



# 2019

British Columbia **Broadband** Conference



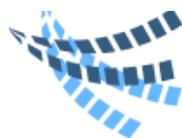
## Managing the Customer's Experience

**15th Annual BC Broadband Conference**

**April 30th & May 1st, 2019**

**Radisson Hotel in Richmond, BC**

**The Conference Package is proudly sponsored by**



British Columbia  
**Broadband Association**

## Welcome to the 15th Annual BC Broadband Conference!

A message from, Bob Allen, President of the BC Broadband Association:

The BC Broadband Association and Conference Partner ABC Communications are pleased to welcome you at this year's BC Broadband Conference.

Our Conference theme this year is "Managing the Customer's Experience"

Customer satisfaction is at the core of the Internet Service Provider business model and this year we are highlighting customer satisfaction as our conference theme. We are pleased to welcome a number of knowledgeable speakers on this topic who will share insights and ideas to help ISPs maintain and grow their customer base.

Thank you to everyone for helping the BC Broadband Association host this annual event.

We have a number of door prizes that are generously donated by some of our vendors and sponsors that will be awarded by a draw after the Conference Dinner on Tuesday evening.

This year, you can win:

- Ipad donated by MBSI WAV
- \$ 200 Source Gift Cards donated by Bell
- \$ 100 Gift Card donated by LiteAccess
- Raffle Prize from ADTRAN
- Raffle Prize from Fibnet
- Gift from Alliance Corp
- \$50 Google Play Gift Card donated by Lindsay Broadband.

To enter, please leave your business card at our reception desk. The prizes will be drawn at dinner on Tuesday night. The winner will have to be present at the time of the draw in order to be eligible to receive the prize. Good luck!

On behalf of the BC Broadband Association and ABC Communications, we would like to thank all our sponsors, vendors and attendees for their support.

We hope you will enjoy this year's program. Let us wish you and your organization much success at the 2019 BC Broadband Conference!

The Teams at BC Broadband Association and ABC Communications



BC Broadband Conference | [www.bcba.ca](http://www.bcba.ca)





**Tuesday, April 30th, 2019**

- 8:30 AM - 9:00 AM: Registration Opens | Vendor Exposition Opens
- 9:00 AM: BC Broadband Conference 2019 Opens
- 9:00 - 9:15 AM: Opening Remarks from the Master of Ceremonies  
-Chris Allen, President - ABC Communications
- 9:15 - 9:25 AM: Welcome Address / Introduction of the Keynote Speaker  
-Bob Allen, President - BC Broadband Association
- 9:25 - 9:45 AM: Keynote Speaker  
-Chris Seidl, Executive Director -Telecommunications - CRTC
- 9:45 AM - 10:30 AM: Connectivity and Connected Communities BC  
-Susan Stanford, ADM - Information Communication  
Technologies (ICT) Division, Ministry of Citizens' Services and  
-Howard Randell, Executive Director - NetworkBC, Ministry of Citizens' Services

**Platinum Sponsor**



- 10:30 - 10:45 AM: Coffee Break & Vendor Exposition
- 10:45 - 11:20 AM: De-Mystifying Artificial Intelligence in the CX space  
-Jim Radzicki - TELUS International
- 11:20 - 12:00 PM: Elevating the Customer Experience: Best Practices from around North America  
-Pam Ferguson, AVP Product Marketing Cloud and Premises - CALIX
- 12:00 - 1:00 PM: Lunch & Vendor Exposition

## Diamond Sponsors



- 1:00 - 1:40 PM: The Next Level Of Customer Experience -Conquering the New Battleground for Customer Loyalty  
-Elya McCleave Founder of Elya McCleave Consulting and Innovorg
- 1:40 - 2:25 PM: Annual Legal and Regulatory Update  
-Chris Allen, President - ABC Communications and  
-Christian Tacit - Barrister & Solicitor
- 2:25 - 2:40 PM: Coffee Break & Vendor Exposition
- 2:40 - 3:15 PM ISED Canada Radio Spectrum Program Updates  
-Michael Fu, Regional Director, Western Region - ISED Canada
- 3:15 - 3:45 PM Why and How to Peer at VANIX  
-Tom Samplonius, VP of Technology - Urban Communications

