumes contestable market conditions that are not present in many target regions, and where thin local markets require case-by-case program model assessment. Current funding rules may divide, assess, and approve regional transport and local distribution as if they were independent projects, even where both are interdependent parts of one network. Eligible project type rules (Section 2.1.2 of the 2026 Technical and Program Details Guide), the requirement that applications be technologically and financially independent (Section 2.1.1(f) of the 2026 Technical and Program Details Guide), overlap rules and efficient use rules, geographic eligibility and project scope rules for universal service objective projects (Section 2.1.3 of the 2026 Technical and Program Details Guide), can prevent Indigenous led regional networks from being planned, funded, and built as coherent systems (CRTC 2024-328, Appendix 1; 2026 Technical and Program Details Guide, ss. 2.1.1(f), 2.1.2).
9. The Commission should adopt an optional Regional Transport and Community Distribution framework. One Indigenous controlled regional entity should be able to apply for shared regional transport, while each participating First Nation, First Nation controlled entity, or community ISP applies separately for its own local distribution (access) network.
10. The framework should be supported by lifecycle funding, including project development, engineering, legal and regulatory support, route and rights-of-way work, interconnection, technical and managerial training, workforce development, operational transition, cybersecurity, maintenance, and bounded operating support.
11. The Commission should implement the framework through clear conditions: Functional Transport Availability, route scaling, later entry, separate regional/local oversight, physical layer *and* Layer 2 interoperability, collect once reporting, OCAP based Indigenous data sharing agreements, active project support, and risk safeguards.

Questions for Determination

12. This intervention can be resolved through five determinations:

- a. Whether persistent First Nations connectivity deficits establish a market failure context requiring the Indigenous Stream to operate as a regulatory countermeasure rather than a narrow administrative intake reform (CRTC 2026-47; Telecommunications Act, ss. 7, 34, 46.5 and 47).
- b. Whether the combined operation of current Broadband Fund eligible project type rules, application independence requirements, geographic/project scope rules, overlap considerations, efficient use considerations, and restrictions on unsecured dependencies, can create a regional funding and sequencing barrier for Indigenous led regional networks.
- c. Whether the Indigenous Stream should permit one Indigenous controlled regional entity to apply for shared transport, while participating First Nations, First Nation controlled entities, or community ISPs apply separately for local distribution.
- d. Whether the Indigenous Stream should fund project development, OPEX, technical training, workforce development, legal/regulatory support, interconnection, governance capacity, and operational transition where these costs are necessary to make Indigenous ownership and operation viable.
- e. Whether the Commission should implement the framework through Functional Transport Availability, route scaling, later entry, separate regional/local accountability, technical interoperability, collect once reporting, active case management, and risk safeguards.

Direct Responses to Commission Questions

13. Q1-Q3: Indigenous applicant definition, self-identification, and certification of ownership/control. The joint intervenors take no position on broad questions of Indigenous identity, citizenship, membership, nationhood, or rights holder status. Those matters should be developed primarily from the evidence of First Nations, Inuit, and Métis rights holders, governments, communities, and representative institutions. For program purposes, the Commission should ensure that Indigenous Stream measures attach to substantive Indigenous ownership and control, not nominal participation (CRTC 2026-47, Appendix Section A, Q1-Q3).
14. Q4-Q5: Consortium eligibility and definitions. Indigenous applicant measures should attach to substantive Indigenous ownership and control of the funded project. The Indigenous Stream should define the core terms required to administer a regional model, including Indigenous Regional Transport Project, Community Distribution Application, Functional Transport Availability, Participating Indigenous Community,

Project Development Stage, Material Change, and Substantive Indigenous Ownership and Control (CRTC 2026-47, Appendix Q4-Q5; Annex A).

