

# Standing Committee on Industry, Science and Technology

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## **EVIDENCE**

Thursday, February 1, 2018

Chair

Mr. Dan Ruimy

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● (1535)

[English]

The Chair (Mr. Dan Ruimy (Pitt Meadows—Maple Ridge, Lib.)): Welcome back, everybody, to the Standing Committee on Industry, Science and Technology. This is meeting number 92. Which hockey player is 92?

Nobody?

Mr. Steven Finlayson (NetWisper Inc.): Crosby.

The Chair: Crosby, there we go.

Pursuant to Standing Order 108(2), we are continuing our study of broadband connectivity in rural Canada.

Today we have two witnesses. From Rigstar Industrial Telecom, we have Brent Grisdale, founder and vice-president of business development. Then from NetWisper, we have Steve Finlayson.

Did I get your name right?

Mr. Steven Finlayson: You got it.

The Chair: Okay.

The Clerk of the Committee (Mr. Michel Marcotte): It's "whisper" without an "h": NetWisper.

**The Chair:** Okay. We're going to start with Mr. Grisdale. You have about seven minutes to give us a presentation, then we'll move on to NetWisper, and then go into questions.

Go ahead, sir, the floor is yours.

Mr. Brent Grisdale (Founder and Vice-President Business Development, Rigstar Industrial Telecom): First of all, thank you very much for the opportunity to address the Standing Committee on Industry, Science and Technology. I always just want to call it Industry Canada, so you'll have to forgive my age.

Rigstar Industrial Telecom was originally called Rigstar Communications, and we were an oil and gas upstream technology provider for drilling rigs. We formed in 1998, and as we moved along, in order to provide services to our clients, we constantly had to find ways around the ILECs to provide services and communications services, where we could control the outcome. The end result of that was that Rigstar bought a data centre, partnered with Verizon. We bought an out-of-business asset called FlexiCom that was on rooftops in downtown Calgary. It was using the old Harris radios, and 2.4 gigahertz, I think, that had blistering speeds, at the time, of three megabits per second. Of course, back in 1998, that was cutting-edge technology. I'll come back to why I bring that up in a moment.

We have a small WISP called ABnet, Alberta Networks, that is east of Calgary. This might sound a little crass. We didn't know a lot about wireless infrastructure at the time, and we wanted to learn and cut our teeth on clients who were paying \$39.95 a month as opposed to \$5,000 a month. We have been operating that since 2003.

We've recently rebranded as Rigstar Industrial Telecom to reflect our overall non-dominant carrier status within Canada. We provide services now that are voice. We provide entertainment packages to remote camps. We provide satellite. We provide private LTE networks. We build towers and we create infrastructure.

We're heavily involved with the Van Horne Institute here in Calgary. We also attend the conferences around the same types of discussions around broadband and the rural communities.

The rural communities right now are really struggling, as everybody knows, in getting the speeds up. My presentation will be around what we can do differently from what we're currently doing to service those.

Whenever any new technology was introduced, and this was the same for Canada, the country was carved up into individual sectors. In the original case it was divided up amongst the provinces. Those provinces had exclusive rights to build the infrastructure within the province, and they had the ability, under those guidelines, to recover their capital infrastructure costs, get cost certainty to their investment, and everybody was serviced to the point where twisted pair was provided to every farm. It's known as the last mile, of course, because that's basically the longest distance a signal will travel over copper wires, about a mile.

I will just say that I think the privatization of telecom has been a disaster in Canada. Any time I drive by three towers side by side, I know that one is Rogers, one is Telus, and one is Bell. It just drives me crazy, the amount of money that has been spent to provide threefold communications infrastructure to people in Calgary, whereas rural communities do not get that same service because the economic return is not guaranteed or in any way planned.

This leads to ad hoc programs, like "let's throw \$500 million at it." But even when you throw \$500 million at it, you're asking me to design the network to submit to the Government of Canada in the hope that the grant might come through. The return on investment is not even guaranteed for the design work that we put in, nor for the meetings we put in. We sit down with the counties and we do all kinds of work and infrastructure to support these people, and then it's not approved, and they come to us and ask the simple question, "Why?" Well, the simple answer is that if there's no infrastructure and no capital return laid out by the governing body, then the risk is not worth the capital investment and nobody will make the investment.

In Alberta, this has really sprung up, as the counties now have taken the lead and have decided as they know they cannot get these services from the major telcos or the ILECs. They've now resigned themselves to the fact that to get the service that they and their clients need, they're going to have to fund this themselves. With the help of the Government of Canada, they're allocating their capital projects to build tower infrastructure instead of building a road. They're using creative ways to meet their own needs because the needs are not being met by the free market. The free market is flawed, just flawed.

We're working hard to help those communities leverage the capital grants, but my recommendation at the end of the day, in a really simple form, is that you can use the county outlines for who and where the services are being recommended and you allocate that infrastructure build to one company. Those companies build that infrastructure. They run it for a period of, say, five years. Once their capital has been returned, it's opened up to the free market. Then you have a natural amalgamation of services, not unlike what happened with the cable companies when cable first came out.

Paramount, of course, was the owner of the coax cable technology. The CRTC would not let a foreign entity control a technology such as coax cable for deployment and told Paramount that they needed to get that into Canadians' hands. Paramount turned to the theatre owners across the country and asked who wanted to have the rights for the technology in their area. All the Paramount owners who owned theatres either accepted the technology and went to the banks to invest in the technology or not, but they had defined areas, even in Calgary. When Calgary first started this, the south was Shaw Cable's, and the north was for Rogers', because there were two Paramount theatres in Calgary.

