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Chair

Mr. Dan Ruimy

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● (1545)

[*English*]

The Chair (Mr. Dan Ruimy (Pitt Meadows—Maple Ridge, Lib.)): Welcome, everybody. Again, apologies. We had votes, and that's what happens.

We're in meeting number 93 of the Standing Committee on Industry, Science and Technology, and we are continuing our study on broadband connectivity in rural Canada.

With us today, we have, from the Canadian Cable Systems Alliance, Jay Thomson, CEO; and Ian Stevens, board member, chief executive officer of Execulink Telecom.

From the Institute for Local Self-Reliance, we have Christopher Mitchell, director, community broadband networks, by video conference from Minneapolis, Minnesota.

From SSi Micro Ltd., we have Dean Proctor, chief development officer.

Finally, from Xplornet Communications Inc., we have C.J. Prudham, executive vice-president, general counsel; and James Maunder, vice-president, communications and public affairs.

You will each have up to seven minutes to do a quick presentation, and then we'll get into our line of questioning.

We are going to start with Canadian Cable Systems Alliance.

Mr. Thomson, you have the floor.

Mr. Jay Thomson (Chief Executive Officer, Canadian Cable Systems Alliance): Thank you, and good afternoon, Mr. Chairman and honourable members.

My name is Jay Thomson, and I am the CEO of the Canadian Cable Systems Alliance, or the CCSA. With me today is a member of our board, Ian Stevens, who is also, as mentioned, the CEO of Execulink Telecom based in Woodstock, Ontario, in southwestern Ontario. It's our pleasure to be here today to discuss our recommendations to increase the reach and quality of critical broadband infrastructure in underserved parts of the country.

We are well placed to speak to this issue. CCSA represents more than 110 independent companies providing communications services all over Canada. Our members serve hundreds of thousands of customers in about 1,200 communities, generally outside of large urban markets. Our members connect Canadians who may not otherwise have access to the Internet or TV or telephone services, because they live in areas where the larger players in the industry have not invested. In many rural areas of the country, our members are the only terrestrial providers of these services.

As committee members can see in our written submission, we have a number of concrete recommendations that we believe will help improve broadband connectivity in rural Canada.

In these remarks, I'll highlight three of those recommendations.

First of all, broadband service should be viewed as critical infrastructure that is on par with electricity and roads. The government has made important progress with its $500-million connect to innovate program, but more funding is needed. In today's digital economy, it is vital that the government invest in the country's broadband infrastructure, just as it does for other physical infrastructure deemed critical for the well-being and future of our communities.

It's also important to recognize that Canada's very remote areas are not the only ones that need government investment in their broadband infrastructure. As Ian can attest to, based on his own experience, sparsely populated regions very close to major markets will also often require government intervention to get the broadband services they need.

Our second recommendation is to structure broadband funding programs so as to leverage the resources and networks that local communication service providers have already established. Local providers throughout Canada have tremendous value to add in extending broadband services to rural areas. Because they are on the ground in their communities, it is local service providers who best understand their communities' needs. More importantly, it's local service providers who are the most motivated to provide the connectivity that their communities require to survive and thrive. Why is that? It's because they are members of those communities too.

In order to support smaller local providers in rolling out broadband, the government, in our opinion and recommendation, should adopt a simplified application and reporting process for smaller projects. As successful entrepreneurs, local providers know how to stretch every dollar they might receive from government to achieve the best results. If you overburden their limited administrative resources with lots of complex paperwork, you'll knock them out of the game before they even have a chance to lace up.

The third of our recommendations that we'd like to highlight today is that broadband funding should not just support capital projects but should also help to cover ongoing network operational costs and upgrades. To date, federal funding initiatives have subsidized only direct capital outlays. However, it's equally important to ensure that the networks built with those funds are sustainable.

To that end, funding programs should seek to ensure that backhaul or transport services are available to smaller operators at reasonable, affordable prices. Likewise, funding programs should help defray the ongoing costs of access to support structures such as hydro poles. This hydro pole issue is a very hot topic right now, because the Ontario Energy Board has recently approved huge increases to the pole rates that CCSA's members will have to pay in that province.

For the smaller companies that serve low-density areas, where there are substantially more poles between customers than in urban areas, such increases have a disproportionate negative impact. They create a situation whereby, even with capital funding support, the increased operational costs may foreclose a small company's ability to build a sustainable broadband network.

As such, those kinds of rate increases run directly counter to the government's objectives for its broadband funding programs.

Thank you, Mr. Chair and committee members, for undertaking this important study and for inviting our association to be here with you today. We'd be happy to answer your questions.

● (1550)

The Chair: Thank you very much.

We'll move to Mr. Mitchell from the Institute for Local Self-Reliance.

You have up to seven minutes.

Mr. Christopher Mitchell (Director, Community Broadband Networks, Institute for Local Self-Reliance): Thank you very much, and thank you for the invitation. I'm honoured.

We have a rather unique body of knowledge and study regarding local governments' participation in various investments. My focus is on local government policies around broadband. From the Institute for Local Self-Reliance in Minneapolis, I run a program called “community broadband networks”. This came about largely because we felt that the Internet—we recognized this about 12 years ago—was becoming essential for local businesses, local economies, and quality of life issues that communities were concerned about, but local governments had no ability to compel existing providers to meet the needs as they saw them. We were looking at ways in which local governments could ensure that they had the networks they needed, so we focused on a number of different areas.

I should say that it's a somewhat limited number of governments that have done this sort of thing. We're tracking local government networks in the United States and Canada. There are also quite a few in Sweden. I've had a chance to visit with some of them. Other than that, there aren't very many. This is something that is somewhat specialized and unique to certain nations.

One of the things we've been most known for is what local governments are doing in terms of building their own networks. Two common examples that we cite are Wilson in North Carolina and Chattanooga in Tennessee. For the purposes of talking about rural broadband, I wanted to bring them up, because their goal is not only to serve themselves, which they are doing on a city-wide basis, offering gigabit services, very high-reliability networks, and low prices that are competitive. They're really doing a tremendous job by all measures. They also have ambitions to serve their neighbours. They would very much like to serve the rural areas around them, but have been prohibited from doing so by state law.

We do have other states, such as Minnesota, in which we have local governments such as Windom—it's in what I think of as farm country in southwest Minnesota—which has built a network for itself. It's about 4,000 people. They expanded that to serve 10 towns near them and the farm country in between, a model of where local governments that were focused on regional improvement have been able to first serve themselves and then expand to nearby areas.

One of our areas of study is more relevant to rural, and that is the rural electric and telephone co-operatives we have, which have brought telephone and electricity to much of the rural United States. An example that I would cite is a surprise for many people; in North Dakota, the vast majority of the territory is covered with fibre optics. In fact, if you're on a farm in North Dakota, you're far more likely to have high-quality Internet access than if you're in one of the population centres. That was done almost entirely with co-operatives but also with local, independently owned companies that reinvested in their communities because they are local communities, much like Jay Thomson was just discussing in terms of the incentive for locally based entities.

Those are cities that have built their own networks. Those are co-operatives that have built their own networks. Our electric co-operatives are just getting into this. We're tracking 60 electric co-operatives that are offering service to businesses and residents outside of their own purposes for keeping the grid stable. We expect that to be well over 100, and possibly approaching 150 by the end of this year. For comparison purposes, we have about 800 or 900 electric co-operatives in the United States. That's a substantial jump.

The final thing we tend to study in terms of local governments and these co-operative solutions is partnerships. Here again we have something that's directly relevant to Canada. One of the companies that has one of the most promising partnerships is Ting. It's a company run by Canadians and staffed by Canadians, and it operates almost entirely in the United States of America. It has partnered in five different local fibre optic investments, building fibre optic networks. It also has a wireless division that resells wireless service.