15. Q6-Q8: Application process and applicant experience. The Commission should use a standing project development stage and periodic capital calls. Regional and community distribution applications should receive longer filing windows where governance, seasonal access, permitting, environmental review, financing, or sequencing issues require it. Clear Sky contributes practical First Nations telecommunications planning and regional broadband experience on these matters in support of this intervention (CRTC 2026-47, Appendix Q6-Q8).
16. Q9-Q14 - Eligibility, assessment, engagement, consent, geography, and selection. The Indigenous Stream should permit shared regional transport and local distribution to be assessed as coordinated but separately accountable components. The Commission should retain community choice, require evidence of community authorization, allow rebuttal of broadband maps, distinguish geographic eligibility from Functional Transport Availability, and assess lifecycle efficiency rather than only immediate project cost (CRTC 2026-47, Appendix Q9-Q14).
17. Q12 and Q18 - Eligible costs and funding distribution. Eligible costs should include project development staff and replacement capacity, community engagement, governance, legal and regulatory advice, engineering, environmental and rights-of-way work, support structure work, financial modelling, procurement, interconnection, operational transition, training, cybersecurity, maintenance, emergency restoration, shared regional services, defined operating support, and scheduled replacement expenditures. Quarterly reimbursement should not be the default for every Indigenous recipient; payments should follow approved cash-flow plans, construction season, equipment deposits, contractual commitments, and recipient credit capacity (CRTC 2026-47, Appendix Q12 and Q18).
18. Q15-Q17 - Funding conditions and reporting. Funding conditions should attach each obligation to the responsible recipient. Reporting should be proportionate to project value, risk, complexity, and recipient capacity. The Commission should use a collect once core regional record with project specific supplements, appendices, role-based access, confidentiality clauses, and Indigenous data sharing safeguards (CRTC 2026-47, Appendix Q15-Q17; Telecommunications Act, ss. 46.8-46.9).

I. Submission Scope and Evidentiary Basis

19. This intervention is First Nations informed because the practical experience and regional broadband planning context provided by Clear Sky is First Nations specific. The

intervention does not assume that one First Nation may mandate a project for another. It does not recommend automatic application of First Nations informed governance, ownership, consent, data, or regional infrastructure terms to Inuit or Métis applicants.

20. This intervention relies on public regulatory materials, the Commission's record, Clear Sky's practical telecommunications experience, and the Intervenor's analysis. The proposed safeguards, technical conditions, and administrative mechanisms are advanced as recommendations for the Commission's consideration.

II. Why the Indigenous Stream Requires a Regulatory Response

21. The Commission should design the Indigenous Stream as a regulatory response to market failure, not as a narrow administrative intake reform. Persistent First Nations connectivity deficits show that ordinary market mechanisms have not protected users' interests or achieved statutory objectives in many First Nations communities (CRTC 2026-47, para. 2, fns. 1-2; Telecommunications Act, s. 34). The evidence of market failure supports a broader use of the Commission's powers under sections 46.5 and 47 in order to redesign the Broadband Fund.
22. The Commission need not conduct a full service specific section 34 review in this proceeding to apply section 34's logic in determining market failure. The Indigenous Stream is being developed *in response* to the factual record which reveals where ordinary competition, fragmented funding, and existing program rules have not delivered universal, reliable, affordable, and sustainable connectivity in many First Nations communities.
23. The Telecommunications Act and the 2023 Policy Direction provide the Commission with the required tools, Section 46.5 supports the Broadband Fund, and Section 47 requires that the Commission exercise its powers to achieve telecommunications policy objectives in accordance with cabinet direction. The 2023 Policy Direction calls for attention to affordability, reliability, resiliency, barriers faced by new, regional, and smaller providers, funding measures, operating cost considerations, support structures, and public funding coordination (Telecommunications Act, ss. 46.5, 47; 2023 Policy Direction).
24. Reconciliation, UNDRIP, Section 35, and substantive equality constitute the rights-based context for how the Commission should exercise its existing authority. They are not substitute sources of telecommunications jurisdiction. The Telecommunications Act supplies the authority, the Commission's own record supplies the factual basis, and the Indigenous Stream is the operable mechanism now under review.