There's been a natural amalgamation of those services over the last 30 years. Now you have cable TV service for everybody, including from Shaw, for where those defined areas were. The cable companies have recovered their capital, and they're doing great.

That concludes my presentation.

**●** (1540)

The Chair: Thank you very much for that.

We're going to move on to you, Mr. Finlayson. You have up to seven minutes.

**Mr. Steven Finlayson:** We're a new company in our infant stages here. We fired up about a year ago. We do rural wireless Internet, fixed point to point. We started up on a budget. We're still on a budget.

Like everybody else, what we see in these areas is that with the current options, rural Internet is unusable in most cases. Actual speeds aren't even coming close to the advertized speeds. Also, the coverage is not that great. We're trying to focus on that and expand our coverage.

There are a lot of things that could be done on the government side to initiate this and to make things a little easier for getting rural Internet out there. An example would be expanding beyond the five gigahertz range. That's the free range that we and most other wireless Internet service providers operate in. That would have a big benefit.

On grant money, we've been digging around for the past year and just been banging our heads against the wall trying to find out where this grant money is. From everyone we've talked to, we just get a runaround. We just get "talk to somebody else, talk to...". It just never ends. That's why I contacted our MP, John Barlow, and it's the reason we're at this meeting today.

There are a lot of issues with rural Internet, as we all know. I think that if we all work together in the industry, it's going to be more beneficial in the long run. The big telcos have their hub solution, which is a great solution in most cases, as long as the towers don't get overloaded, but they do have the data caps. At NetWisper, we don't do data caps. We focus primarily on customer service. We just try to keep our speeds to what we have advertised them as and keep our customers happy.

That's about it for me.

The Chair: Thank you.

We're going to go right into questioning. We're going to start off with—drum roll, please—Mr. Baylis.

You have seven minutes.

Mr. Frank Baylis (Pierrefonds—Dollard, Lib.): Welcome, gentlemen. Thank you for joining us.

Mr. Grisdale, I'll start with you. You clearly have an in-depth knowledge of how things have evolved both with the cable companies and the free market with cellphones. You stated that it doesn't work, and you just left that statement hanging. Do you have thoughts on a different way? Was there something you wanted to express in that regard about what you think would work?

**●** (1545)

**Mr. Brent Grisdale:** I think what you're asking me about is defined areas, using the counties as an example. When you're dealing with a new country, say, like.... I've been around this business for 20 years, and this is an example that was brought up by a friend of mine. It's about an African country where they were just deploying cellular technologies.

They divided the country into five segments and allocated the carriers to look after just their segment until they fully and completely had built that network out. Once they had returned the capital on the project and the services were rendered really efficiently, they opened it up to where you could buy the neighbouring service or you could buy this other one and get the amalgamation. There is a problem there, in that they didn't think about making sure that roaming agreements between the five carriers were carried and agreed upon beforehand. Because they didn't, people would end up carrying two or three cellphones, depending on what part of the country they were in. Nothing is perfect, as you know.

Here's my really big cautionary tale about right now and where we are. As a private company, you always have to make this decision: when do I invest in the next level of technology so that I'm going to have the longest opportunity for return on my capital investment before it goes out of style? We've seen that 4G really has not been successful. Everybody knows that 5G is 20 times faster than 4G, so they say they'll wait until 5G comes out before they're going to invest in their network, prior to 3G.... I completely agree with that. It makes sense, right? I don't want to spend money and then have 18 months where I have to do a return on investment. It just doesn't work unless I have some predefined time period of capital investment, and then the recovery of the capital.

Other than that, honestly, I don't think it works anywhere else. If it did, the private industry would find a way to do it and they would build it. That's what private industries do. If they've existed for 25 years and they haven't built it, they haven't figured out a way to do it.

**Mr. Frank Baylis:** You've touched on an important point, which is probably the difference between rolling out the phone system and rolling out the cable system. There's a tremendous rate of change in Internet speed, access, and demand, as we even saw when Netflix came on just a few years ago and changed the demand curve tremendously as well.

You've just alluded to my next question. Do you see a flattening out of the technology? Let's say we hit 5G or what comes after 5G. Are you seeing that your customer base is slowly being satisfied, or are you still always chasing your tail trying to keep up?

**Mr. Brent Grisdale:** No, I don't see that the technology will be always chasing its tail.

There are two levels or flows of technology that have been going concurrently. The first is the increased bandwidth. We've been able to increase the amount of bandwidth that we've been able to shove down the pipes and provide to the people. My God, when I got 3G, I remember in 1998 reading an article about Korea launching their five-megabyte phone service. It was a huge flop because nobody used it except for making phone calls. Nobody had developed an app or a smartphone yet. There was this infrastructure that was built way ahead of what the technology, on the one side, was able to use. Then the phone came in and overwhelmed the broadband capability for how much was required.

The parallel I'm talking about is that at the same time as you had speeds increasing, you had people working very hard on codecs to reduce the video compression technology. They were using less and less bandwidth at the same time as the growth. As for a gigabyte of

data, I don't know, but I can't imagine right now how one would use a gigabyte of streaming data. I just can't imagine it. I think that if you had a gigabyte up and down, there would just.... I can't imagine what you would use to take up that much bandwidth. I just can't imagine it.

**●** (1550)

Mr. Frank Baylis: Thank you.

I don't have much time, but I'll drop that same question over to you, Mr. Finlayson. Do you see technology catching up? Do you have any thoughts in that respect as you're building your networks?

**Mr. Steven Finlayson:** I think it's something that we're always going to be battling. As things develop on the Internet, a web page that worked on dial-up years ago.... Everything evolves so much. I think we're always going to have to stay at the forefront. Falling behind is not going to give people, the end-users, the results they need.