## Gold Sponsors



- 3:45 - 4:15 PM: Exhibitor Blitz  
5-Minute Product Presentation from 6 of our Exhibitor
- 4:15 - 4:30 PM: Closing Remarks  
-Chris Allen, President - ABC Communications
- 4:30 - 7:00 PM: Welcome to Reception and Vendor Exposition  
-Mike Faddoul, Senior Director - Sales - Bell Canada
- 7:00 PM Conference Dinner (President Ballroom)  
Dinner Speaker  
-Mark Buell, Regional Bureau Director -NorthAmerica -Internet Society
- 8:30 - 11:00 PM: Hospitality Reception (Richmond Room)

**Wednesday, May 1st, 2019**

- 7:15 AM: Breakfast \*  
Breakfast for BCBA members attending the AGM will be at Cambie Room.  
Breakfast for Conference Attendees will be served at the Pre-function area at 8:00 AM
- 7:30 - 9:00 AM: BCBA Annual General Meeting (Cambie Rooms 1& 2)
- 8:30 - 9:00 AM: Vendor Exposition Opens (President Ballroom)
- 9:00 AM: Day 2 -BC Broadband Conference 2019 - Opens President Ballroom  
Opening remarks - Chris Allen, President - ABC Communications
- 9:10 - 9:40 AM: Connected Coast Project - Collaboration and Update  
-Donovan Dias, VP Sales & Project Management - CityWest and  
Victoria Smith, Manager -Strategic Initiatives Strathcona Regional District
- 9:40 - 10:20 AM: Fibre Optic Valuation for Assessment Purposes  
-Barton Bourassa, Senior Appraiser - BC Assessment

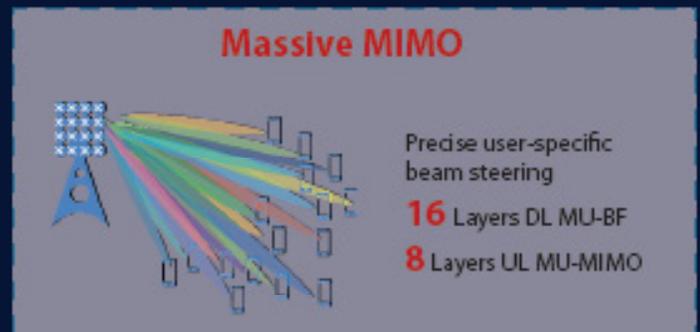
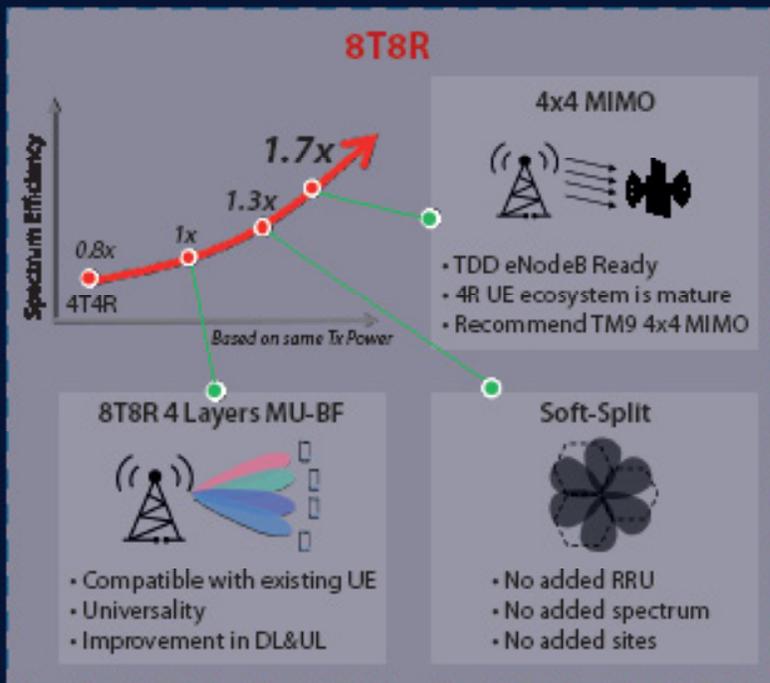
**Silver Sponsors**