25. This approach is consistent with the Commission's own regulatory practice and recent Federal Court jurisprudence. The Commission has previously treated Indigenous participation and UNDRIP linked statutory commitments as relevant to its regulatory work, including in the APTN decision and Indigenous Broadcasting Policy process. In *Kebaowek v CNL*, the Federal Court further confirmed that a federal administrative tribunal should not treat the UNDRIP Act as irrelevant merely because tribunal authority is granted through statute. While UNDRIP does not constitute jurisdiction, it informs how statutory authority should be exercised by administrative tribunals implementing Indigenous specific policy (Intervenors' analysis; CRTC 2024-106; *Kebaowek First Nation v Canadian Nuclear Laboratories*, 2025 FC 319, paras. 11, 57, 70, 76-86, 128-134).
26. Funding architecture redresses failed or thin Indigenous telecommunications markets. The principles of substantive equality (para 25) provide the justification for the Commission to implement a modular program model that can accommodate a range of criteria for eligible projects, dependencies, sequencing, costs, operating support, technical conditions, and reporting obligations. It is the flexibility of the program that will determine whether the Indigenous Stream corrects market failure or reproduces it (Intervenors' analysis).

III. Program Design: Regional Transport, Local Distribution, and Lifecycle Support

27. The core program design problem is regional funding and sequencing. A complete connectivity system may include local distribution, regional transport, gateway access, upstream interconnection, institutional connectivity, mobile backhaul, public safety sites, and future expansion capacity. These components are interdependent, but they may not have the same owner, operator, budget, governance approval, or readiness date.
28. The Indigenous Stream should permit an optional regional transport and community distribution framework. One Indigenous controlled regional entity should be able to apply for shared transport or other regional infrastructure serving multiple participating communities. Each participating First Nation, First Nation controlled entity, or community ISP should apply separately for its own local distribution (access) network.
29. The framework should preserve community choice. No First Nation should be required to join a regional project, transfer ownership of its local network, accept another community's priorities, or rely on an uncommitted cross-subsidy.

30. The framework should preserve accountability. The regional entity should be accountable for shared transport, route, gateway arrangements, capacity, committed demand, cost sharing, route scaling, later entry, continuity, and unused capacity. Each local recipient should be accountable for its own distribution network, service obligations, reporting, compliance, and operation.
31. The Commission should permit coordinated but separate funding decisions. A local distribution project should be allowed to rely on conditionally approved or otherwise secured shared regional transport, without requiring the local project to pretend that the regional dependency does not exist.
32. The Commission should establish a Project Development Stage before capital selection. Eligible development costs should include project staff and replacement capacity, community engagement, governance, feasibility, route work, engineering, environmental and archaeological work, rights-of-way, legal and regulatory advice, financial modelling, procurement, interconnection, cash flow planning, and preparation of construction ready applications (Annex A).
33. Properly incurred and approved development costs should remain non-repayable where approved deliverables are completed, even if the related capital application is not selected. Completion of development work should create no entitlement to capital funding.
34. The Indigenous Stream should support bounded operating expenditures where needed to make Indigenous ownership and operation viable. Eligible OPEX should include operational transition, technical and managerial staffing, training, cybersecurity, software, insurance, compliance, maintenance, emergency restoration, transport and gateway charges during ramp up, and shared regional services.
35. The Indigenous Stream should be understood partly as a non-dominant Indigenous carrier incubation program. Success should be measured not only by households connected or kilometers built, but by whether Indigenous applicants become viable telecommunications operators able to own, operate, maintain, expand, and govern infrastructure over time (Intervenors' analysis; CRTC 2026-47, paras. 13-16 and 31-35).
36. Comparable infrastructure programs support this lifecycle approach. BEAD demonstrates that broadband deployment depends on workforce capacity. Indigenous loan guarantees demonstrate that governments can advance Indigenous ownership by reducing financing barriers rather than compelling ownership transfers. The Clean Energy for Rural and Remote Communities program (CERRC) is the strongest Canadian comparator because it supports capacity building, feasibility work, front end

engineering and design, planning, training, and community led development in Indigenous, rural, and remote infrastructure contexts (Intervenors' analysis; NTIA, BEAD Program; Canada Indigenous Loan Guarantee Corporation; Clean Energy for Rural and Remote Communities Program).

