REGIONAL DISTRICT OF BULKLEY-NECHAKO

BROADBAND COMMITTEE
AGENDA
Thursday, November 5, 2020

SUPPLEMENTARY AGENDA

NEW BUSINESS

IN-CAMERA MOTION

In accordance with Section 90 of the *Community Charter,* it is the opinion of the Board of Directors that matters pertaining to Section 90(2)(b) – the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between

a provincial government or the federal government or both and a third party (Connectivity), must/may be closed to the public, therefore exercise their option of excluding the public for this meeting.

<u>ADJOURNMENT</u>

REGIONAL DISTRICT OF BULKLEY-NECHAKO

BROADBAND COMMITTEE MEETING

Thursday, July 16, 2020

PRESENT:	Chair	Michael Riis-Christianson
	Directors	Tom Greenaway Clint Lambert Chris Newell Mark Parker Gerry Thiessen
	Director Absent	Mark Fisher, Electoral Area "A" (Smithers Rural)
	Staff	Curtis Helgesen, Chief Administrative Officer Cheryl Anderson, Manager of Administrative Services Nellie Davis, Regional Economic Development Coordinator John Illes, Chief Financial Officer Wendy Wainwright, Executive Assistant
	Others	Tyler Mooi, Marketing Manager, Telus – Via Zoom Roberta Squire, MBA, General Manager, CSD Northern BC, Telus – via Zoom Sarrah Storey, Village of Fraser Lake

CALL TO ORDER — Chair Riis-Christianson called the meeting to order at 9:00 a.m.

AGENDA

Moved by Director Lambert
Seconded by Director Newell

BBC.2020-3-1

"That the Broadband Committee Agenda for May 7, 2020 be approved as amended to include in New Business – Briefing info from Taylor Bachrach, MP Skeena-Bulkley Valley."

(All/Directors/Majority)   CARRIED UNANIMOUSLY

MINUTES

Broadband Committee
Meeting Minutes
–May 7, 2020

Moved by Director Parker
Seconded by Director Greenaway

BBC.2020-3-2

"That the Broadband Committee Meeting Minutes of May 7, 2020 be approved."

(All/Directors/Majority)   CARRIED UNANIMOUSLY

REPORT

Funding and Partnership
Agreements

Moved by Director Newell
Seconded by Director Lambert

BBC.2020-3-3

"That the Broadband Committee receive the Chief Financial Officer's July 16, 2020 memo titled Funding and Partnership Agreements."

(All/Directors/Majority)   CARRIED UNANIMOUSLY

REPORT (CONT'D)

Discussion took place regarding:
- Regional District of Fraser-Fort George entered into an agreement with Tannex
  - Potential Partnering Agreements with TELCOM's and local governments
- Partnering Agreement/Funding Agreement definition
  - Local government can request system utilized eg. wireless/hardwire
- Developing a Bylaw for Broadband Service
  - Economic Development Function
  - Referendum process
    - Including all Electoral Areas
    - Including portion of Electoral Areas
    - Timeline
- Coastal GasLink contractor for connectivity is applying for funding under currently available connectivity funding programs
- Partnering with TELCOM companies to provide connectivity to underserved areas
- Viability of partnerships
  - Backhaul capabilities/permissions
    - Currently some TELCOM's can't meet speeds due to backhaul issues.
  - Potential issues in the future with backhaul capabilities.

CORRESPONDENCE

Todd Doherty – MP Cariboo-Prince George – Broadband/ Rural Connectivity Letter to the Honourable Maryam Monsef, Minister of Rural Economic Development

Moved by Director Parker
Seconded by Director Lambert

BBC.2020-3-4

"That the Broadband Committee receive the correspondence from Todd Doherty, MP Cariboo-Prince George regarding Broadband Rural Connectivity Letter to the Honourable Maryam Monsef, Minister of Rural Economic Development."

(All/Directors/Majority)   CARRIED UNANIMOUSLY

NEW BUSINESS

Briefing Information
Taylor Bachrach, MP Skeena Bulkley Valley

Chair Riis-Christianson noted Taylor Bachrach, MP Skeena-Bulkley Valley's Constituency office responded to the RDBN's request for letter of support and has requested an update be provided to MP Bachrach. Staff will schedule a Zoom meeting with MP Bachrach and provide a briefing note for the meeting. Director Newell requested the information be provided prior to the meeting.

Coastal GasLink Legacy Funding

Chair Riis-Christianson mentioned that the information in regard to the meeting with Coastal GasLink regarding legacy infrastructure for fibre is encouraging.