In the city of Westminster, Maryland, which I've written a report about, Ting has partnered with the city to bring universal coverage at affordable rates. It's a balanced partnership that we've identified as a model in which both the government and the private sector share in the upside and the downside. We've seen too many things in the United States that are called partnerships where one side really dominates the risks and the other side dominates the benefits. I think that's something to be concerned about. Ting has offered a model for being willing to share in both.

● (1555)

The reason I bring them up is that they are interested in finding Canadian cities to work with, so it's directly relevant.

I will note one final thing. In preparing, I was looking at some of the briefs. First of all, there's a lot of very good information on the record. wanted to amplify something, which is the need for both last-mile and middle-mile connectivity.

We have seen programs that have focused too much on a middle mile, or backbone in different parlance, connecting one geography to another geography, rather than distribution fibre, on the mistaken notion that with enough backbone fibre, one will spur investment in last-mile services. In our experience, that does not happen. The economics of last mile are challenging. They are so challenging that having a more robust middle mile does not change them significantly.

I strongly concur with the many people who have stated that we need to be focused on both in order to solve this challenge in rural areas.

I'm hoping to be helpful in answering questions relevant to my background.

Thank you very much.

The Chair: Thank you very much.

We're going to move right to SSi Micro.

Mr. Proctor, you have up to seven minutes.

Mr. Dean Proctor (Chief Development Officer, SSi Micro Ltd.): *Merci beaucoup*.

I want to thank the committee for this opportunity to contribute to your study and to discuss plans to improve rural and remote area broadband connectivity.

If I could just take a quick second, I have a very dear friend in the room, Adamee Itorcheak, who I wasn't certain would be here today. Adamee is at the back, and he's the founder of Nunanet Worldwide Communications, the first Internet service provider in Nunavut. He was also a member of the National Broadband Task Force back in 2001, so I know he's extremely interested in the work of the committee.

I'm thrilled that Adamee is here today.

I'll provide a brief overview of SSi and our operations in the north, but my focus is on the policies we believe will sustainably improve connectivity for all of Canada's remote and rural areas. Those policies will let local talent contribute their ingenuity, creating truly Canadian-made and northern-made models that can be exported around the world.

First and foremost, we believe that to deliver attractive and affordable rural and remote area broadband, the policy framework must support developing local talent, which rests on three well-established principles: one is competitive and technological neutrality; two is a focus on funding backbone transport infrastructure; and three is open access for all service providers to the backbone and gateway facilities. I'm happy to say that ISED and the CRTC have already begun to implement many of the needed policy changes since this committee began its work, but more needs to be done. It's increasingly apparent that government and industry must defend the good work and changes already under way.

What is SSi? We were formed and headquartered in Canada's north. We're a family company, launched 28 years ago by Jeff and Stef Philipp. Our roots go further back, to the Snowshoe Inn, from which SSi has its name. The inn was founded 54 years ago by Jeff's parents in the community of Fort Providence in the Northwest Territories.

We specialize in remote area connectivity, we provide broadband, mobile, and other communication services across Canada's north, and we've also carried out projects in Africa, the South Pacific, and Southeast Asia. Our mission is to ensure that all northern communities have access to affordable, high-quality broadband, and to achieve this we've invested heavily in infrastructure and facilities. In 2005, we built and launched the Qiniq network to provide affordable broadband to all 25 communities in Nunavut. Investments by the federal government covered part of the initial cost of satellite transport and infrastructure. Since then we've co-invested over $150 million into Nunavut infrastructure, and we have paid over $10 million to our community service providers. Our local agents were our key to success in each one of our 25 communities.

In September of 2015, we announced a $75-million investment in Nunavut's broadband future, and this includes $35 million from ISED's connecting Canadians program for the purchase of satellite capacity. We've directly committed over $40 million for additional satellite capacity and network-wide upgrades to both the backbone and last-mile infrastructure throughout the territory.

Qiniq, the broadband service, improved the lives of Nunavummiut by providing access to cost-effective broadband. This was previously impossible. Before 2005 most users had no access to broadband infrastructure. With Qiniq, for the first time every Nunavut community had affordable Internet access for the same price, immediately allowing consumers access to the digital age.

Now, with our latest investments, we're delivering another first. As of February 1, just last week, Clyde River and Chesterfield Inlet residents have access to mobile voice and data services for the first time. Until now the vast majority of Nunavut has had no access to mobile services. We've completed the SSi mobile deployment throughout the territory, and all residents will soon benefit from the latest generation 4G LTE technologies—we're doing phased rollouts to the communities—with the same service level and pricing available in every community.

The new 4G LTE system enables high-performance broadband mobile voice and data, telemetry, video conferencing, and more. It's also offering for the first time ever a less expensive and more versatile alternative to the old wireline phone. To make the service unique, we've eliminated long-distance charges between communities, bringing families closer together.

Our company is on the front lines. We know and live daily the positive impact of information technology, and we see the positive impact of our investments for consumers, organizations, and small business in Nunavut. Unfortunately, over the last few years the ever-increasing rates of data transfers, and the corresponding demand for scarce backbone capacity, presented significant challenges to Arctic communication systems.

● (1600)

Where once we made great strides to close the gap, we're once again seeing the digital divide deepen between Canada's north and the south of the country.

Investing in better last-mile technology is an essential step to improving rural and remote area connectivity. To be clear, SSi has deployed last-mile infrastructure into every Nunavut community that can deliver the same quality of broadband and mobile service that you can find in downtown Ottawa. My iPhone 6 and iPhone 7 work in each one of the 25 communities as well as they work here.

To ensure that northerners receive the full benefit of these new last-mile technologies, significant additional investments into wholesale backbone capacity are urgently needed. In this regard, December 2016 was a pivotal month for the evolution of telecom policy in Canada. New policies are recognizing that broadband access is essential and they establish major program changes and new initiatives for public investment in broadband backbone infrastructure.

These advances are important, and we believe they need to be recognized, promoted, and protected by this committee. Together these policy initiatives build a path that will let local talent shine by refocusing away from exclusive support to the phone companies, which despite a century or more of public support have failed to deliver broadband to many Canadians in remote and rural areas. The challenge now for all of us, this committee included, is not to repeat or perpetuate past mistakes. If there are to be public investments into rural and remote-area communications infrastructure—and we believe there should be—the investment process must be transparent, and the funded infrastructure needs to be open to all in order to support competition, further investment, innovation, and consumer choice.

On December 15, 2016, ISED launched its connect to innovate program. For the first time, public funds were dedicated to developing open-access backbone networks, to be made available on a wholesale basis. Susan Hart, ISED's director general for the program, spoke before you in November.

SSi wholeheartedly supports the open-backbone approach. When public investment focuses on backbone infrastructure and requires that it be made available on a wholesale basis, it encourages further private investment and innovation in the last mile by companies such as ours. This leads to a choice of technologies, service providers, and opportunities for consumers.

It's important. As SSi has proven in Nunavut and elsewhere, quality local access networks can be built in remote areas, largely due to advances in technology, in particular wireless and IP technologies.

Moving ahead, the CRTC also presented before you in November, not only noting that broadband is now an essential service, but also establishing a significant new fund, the rules of which are still being worked out. But as is often the case, the devil is in the details. We have to ensure policies are enacted as intended, and that inertia and neglect and incumbency do not bring us back to an end-to-end monopoly where incumbent phone companies receive all the public funding, restrict competitor access to their publicly funded networks, and thereby squeeze out further investment and consumer choice.