- 10:20 -10:45 AM: Coffee Break & Vendor Exposition
- 10:45 - 11:15 AM: WI\$P Business Requirements, Wireless NW and RAN Evolution  
-Bing Wu, Director of Product and Solution - Huawei Canada
- 11:15 - 12:00PM: Connecting the Future "Using self - organizing mmWave to deliver 5G services"  
-Jonathan Brady, Sales Director - Cambridge Communications Systems
- 12:00 - 1:00 PM: Lunch & Vendor Exposition

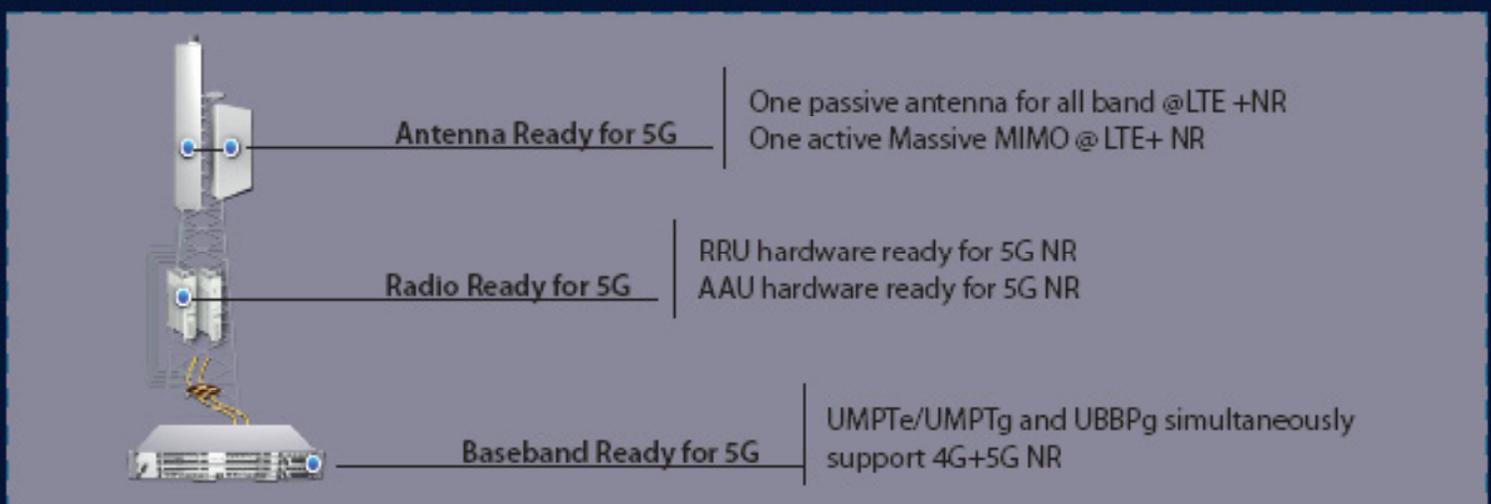


## From 8T8R to Massive MIMO Builds 5G-like Experience



## Make Everything Ready for 5G

SingleRAN Pro Get Hardware Ready for 5G **SingleRAN Pro**



- 1:00 - 1:40 PM: Cyber Security: A Multi-Player Co-op  
-Colin Belcourt, Director - Risk Mitigation Programs - Canadian Centre for Cyber Security
- 1:40 - 2:15 PM: The Challenge! Build Gigabit Fibre Network in Rural BC  
-Tim Ryan, Board of Director - Kaslo Infonet Society and BCBA
- 2:15 - 2:50 PM: Network security & ownership autonomy for SMEs  
-Nader Kashani, Founder of Solimedia Technology Inc.
- 2:50 - 3:15 PM: Coffee Break & Vendor Exposition
- 3:15 - 3:45 PM: Advances in Underground Construction Methodologies  
-Scott Grant, VP-Global Sales - LiteAccess Technologies
- 3:45 - 4:15 PM: An Introduction to How Spectrum Auctions Work  
-Brenda Bouchette P. Eng. - ABC Communications
- 4:15- 4:30 PM: Conference Closing  
-Chris Allen, President - ABC Communications