**Mr. Frank Baylis:** You mentioned some of the challenges in getting grant money. Have you had those challenges with respect to expanding the capabilities of your network? Has that been a challenge?

Mr. Steven Finlayson: Expanding coverage has.

**Mr. Frank Baylis:** Not the speed, but just with expanding the coverage, what happened that prevented your from getting access to that money?

**Mr. Steven Finlayson:** Everywhere we phoned, we were referred to other people to call or email. We were offered loans and those kinds of things, but we were specifically looking into the grants that were being offered.

Mr. Frank Baylis: Is it the federal grants we're talking about here?

Mr. Steven Finlayson: Yes.

Mr. Frank Baylis: Thank you.

The Chair: Thank you very much.

We're going to move to Mr. Eglinski.

Mr. Jim Eglinski (Yellowhead, CPC): Thank you. I'd like to thank both gentlemen for coming out today and speaking to us.

Mr. Grisdale, first of all I want to say thank you to Rigstar, because I used your facilities many times over the years as I travelled through northern British Columbia and Alberta in my different occupations. I always looked for where you guys were because I knew I could get out and talk to somebody, so thank you for that. I know that you do have a specialty in that line.

A number of counties have submitted briefs in response to this study because they're very concerned about their coverage for the residents in their communities. One solution—and I think you spoke briefly on this—is for the municipalities or the counties to build their own infrastructure, which takes a fair amount of money. Maybe they can get part of that, as somebody said earlier, through infrastructure grants and, instead of building roads, build towers or systems.

Here's my question for you, sir. You talked about private industry doing that versus the counties and said that you didn't think it would be economically feasible for private industry. I wonder if you could just expand on it a little more. I know that in some areas such as Parkland County, on the eastern side of my riding, we've had companies come in. They offer a service with so many megabytes, and that's great until they load the system down with so many customers to try to make them pay for it that the only time you get those megabytes is at about four o'clock in the morning, and then hopefully you're the only one on it.

I wonder if you could expound on that and see whether you think it would more viable for the counties or municipalities to do it as an infrastructure-type program or more viable for private industry.

Thank you, sir.

Mr. Brent Grisdale: Sure. To address your last point first, that's what happens when you invest in a technology and then the technology goes past, but you don't have the capital dollars recovered from the technology to be able to invest back into the technology to give the service. I will spare the federal government any rants on the Alberta SuperNet, and we'll just move on from there.

There has been discussion, and it has been acknowledged that high-speed Internet connectivity is a utility as opposed to a service. When we use terms like "utility" or "private company", we say that a utility is a group of people that acknowledges that this is a fundamental service in order to exist, co-operate, or participate within the economy of the area. The government acknowledges that and then says, "Okay, private industry might not be able to afford it, and that's where we step in."

Why I think counties are a good place to start for the investment of these capital dollars is what we've seen in the United States, with the threat to net neutrality, with the inability to have privacy and your private information. At what level do you want to have that privacy, that control of the network, and that infrastructure in the hands of the people? In the remote communities, my view is that if you want to successfully transfer all of those economic benefits to rural ridings, that rural riding itself—the county, whatever it is—has to be in control of the technology, with the support of the government agencies, both federal and provincial.

**●** (1555)

Mr. Jim Eglinski: Okay.

How's my time going?

The Chair: You have about two minutes.

Mr. Jim Eglinski: I have another technical question for you.

Mr. Brent Grisdale: Please say something about spectrum.

Mr. Jim Eglinski: Okay. About four years ago, I was watching a fracking operation just below the Fox Creek area. Rigstar was providing the communications. I was thoroughly amazed that as we were trying to drop a plug 3,500 feet below ground, working in conjunction with people in Calgary at a remote site, everything was instantaneous. There was no lag—because there's no room to lag, as you're fully aware.

Then I go and look at a community in my northwestern area, Grande Cache, which I think you're quite familiar with, and the poor town can't get more than two megabytes. How do you accomplish what you accomplish in your remote sites? For those who've never been able to see that done, it is outstanding.

**Mr. Brent Grisdale:** Thank you very much. Because this is being recorded, I think the more times we can say "Rigstar", the better.

Voices: Oh, oh!

Mr. Jim Eglinski: Well, you're wearing their shirt—

Mr. Brent Grisdale: I know.

Well, you know what? That's simply a function of money, isn't it? Right?

Mr. Jim Eglinski: Yes.

**Mr. Brent Grisdale:** The ability to provide remote communications is there. Can a farmer out in Grande Cache afford the bandwidth? The bandwidth is the issue. I can go outside Grande Cache and do that same service for that same fracking company—no problem. If you want one megabyte, 10 or 20 megabytes, or up-and-down streaming, I can do that, because they have the money.

The value to them of having that information instantaneously is critical, because a mistake could mean millions and millions of dollars. Then you go to Grande Cache residents and they say, "I don't know if I should pay \$79.95 a month." There's a dichotomy between the two, of course. For private industry to work, no matter what it costs, they'll pay for it. It's not that Grande Cache doesn't have access to fibre. If I'm not mistaken, fibre runs right through the middle of Grande Cache all the way up to Grande Prairie, so the infrastructure is there.

I'll give you an example: the town of Wandering River on the way up to Fort Mac. I got a job at Wandering River to provide a camp with Internet. There were 20 people. I gave them 100 meg service, up and down. It was a kilometre outside of the town of Wandering River. That service was backhauled over the Alberta SuperNet. I knew that the forestry was there and I could do that work. For the town, a mile down the road and with more than three separate fibre companies running fibre up to Fort Mac—Shaw, Telus, Bell, and the Alberta SuperNet—in the ditch, they couldn't get a megabit of service in town. The service was provided by an antenna that was five kilometres outside of town, beaming in an old-technology wireless service.