37. A redesigned program should avoid collapsing categories of target Indigenous communities based on geography alone (i.e. rural, remote, Far North) and instead treat these as local material characteristics accommodated by the revised program model.

IV. Implementation: Conditions, Standards, Reporting, and Oversight

38. The Indigenous Stream should include a Functional Transport Availability test. The physical presence of fibre or transport should not be treated as equivalent to usable transport. Existing or proposed transport should be considered functionally available only where reliable evidence establishes conduit capacity, strand quality, transmission reliability, restoration, price, term, demarcation, handoff, supported uses, upgradeability, activation date, and binding availability.
39. Regional routes should permit route scaling and later entry. A regional route should be able to begin with communities that are ready while preserving a planned and costed pathway for later ready communities to connect. This avoids requiring every participating community to be construction ready at the same time and avoids duplicative transport builds.
40. The Commission should require practical interoperability for funded infrastructure. Interoperability should include physical layer documentation and, where applicable, shareable interconnection standards at Layer 2, including service handoff, fault isolation, capacity management, monitoring, service levels, interfaces, VLAN or QinQ arrangements, maximum transmission unit, quality of service, protection switching, and customer edge responsibilities (Annex D).
41. Funded recipients should provide Indigenous owners or authorized operators with the technical information required to govern, operate, maintain, and interconnect the network. This should include current physical and logical diagrams, inventory, test results, service handoffs, maintenance procedures, restoration procedures, vendor contacts, change management information, and escalation contacts.
42. The Commission should develop or require a Model Indigenous Infrastructure Access Agreement or equivalent model terms. Such terms should address access rights, adaptable minimum standards sharing and interconnection provisions that still protect Indigenous operator owners, maintenance obligations, documentation, confidentiality,

escalation timelines, operator replacement, and treatment of participating community and approved linked project commitments. Critically, the model agreement must include provisions for: affordability, actual performance targets, outage and service restoration reporting, continuity planning for health, education, public safety, government, and emergency communications, backup power provisions, and maintenance terms (Intervenors' analysis).

43. The Commission should establish an Indigenous applicant support and project coordination function, separated from merits evaluation. Before filing, this function could explain published requirements, conduct completeness and development scope review, coordinate reusable records, and refer applicants to independent technical resources. After approval, a case manager could support statement-of-work development, compliance, reporting, and issue resolution.
44. Reporting should follow a collect once approach. The Commission should use a core regional record with project specific appendices, risk-based verification, narrative explanations, role-based access, confidentiality procedures, retention limits, Indigenous data sharing safeguards, and aggregated/anonymized public reporting where detailed disclosure would abrogate Indigenous data governance provisions (Telecommunications Act, ss. 46.8-46.9).
45. Flexibility should be paired with safeguards. Funding decisions should address duplicate funding, double counted demand, speculative capacity, unused capacity, community withdrawal, operator failure, insolvency, Material Change approval, related party transactions, sensitive information, fiscal exposure, and continuity of essential services (Annex C).
46. The Commission should evaluate the regional option after implementation. It should publish an evaluation framework measuring application demand, projects redesigned or delayed because of sequencing, processing time, selection outcomes, route scaling, overlap avoided, later entry, communities enabled, operating support, reporting burden, Indigenous control, and residual gaps.