**We would like to thank our Sponsors for their support!**

**Bronze Sponsors**



# This year's Speakers

Master of Ceremony

Chris Allen - President - ABC Communications



Chris Allen is the President of ABC Communications, an internet provider in BC that focuses on rural and urban markets. He focuses on the operations of the company including sales, support and service. He has been with the company for nearly 20 years and has been a large part of growing the family business. Chris has been involved with the BCBA since its inception as a director and is eager to grow the membership to provide a stronger voice for BC.

He has been instrumental in the writing of several key CRTC submissions over the years and continues to champion ISP issues at the National level.



Bell offers end-to-end wholesale communications services, including connectivity, professional and managed services, data centre solutions and network equipment. Our fibre network is Canada's largest at more than 240,000 kilometres and supports 94 of the country's top 100 enterprises.

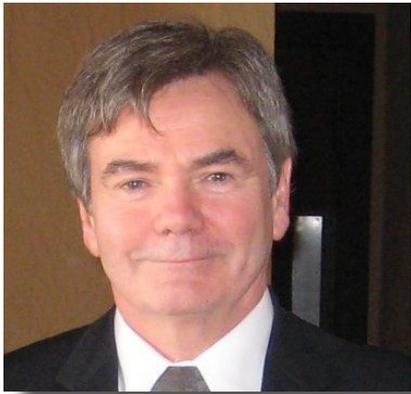
And, with our transatlantic routes, you can connect services from anywhere in Europe to anywhere in Canada with speed and security. One year of our routes, you can stretch it in the safety of one of the world's largest data-centre fibre networks.

Contact us at [connectivity@bell.ca](mailto:connectivity@bell.ca) or +1 866 343-0282, or visit us at [bell.ca/fiber](http://bell.ca/fiber)



## Welcome address

**BOb Allen** -CEO - ABC Communications President, BC Broadband Association



Bob Allen is the founder and CEO of ABC Communications. He is in charge of ABC's strategic corporate planning and business development, as well as technical, engineering and financial operations. ABC has worked extensively with Network BC and local governments in the BC interior region to bridge the digital divide. ABC Communications has also worked with other ISPs across BC in order to develop the market for competitive interconnection services. In 2009, Bob contributed to the founding of the British Columbia Broadband Association, and has acted as its President since its inception.

The BC Broadband Association has participated in a number of CRTC proceedings and reviews and the organization has become recognized as the voice of the BC competitive telecom providers.

Bob has been a strong advocate for LTE technology and led his company to the first deployment of TD LTE in British Columbia.

## Keynote Speaker

**Chris Seidl** - Executive Director ,Telecommunications - CRTC



Chris Seidl has over thirty years of experience in the telecommunications industry. He has spent the last fourteen years in various leadership roles at the Canadian Radio-television and Telecommunications Commission (Commission).

Mr. Seidl is currently the Executive Director for the Telecommunications Sector and is responsible for fostering a world class Canadian communications system. He has addressed major regulatory policy issues concerning telecommunications service competition, emergency services, digital media, high definition television and the Internet.

Prior to joining the Commission, Mr. Seidl was involved in the private sector leading various telecommunication research and development projects. He has directed the development of various leading edge products in the optical, switching and Internet domains. Mr. Seidl has also significant experience contributing to North American and international telecommunications signaling and service definition standards.

Mr. Seidl graduated with high distinction from Carleton University with an engineering degree.