It's not that the infrastructure isn't in existence and that the infrastructure isn't there; it's that the infrastructure is owned by private entities, and in order for them to bother with Wandering River, they would have to go to the handhole that is 500 metres outside of town and do 10,000 dollars' worth of work, but there are only 40 people in Wandering River.

**(1600)** 

 $\mathbf{Mr.\ Jim\ Eglinski:}$  Thank you. I think we've run out of time. I'm getting a—

Mr. Brent Grisdale: Sorry.

The Chair: Yes, you're just a bit out of time.

**Mr. Jim Eglinski:** Thank you. I wanted you to say that about the technology.

The Chair: Yes, that's why I let it go, because it was pertinent.

Mr. Masse, you have seven minutes.

Mr. Brian Masse (Windsor West, NDP): Thank you, Mr. Speaker—or Mr. Chair.

The Chair: Yes, I got promoted.

Mr. Brian Masse: Yes, a little promotion: there you go.

Even in the city where I'm from, Shaw at one point wanted \$10,000 for our cable access for satellite into a new plaza right in the middle of the city of Windsor, because we were the first customer that wanted it, so I get some of that.

To go right to the spectrum auction, here's what I want to hear from both of you. What do you want out of this next spectrum auction that's coming up? I mean, this is the public's entity. The spectrum is no different than other public assets. Unfortunately, we've seen it auctioned off by successive governments, which have received billions of dollars of revenue, and we still have the same problem we've had in the past. We've said that it's a national goal to have broadband across this country. We've received billions of dollars, with upwards of almost \$10 billion in revenue coming in from that direct sale, yet we still have the same problem. What do you think should happen in this next spectrum auction that's coming up?

That's for either one of you.

Mr. Brent Grisdale: Who were you asking?

Mr. Brian Masse: It's for both of you.

**Mr. Brent Grisdale:** Why don't you go first? I have a tendency to run on.

**Mr. Steven Finlayson:** Spectrum is a huge issue. Licensed spectrum would be nice. It's really costly in Canada compared to in the U.S., for example. It's beyond our means at this point, since we are a start-up company, but if we can widen the current five gigahertz, I know there are other areas where we could sneak around the limitations of 4.9 up to the 6.1. There is the 3.65, which is licensed but easy to get a licence for. So yes, spectrum would be awesome, because it's such a busy environment we work in.

Mr. Brian Masse: Okay, those are some good specific recommendations

You're up, Mr. Grisdale.

**Mr. Brent Grisdale:** Okay, here we go. Thank you very much for asking the spectrum question. It's the elephant in the room. It's the private versus public, and we are all familiar with the spectrum squatting that has gone on for over 15 years now.

The first thing I'd say is that if you don't use it, you lose it—except in Canada, where you don't have to use it. You you can just keep it, and keep it out of the hands of entities, small entities like mine or Mr. Finlayson's.

There are a couple of problems. The first is that spectrum is priced on twisted pair copper per 56 kilobits, and so if I get a private licensed radio, Industry Canada looks at how many twisted pair 56 kilobits of spectrum I can put into that and prices it accordingly. It doesn't even matter if it's in the remote location and I'm doing a point-to-point for a client; this is just an archaic way of pricing spectrum in the first place. I'm sure many people have said that.

The second, of course, is that when you do an auction, you're auctioning off an asset that the public has. It is no different from a barrel of oil. When we sell land or a barrel of oil, we want a royalty in return, and we want it to be utilized. If you don't use that purchased land within five years, it expires and it goes back to the auction where other people can buy it. There's nothing wrong with the spectrum auction. What the telecom companies recognized a long time ago was that with the bandwidth and how much spectrum was going to be required, they were going to need to acquire and hold on to as much spectrum as possible. It wasn't about the immediate need; it was about the future need. We can go into Inukshuk about that. I refer to the other 98 people who have met before you.

So again it comes back to what I think is allocating proper spectrum in a defined area for companies that have an opportunity to make their capital costs back, provide the service, build the infrastructure, and then open it back up to free market.

#### **●** (1605)

Mr. Brian Masse: I think one of the challenges—and you can correct me if I'm wrong—with the model we've had is that even if there is a government program to initiate it, there's no sustainable model, because the customer base just isn't there, and it may not even be renewed by people coming and going in those areas with the service once it has actually been subsidized.

**Mr. Brent Grisdale:** Why are we paying for any spectrum in that case? What's the value of the spectrum? It's nothing, because the amount of money that you can return on the capital is zero. You you have to make it affordable for those people, and for the companies to be able to provide that. It's true that you might have to subsidize the existence of that as a government entity forever. It's possible.

**Mr. Brian Masse:** Lastly, how do you both feel about net neutrality? I would like your position on that.

**Mr. Brent Grisdale:** As a private company, I'm against net neutrality. I want all of your private information, and I want to leverage the crap out of it to make as much money as possible off it.

As a private citizen, I'm for net neutrality because I do not want you to have all of my private information and leverage the crap out of me.

Some hon. members: Oh, oh!

**Mr. Brian Masse:** That's probably the best answer I've heard on net neutrality.

May I have your response as well?

Mr. Steven Finlayson: I couldn't have said it any better myself.

Mr. Brian Masse: Thank you, Mr. Chair, and thank you to our witnesses

The Chair: I think we're going to have you come back again.

All right, we're going to move to Mr. Longfield.