We'd hope that you would also recognize how the three principles I mentioned earlier are necessary to support that local talent. These principles are competitive and technological neutrality; funding focused on the backbone; and open gateways, meaning that all local service providers must be offered open and affordable access to backbone connectivity.

In summary, though we've come a long way, much still needs to be done to improve remote and rural area connectivity in Canada.

I will cut this short.

● (1605)

[*Translation*]

I would like to thank the committee for the opportunity to make my presentation before you today.

I will be very happy to answer your questions.

[*English*]

The Chair: Thank you very much.

Finally, we're going to move to Xplornet, with Ms. C. J. Prudham.

Ms. Christine J. Prudham (Executive Vice-President, General Counsel, Xplornet Communications Inc.): Good afternoon. I'm C. J. Prudham, the executive vice-president, general counsel for Xplornet Communications Inc. With me is James Maunder, vice-president of communications and public affairs.

Thank you for the invitation. We are delighted to be here today to participate in the committee's study on rural broadband connectivity. At Xplornet, it's a subject we understand very well. Our business was founded over 10 years ago with a simple mission: to make affordable, high-speed broadband available to every Canadian. This is what drives us.

Xplornet is today the eighth-largest Internet service provider in Canada and the only one in the top 10 exclusively focused on rural Canada. We are truly national, serving over 350,000 households, or over 800,000 Canadians, every day in every province and territory. We want rural Canadians, wherever they choose to live, to be able to affordably connect to what matters.

Therefore, our goal at Xplornet is to deliver the Internet to our rural customers at the same speeds that Canadians receive it in the largest cities. As we announced in 2015, Xplornet will deliver packages with speeds of 100 Mbps by 2020 throughout our service area—double the CRTC's target.

As was noted by others before this committee, Canada's geography requires a diversity of technologies—fibre, fixed wireless, and satellite—to connect the country. All of these technologies can achieve the results.

Canada's population density averages just under four Canadians per square kilometre. Yet today, virtually all Canadians, 99%, have access to Internet connectivity, and that includes 95% of rural Canadians. Canada is ranked fourth in the G20 for per capita broadband connections that exceed 15 megabits per second.

We got here through hard work, innovation, and unprecedented private sector investment. In the last five years alone, Xplornet has invested over $1 billion in its network, focused entirely on bringing better service to rural Canada. No doubt other providers will share their figures.

Now that coverage exists virtually everywhere in Canada, the question becomes how to keep up with consumers' growing needs for speed and data. The introduction of 5G networks and the Internet of things is transforming our everyday lives. In 24 months, the average Canadian household will have between 15 and 20 devices connected to the Internet.

Mr. James Maunder (Vice-President, Communications and Public Affairs, Xplornet Communications Inc.): So how does rural Canada keep pace? We believe there are three key ingredients to success. The first is private investment. The second is targeted public investment. The third is spectrum.

The first issue, we would submit, is for governments to create the right conditions to allow companies to continue to aggressively invest in their networks. Sometimes this includes governments simply staying out of the way. After all, the goal should be sustainable solutions where networks are economically viable to be able to make continuous private investments that are needed to meet consumers' growing demands. But in certain areas, it will also include targeted public investment. To that end, Xplornet has supported and worked closely with the Government of Canada through its various iterations of funding programs, the first being broadband Canada, the second being the connecting Canadians program, and the third—most recent—being connect to innovate.

Where most companies, including Xplornet, can agree is on the need for a robust backbone network to drive investments and capacity into rural areas. You've heard witnesses today echo that sentiment.

At Xplornet we believe the Government of Canada's connect to innovate program is a great start. Similarly, the details of the CRTC's broadband funding regime, the seeds of which were announced one year ago, are still to be determined, and we await further details on that fund. We think all providers should look forward to clarity and coordination on these programs so that we can accelerate our own investment plans.

Finally, we believe we need consistent and reliable access to wireless spectrum to fuel our networks all across the country in rural Canada. Of course, these policies are determined by Innovation, Science and Economic Development Canada.

Ms. Christine J. Prudham: We point out that in recent years the explosion of data consumption by Canadians has been the same in rural Canada as it has been in urban Canada. Our rural customer usage across our LTE network doubled in the last year and exceeds over 100 gigabits per month, which is in line with what the CRTC says is the average for all Canadians. Over 60% of that usage is video, which again is in line with the national averages.

While mobile data use has grown significantly, too, the fixed home connection continues to be the workhorse that carries the heavy data uses like Netflix and Apple TV, yet all significant spectrum allocations made in Canada in the last five years have focused on mobile needs. There has not been an allocation designated for fixed wireless broadband. How do we meet growing the needs of consumers if one primary input has not changed?

We strongly believe that there should be a long-term spectrum strategy to allow rural broadband to keep up. Capacity and speed of rural broadband cannot keep pace without additional spectrum.

The cornerstone of this strategy must be a plan that strikes a balance to allow mobile broadband and fixed rural broadband to expand together to meet consumers' needs. One cannot come at the expense of the other. Rural consumers cannot be left behind.

In summary, Xplornet believes three critical factors must be met in order to create the right conditions for rural broadband connectivity.

Governments at all levels must allow the private sector to do what they do best, invest in our networks, driven by consumer demand. Xplornet is proof positive there is a business case for investing in rural Canada.

The second is targeted government investment for fibre transport and backhaul services that can help accelerate broadband deployment in rural areas. This support should be encouraged when it is coordinated and subject to consultation with the private sector.

And finally, rural Canada must be given access to the spectrum it needs to keep pace with urban Canada. It is the oxygen that breathes life into our rural networks.

Thank you again for the invitation to appear here today. We would be pleased to take any questions.

● (1610)

The Chair: Thank you very much, everyone, for your presentations.

If we keep our questioning tight and our time tight, we should be able to complete a full round.

We're going to start right away with Mr. Graham.

You have seven minutes.

Mr. David de Burgh Graham (Laurentides—Labelle, Lib.): Thank you.

I have a variety of questions for a variety of you. I'll start very quickly with Mr. Thomson.

With regard to your comments about hydro poles, I just wanted to say thank you for making those comments. We have a project in my riding where the single biggest issue they have is the 46,000 hydro poles they have to inspect, and it's the lion's share of the connect to innovate program, but I don't want to dwell on that too much.

I really want to talk to Chris Mitchell.

I met Will Aycock and Brittany Smith from Wilson, North Carolina recently, and I think you know them. They recommended that I speak to you, so I'm very happy to have the opportunity to do so. Thank you for being here.

You mentioned that a lot of states are making it illegal or effectively illegal to create community broadband. Can you dive a little bit more deeply into that?

Mr. Christopher Mitchell: Yes. We've had a strong push ever since the movement for regulation went from a monopoly-style regulation to competition. There's been a fight in most of our states about the role of local governments in that. The records suggest that the federal Congress meant to include local governments as competitors, but since then, some states have decided they'd rather not have that. Fewer than half of our states have limited local governments doing so, but about 20 states have limitations.

Mr. David de Burgh Graham: In North Carolina, what I learned was that it's now illegal, for example, for a new service provider to not make money from the first customer, and this is the kind of tool they're using to limit us. They're not saying you can't do it, but they're throwing up roadblocks. Who is driving these roadblocks?

Mr. Christopher Mitchell: It's definitely the large cable and telephone companies. Some of the small cable and telephone companies also have concerns about local governments getting involved, but this legislation is almost always a result of the big ones.

Mr. David de Burgh Graham: What do you recommend to Canada to avoid that happening?

Mr. Christopher Mitchell: I certainly think that the examples we're seeing from Olds and Campbell River suggest that we need to see more freedom for local governments to experiment with this where it's appropriate. In our experience, local governments do not take on this very large, challenging task unless there's a strong need, because a) they'll be voted out, and b), it's a very difficult prospect, and local governments typically have enough problems without trying to take on something new like this.