V. Relief Requested

47. The joint intervenors request that the Commission find that persistent First Nations connectivity deficits establish a market failure context requiring the Indigenous Stream to operate as more than an administrative accessibility reform.
48. The joint intervenors request that the Commission recognize that the current interaction of eligible project type rules, application independence requirements,

geographic/project scope rules, overlap considerations, efficient use considerations, and restrictions on unsecured dependencies can create a regional funding and sequencing barrier.

49. The joint intervenors request that the Commission adopt an optional regional transport and community distribution framework within the Indigenous Stream.
50. The joint intervenors request that the Commission make project development funding, bounded operating support, workforce development, technical training, legal and regulatory support, interconnection, technical documentation, and scheduled replacement expenditures eligible where necessary to make Indigenous ownership and operation viable.
51. The joint intervenors request that the Commission adopt Functional Transport Availability, route scaling, later entry, separate regional/local accountability, physical layer and Layer 2 interoperability, collect once reporting, Indigenous data governance, active project support, and risk safeguards as implementation conditions.
52. The joint intervenors request that the Commission base its Indigenous Stream impact targets on: median household cost burden capacity, service quality standards, Indigenous provider workforce capacity, and broader Indigenous application supports (i.e. legal and engineering funds). Detailed implementation metrics and specifications, such as latent network capacity, access conditions, and target income quintiles should be reserved for Commission led implementation work in partnership with Indigenous rights holders.
53. In the alternative, if the Commission is not prepared to adopt the complete framework, it should recognize the two-applicant architecture in principle and permit a community distribution application to rely on conditionally approved or otherwise secured shared regional transport.
54. At minimum, if the Commission is not prepared to recognize the two-applicant architecture at this stage, the Commission should amend the application independence and unsecured dependency requirements to permit community distribution projects to rely on conditionally approved or otherwise secured shared transport, authorize a limited project development stage, collect evidence on sequencing and overlap barriers, and include the full regional transport and community distribution option in the draft Indigenous Stream policy for comment.

Conclusion

55. The Indigenous Stream should not be confined to administrative streamlining. The Commission's own record establishes persistent First Nations connectivity deficits and the need for Indigenous owned and Indigenous led projects. The targeted response is not a new statutory fund or mandatory regional model, but rather a controlled refinement to the existing Indigenous Stream that permits Indigenous communities to use regional collaboration where it reduces lifecycle cost, avoids duplication, supports smaller or late readiness communities, and preserves local ownership, consent, accountability, and service continuity.

Annex A - Proposed Definitions

Annex B - Neighbouring Community Sequencing Example

Annex C - Risks and Safeguards

Annex D - Technical Development Issues

Annex A - Proposed Definitions

Approved Regional Plan means a community authorized technical, financial, governance, and sequencing plan identifying the participating communities, eligible geographic areas, Indigenous controlled regional entity, related Community Distribution Applications, ownership structure, dependencies, route, capacity, gateway arrangements, costs, cost sharing commitments, operating model, lifecycle requirements, later entry terms, route scaling rules, and material change process.

Community Distribution Application means a separately budgeted and conditioned application submitted by a First Nation, First Nation controlled entity, or community ISP for infrastructure from the community point of presence to local households, businesses, institutions, towers, public facilities, and other end users. A Community Distribution Application may rely on an Indigenous Regional Transport Project where that dependency is disclosed and approved.

Development Mandate means authorization from each applicable Participating Indigenous Community to undertake defined planning, engagement, technical, governance, and application development activities. A Development Mandate authorizes project development work only. It is not Project Consent for construction.

Functional Transport Availability means that existing or proposed transport is available on usable, reliable, technically adequate, and binding terms. Physical presence of fibre or other transport infrastructure is insufficient. Functional availability should be assessed through conduit capacity, strand quality, transmission reliability, restoration, price, term, demarcation, handoff, supported uses, upgradeability, activation date, and binding availability.

Indigenous Regional Transport Project means a project submitted by an Indigenous controlled regional entity to build, upgrade, lease, or secure long term capacity on transport or other infrastructure shared by two or more Participating Indigenous Communities, or connecting those communities to gateway, interconnection, or upstream service locations.