You have seven minutes.

Mr. Lloyd Longfield (Guelph, Lib.): It's great to get that on the record.

I'd like to focus first on Rigstar. I've done work with Ensign on remote drill rig monitoring systems. They were controlling drill rigs in the Middle East or in northern Alberta from central stations. The vehicles are looking at using 30 to 40 terabytes per eight-hour day in the upcoming world of AI and machine-to-machine communications.

With regard to the comment on the expanding technology as we get into artificial intelligence, I was in Saskatchewan last summer and I saw DOT run, an autonomous tractor. That means we're going to need a bunch of bandwidth everywhere in terms of rural Canada. If you're going to drive across Canada, you're going to need it. If you're going to work on a farm, you're going need it.

It sounds like the technology is there if you can pay the price. Is that basically what you were saying earlier?

**Mr. Brent Grisdale:** As an example, we can get colour pictures from a satellite that went by Pluto.

Mr. Llovd Longfield: Yes.

**Mr. Brent Grisdale:** Yes, if you have the money, we can do these things.

There are a couple of inherent problems. In this regard, I'd want to meet with everybody personally, because I don't want to give away all of my trade secrets, of course. That said, I will say there's an inherent infrastructure problem with the way telecommunications are designed, and the inherent problem that comes with that design is what you're speaking to, namely the assumption that all of the decisions that need to be made in an artificial intelligence or intelligent manner are a serial problem. In other words, there's a problem. I'm going to send it all the way to the head office here, and I'm going to make a decision there, and I'm going to send it all the way back. I'm going to use that bandwidth all the way through to make sure that I make that decision. That is a serial design of a communication system, and yes, we will run out of bandwidth, and it will fail.

In a parallel architecture, that's not the case. You will then have information that is relevant, and its relevance will escalate as it goes up, so that it minimizes the usage of your bandwidth. That will be where the technology advance comes that will minimize the amount of bandwidth you're thinking that you're going to need.

• (1610)

Mr. Lloyd Longfield: I've got two short follow-up questions on that.

First, I'm not sure how that management would happen when you look at parallel structure in remote fly-in communities across northern Canada. Is that still an opportunity? You've developed solutions with power supplies using fuel cells and solar wind. You've done a lot of remote work.

Is there capacity to have parallel structures in the north?

**Mr. Brent Grisdale:** Of course, and it's ideal to have parallel structures in the north. I'm working on some in co-operation with some radio manufacturers who are looking at how to address that, but I really don't want to talk about that.

Mr. Lloyd Longfield: That's fine. I understand.

If we were to look at research funding, there could be an opportunity for strategic innovation funding to develop some of those a little bit further.

**Mr. Brent Grisdale:** That is actually my only hurdle, the funding to develop the radios, and because it is fundamentally different from the thinking of how to do radios....

I'll give you an example. All Wi-Fi radios are using technology that's 25 years old, developed in Germany. I can't even remember what it's called. It was hacked years and years ago, but if you write a proprietary code for a Wi-Fi radio, people lose their minds. The security is there, however, so I will run with my proprietary code, and I'll just deal with the people losing their minds.

**Mr. Lloyd Longfield:** Right, but another solution could be out there as the previous solution was developed.

Mr. Brent Grisdale: Oh, it could be, 100%. Yes.

**Mr. Lloyd Longfield:** This is very helpful. I have just over a minute left.

There's Community Futures and its role. You have mentioned counties playing a role. We have Community Futures from coast to coast to coast. Have you worked through Community Futures organizations? Is that an opportunity the Government of Canada should be looking at leveraging?

**Mr. Brent Grisdale:** That is an excellent question. I've been working with the Van Horne Institute, and I think I can speak for my colleague here.

We're businessmen. We're quick. We can respond quickly. That is an advantage. There's nothing wrong with the major telcos. That would be a great initiative. If, for instance, we could secure funding and have a viable future, just knowing we were going to recover our capital costs, we could resolve many of these issues right away. The uncertainty of knowing whether we're going to get the funding, and then to have the announcements out of the fund that Bell is getting it is just really like—

**Mr. Lloyd Longfield:** Right. We have that on the record too. Thank you.

I have a quick question for NetWisper, and thank you for being here. Guelph has some nodes that are dormant because we can't get access into rural communities. We can't get funding to extend connectivity. Are you looking at the same problem in terms of using your company to try to get from the towers in the city into the rural communities?

Mr. Steven Finlayson: Definitely yes.

Mr. Lloyd Longfield: Do you have a solution or recommendation?

**Mr. Steven Finlayson:** Money. If it were easier to access it, then we could buy the backhaul, and we could buy the hardware to expand giving the end-users the result they are looking for. That's about all I can say.

**Mr. Lloyd Longfield:** Is there an example you are working with that has been successful that we can put on the record?

**Mr. Steven Finlayson:** Yes. We have small communities that were suffering through the other bigger providers, so we put up a tower into the area and shot them Internet. We got tons of emails from happy customers.

**Mr. Lloyd Longfield:** So it's just coordination from the government, possibly, then?

Mr. Steven Finlayson: Yes.

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

Thanks, Mr. Chair. **The Chair:** Thank you.

We're going to move over to Mr. Lloyd.

You have five minutes.

Mr. Dane Lloyd (Sturgeon River—Parkland, CPC): My question is for Mr. Grisdale. With the selling of spectrum under the previous government, the key priority was to set aside spectrum to try to promote the emergence of new players to create more competition in the mobile phone and spectrum market. I'm thinking of groups like WIND Mobile, for example. The other priority was to maximize the revenues for the Government of Canada.