IN-CAMERA MOTION Moved by Director Lambert
           Seconded by Director Newell

BBC.2020-3-5   In accordance with Section 90 of the *Community Charter,* it is the opinion of the Board of Directors that matters pertaining to Section 90(2)(b) – the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party (Connectivity), must/may be closed to the public, therefore exercise their option of excluding the public for this meeting.

          (All/Directors/Majority)   CARRIED UNANIMOUSLY

ADJOURNMENT   Moved by Director Lambert
           Seconded by Director Parker

BBC.2020-3-6   "That the meeting be adjourned 9:20 a.m."

          (All/Directors/Majority)   CARRIED UNANIMOUSLY

_____   _____
Michael Riis-Christianson, Chair   Wendy Wainwright, Executive Assistant

Regional District of Bulkley-Nechako
Broadband Committee

To: Chair and Committee Members
From: Nellie Davis, Manager of Regional Economic Development
Date: November 5, 2020
Regarding: **Revised Project Priority Setting**

Recommendation:

That the Committee recommend that the Board amend the January 9, 2020 project prioritization resolution as follows: That the RDBN Board prioritize the following projects for 2020/21: Fort St. James Rural (Sowchie, Mount Pope, Necoslie Rd); Buck Flats; Highway 35 and Southbank; Grassy Plains and Ootsa Lake; Industrial Cellular and LTE Coverage for Clearview Landfill.

Background:

Staff recommend these amendments to the original Project Priority Resolution which reads:
 "That the Board prioritize the following projects for 2020 grant applications: Fort St. James Cellular Coverage; Buck Flats Cellular and LTE Coverage; Grassy Plains and Ootsa Lake Cellular and LTE Coverage; Industrial Cellular and LTE Coverage for Clearview Landfill, Pinkut Lake and Taltapin Lake; fibre to the home for Area B/Area E – Highway 35 and Southbank, and east end of Francois Lake."

The original resolution includes limiting language regarding Cellular and LTE coverage, where other options may be considered more applicable solutions for some areas. The geographic scope of the priority project areas remains unchanged, with the exception of the removal of Taltapin and Pinkut Lakes which, as they serve industrial and recreational users and not residents, are not currently considered priority areas.

Regional District of Bulkley-Nechako
Broadband Committee

To: Chair and Committee Members
From: Nellie Davis, Manager of Regional Economic Development
Date: November 5, 2020
Regarding: **Space Exploration Technologies Corporation Letter**

Recommendation:

That the Committee recommend that the Board send a letter to Space Exploration Technologies Corp. (SpaceX) requesting participation in the Corporation's planned beta testing of Starlink Satellite service with volunteer households in Canada.

Background:

In a letter dated October 15, 2020, the Canadian Radio-television and Telecommunications Commission approved an application from SpaceX to provide low Earth orbit satellite internet to rural Canadians.

Reporting on the announcement by the CBC indicates that SpaceX has indicated a start to beta testing in Canada this fall.

CRTC Letter attached.

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Government **Gouvernement**
of Canada   **du Canada**

Canada

Canadian Radio-television and Telecommunications Commission

Home → Business → Commission Letters → 2020

Telecom Commission Letter addressed to Bret Johnsen (Space Exploration Technologies Corp.)

Ottawa, 15 October 2020

Our reference: 8190-S206-202002799

BY EMAIL

Bret Johnsen
Space Exploration Technologies Corp.
1 Rocket Road
Hawthorne, California 90250
UNITED STATES OF AMERICA

Re: Application for a Basic International Telecommunications Services (BITS) Licence

Dear Bret Johnsen,

On 15 May 2020, Space Exploration Technologies Corp. completed an application for a Basic International Telecommunications Services (BITS) licence for the provision of international telecommunications services, pursuant to section 16.3 of the *Telecommunications Act* (the Act).

The Commission received 2585 interventions regarding Space Exploration Technologies Corp.'s BITS application. After consideration of the comments received, the Commission has approved the application and a BITS licence is enclosed.

Please note the BITS licence conditions, which can be viewed on the back of the enclosed licence, include regular filings to the Commission.

The Commission notes that a BITS licence does not by itself authorize an entity to operate as a facilities-based carrier or non-facilities-based service provider. All entities who provide services as a facilities-based carrier must at all times comply with the appropriate regulatory framework, including the ownership and control requirements of section 16 of the Act and the Canadian Telecommunications Common Carrier Ownership and Control Regulations. Entities who provide services as a non-facilities-based service provider must register as such with the Commission and comply at all times with the appropriate regulatory framework.