We don't think it's appropriate to tie local hands at all.

Mr. David de Burgh Graham: I have one final question for you about Broadband Communities Summit in Texas. Is it useful for us to know about that?

Mr. Christopher Mitchell: Yes, I think so. I think it's a wonderful event. There are often Canadians there. I've met many Canadians, specifically from Alberta, over the years there, so it's certainly something that they felt is worthwhile going to.

● (1615)

Mr. David de Burgh Graham: Thank you.

I want to move over to Xplornet for a moment.

You talked about 350,000 households being connected and said that 95% of rural Canadians have a connection available. I don't know a lot of happy Xplornet customers in my riding, so it's nice to have an opportunity to chat with you.

Recently I received an ad in the mail for Xplornet service, which offered me 25 gigabits at 5 megabits per second for $40 for the first six months and then $65 a month after that. If you look at it really carefully, in the fine print it says “up to” 5 megabits, and for $100 a month, “up to” 10 megabits.

Can you tell me the real speeds your customers get today?

Ms. Christine J. Prudham: You're speaking to the advertising issue. The reason why the words “up to” appear is quite common amongst most providers. Because the Internet is a shared resource, it's impossible to guarantee it unless you have a dedicated line. Consequently, that's why you frequently will see that choice of language referring to “up to”.

The specific speeds that your average customer receives are dependent upon where they are within the network and which particular platform they're on, etc. We do have all of those statistics, but we have over 2,000 towers, so it's a bit of a broad range.

Mr. David de Burgh Graham: That's fair for the towers, but I'm talking about the satellite service, which is what we have in my area. There is no tower service available through Xplornet where I am. There is through other WISPs.

The complaints I get from citizens coming to my office—because Internet is the biggest issue in my riding—are that Xplornet will have a 5 megabit or 10 megabit advertised service, and when you test it, on a very good day you might get 1 megabit. I'm wondering if you have any comments on that.

Ms. Christine J. Prudham: Again, I'd have to know which satellite platform. I'm happy to provide you, as a follow-up matter, with information on the specific beam over your riding. I don't know off the top of my head.

Mr. David de Burgh Graham: Okay.

If your clients go over their quota, do you throttle or do you cut them off? Or do you charge more? How does that work?

Ms. Christine J. Prudham: We give the customer the choice. It has been very important to us to allow customers to choose how they control their household expenses.

The choice we give customers is that if they go over their monthly data quota, they can choose to purchase additional data that way. Or if having a fixed price is more important—and this has certainly been surprisingly important to a number of our customers—we do slow down their speed at that point.

It's up to them to choose which one they would prefer.

Mr. David de Burgh Graham: Fair enough.

You've talked about the thousands of LTE towers thereabouts around the country. How much ground-based service do you now have?

Ms. Christine J. Prudham: I'm sorry. I don't understand the question.

Mr. David de Burgh Graham: Xplornet was built on the satellite network, but you're now moving to a WISP style of service in a lot of the country. Can you tell us where you're at with that?

Ms. Christine J. Prudham: We've been in business now since the 2004-05 range and we have been, since at least 2007, fifty-fifty between satellite and fixed wireless, and we continue to be today. We're balanced between the two. We're actually quite unique in North America in that sense.

Mr. David de Burgh Graham: Is that concentrated in one part of the country?

Ms. Christine J. Prudham: No. Actually, we have fixed wireless deployments. The biggest ones are in Ontario and Alberta, but we also obviously have them in Quebec, and we have now added Saskatchewan, New Brunswick, Newfoundland, and are working on P.E.I., and Manitoba.

Mr. David de Burgh Graham: Fair enough. Thank you.

I have only a few seconds left so I'm going to go very quickly to you, Mr. Proctor. You talked about the fact that your iPhones work in Nunavut in all the different communities up there. Are you also providing cellular service yourself?

Mr. Dean Proctor: That is a cellular service. It's our network, so we—

Mr. David de Burgh Graham: How is that working?

Mr. Dean Proctor: It's working extremely well.

Mr. David de Burgh Graham: I don't mean that way, but how does it work? You are a cellphone provider up there, as opposed to reselling or repeating the signal for other services.

Mr. Dean Proctor: We have our own infrastructure. That's right.

Actually, as I said, last Thursday we launched mobile service for the first time, but it's more than just as a WISP: it's actually as a CLEC. A few years ago, we forced open the local market, which I think was the last regulated, protected monopoly in the western world, and we're now a competitor to Northwestel, offering local phone service, but across our own mobile network. Beyond that it's a 4G LTE network, so it's going from 0G to 4G.

Mr. David de Burgh Graham: I'm out of time, so thank you very much.

The Chair: We're going to move to you, Mr. Eglinski. You have seven minutes.

Mr. Jim Eglinski (Yellowhead, CPC): I'll start with Mr. Mitchell.

You may be aware that the Canadian government currently maps services to homes through a hexagon model. We usually pick one house to get the access speeds to see if that meets the requirement, but we could have 10 or 12 houses around there that don't meet the same standards. In the United States, what kinds of mapping models do you use?

● (1620)

Mr. Christopher Mitchell: We use census blocks, and those are irregular shapes, typically. We have roughly the same approach. If one [*Inaudible—Editor* has service, then it's considered served. There's an open matter at our Federal Communications Commission regarding whether they should mark whether an area is entirely served or partially served, which would provide an entity that ambiguity in some respect.

Mr. Jim Eglinski: You were saying earlier that most of the part of the country you're in is fibre-fed.

Mr. Christopher Mitchell: Most of North Dakota is. I thought that would be more relevant for Saskatchewan and some of the provinces.

Mr. Jim Eglinski: What is the level of service? How many megabytes would you be getting on the average?

Mr. Christopher Mitchell: It varies. Roughly half is gigabit, I believe. Others may not offer gigabit, but are gigabit-capable with basic upgrades.

Mr. Jim Eglinski: Thank you.

Moving over to Xplornet, Mr. Maunder, I didn't catch all of your comments, but you said something about government and interfering. Is government interfering with the ability of your company to provide service and expand your customer base?

Mr. James Maunder: What we had identified were three core principles. I'll start at the end and I'll work my way forward. The third is access to spectrum. The second is targeted public funding. The first, as you rightly mentioned, is governments at all levels just getting out of the way of the private sector and allowing it to continually and aggressively expand its network.

The pace of innovation and transformation in the telecommunications sector is quite remarkable. Over the last five years, Xplornet alone has invested in excess of $1 billion in our fixed wireless and satellite network. Other witnesses and other providers will come before you and share with you similar figures. Where the industry was at even five years ago relative to where it's at now demonstrates that the transformation that has taken place from then to now is quite remarkable. The $1-billion investment is what we shared with you; others will do the same.

Mr. Jim Eglinski: Well, we are government, and I'm curious to know some of the problems we're causing. Is it bureaucracy loaddown, or what?

Ms. Christine J. Prudham: If I may, sir.

Mr. Jim Eglinski: We're trying to fix that.

Ms. Christine J. Prudham: Xplornet is in many respects lucky to be here today. We started out as a very entrepreneurial little company in Woodstock, New Brunswick. We were completely privately funded, and off we went. The CRTC issued what was known as the "deferral account decision". That decision, which essentially put over $300 million in the hands of Bell Canada to compete with little Xplornet, almost crushed us. We could not raise private capital for 18 months after that event. Essentially, we thought that was the end of us.