We've seen billions of dollars raised for spectrum on the one hand, yet the government, on the other hand, is subsidizing increased broadband connectivity for rural areas.

Therefore, my question for you is this. In your opinion, can spectrum be auctioned in a way that would promote rural capacity? In your opinion, would the benefits of increased coverage as a result of perhaps accepting lower upfront payments for spectrum outweigh the savings from cutting the subsidies for broadband connectivity?

• (1615)

Mr. Brent Grisdale: There were about five points in there that I will address. The previous government, the government before that, and the government before that allocated at different times funding for this problem, and they came at it in different ways. In 2003, 2004, 2005, and 2006, I attended regulatory affairs conferences in Ottawa that had nothing but the regulatory lawyers. We were not a big enough player to have any impact. It was just so entertaining to watch these guys kick sand at each other, and then frequently, the next year they would actually be employed by the other guy and would be arguing the same point.

When WIND went down, I tried to buy it. I called Anthony and tried to get in there, because it was ridiculously cheap at \$350 million, and half of it was assets. I knew that with the infrastructure it had built, I could sell off the towers and fund half the cost. I poked my head up, and the deal was done within three weeks after I initiated any kind of conversation.

I said so be it; that's the way it goes. I called Mobilicity, signed an NDA, asked for the financials, and never got them. I probed and probed for three weeks, trying to get the financials, and Rogers bought the spectrum suddenly, out of the blue, with no notice at all that it was going to do that. You can imagine that I was irritated as heck about that.

Your question, though, is where's the funding got to go? Why does there always have to be funding? The spectrum is an asset. It could be allocated. It doesn't need funding. It just needs to be allocated in an—I can't believe I'm going to say this word—"appropriate" way in a manner that serves the rural communities best. Sorry about using the word "appropriate". Therefore, the real challenge out of saying there's a county and we should give the asset to the county is how the county is going to manage the service. That's actually what I'm going to the counties with when I talk to them about how they should own and build their own network. I'll manage that network for them, and then out of that, what needs to be thought about, which was alluded to before, is that we are going to have to keep feeding spectrum to keep up with the demand.

The way it is set up right now is a knee-jerk reaction to something that happened three years ago, as opposed to forward thinking about what we're going to need. If I'm a farmer, I want that spectrum now to be able to run my combines efficiently and unmanned, as unmanned vehicles. Everyone knows that's where that's going, and we're going to fight over that. That's where the spectrum is going to be needed in rural communities.

High-speed spectrum might be needed, but it could be that it's just Wi-Fi that provides that service in a local area. That's what I mean. It doesn't necessarily need to be a huge spectrum. There's all kinds of spectrum that could fit it.

**Mr. Dane Lloyd:** Thank you for that comprehensive response. Just to clarify my question, there's a balance. The government raises money from the sale of spectrum at auctions, and yet the government is also subsidizing increased connectivity in rural areas. Is there a way that we could allocate spectrum in a better way that would reduce the need for the government to subsidize increased connectivity?

Mr. Brent Grisdale: Yes.

**●** (1620)

The Chair: Be very brief, please. Mr. Dane Lloyd: That was brief.

Mr. Brent Grisdale: Yes.

The Chair: That was brief. All right. Thanks very much.

We're going to move to Mr. Jowhari.

You have five minutes.

Mr. Majid Jowhari (Richmond Hill, Lib.): Let me pick up where Dane left off.

I'll let you answer that question, actually, Mr. Grisdale.

**Mr. Brent Grisdale:** Oh, dear. You want a more comprehensive answer than "yes"?

Mr. Frank Baylis: How?

Mr. Majid Jowhari: Thank you.

**Mr. Brent Grisdale:** How? I'm sorry, I thought I was fairly clear, but I'll go through what I think again. Maybe I'm missing something.

You simply take underserved areas; you assess an area to one company; and that one company manages that area for providing spectrum. There are all kinds of checklists you can use, such as they need to meet this requirement; they need to do this; they need not too much of this, that, and the other thing, but you give single-source provision of services, and then you support those services by making sure that spectrum is available to that single source, to make sure the need is met. Then after all of it has been built, the capital has been returned, the companies are making money, and everybody is healthy, you open it up to allow people to do amalgamations or what have you.

**Mr. Majid Jowhari:** What is the current challenge to being able to do that? Is it the capital not being available, or is the capital too much?

**Mr. Brent Grisdale:** There's no spectrum. There's no access. I'll refer back to Wandering River, where terabytes of data was going by in the ditch, and they could not get 500 kilobytes up. Right there, it's just like—

**Mr. Majid Jowhari:** What can we do as a government to help small guys like you guys to do that, to get to the—

**Mr. Brent Grisdale:** It's really easy; you put a time frame on a response. There's a need. It's been identified what the need is. If you want to support the major telcos, you say you have 90 days to respond to this need that's been identified. You have assets in the area. If you do not want to, we will go to the next tier level of communication companies to offer it to them.

You just create a tiered system of companies, and you give them access to the infrastructure. That infrastructure was paid for years and years ago by the public. Everybody knows that.

Was that a good enough answer?

Mr. Majid Jowhari: Thank you.

I'll share my time with Mr. Baylis.

Mr. Frank Baylis: If I understand it, and we think about it in a bigger picture, both of you guys are up against the Shaws, the Rogers, these massive companies, and they're making all their money in downtown Calgary, downtown Toronto, this and that. We keep coming along and saying, "Hey, will you just go out there and help these little rural areas?" They go, "Yeah, yeah", and they just buy up all the spectrum, whatever it costs. They make their killing in the cities.