Sincerely,

Original signed by

Claude Doucet
Secretary General

Enclosures

Date modified:

2020-10-15

Regional District of Bulkley-Nechako
Broadband Committee

To: Chair and Committee Members
From: Nellie Davis, Manager of Regional Economic Development
Date: November 5, 2020
Regarding: **CIRA Internet Speed Test Data Update**
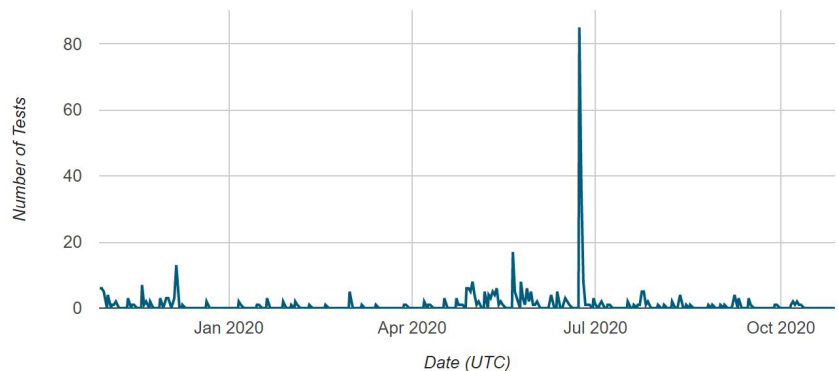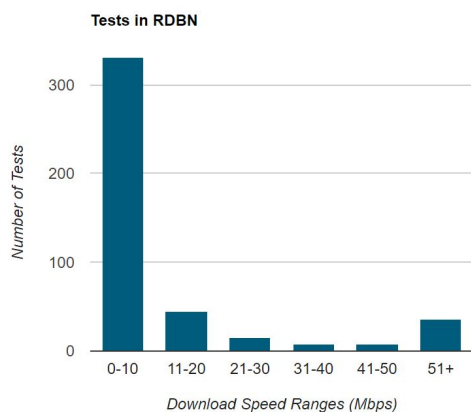
Recommendation:

Receive.

Background:

Included is a visual representation of the CIRA Internet Speed Test Data collected over the previous year. A total of 1608 tests have been performed in the region, with approximately 600 of those occurring through the dedicated RDBN CIRA site.

The interactive map can be viewed at https://performance.cira.ca/rdbn

MEMORANDUM

TO: Connectivity Committee   **DATE:** October 21, 2020

FROM: Michael Riis-Christianson

RE: Rural Broadband and Connectivity Committee meeting

DISCUSSION:

Today Nellie Davis and I participated in a virtual rural broadband and connectivity meeting with representatives of the Union of BC Municipalities, the Ministry of Citizens' Services, and several other regional districts. Dr. Bob Long, chair of Citywest, also participated.

This meeting, organized by Maureen Lebourdais, an electoral area director for the Cariboo Regional District, was organized to gauge interest in sharing information, ideas, and concerns relating to connectivity among local governments.

Participants agreed that it would be beneficial to establish such an organization. A second meeting will be held in a month, at which time representatives will consider draft Terms of Reference. It was also suggested that representatives might benefit from a "Connectivity 101" briefing, as this is a field that few of us pretend to understand.

It was clear from the initial meeting that regional districts across BC share many of our connectivity concerns and frustrations. Most are wondering how they can finance connectivity projects. Others point to the lack of competition in the communications industry – particularly in rural and remote communities – as a significant stumbling block along the road to improved internet service.

In terms of making progress on connectivity issues, we are probably in the middle of the pack; some regional districts are farther ahead, while other are behind. A couple are just starting work on their strategies with the help of TANex.

I believe membership in the group may prove beneficial, even if all we ever do is discuss issues, share information, and identify opportunities to lobby government. I will forward the draft TOR to you as soon as I get them.

MEMORANDUM

TO: Connectivity Committee   **DATE:** October 21, 2020

FROM: Michael Riis-Christianson

RE: Municipal Broadband Master Class

DISCUSSION:

This session, offered through Municipal World, was designed to give local governments insight into broadband technology, the importance of connectivity (specifically broadband connectivity), and the role they can play in advancing broadband. It was presented by Jesse Hirsh, a researcher, futurist, and public speaker who has appeared on CBC, TVO. You can find out more about him here: https://jessehirsh.com/. You can check out his TEDx talk at https://www.youtube.com/watch?v=BFRRIuW0giM.

More than two dozen local government leaders from across Canada participated in this session. Not only is Hirsh extremely knowledgeable, but he is an engaging speaker who has that rare ability to make a complex subject easy to understand.