## Presentation: **Connectivity and Connected Communities BC**

**Susan Stanford** - Assistant Deputy Minister Information Communication Technologies (ICT), Ministry of Citizen's Services



Susan was appointed ADM of ICT with the Ministry of Citizens' Services in 2018. She leads a Division focused on providing Information Communication Technologies (ICT) leadership and expertise for the expansion and provisioning of telecommunications services, vendor management, innovation and technology that enables the digital transformation of government work environments and to communities in every corner the Province. In this role, Susan is responsible for the strategic deal management of a \$1-billion telecommunications deal, the delivery of the provincial connectivity strategy and programs, and strategic initiatives with Health Authorities, Provincial Crowns and other levels of government. Prior to taking on this role, Susan provided business leadership on the development and launch of the BCTech Strategy that promotes economic development through commercialization and the growth of BC's high tech sector.

Prior to joining the OCIO, Susan held several private and public sector roles in Ottawa, Ontario including Director of Strategy at Canada Post Corporation, Director General Commercialization at the National Research Council, Vice President Marketing for the Cement Association of Canada and Director of Marketing at Bell Canada, Corel, and Nortel.

A proven leader with over 20 years experience, Susan holds a Masters degree in Leadership from Royal Roads University, an executive MBA from Athabasca University and a Bachelor degree from Carleton University.

Susan spent most of her career in Ottawa before moving to Victoria with her husband in 2011. She has two sons, three stepchildren, and one very happy grandchild.

**BROADBAND  
TRANSFORMS  
COMMUNITIES**

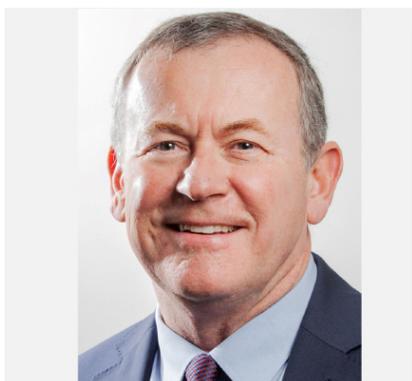
**ADTRAN**<sup>®</sup>

Visit us at **Booth 15**  
Learn more at [adtran.com/broadband](http://adtran.com/broadband)

AD10826A Copyright © 2019 ADTRAN Inc. All rights reserved.

A green banner with a dark green background on the left side. The text "BROADBAND TRANSFORMS COMMUNITIES" is written in large, white, serif font. To the right, the ADTRAN logo is displayed in white. Below the logo, the text "Visit us at Booth 15" and "Learn more at adtran.com/broadband" is written in white. At the bottom right, there is a small copyright notice.

**Howard Randell** - Executive Director of Network BC, Information Communication Division,  
Ministry of Citizens' Services.



Howard Randell is the Executive Director of Network BC in the Information Communication Division of the Ministry of Citizens' Services.

He is responsible for provincial programs in support of expanding connectivity in rural, First Nations and Indigenous communities in BC.

Presentation: De-Mystifying Artificial Intelligence in the CX space

**Jim Radzicki** -TELUS International



[www.focusd.ca](http://www.focusd.ca)

**FOCUS Communications provides Turnkey Carrier Class Level 1 Network Solutions.** Whether placing aerial telecommunications support structure including poles, anchoring systems and grounding, or placing underground installations of sub duct with fibre optic cables in existing support structure, FOCUS delivers the same high level of attention to detail.

**Serving Western Canada**  
British Columbia - Alberta



**Corporate Offices**  
9701 201 Street  
Langley, BC V1M 3E7  
604-529-1842



**Kelowna Offices**  
#108 - 2350 Acland Road  
Kelowna, BC V1X 6N6  
778-753-7177



**Edmonton Offices**  
5604 76 Avenue NW  
Edmonton, AB T6B 0A6  
587-521-7717

END-TO-END TELECOMMUNICATIONS CONTRACTORS [info@focusd.ca](mailto:info@focusd.ca)

**Pam Ferguson** - AVP Product Marketing Cloud and Premises - CALIX



Pam Ferguson will share tips & tricks learned from Service Providers around North America as they focus on customer experience and ensure they are starting with the foundational layer in the premises: Managed Wi-Fi. Lessons learned & best practices will be used to illustrate ways you can easily follow suit & deliver a top notch customer experience.



# Platforms that Connect the World

Winning Communication Service Providers are turning relentless subscriber demand into new revenue streams by deploying software defined access networks and smart premises platforms to connect everyone and everything.