Then we try to say, "Can you spend a bit of energy or time thinking about these other guys?" But why would they? There's no money in it for them compared to where they're making their big money.

If I understand you, Mr. Grisdale, we need to get the smaller players who say, "Okay, it's not big money for Rogers or Shaw, but for my little company, this is is enough to live on."

Mr. Finlayson, go ahead. Do you want to add to that? Am I on the right track?

Mr. Steven Finlayson: Yes.

Mr. Frank Baylis: Okay. If we're seriously going to get this done, we can't keep looking at the big guys to do it. When they come to see us, what they do is—and here I'll be direct like you, Mr. Grisdale—they bamboozle us and say, "Don't look at it, boys. It's all being taken care of. It's all good." Then we talk to everybody, and they're mad as hell. They don't have service.

If we were to use your concept—and this is somewhat like that idea in Africa—we give it to smaller-tier companies and say, "You're getting this area, you're getting this spectrum, and you've got a time frame to do it." Then we're going to give them enough of a monopoly, with some limits on it, so they can make their capital back and then be profitable. Everything is good. Then you say, "You know what, now Bell or Rogers wants to buy you out, and we're going to open it up."

That way, we have an approach to getting it into these areas by not looking to the big players. It's just does not make financial sense for these large, public companies. You have to be fair to them, too. They're public, and their shareholders don't want to hear that they're doing all of this work to help rural areas that is not paying back.

Am I on the right track here? I'd like to hear both of you explain that.

Mr. Brent Grisdale: I'll try to be brief. Yes, absolutely.

It's okay for big, multinational companies—

A voice: I don't know if "multinational" is the right word.

Mr. Brent Grisdale:—or big ILECs like Telus and Bell to make money. They should do that. They have their hands full keeping up with the technology and the upgrades in the major urban centres. That is a big thing to do. They should not be criticized for it in any way. It's a huge job.

At the same time, the way I describe it is simple. It's a population-based answer, and it's a tiered communication level infrastructure that's supported. The major centres, say anything over 50,000 people, is an ILEC fight-it-out, knock-yourself-out spectrum. Spectrum has to be priced by the population.

In short, if it's 50,000, you leave that to the ILECs. That's their sweet spot—and even more so, 10,000. Let them decide where their sweet spot is and where it starts to—

(1625)

Mr. Frank Baylis: I'm going to come back.

**The Chair:** You may have time later on, but we have to move on. Let's be fair. We're going to move to Mr. Eglinski again.

**Mr. Jim Eglinski:** Thank you. I have a question for each one of you, gentlemen. I'll start with Mr. Finlayson.

Mr. Finlayson, the current CRTC considers download speeds of at least 50 megabytes per second and upload speeds of 10 to be the target. According to your website, your own company can provide 30 down and 3 up.

Do you feel that the CRTC target is a reasonable threshold? Is it too high or too low?

**Mr. Steven Finlayson:** I would say that's reasonable. We do actually offer 50 megabytes down.

With licensing, yes, we could obviously do more and give people faster speeds as well.

Mr. Jim Eglinski: Okay. I'll go to Mr. Grisdale.

We were talking about a similar topic. You were talking about Wandering River and I was talking about Grande Cache and the fibre optics that go there right now.

From my conversations with Telus, it's my understanding that Telus has no intention of spending any money to supply upgraded fibre to that community because it's just not feasible for them to do it, and so the community sits there and suffers.

Can the technology out there be provided at a reasonable cost remotely, via satellite or the way your systems work?

**Mr. Brent Grisdale:** The short answer is yes, but, again, your question actually is a spectrum question. With an allocation of spectrum, both of us can provide those bandwidths easily, with the proper spectrum to support our radios.

Mr. Jim Eglinski: Okay. Good.

Mr. Baylis, you had a question. I was kind of curious. You were starting it, and I'm going to let you take a bit of my time to finish your question, because I was interested in it.

Mr. Frank Baylis: I appreciate that, Jim.

I want to come back to your question on the pricing of spectrum. I'm not an expert on it, but you had mentioned that right now the model is still based on copper twisted pair.

First of all, you did say that? Am I correct? Okay.

You're saying that model should be changed in these remote areas to a spectrum based on population, i.e., tied to the potential of me making money back as opposed to the twisted copper pair.

Explain to me how the twisted copper pair works. Is it the length of laying it? Explain to me how that would work, this spectrum based on twisted copper pair pricing.

Mr. Brent Grisdale: Sure.

A voice line is about 56 kilobits a second, originally over a twisted pair, which is copper. It's the old phone line, POTS, plain old telephone system, delivered to your set.

What Industry Canada did, as I understand it—and as an aside, what my engineer told me to make sure I bring up—is that the pricing is based on how much 56 kilobits is used in the spectrum, and that's how the pricing is come to.

**Mr. Frank Baylis:** Okay, so basically spectrums are way overpriced because the ability to transmit is much higher, but I'm only transmitting that to one house. It's not like in the old days: if you had this much spectrum and everything was 56K, the spectrum would mean that you're getting a lot of houses in there. In this case, because the demand is so high, we need to change.

Correct me if I'm wrong here. You'd like to see the spectrum taken away from these big guys, sold to the smaller players, with a timeline for you to implement your solution so that you don't just sit on it like the big guys are doing, and price the spectrum to you based on your potential of return in the population, as opposed to this twisted pair model. Am I right?

**●** (1630)

Mr. Brent Grisdale: Yes.

Mr. Frank Baylis: Does that work for you, Mr. Finlayson?

Mr. Steven Finlayson: Love it. That would be great. Use it or lose it

**Mr. Frank Baylis:** What type of time frame would a smaller company like yourselves need to build, say, a network?

The Chair: I think he took your exact example.