We were very fortunate that Bell didn't build out on the proposed schedule. It's well known in the public record that there were significant delays, and that incredible delay was pretty much what saved our company at the beginning. Otherwise, handing over $300 million to compete with what was then a very tiny company would have definitely driven us out. Undoubtedly, if we put too much money into areas where people are already willing to privately invest, we can drive out private money. I'm sure that's not your intention.

Mr. Jim Eglinski: Thank you.

Mr. Proctor, when you're in your individual community, how are you feeding it to the residences? Are you doing it by fibre optics, or are you doing everything remotely?

Mr. Dean Proctor: We use fibre. In the case of Nunavut, it's actually government fibre. The Government of Nunavut is one of our clients, and they have built out their own fibre ring. We're delivering it across their own fibre to their buildings. With consumers, small offices, home offices, it's all wireless. That began back in 2004-05. We built our broadband wireless—it's called WiMAX. We've evolved that to 4G LTE and 2G GSN. It's all wireless. The speeds that come across it are phenomenal, certainly well in excess of the CRTC's 50 down and 10 up objectives. We can deliver much more than that in the last mile; our problem is the backbone.

Mr. Jim Eglinski: I'm going to go back to you, sir, since I think you're about as rural, as remote, as we can get.

Mr. Dean Proctor: My Saskatchewan accent is coming out.

Mr. Jim Eglinski: Referring to the last mile, broadband technologies, what is the best thing we can do for rural Canada? What are the best systems to use?

● (1625)

Mr. Dean Proctor: It depends on your use. It depends on what you want to be doing. We're obviously advocates of wireless technologies, mobile wireless, 4G LTE, soon to be 5G. If you're talking about an individual connection to a home, to a business, fibre is obviously the cream of the cream, but the question is whether it's practical for all areas.

One of the things we're finding in a lot of the small communities is that with 4G LTE we can deliver well beyond what any individual needs. It's an incredible technology. The answer is that it all depends. That's the classic engineering answer, but it's true. If you're able to deliver fibre, that's great. I would suggest to you, though, that for the vast majority of rural and remote areas, wireless solutions, fixed or mobile—and our preference is mobile—are the best way to go.

Mr. Jim Eglinski: What is the cost comparison for, say, fibre versus what you're doing? Is it a lot more expensive?

Mr. Dean Proctor: Fibre is much, much more expensive, yes.

Mr. Jim Eglinski: Thank you.

I think I've just about used up my time.

The Chair: Mr. Masse, you have seven minutes.

Mr. Brian Masse (Windsor West, NDP): Thank you, witnesses, for being here.

I'll start with Mr. Mitchell, but I would ask for this to go around.

Obviously the decision in the United States to abandon net neutrality has a significant impact on, I think, even government policy to spend resources to connect and how to connect. There is obviously going to be a change of behaviour and marketing access to people's information now that won't be based on just the net neutrality model. It can, quite frankly, be vulnerable now to a specific type of relationship that is different from what it's had in the past.

I don't expect you have an answer for it, but what does that do for public policy people like me, who believe in net neutrality but who are now faced with—especially here in Canada, because the pipelines and the effect also come from the United States—the defeat of some of the principles? This service has been characterized as being like highways, but the reality is we're now building toll roads to certain destinations.

If you have any comments about that, I'd be interested in hearing them, starting with the U.S. side and Mr. Mitchell, and then the Canadian after that.

Mr. Christopher Mitchell: I'll sum mine up with just two quick thoughts, because it's very deep. The first is that about 100 million Americans can only get broadband Internet access from a large provider that is expected to begin violating network neutrality. So it's of deep concern and we're seeing local governments taking more initiative to think about building their own networks or conditioning the use of certain assets such as conduit upon maintaining a neutral network. States are increasingly making procurement decisions to require neutral networks. If Montana is purchasing a link, it will have to get it from a company that is offering a neutral network.

The second piece is simply that there is push-back, and I don't think we'll see this abandonment of net neutrality last for very long. Whether under this administration or the next one, I suspect we'll see a much larger coalition forming to defend the Internet more broadly. I think that's a welcome change, so that gives me hope for all range of areas.

Mr. Dean Proctor: Net neutrality is a tough subject. Our company members are Internet pioneers. It would be fun if you actually came and met some of the originals from the company. We're strong believers in the openness of the Net.

There's another way to look at this one as well, though, which is with regard to the control of the content. It's one thing to block certain content or to privilege certain content, but in the case of Canada, where you have one company in particular that is a controller and owner of a large part of the content that could be delivered across the networks, we have to be worried about the other side, which is to make certain that all carriers—we're a carrier—have access to content that may be controlled by other carriers. So I'd flip this one back a bit to the extent that there are restrictions on open access, and we have to make certain that the content itself is available to all providers as well. I'll just throw it in a little different direction.

Ms. Christine J. Prudham: I think Xplornet's view has been that we don't own content. We are not overly concerned about that because we respect subsection 27(2) of the Telecommunications Act and believe all carriers should respect subsection 27(2), which deals with this issue, obviously, in Canada.

Consequently, our primary focus continues to be providing the service that allows people their choice of content, if that helps.

● (1630)

Mr. Jay Thomson: We come at this question from an interesting perspective, because our members are Internet providers, but they're also cable television companies and IPTV companies, so they distribute TV programming services. It's a big part of their business.

Most of those programming services are owned by Bell, Rogers, and Quebecor, which are also the biggest ISPs in the country. Our fear is that, absent net neutrality, they would be in a position to favour their own networks over ours for distribution of those services.

Mr. Brian Masse: There's no doubt, and that's part of the reason for the defence of net neutrality. It really becomes the eye of the beholder as to what's really important content or not.

At any rate, with regard to the next spectrum auction, maybe I'll go in reverse order for responses, if I have time.

How do you feel about the terms and conditions on the spectrum auction that might be more involving the final mile that is asked? It's nice to talk about, and I know the catchphrases in terms of governments staying out of the way and then knowing when to help. It's always told to stay out of the way when the lucrative aspects of business are there in front and the low-hanging fruit. It's asked to get out of the way for that, but then it's always requested to partner for the more difficult aspects. How do you feel about having terms and conditions that might be more specific on the spectrum auction that's coming up?

Maybe I'll go in reverse order, if I have time. Let's start with Mr. Thomson.

Mr. Jay Thomson: Our members don't have spectrum, generally. They'd like it, but they can't afford it. The licence areas typically are way too large and encompass too many potential customers for our members to be in a position to bid for any of those licensed areas. The auction process is very complex. It's not really designed for the smaller player at all.

Mr. Brian Masse: That could be written in the terms and conditions, who actually gets—

Mr. Jay Thomson: We'd certainly like to see that.

Ms. Christine J. Prudham: Likewise, Xplornet is certainly concerned about the upcoming auctions. As we stated in our presentation, we're concerned that there hasn't been a recognition of the fact that it's needed for rural broadband. On the economics of serving downtown Toronto, Jay is quite right when he speaks to the fact that, the way the map of downtown Toronto is drawn, some of the worst broadband servicing in Canada is actually right around Toronto. It's because the spectrum is trapped in the Toronto licence. If it's worth seven million people in that area, you're buying it to serve the downtown Toronto folks. You're not serving Uxbridge, Stouffville, Milton, or some of those areas.

Yes, we think there needs to be something specific, something addressed to it.

The Chair: We're out of time, but both of you could give a very quick answer.

Mr. Dean Proctor: We intervened in favour of the spectrum set-asides for the smaller players, the new entrants. We intervened in favour of a much lower opening price, because that has been a real hurdle for us in past auctions. In outlying areas where it's very difficult to build out a network, the last thing you want to be doing is spending a fortune buying into the spectrum, so we supported that.