**Join us at booth 10 to learn how.**



Conference theme Presentation:

## **Elya McCleave - Elya McCleave Consulting and Innovorg**



Elya McCleave has almost two decades of experience in IT Service Management and Customer Success. She is a vibrant, veteran leader of the CS industry, having pioneered and reshaped many customer service operations through leadership roles worldwide.

Elya have spoken at many technology industry events and managed teams through high- profile acquisitions. Over time, her experience has been punctuated by some major industry timeline events; the rise of social media, mobile devices, cloud computing, AI and big data. As a result Elya is always pushing the boundaries and innovating when it comes to Customer Experience.

Since leaving the corporate world, Elya founded Elya McCleave Consulting and a SaaS firm Innovorg to help more businesses to wrap their company's focus around customer and employee growth. In this capacity, Elya works with organizations globally providing tools, support, and guidance to unite their efforts in achieving high employee engagement while delivering customer experiences that lead to growth and prosperity.

## **Presentation: Annual Legal and Regulatory Update**

**Christian Tacit** - Barrister & Solicitor



Drawing on over thirty 36 years of technical, business and legal experience, Chris provides legal and business advice to domestic and international clients who wish to obtain high-quality, personalized and cost-effective services. A main focus of his practice is promoting competition in the communications and technology sectors using an interdisciplinary mix of technical, business and legal skills.

Another focus is advancing policies surrounding the Internet and digital media that lead to improved governance, as well as greater competition, innovation, economic efficiency and open access. One of his particular strengths is forging consensus within industry associations with regard to policy issues and assisting them to pursue those policies using clear and effective communications.

More broadly, Chris provides legal, regulatory, and advocacy services related to all aspects of regulated industries, competition, trade, consumer, privacy, intellectual property and not-for-profit law and policy, and he assists clients with strategic planning, governance, risk management, business reviews, commercial transactions, as well as corporate and regulatory compliance.

Presentation: ISED Canada Radio Spectrum Management Update

**Michael Fu - Western Region Director - ISED Canada**



Michael Fu is the Regional Director, Western Region of ISED’s Spectrum Telecom Sector (STS), the Canadian wireless regulator. He is responsible for the largest region in Canada covering offices from Winnipeg to Victoria and the Territories. Michael has been with STS for three years in this role.

Prior to this appointment Michael was with Transport Canada for 14 years assuming roles of increased responsibility. One of his recent roles with Transport was Associate Regional Director, Transportation Security. His portfolio includes Aviation Security and Air Cargo Security. His group is responsible for overseeing the security operations of aerodromes and air carriers operators in the Pacific Region.

Michael has a Master’s Degree in Civil Engineering and a Bachelor Degree in Law. He started his career as a Police Inspector with the Royal Hong Kong Police. He has also spent ten years as an Industrial Relations Officer with the Government of British Columbia. Michael office is located in Surrey, BC.

Presentation: Why and How to Peer at VANIX

**Tom Samplonius - VP of Technology - Urban Communications**

Tom Samplonius is the VP of Technology at Urban Communications Inc and Board member at Vancouver Internet Exchange (VANIX).

Urban Communications has been building a fibre optic network in the Greater Vancouver area for the past 12 years.

He worked in telecom industry for 20 years, mostly ISPs but also with data centres and voice services.

**We've Launched 100Mb symmetrical Ethernet over DOCSIS.**

With Ethernet over DOCSIS, leverage the power of the Shaw's Hybrid Coax network that enables us to access 300,000+ serviceable business locations.

Available now:

5x5Mbps | 15x15Mbps | 30x30Mbps New | 100x100Mbps New

Interested to learn more? Contact us at [wholesale@shawbusiness.ca](mailto:wholesale@shawbusiness.ca)

**SHAW Business**

## Dinner Speaker

Mark Buell - North American Bureau Chief - Internet Society



Mark Buell is the North American Bureau Chief at the Internet Society. In this role, Mark oversees the Internet Society's engagement activities in Canada and the United States.