Mr. Frank Baylis: Sorry, Jim.

Mr. Jim Eglinski: Give him an inch and he takes a foot.

Mr. Brian Masse: Talk about hogging the spectrum.

**Mr. Jim Eglinski:** It was a very good question. Have we got any time left?

The Chair: You have 30 seconds.

**Mr. Jim Eglinski:** Mr. Grisdale, you were awfully peeved that certain companies jumped the gun on you when you were making some inquiries. Do you think that was on purpose?

Mr. Brent Grisdale: Well, if you're asking my opinion, then yes.

Mr. Jim Eglinski: Good. That's what I thought you were going to say.

Mr. Brent Grisdale: I will say this, and I think this is important. The one thing to add to the model is where this funding should be allocated to and where it should be drawn from. If the infrastructure bank is actually created, that's where you want to do the financing of the towers and our ability to deliver those services. Because it's infrastructure, a hard asset with a hard value, if the company fails to provide the services, the infrastructure should still be there for the next company to come along, pick up where they left off, and make sure that clients still receive that service.

Mr. Jim Eglinski: Thank you.

**The Chair:** Thank you very much. I'm seeing a lot of nodding heads, so I think you said something good.

We're going to move to Mr. Sheehan, who has the last five minutes

Mr. Terry Sheehan (Sault Ste. Marie, Lib.): I'd better make it count

Thank you very much for your presentation and the very thoughtful advice you've been giving this committee as we're looking at bringing high-speed rural broadband to all sorts of places, such as northern Ontario, which has a significant amount of dark fibres that are served in the major cities by companies like Shaw in Sault Ste. Marie, for example. As soon as you get out of my city of Sault Ste. Marie and start going north, there are a lot of challenges in just the geography of Canada and all the different issues.

There's a company in Sault Ste. Marie called WirelessCom. It's a small one, and it has just started up. I've met with the owner. There are a lot of expenses in the towers and getting access, trying to find places where he can beam his signal and bounce it. He gets pretty innovative. Sometimes he has to hire a helicopter, or he has to climb up a mountain with his crew in the middle of winter, and so on.

I've heard testimony from various people that it would have been easier if other people who owned towers gave access to the smaller and medium-sized corporations, but they're not. Have you heard that as well? It could be Hydro, Bell towers, or Shaw. It's about being able to piggyback on there. Have you had any success doing that, and do you have any examples?

Mr. Brent Grisdale: It's an excellent question.

I remember when DAVE Wireless was at the regulatory stage, begging the CRTC and Industry Canada to enforce the tower-sharing agreement. The problem is that if you make an application to Telus, they will say it's going to take them three months to do a wind load calculation and engineering drawings. It's going to cost them \$5,000 and three months to do this, and guess what? After three months, on day 85, they're going to need more radios on that tower, it's going to change their wind load requirements for that tower, they're going to have to do that implementation, and so on. The end of the story is that you'll never get on their towers.

In the States and across the world, how they're resolving that issue is they're saying, "Why am I owning these towers for which the government is mandating access? I'll sell it to American Tower or one of those companies that will operate towers as a REIT." That was a great solution. I can now get access to a lot of towers because they've sold the towers to American Tower or...I can't remember all the companies' names. They're happy because that increases their

REIT revenue for the tower. Everybody wins there, and it's reasonable. Like I said, when I was looking at Wind, I knew if I sold those towers to a REIT, I'd probably pay for the purchase of the asset in the first place.

I can't even remember what the question was. I'm sorry.

(1635)

**Mr. Terry Sheehan:** It was about access to all these towers that are out there and setting them up as a REIT. The gentleman from Sault St. Marie, Carmine Biasucci, has so many stories about having to be so innovative and creative in creating towers. It is an expense. He's trying to go through the Laurentian Mountains, climbing, hiring helicopters, and all that. Meanwhile, there can be a tower just sitting there not doing anything, and he can't get access to it.

**Mr. Brent Grisdale:** You don't realize how many electrical poles and infrastructure components are out there, around the landscape, until you start working in electricity. You don't realize how many drilling rig signs there are until you start driving and have to find the drilling rig by knowing where the signs are on the side of the road. All of a sudden, they're everywhere. It's the same with us. There are towers everywhere, and it drives not only me crazy, but it drives my wife crazy, because I can't help but point it out to her.

**Mr. Terry Sheehan:** That's good. I just have a minute left, so I have to move on from that, but I think we have to underline and highlight that in our recommendations.

With respect to the first nations, there was a recent announcement in northern Ontario for the Ring of Fire. With the Matawa First Nations, there five remote, fly-in nations. The government invested about \$7 million both federally and provincially, with the federal government providing the lion's share. It was done through a private company that's up there, although the name has escaped me.

In your opinion, how can the government continue to serve first nations who are in remote and rural areas?

Mr. Brent Grisdale: You really don't want me to answer that question.

Some hon. members: Oh, oh!

Mr. Terry Sheehan: I think that's my time.

The Chair: Do you want him to answer the question?

**Mr. Terry Sheehan:** If you want to, go ahead. You're not going to hurt anyone's feelings.

**The Chair:** On the record, I'll give you 30 seconds to answer that question.

**Mr. Brent Grisdale:** I can't do it. This is going on record, and it will involve some constitutional items.

The Chair: Okay, we'll stop there. That concludes our session for today

I'd like to thank both of our guests for a most informative and fun session.

Thank you all very much. We're all looking forward to finishing this study and seeing what we can come up with. We're going to break for two minutes while we go in camera.

[Proceedings continue in camera]

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