The one area where we're probably in agreement with Xplornet and would like to see some adjustments is where one can bid, but also the size of the tiering. Maybe the tiering needs to be adjusted to favour more rural and remote area auctions.

Mr. Christopher Mitchell: I cannot add anything, so please move on.

The Chair: We're going to move to Mr. Bossio for seven minutes.

Mr. Mike Bossio (Hastings—Lennox and Addington, Lib.): Thank you, everyone, for being here today. This is a great discussion and a lot of valuable information is coming through it.

I'd like to start with Mr. Mitchell. As you know, the CRTC has just created a fund to help fund Internet as an essential service. They're trying to determine how best to utilize those funds. In the U.S., you have something similar, the RUS fund, the rural utilities service fund. You were mentioning that there are 800 to 900 electric co-ops. I believe all these co-ops can access the RUS funds in order to be able to build out the network, including the one there in North Dakota.

● (1635)

Mr. Christopher Mitchell: That's right. In North Dakota, it's mostly telephone co-operatives, but that RUS fund is what builds electricity to all of rural America.

Mr. Mike Bossio: The CRTC funds are going to be essentially the same type of fund. If you had to give advice to the CRTC on how best to implement a fund such as the RUS fund to maximize the impact, what advice would you give them?

Mr. Christopher Mitchell: For the various funds that are available, which should also include the connect America fund, the rules are very complex, and as has been stated earlier, unfriendly to local firms on that basis. Larger companies that have many lawyers have much easier access to them. So to the extent that rules can be kept simple, that is important.

A second piece of information that I think is important is not to direct them solely to unserved areas, if you differentiate between unserved and underserved. To have a viable business model, it's important to allow a mixture. If someone is applying for funds, they shouldn't have to only serve the worst, hardest-to-serve areas. They should be able to mix that in with perhaps some higher-density areas or a population centre in the nearby region, rather than solely being able to serve the unserved. That's something we have not done in the United States, whether it's in state or federal programs, because of the power of incumbents to block any ability to use subsidization to compete.

Mr. Mike Bossio: Thank you so much for your help with that.

On spectrum, Jay, you had mentioned that it would be nice to have.

And C.J., you mentioned that it would be nice to be able to use all of it all the time.

I wonder what your thoughts are around dynamic spectrum allocation, where instead of just having focused blocks of spectrum —you have to buy it all, use it all, all the time, you're paying for it every second of the time—you have a dynamic spectrum allocation where you could dynamically reroute the spectrum depending on the needs of the different entities that are willing to rent that spectrum at a given time. That way, you could very quickly turn over spectrum on an ongoing basis.

Can you give me your thoughts on dynamic spectrum allocation?

Mr. Ian Stevens (Chief Executive Officer, Execulink Telecom and Board Member, Canadian Cable Systems Alliance): I can take that.

I see that as very problematic, trying to coordinate it between all the operators. Perhaps a different thought could be this. When you license spectrum, typically the conditions of licence are that 50% of the population is serviced within a period of time, but there's no requirement for the unserviced area—the area around the outside of Toronto where it's not serviced—that the service provider then must service it. Perhaps you could take that spectrum back and reallocate it out to other operators that would be willing to commit to servicing those areas.

Mr. Mike Bossio: Yes, but the technology does exist now to be able to actually do full-blown dynamic spectrum allocation where you use it when you need it and you pay for it when you need it.

Mr. Ian Stevens: I can't comment on that.

Perhaps you can.

Ms. Christine J. Prudham: We actually have looked into this in some of the matters in the U.S. I think it's Google that actually runs the computer system that would allow it to work in the United States. My understanding is that it has not been a success, and there are a number of operators that are quite unhappy with it, because the way it works essentially is that you can't plan for your peak spectrum. So how do you know how much to invest in your network when you never know how much spectrum you're going to have in order to service your customers?

It creates a real problem. It essentially forces you back to the equivalent of working in the 900 spectrum or the 2400 spectrum, which is unlicensed, because that's effectively what happens. You are contending constantly for spectrum. When it's not there, great, you have no interference and you can continue to operate. The second there's interference from somebody else, all this is doing is essentially, through dynamic spectrum allocation, is saying, “Okay, one of you gets away with not receiving interference; the other one, however, is off the air” because they didn't get that particular item.

Mr. Mike Bossio: Mr. Mitchell, I see you nodding your head. Would you like to make a comment?

Mr. Christopher Mitchell: I would just say that I think many of the small providers are hopeful that those bugs will be worked out, because many of the small providers are fighting very hard in a current fight related to that spectrum and whether it's going to be designed in a way that's more accessible to big carriers or small. They view that as being quite important still.

Mr. Mike Bossio: I know another big issue for the small carriers is the cost of the spectrum, even just to rent it. In the U.S., I think they rent their spectrum at a gigabit. If my memory serves me correctly, it's about $1,650 for 10 years to be able to rent that, whereas in Canada it's $13,000 a year for a 1-gig PoP. Is that the case?

● (1640)

Mr. Christopher Mitchell: I'm afraid I don't know how to answer that question.

Mr. Mike Bossio: Okay, I just thought I'd try to get that on the record.

Finally—and unfortunately I'm running out of time and this is a big question—Xplornet gets beat up a lot because you're one of the biggest players in rural areas, and the rural areas are underserved, and you've had to oversubscribe in order to try to meet the huge need, and the fact that you don't have fibre to your PoPs. A lot of times you're doing hops from one antenna to another to another, and you can only have an antenna within a 25-kilometre radius, right? You can't have another one because of interference.

What is the solution to that, that you see?

Ms. Christine J. Prudham: You could have sat in our network meetings in terms of how you've done a great job of summarizing it.

The answer from our perspective is investment in the backbone element of it, which is extraordinarily important and why we have been so enthusiastic about the connect to innovate program. As the sheer volume of data increases, there's more and more pressure on the tower. You can try to deal with how you get that last mile to the customer by adding an extra ring of radios or something like that to build the capacity, but then you just have a whole pile more data at the tower. How do you get it back to the Internet connection? That's fundamental.

Mr. Mike Bossio: But it's not just the backbone piece of it. It's going that mid—

Ms. Christine J. Prudham: It's that middle—

Mr. Mike Bossio: It's going that mid-level to the access point, because you need it at the PoP.

Ms. Christine J. Prudham: Exactly.

Mr. Mike Bossio: Every tower needs to have fibre. Correct?

The Chair: Thank you.

Mr. Lloyd, you have five minutes.

Mr. Dane Lloyd (Sturgeon River—Parkland, CPC): Thank you for coming.

My first question is directed to Mr. Thomson.

You alluded to, in your testimony, a number of regulations and costs inhibiting the ability of companies, particularly smaller companies, to be competitive, for example the costs of hydro, the hydro pole legislation. And you alluded to paperwork. Could you elaborate on what government regulations are getting in the way of smaller companies getting into the field?

Mr. Jay Thomson: The reference I made to paperwork was primarily with respect to the application process for the funding programs. We have a live example of the cost of complying with requirements.

I'll turn it to Ian.

Mr. Ian Stevens: We were successful with the connecting Canadians project. We had several projects on the go. It took us about 80 man-hours every quarter to do the reporting to get the funding released, and for us, the project was large enough that it made sense. But some of the CCSA members, when they look at smaller projects.... When you're investing 80 man-hours to get your funding back out, you're starting to run an equation. Does it make sense to apply to a funding mechanism when there's that much overhead to maintain it? And that's just on.... During the project there's also a very burdensome application process for projects. Again, you need a certain size of project to make it make sense.

Mr. Dane Lloyd: Thank you.

This question goes more to Xplornet.