Hirsh started this session by talking about the economic and social importance of the internet and the role local governments can play in promoting connectivity. He then discussed the various technologies that can be used to connect to the internet: wireless, satellite, hybrid, mesh, and fiber.

There are benefits and disadvantages to all these technologies. 5G wireless is highly touted, but neither it nor 6G will match fiber. 5G will work well in high density urban areas, but not in smaller rural and remote communities, he said.

The use of Low Earth Orbit (LEO) satellites (as proposed by Elon Musk's Space Exploration Technologies Corp.) may be an improvement over existing satellite internet service, but there will still be latency and speed issues. Even Musk is cautious about how effective LEO satellites will be in connecting rural and remote communities; he recently told the New York Times that the service will likely only provide a measure of connectivity to people living rural and remote communities who currently have none. Hirsh says the SpaceX solution will likely still provide what he considers "subpar" connectivity.

Hirsh says that in terms of capacity, speed, latency, and 'bang for the buck,' fiber is the best method of connecting to the internet. It will likely remain so because it's the fastest developing internet technology. Fiber's upload/download speeds are far superior to those of wireless and satellite (100 times better, in fact), and are increasing exponentially.

According to Hirsh, local governments should focus primarily on bringing fiber to their communities. *Focusing on other solutions and technologies is guaranteed to perpetuate (and in fact exacerbate) the current rural/urban connectivity disparity, he said. Any connectivity solution other than fiber will be subpar.*

There is a role for local governments to play in advancing connectivity. Hirsh is also convinced that there are compelling arguments in support of local governments taking a lead in this regard.

Even before COVID, we were seeing an exodus from cities. Not only are people leaving big cities for affordability reasons, said Hirsh, but they are also leaving the 'bright lights' in search of a better lifestyle.

The pandemic has provided added impetus. If people can work from home in a rural community because they have access to broadband, many more will make the move. Hirsh is an example; he moved from Toronto to a small community, though he had to solve the internet issue himself.

It pays for local government to take a lead role in advancing connectivity (specifically fiber), says Hirsh. Ensuring that residents and businesses have access to high speed internet will address economic challenges, help diversity rural economies, address problems associated with aging populations, and bring much-needed investment dollars.

Municipal involvement in promoting broadband connectivity can take many forms.

1. Literacy and advocacy
   Unfortunately, most people don't understand the internet or realize what access to broadband can do for them and their communities. Local government can (and should) play a role in promoting internet literacy in their communities. Building literacy will ensure that residents understand the value of making investments in connectivity and make them more likely to support those investments. According to Hirsh, every local government should have a strategy in place for advancing broadband literacy.

   As we have seen, local governments can help promote broadband through advocacy. They can identify issues that prevent existing ISPs from providing high speed internet, and advocate for change. For example, in most jurisdictions, the policy toward utility pole sharing places ISPs at a disadvantage because the last company to install infrastructure on a pole is often responsible for any upgrading and repair costs. This puts ISPs at a disadvantage and discourages them from bringing fiber to the home.

   Another barrier to connectivity is the current regulation that allows Telcos to keep the status of their existing infrastructure a secret. At present, most telecommunications companies are loath to disclose the state of their current infrastructure because they feel it gives them a competitive advantage. This makes it difficult for communities (and smaller companies) to make informed investment decisions about broadband infrastructure. Hirsh feels the CRTC should require that all telcos disclose the state and location of their IT infrastructure.

2. Promoting Broadband Connectivity through property taxation and collective bargaining
   In most cases, customers are required to foot the bill for connecting their premises to a fiber optic cable. This can be costly. Local governments can promote connectivity by allowing customers to roll these costs into property taxes and pay them off over time, like investments in water and sewer infrastructure.

   Local governments can also work together to get a better rate on goods and services. There are benefits, says Hirsh, to forming a "regional consortium" for the purposes of getting better deals on fiber, construction costs, etc.

3. Promoting Broadband Connectivity through Investments in Infrastructure and Internal Usage
   Some local government have started investing in fiber optic infrastructure primarily for their own

use. They then extend the connection to other organizations such as schools, libraries, etc. – and in doing so, reduce their own costs. The primary benefit of this strategy is that it lowers the telco's costs and enables the implementation of smart infrastructure and programs.

4. Promoting Broadband Connectivity by Enabling Competition

According to Hirsh, the "braindead bureaucracy in large Telcos" is forcing many local governments to invest directly in broadband infrastructure. In this scenario, local governments build the network and then open it up to other service providers. This promotes local competition and ensures customers get access to high speed internet at an affordable price.