Material Change means a change that may affect project eligibility, cost, schedule, route, technology, capacity, service, applicant, ownership, control, participating communities, authorization, governance, operating model, financial viability, data governance, or the ability of a linked regional or local component to proceed.

Participating Indigenous Community means a First Nation, Inuit, or Métis government or community whose authorized representative has approved participation in the relevant development stage, regional plan, or project through the distinctions based process

applicable to that rights holder. First Nations informed terms in this intervention should not be applied automatically to Inuit or Métis participants.

Project Consent means final program authorization from the applicable Participating Indigenous Community for the funded infrastructure, route, ownership, governance, service model, and institutional arrangements before final capital funding approval. Project Consent is a program requirement and does not determine whether any constitutional duty to consult has been discharged.

Project Development Stage means a separately approved and funded stage before final capital selection. Eligible activities may include community engagement, governance, feasibility, route work, engineering, environmental and archaeological work, rights-of-way, legal and regulatory advice, financial modelling, procurement, interconnection, operating planning, cost sharing development, and preparation of a construction ready application.

Regional Plan Authorization means approval by each Participating Indigenous Community of the proposed regional route, governance, ownership, cost allocation, capacity allocation, later entry structure, and participation terms, to the extent those matters affect that community.

Route Scaling means the ability to construct, shorten, extend, or stage an approved regional route depending on which participating communities are ready, selected, or added later, subject to approved cost allocation, capacity, material change, and later entry rules.

Substantive Indigenous Ownership and Control means effective Indigenous authority over the funded project. For an Indigenous Regional Transport Project, the applicant should be an Indigenous controlled regional entity representing participating communities. Control should include effective governing authority over infrastructure, data, major contracts, service priorities, operator replacement, long term benefits, change of control, and any transition pathway. Nominal participation is insufficient.

Annex B – Neighbouring Community Sequencing Example

This example illustrates the regional funding and sequencing barrier and is not evidence about a specific application, carrier, community, or funding decision. It shows why the Indigenous Stream should permit shared regional transport and local distribution to be assessed as coordinated but separately accountable components.

1. Communities A and B are neighbouring First Nations. Each requires a local distribution network from its community point of presence to end users. Both also require transport along substantially the same corridor to reach a gateway or upstream interconnection point. Indigenous controlled regional entity C is capable of constructing and operating the shared transport route.
2. Under ordinary complete solution rules, A and B may each need to submit separate applications that include both local distribution and transport. Those applications may therefore propose overlapping transport along the same corridor.
3. If A is selected first, B may later be assessed less favourably because its proposed transport overlaps a route that is already funded, selected, or treated as existing transport. B may remain without a funded local solution even though a coordinated regional route could have served both communities.
4. A separate application by C may also be difficult if transport only eligibility is unavailable or if A and B cannot make their local distribution applications contingent on funding for C's shared regional transport project.
5. Under the proposed Regional Transport and Community Distribution framework, C would apply for the shared regional route. A and B would each submit separate Community Distribution Applications for their local networks. The Commission could coordinate the decisions, identify the permitted dependency on regional transport, and preserve separate budgets, recipients, conditions, claims, and accountability.
6. If only A is ready or selected initially, C could scale or stage the route to serve A while preserving a planned and costed pathway for B to connect later. If B is later selected or becomes ready, the approved regional plan could permit extension or activation of the route under the later entry terms.
7. This framework would not guarantee funding to B and would not require B to participate. It would simply prevent the funding architecture from forcing duplicative complete solution corridors or treating regional and local components as independent when they are technically interdependent.

Annex C - Risks and Safeguards

The Regional Transport and Community Distribution framework should include default safeguards. A funding decision may vary a safeguard where the record demonstrates that an alternative provides equal or better protection of public funds, community authority, Indigenous ownership/control, and service continuity.