Something I've read is that when you have very engaged communities that work together saying they want broadband, and work with private companies and local governments, it seems to be a really successful model of getting broadband into rural areas. Can you describe some situations where Xplornet has been involved with communities to bring in rural broadband?

Mr. James Maunder: Xplornet has a considerable amount of experience working with governments at all levels on infrastructure projects. A good example is a project that Mr. Bossio would be quite familiar with, and that's our relationship with the Eastern Ontario Regional Network, EORN.

They brand themselves as a novel partnership, and it really is novel in the sense that mayors from the region of eastern Ontario circa 2010 felt that there was a real lack of broadband infrastructure in their part of the province and they banded together. They solicited funding from the federal government. They worked with a number of Internet service providers, Xplornet being one of them, to construct the last-mile infrastructure in the region. My colleague C.J. can speak to some of the details in terms of the number of towers that Xplornet built. It predates my time at the company.

Xplornet was a partner of EORN. Five years later, EORN has a built network, has transferred the ownership of those assets to Xplornet. To this day, Xplornet continues to work with EORN, providing rural broadband service to residents in the region.

● (1645)

Mr. Dane Lloyd: Mr. Proctor, can you describe the impact of accessibility to broadband in northern communities, such as Nunavut? How is this impacting people's lives?

Mr. Dean Proctor: That's a wonderful question. I should almost bring Adamee up to answer it.

Imagine a world where school doesn't go far enough. Often kids have to be sent away to finish high school. In a world where there are no banks, no bricks and mortar, in a world where.... As a friend of mine described it, we're not dealing with a remote area, we're dealing with isolation. This breaks down the barriers. These are the roads that cannot be built to these areas. The communication system is, in fact, the way out. It's the way to communicate, to have contact with the rest of the world. It's a way to complete education, to continue education. It's a way to sell as well as to buy merchandise online. It's a way to carry on banking and government services, and it's—something that I'm sure this entire committee is concerned about—digital democracy. It's really been earth-changing.

I saw all this come through back when we were launching broadband 10 or 15 years ago, but we're seeing it again now with the mobile. In each one of the communities, we go through business readiness testing. We have friendly users making sure the network works. Everybody has an obligation to fill out survey reports.

Some of the stories coming in make you want to cry—they really do—just in terms of the joy and the open feeling that people are receiving from having technology. They know full well it exists, they just don't have access to it. A lot of our friendly users already have their own iPhone and they use it when they're down south. We don't have to give them phones; we just give them a SIM card. The thrill that comes out of that is earth changing. It really is. It makes us feel very good to be able to do it.

Mr. Dane Lloyd: Thank you.

The Chair: We're going to move to Mr. Baylis.

You have five minutes.

Mr. Frank Baylis (Pierrefonds—Dollard, Lib.): Thank you, Chair.

I'd like to focus a bit more on how we can help the small companies compete, if I understand it, on two fronts. First of all is funding. It has been alluded to that the government is making one program, and the expectation of that program is so heavy that it works great for these big deals, but when it comes down to little chunks, it's a lot of paperwork or it's too complex.

Am I understanding that right? I think both you, Mr. Proctor, and you, Mr. Stevens, spoke about that.

I'll start with you, Mr. Proctor.

Mr. Dean Proctor: I would echo the concerns over the amount of paperwork. At the same time, I profoundly believe that a recipient of funding needs to disclose what that funding is being used for. I might go a little further and say that it's one thing to report, but it's another thing to make sure those reports are made publicly available. We may need to do a little more on that one. I know that's not what you're looking at on that, but reporting is a necessary requirement for public funding.

I would be much more concerned about what I call a bait and switch. If somebody receives funding to build out an open-access, “available on a wholesale”, backbone network, and then decides they don't want to open it up or they're going to make it too difficult to open up, that's what I'd be worried about.

Mr. Frank Baylis: Has that happened?

Mr. Dean Proctor: I certainly hope not.

We are concerned that parties are receiving funding under connect to innovate—

Mr. Frank Baylis: That may or may not open up the backbone.

Mr. Dean Proctor: That may or may not open up the backbone.

Mr. Frank Baylis: Let's get back to this question.

Mr. Stevens, it's one thing if I have a ton of paperwork and I'm going to get $100 million, but if I have a ton of paperwork and I'm going to get $1,000, somewhere the math doesn't add up.

Is the government putting out programs that are too paper-heavy for small companies to get proper funding?

Mr. Ian Stevens: I think the connect to innovate program, as Mr. Proctor alluded to, is fairly well balanced in terms of the reporting requirements. When you're getting big funding, it's nice to know that taxpayer dollars are being nicely shepherded.

There's a business case point; it's probably around $75,000 to $100,000. If the totality of all your projects is smaller than that, then it probably doesn't make sense.

Mr. Frank Baylis: But is it enough for the small people to get involved? That's what I'm asking.

Is it a barrier, or is it fair? Is it balanced right now?

Mr. Jay Thomson: It has definitely been a barrier—

Mr. Frank Baylis: In the past.

Mr. Jay Thomson: —for a number of our members to get to participate in connect to innovate. The paperwork was too complex, and they would have had to hire an outside consultant.

Mr. Frank Baylis: There are very small companies that just don't have the....

If we're looking for solutions and we want small companies to go after small areas, we need to make sure we make it easy for them to get on board.

● (1650)

Mr. Jay Thomson: That's our message, yes.

Mr. Frank Baylis: I want to take the same line of thought now to the topic of spectrum.

I'll start with you, C.J.

I understand that the size of the spectrum when it's being sold covers too much. Let's say it encapsulates much more than I need. I can't afford to buy this whole area, and I'm not interested in serving this whole area. Someone else buys it that might have a great city involved, but then all the rest....

Would a solution be to sell spectrum off in smaller chunks, and/or could you also elaborate on the entry price, please?

Ms. Christine J. Prudham: There are some great examples from various ridings represented around this table. One that always springs to mind is Beach Corner near Edmonton. Calgary is another example, and the Toronto licence is a great example.

When you look at a Calgary licence, for example, you'll see that it goes all the way to the B.C. border. It's not really Calgary; it's everything to the west of Calgary, all the way to the border. The Toronto licence goes well beyond and covers the entire green space that surrounds that area.

Mr. Frank Baylis: Calgary is a great example. So, I want Calgary. I'm a big player. I buy Calgary and it costs a ton of money. I'm busy with Calgary for the rest of the time, and I don't care anything about going west of the border.

Ms. Christine J. Prudham: Such as Jasper, Olds, etc.

Mr. Frank Baylis: Whereas, your company or someone else may say that little bit is interesting to them, but they can't get it because it's been sold.

Ms. Christine J. Prudham: Exactly.

Mr. Frank Baylis: A solution would be to be cognizant of this when these boundaries for spectrum sales auctions are being done, such that we don't grab an important city with rural....

Ms. Christine J. Prudham: We looked at it a number of years ago and tried to make some suggestions about how you could look at basically the 12 largest cities in Canada and carve those licences a little differently than they are today to take out a lot of the green space.

Quebec City falls into that, and Ottawa also falls into that category.

Mr. Frank Baylis: So if you happen to be around a big city but not in it, you're really in trouble.

Ms. Christine J. Prudham: Exactly.

That's why I alluded to Milton, which is one of my favourite little problem areas that we've been trying to deal with.

Mr. Frank Baylis: It's just outside of Toronto.

Ms. Christine J. Prudham: They are literally right at the end of the runway of Pearson International Airport. They're up on top of the escarpment. They can see the big city lights and have some of the worst service in the country, because they're in that Toronto licence and there is just no way of serving them.

Mr. Frank Baylis: The big guys have been too busy working Toronto.