From 2009 to 2016, Mark held a variety of positions with the Canadian Internet Registration Authority (CIRA), the registry for the .CA country code top-level domain. At CIRA, Mark provided senior level support for the organization's activities in the domestic Internet policy and global Internet governance fora. In 2010, Mark initiated the Canadian Internet Forum, Canada's Internet Governance Forum and continued to coordinate the event until 2016. He also established CIRA as a leader in the domain name industry in the use of social media.

Prior to joining CIRA, Mark spent a decade working in Indigenous health policy, first as a Community Development Officer at an Inuit land claim organization in the Western Canadian Arctic, then as the Director of Communications and Research at the National Aboriginal Health Organization in Ottawa.

### Presentation: **Connected Coast Project - Collaboration and Update**

**Abstract:** The Connected Coast project proposes to bring new or improved high-speed broadband connectivity to as many as 154 communities, including 56 First Nations communities, along BC's coast line. This is more than an infrastructure project. Bringing connectivity to these rural and remote communities along BC's rugged coastline requires collaboration, innovation and a focus on end-use benefits. This presentation will provide an overview and update on project progress and present the importance of new approaches to deliver rural and remote telecom infrastructure.

**Donovan Dias** - VP Sales and Project Management - CityWest



Donovan Dias is the VP of Sales & Project Management at CityWest. With almost 20 years of experience in the Telecom industry under his belt, Donovan has held leadership roles in Customer Service, Marketing, Carrier Relations and Sales at organizations like Northwestel, Bell Aliant and CityWest. Prior to his current role leading the project management and sales teams at CityWest, he was their Director of Sales & Marketing.

**Victoria Smith** - Manager - Strategic Initiatives - Strathcona Regional District



Victoria Smith is the Manager of Strategic Initiatives at the Strathcona Regional District. Victoria's public-sector experience includes appointments as a senior policy advisor to the Victorian Government (Australia) and various senior roles in local government leading collaborative and innovative planning and infrastructure projects. Prior to joining the public sector, Victoria worked in consulting and business development within the design and investment service industries.

### Presentation: **Fibre Optic Valuation for Assessment Purposes**

**Abstract:** How does BCA value fibre optic cables and why? We will discuss the valuation process of fibre optic cable systems used for data transfer or internet access. How is this different than the way telephone and television cable services are assessed? We will also explain in detail the importance of industry involvement in this process. Everything you need to know about the inner workings of BC Assessment and fibre optic networks.

**Barton Bourassa** - Senior Appraiser - BC Assessment



Barton has worked with BCA for 10 years. He has been a member of the Appraisal Institute of Canada for over 25 years and holds the AACI accreditation. Barton has been part of a core team of appraisers responsible for the valuation of all linear improvements including fibre optic cables and their associated land for most of his time with BCA.

**Off grid,  
and online.**

In rural Canada, how you connect to the Internet is different, because the conditions are different. We get it, that's why Xploernet is Canada's #1 provider of rural high-speed access.

 **XPLOANET**

# Solimedia

Superior performing IP Networks

[www.solimedia.net](http://www.solimedia.net)



OPTICORE



A proud BCBC 2019 Silver Sponsor

See us in  
**Booth #7**

KGPCo is your partner for comprehensive wireless and fiber connectivity solutions, featuring...

COMMSCOPE™



Cambium Networks

ADIRAN™

VIANT



UBIQUITI NETWORKS



Trusted Solutions for Your Network  
[www.kgpc.com/Canada](http://www.kgpc.com/Canada)

# Rogers Service Providers

Connectivity that's fast, flexible and always available. It's what your customers demand.

## We are Rogers



Dense national footprint supporting fibre, cable and wireless services



Ease of doing business with dedicated Service Providers specialists



Secure and reliable high-performance network

## Additional Services

### Internet

Enables customers to burst beyond their contracted bandwidth up to a maximum speed. This provides a cost effective and flexible solution for fluctuating traffic volumes. Provides customers with unlimited Internet usage at contracted bandwidth speeds. Available on fibre and coax to provide customers with fast and reliable unlimited usage.

### Ethernet

Rogers Ethernet Services are available in three Quality of Service tiers; Standard, Plus, and Premium, across all network topologies to better match the performance requirements of specific business applications.