What impact does this have on connectivity? Consider this: In Ammon, Idaho, the municipality built the infrastructure and then opened it to ISPs. At least four companies now operate there, and as a result, residents of Ammon get 'basic' internet services (15mb/second upload and download) for $1.88 per month, and 100mb up/down service for $8.88 a month. In Burns Lake, Telus charges $90/month for 75mb/15mb.

Hirsh feels more local governments should be following the lead of Ammon. Again, the social and economic benefits for communities are huge. And, as he notes, local governments have access to the low-cost debt financing needed to build the infrastructure.

5. Full-service provision

In some instances, enlightened local governments are not only building their own broadband infrastructure, but offering internet service to their citizens. This is a more comprehensive strategy, and the most expensive. Yet financing can be obtained through Private/Public Partnership (3P) agreements.

Perhaps the most celebrated municipal full-service provider is the city of Chattanooga, Tennessee. In 2010, Chattanooga became the first US municipality to provide citywide internet service at 1gb/second through its city-owned utility. A decade later, internet speeds in Chattanooga are now 10gb/second, and tech companies and start-ups are flocking there. You can read more about it here: https://www.pcmag.com/news/gig-city-how-chattanooga-became-a-tech-hub.

TAKEAWAYS:

1. Internet technology is not that complicated, according to Hirsh. An ISP is simply someone who buys a fast, high-capacity connection to the internet (data) and then sells to it to others. Unfortunately, large Telco's have mystified it for their own financial purposes.
2. It is feasible to bring broadband internet to people in rural and remote communities. Hirsh says it's not that complicated and not that expensive. (For example, you don't have to buy and bury 48-strands of fiber to give high speed access to a small rural community; sometimes, all it takes is one or two strands, which are considerably less expensive.) Many jurisdictions have already done it, some of them through not-for-profits like B4RN (Broadband for the Rural North in England, https://b4rn.org.uk/), which now supplies 1gb service to about 7,000 households and businesses for the Canadian equivalent of $51/month. Others, like GUIFI.NET

(https://en.wikipedia.org/wiki/Guifi.net) provide **free** high speed to residents. <u>It only takes is a willingness to act.</u>

3. Canada's approach to broadband needs to change because it's not working for rural and remote communities.
4. There is a huge urban/rural disparity in terms of access to the internet, and that 'digital divide' will continue to grow unless local governments take steps to bridge it.
5. Local governments that want to bring broadband to their residents should
    a. Identify local expertise,
    b. Identify nearby infrastructure (which includes railways, which apparently also have fiber),
    c. Invest in literacy, both internal and external,
    d. Connect with provincial and federal representatives and
    e. Plan and expand internet infrastructure.

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October 9, 2020

Regional District of Bulkley-Nechako
Gerry Thiessen - Chair
Email: gerry.thiessen@rdbn.bc.ca

Dear Gerry Thiessen

Re: Expediting Construction of Telecommunication Infrastructure, British Columbia

In response to COVID-19, we see a greater focus to ensure all communities, including rural communities, have access to high speed internet service. As a result, we see companies, local governments and other organizations expand or build new network infrastructure, often with the support of government funds, to help connect rural residents and businesses.

To quickly deploy new communication infrastructure – towers, fibre optic cable and/or antennas on existing infrastructure – often additional resources are required to design the infrastructure, secure land rights, coordinate environmental and archaeological assessments and obtain all required permits, including a public consultation process, when required. **We are reaching out to raise awareness that Cypress Land Services has the experience, resources, and expertise to help support a quick network deployment.**

Since 2013, representing major telecommunication companies, Cypress Land Services has secured land rights for hundreds of telecommunications sites in British Columbia. With our extensive experience and expertise, we offer the following services to support your network deployment teams:

- Negotiation of land rights for and preparation of all legal documents including Lease, license, Right of Ways and Form E for registration with Land Titles, Right of Entrance and access approvals
- Working with client engineering teams to prepare preliminary engineering plans for towers, antenna installations and/or fibre /wireline routes
- Turnkey Acquisition & Design Services to provide clients with construction ready projects.
- Provide program and project management expertise, to ensure projects progress on time and in budget
- Prepare government funding broadband applications
- Work with local government to obtain approval and permits
- Coordinate and manage a public consultation process, if required
- Present projects to government staff and/or Mayor and Council

If you are seeking support for new communication infrastructure projects, please reach out to my at 604 719 4469 or email james@cypresslandservices.com or Chad Marlatt at 604 910 7310   or email chad@cypresslandservices.com for more information.

Kind Regards

James Shaw - President

cc. Curtis Helgesen - CAO curtis.helgesen@rdbn.bc.ca