Ms. Christine J. Prudham: And are not interested in low density.

Mr. Frank Baylis: Does anybody want to comment on that? Mr. Thomson.

Mr. Jay Thomson: One of our proposals is a use-it-or-lose-it approach so that after a certain period of time, if—

Mr. Frank Baylis: What's the time frame?

Mr. Jay Thomson: I don't necessarily have a time frame for it.

Mr. Frank Baylis: Put a time frame—

Mr. Jay Thomson: A reasonable time frame to roll out....

Mr. Frank Baylis: —that if it's not being used within a certain time, we can claw it back.

Mr. Jay Thomson: Yes, and make it available to other players.

The Chair: Thank you very much.

[*Translation*]

Mr. Bernier, you have five minutes.

Hon. Maxime Bernier (Beauce, CPC): Thank you, Mr. Chair.

[*English*]

I want to go on, on these questions on spectrum. I'll give you an example. A couple of years ago, Quebecor bought a lot of spectrum and were not using it, so they decided to sell a part of that spectrum and they made a lot of money from it. If spectrum is available for Calgary, as you said, and more than Calgary, and a corporation doesn't want to serve an area other than Calgary, why not offer to buy part of the spectrum? Can you do that? Is it very difficult to do?

Mr. Ian Stevens: There's a process whereby you could subordinate the licence, which I think you were talking about, which Quebecor did. There have to be willing partners on both sides. Quebecor was willing to do that in many areas, and London's my favourite area. London is well serviced, but I guess the doughnut around the doughnut hole isn't. Bell and Rogers are not willing to service or subordinate those licences to a third party because they have met the condition of licence as it was written when they acquired the spectrum.

Hon. Maxime Bernier: The answer would be to change the rules of the auction. What would be the best for you, to set aside for sure a smaller area or spectrum, as you just said? What would the best rules be to help you buy some spectrum?

Mr. Ian Stevens: From my perspective, it would be to be able to participate in the auction upfront, but also a horizon perhaps two years afterwards, where if the spectrum is not being used the licensee could be required to give it back, and by requiring to give it back they would also be incented to subordinate it before they had to return it. It could be an effective way to ensure that the spectrum, the scarce commodity that's out there, is being used in the rural areas.

Hon. Maxime Bernier: Okay.

Do you have anything to add?

Ms. Christine J. Prudham: That would be consistent with our experience too. Likewise we have approached various larger carriers, trying to get some of those doughnuts, shall we say, and there generally isn't a willingness to do so. Their argument is always that we need it for the transportation corridors. That's why we said in our presentation you really have to say there has to be something for fixed connections to the home.

● (1655)

Hon. Maxime Bernier: Thank you.

The Chair: Mr. Longfield.

Mr. Lloyd Longfield (Guelph, Lib.): This committee visited Washington last year. I'm just looking at my notes from Washington.

Mr. Mitchell, when the spectrum was being discussed at that time, there was mention of the Rural Spectrum Accessibility Act of 2017. Also, on harmonizing the spectrum between Canada and the United States, where the 600-megahertz spectrum aligns with Europe so that phones don't roam seamlessly, and the 700-megahertz spectrum is harmonized, which is good for 5G. Are you aware of the Rural Spectrum Accessibility Act of 2017 and how it's working? How do we harmonize between the two countries, so if we're driving a new autonomous car, or we're working with farm equipment, we have some kind of harmonized system between the two countries?

Mr. Christopher Mitchell: I'm afraid that when it comes to spectrum policy, I'm much more limited. It's not a good use of your time to listen to me on that.

Mr. Lloyd Longfield: Okay, but we have Canadian companies working in the States. Have you heard of any issues between Canada and the States, in how the companies are operating?

Mr. Christopher Mitchell: No, I have not. I've done extensive business with Ting every time I've called a call centre; it's located outside Toronto. They have an incredible customer service reputation. I think that's in part due to management, and partly due to people. It's been very successful.

I tend to work with the local groups. I'm aware of Ting because they have been very focused on Internet policy more generally.

Mr. Lloyd Longfield: I'm going to share my time with Mr. Bossio. I know he's itching to get into more technology. It's great to have him subbing today.

Ms. Christine J. Prudham: Forgive me, Mr. Chair, could I answer part of that question?

Mr. Lloyd Longfield: Please do.

Ms. Christine J. Prudham: I think you raised a very important point there that may have been missed. You spoke about the 600 and 700 harmonization versus some of the higher level spectrums. It is incredibly important at the 600, 700, and 800 level that it be harmonized because of the cross-border potential for interference. We've seen some of that occurring in even the 2500 right now. There's an issue with Sprint in southern Ontario as a result of those issues. That becomes less and less of a factor the higher up you go because of the propagation characteristics.

When you start to get into the spectrums that are more commonly used for rural broadband, like your 3500s up to maybe the 4200 range, your propagation isn't that big. There are going to be very small areas where you need to harmonize along the border as a result.

Unfortunately, Windsor's always probably going to be a bit of a problem, but throughout the rest of the border, you're probably in pretty good shape because of the limited propagation.

Mr. Lloyd Longfield: Great. Thank you very much.

Mr. Mike Bossio: [*Technical difficulty—Editor*] in the fact that there is consideration right now that it might be given over to the local sector. I think it would be important for you to comment on the impact that could have on rural broadband.

Ms. Christine J. Prudham: Yes, we were highly concerned about that. A couple of years back, there was a suggestion that the urban portion of it, which was very liberally defined, would be taken back and converted into mobile. At that precise moment, I can tell you that was a heart-stopping moment for our company that day because it represented 62% of our fixed wireless potentially being shut off.

We all talk about the same thing, about being in those doughnuts around the cities. That's exactly where a lot of the folks in rural are who need the service. You're quite right; if you take that back to make it mobile, we've got nothing to do it.

Mr. Mike Bossio: Just to put emphasis on that, the Toronto bit of Bell Canada's 3500 goes all the way over to my riding in eastern Ontario, east of Belleville, between Belleville and Kingston, so it is a huge area, just to put that into perspective.

Finally, once again, if we can go back to our earlier conversation around microcells and bringing fibre to the PoP, [*Inaudible—Editor*] what percentage of rural areas, if we go with that model, that network design model, do you think you'd be able to provide with that 50 to 100 megabit download? For example, if you were to look at my riding or any riding in eastern Ontario, because of Beam EORN, because of your experience there, do you think you'd be able to achieve 100% coverage in those areas if you were to go to a microcell and offload from the larger antennas?

● (1700)

Ms. Christine J. Prudham: Yes, we do believe we can make significant differences by doing that. Over the years we've looked at one of the questions asked about costs. Obviously, the less dense the population, the higher the cost to provide. In places where the densities are generally over four households per square kilometre, you're absolutely talking about situations where fixed wireless would be appropriate. For example, a good chunk of southern Ontario, certain parts of southern Quebec, and huge chunks of Alberta are all in these areas. The answer is yes. As you start to do those sort of new 5G technologies with the microsites, based on our mapping, a very high percentage of the population would be covered.

Mr. Mike Bossio: And CTI is what tips it over the top for you to be able to justify it financially.

Ms. Christine J. Prudham: Absolutely, because obviously, the faster the speeds you're offering and the more data that's going through, the bigger the backhaul and backbone you need behind it in order to achieve that.

Mr. Mike Bossio: Thank you.

The Chair: Thank you very much. I feel like I should have doughnuts here or something. I mean, we keep talking about doughnuts.

That will bring our questions to a conclusion. We will suspend for two minutes and then we will go back in camera to discuss future business.

I would like to thank our guests for coming in today and giving us a lot of great information.

[*Proceedings continue in camera*]