1. Risk: A Community Distribution Application does not proceed.

Safeguard: Require minimum committed demand, binding cost sharing or capacity commitments where applicable, route scaling rules, later entry rules, and redesign or reallocation procedures.

2. Risk: Duplicate funding or duplicate cost recovery.

Safeguard: Require separate regional and local cost registers, disclosure of all public funding, reconciliation before payment, and a prohibition on claiming the same cost twice.

3. Risk: Double counted demand.

Safeguard: Require a certified demand schedule identifying each community, household, institution, tower, business, and local distribution dependency once.

4. Risk: Speculative or excessive capacity.

Safeguard: Require a defined planning horizon, incremental cost analysis, foreseeable later entry evidence, and assigned responsibility for unused capacity.

5. Risk: Community withdrawal.

Safeguard: Require community approved withdrawal terms covering committed costs, capacity, governance consequences, unused capacity, and continuity of service.

6. Risk: Applicant, contractor, or operator failure.

Safeguard: Require notification, step in or replacement operator provisions, transfer of documentation, credentials, contracts, records, and continuity of essential services.

7. Risk: Material technical, financial, or governance change.

Safeguard: Require Commission approval for Material Changes and renewed community authorization where the change affects a matter previously approved by a Participating Indigenous Community.

8. Risk: Stranded or inactive assets.

Safeguard: Require maintenance, preservation, reallocation, alternate use planning, and proportionate recovery only where failure was within the recipient's control.

9. Risk: Related party or affiliate preference.

Safeguard: Require disclosure, cost justification, community approved allocation, and no unjustified preference within the approved shared arrangement.

10. Risk: Sensitive or confidential information disclosure.

Safeguard: Require purpose limitation, role-based access, retention limits, confidentiality procedures, security controls, and Indigenous data governance safeguards.

11. Risk: Blurred recipient responsibility.

Safeguard: Assign shared transport obligations to the Indigenous controlled regional entity and local distribution obligations to the relevant First Nation, First Nation controlled entity, or community ISP.

12. Risk: Fiscal exposure grows without limit.

Safeguard: Establish program wide, regional, recipient, development stage, operating support, and lifecycle support limits, with annual review where continuing support is approved.

Annex D - Technical Development Issues

1. The Indigenous Stream should establish minimum technical outcomes rather than universal engineering specifications. Fibre, microwave, fixed wireless, satellite, and hybrid systems may be appropriate depending on geography, cost, resiliency, maintainability, capacity, and community requirements.
2. Minimum technical outcomes should address capacity, reliability, resiliency, safety, maintainability, documentation, expansion readiness, interoperability, continuity, service handoff, restoration, and the ability of the Indigenous owner or authorized operator to govern and operate the network.
3. Physical layer issues may include route, support structures, demarcation, conduit, fibre strand availability, optical budget, splicing, connectors, equipment interfaces, power, backup power, environmental protection, testing, ownership, maintenance, expansion, and as built documentation.
4. Support structure procedures may include application information, surveys, make ready and corrective work, contractor qualifications, cost responsibility, response timelines, extension rules, escalation procedures, and documentation requirements.
5. Layer 2 issues may include service handoff, fault isolation, capacity management, monitoring, service levels, interfaces, VLAN or QinQ arrangements, maximum transmission unit, quality of service, protection switching, and customer edge responsibilities where the approved architecture uses those features.
6. Gateway and upstream issues may include meet me locations, cross connects, upstream services, routing, security, network operations contacts, addressing, autonomous system requirements, peering, transit, content or media arrangements, and continuity where an upstream provider changes.
7. Institutional interconnection issues may include security, service levels, redundancy, procurement requirements, authorized data systems, demarcation, customer edge equipment, maintenance, restoration, and continuity for schools, health facilities, public safety, government, and community institutions.
8. Documentation should include current physical and logical diagrams, inventory, test results, interface and service information, maintenance procedures, warranties, vendor contacts, outage notification procedures, planned maintenance procedures, restoration priorities, change management information, and escalation contacts.

9. Continuity conditions should address loss or replacement of an operator, vendor failure, insolvency, change of control, access to documentation and credentials, transfer of contracts and records, temporary operation, emergency restoration, and the Indigenous owner's ability to appoint a replacement operator.

10. Access and interconnection terms should distinguish participating community and approved linked project commitments from unrestricted third-party open access. The process should preserve Indigenous recipient exemptions where applicable while preventing funded infrastructure from reproducing bottlenecks that prevent Indigenous ownership, operation, or interconnection.

11. The application guide should identify evidence requirements and default outcomes while permitting justified project specific alternatives where equivalent accountability, interoperability, service continuity, and Indigenous control are demonstrated.

12. Detailed physical layer, Layer 2, gateway, institutional interconnection, access, documentation, and escalation requirements should be developed through an Indigenous informed technical process and an expert record before being converted into universal engineering requirements.

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References

- Canada. Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c. 11, s. 35. <https://laws-lois.justice.gc.ca/eng/const/>
- Canada. Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-23. <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2023-23/>
- Canada. Telecommunications Act, SC 1993, c. 38. <https://laws-lois.justice.gc.ca/eng/acts/T-3.4/>
- Canada. United Nations Declaration on the Rights of Indigenous Peoples Act, SC 2021, c. 14. <https://laws-lois.justice.gc.ca/eng/acts/U-2.2/>
- Canada Indigenous Loan Guarantee Corporation. Indigenous Loan Guarantee Program. <https://cilgc-cgpac.ca/en>
- Canadian Radio-television and Telecommunications Commission. Aboriginal Peoples Television Network Incorporated: Licence amendment and mandatory distribution order of the service across Canada, Broadcasting Decision CRTC 2024-106 and Broadcasting Order CRTC 2024-107, 14 May 2024. <https://crtc.gc.ca/eng/archive/2024/2024-106.htm>
- Canadian Radio-television and Telecommunications Commission. Broadband Fund policy review: New policy for funding capital projects, Telecom Regulatory Policy CRTC 2024-328, 12 December 2024. <https://crtc.gc.ca/eng/archive/2024/2024-328.htm>
- Canadian Radio-television and Telecommunications Commission. Call for comments: Developing an Indigenous stream of the Broadband Fund, Telecom Notice of Consultation CRTC 2026-47, 18 March 2026. <https://crtc.gc.ca/eng/archive/2026/2026-47.htm>
- Canadian Radio-television and Telecommunications Commission. Technical and Program Details Guide for the 9 April 2026 Call for Applications for the Broadband Fund. <https://crtc.gc.ca/eng/internet/fnd/appl/tech.htm>
- Clear Sky Connections. CRTC 2026-47 Indigenous Stream Intervention V6.3 Draft. Unpublished supporting technical and program design analysis.
- First Nations Information Governance Centre. The First Nations Principles of OCAP®.

<https://fnigc.ca/ocap-training/>

Kebaowek First Nation v Canadian Nuclear Laboratories, 2025 FC 319.

National Telecommunications and Information Administration. Broadband Equity, Access, and Deployment Program. <https://www.ntia.gov/funding-programs/high-speed-internet-programs/broadband-equity-access-and-deployment-bead-program>

National Telecommunications and Information Administration. Internet for All: Workforce Planning Guide, Guidance for BEAD Program Eligible Entities. https://broadbandusa.ntia.gov/sites/default/files/2022-10/DOC_NTIA_Workforce%20Planning%20Guide_FINAL_100722.pdf

Natural Resources Canada. Clean Energy for Rural and Remote Communities Program. <https://natural-resources.canada.ca/funding-partnerships/clean-energy-rural-remote-communities-program>

Natural Resources Canada. Clean Energy for Rural and Remote Communities Funded Projects. <https://natural-resources.canada.ca/climate-change/clean-energy-rural-remote-communities-funded-projects>