### IoT

Rogers continues to be a Canadian leader in IoT, supporting a vast array of applications our customers depend on. By working with Rogers, customers benefit from our industry and network expertise, IoT connectivity management platforms and security offerings, underpinned with our enterprise grade support.

### Colocation

Rogers owns and operates 14 data centres across Canada, delivering high-availability and secure environments for mission critical systems. Rogers is the ideal choice to serve Canadian clients with data sovereignty requirements. Rogers also offers connectivity to 75 Third Party Data Centres throughout Canada and the United States.

### Video Transport Solutions

Rogers provides reliable Video Transport solutions including ASI circuits, compressed video using H.264 and JPEG 2000 as well as uncompressed contribution video.

### Wavelengths

Rogers offers a point-to-point transport service delivered over our optical network using Wavelength Division Multiplexing (WDM) technology. It provides high capacity, ultra-low latency connectivity to instantly move large quantities of data between major metropolitan markets across Canada and into the United States.

Learn how Rogers services can help extend your network coverage. Speak with a Rogers Representative at **1-855-212-1779** or send a message directly to our Marketing Department: [Tavis.Lochhead@rd.rogers.com](mailto:Tavis.Lochhead@rd.rogers.com)

**ROGERS.**  
Make more possible.

Presentation: “Connecting the Future “Using self-organizing mmWave to deliver 5G services””,

Jonathan Brady - Sales Director - Cambridge Communications Systems



Jonathan joined CCS in 2015 to lead its technical sales in North America. Jonathan has over 25 years’ experience in telecommunications, with particular focus on RF/microwave/optical backhaul and transmission, small cell networks and indoor building solutions.

Jonathan started his career in the Irish Defense Forces and is a graduate of the Army apprentice school where he obtained his full technology certificate in Radio theory from the City and Guilds of London institute.

During that time, he worked on VHF/HF Milspec radio systems progressing on to encryption and security and finishing on frequency hopping and RF networked radio equipment. Jonathan also served twice with the United Nations Interim Force in Lebanon (UNIFIL).

After his time in the defense forces, Jonathan worked in technical sales and support roles for US Robotics, 3Com, UTStarcom, CommWorks, Public Wireless and Soma Networks focusing primarily on Next generation wireless technologies.



**WE'RE  
5G  
READY**

**This is why.**  
Smart cities.  
Availability, reliability and scalability.  
Gigabit performance.  
Next generation broadband.  
Low latency.



## Presentation: **Cyber Security: A Multi-Player Co-op**

**Abstract:** The Canadian Centre for Cyber Security (CCCS), as part of the Communications Security Establishment (CSE), is Canada's authority on cyber security. As the scale and impact of cyber threat activities continues to grow, it is critical for industry, government and our partners to work together to improve the resilience and integrity of our critical infrastructure. The Cyber Centre is in a unique position to work shoulder-to-shoulder with key partners across sectors, to collaborate and share information and to then distill and adapt the lessons to raise the bar for cyber security across sectors in Canada.

**Colin Belcourt** - Director Risk Mitigation Programs - Canadian Centre Cyber Security



Colin Belcourt is the Director, Risk Mitigation Programs at the Canadian Centre for Cyber Security (CCCS). His group is responsible for providing technical advice and guidance, as well as product and architecture assurance, across sectors in the Government of Canada (GC) and enterprise.

Colin joined the Communications Security Establishment (CSE) in 2007 as a software systems developer for the Signals Intelligence (SIGINT) program. He spent the following ten years working for SIGINT in numerous roles, including developer, supervisor, technical advisor, and operations manager. Prior to joining CSE, Colin worked in the private sector as a test engineer for telecommunication technology and developed real-time embedded software. Colin holds a Bachelor of Applied Science in Computer Engineering from the University of Ottawa.



## NO FIBER, NO PROBLEM

Mimosa Networks, a division of Airspan, is the global technology leader in wireless broadband solutions, enabling service providers to connect dense urban and hard-to-reach rural homes at a fraction of the cost of fiber.

Learn more at [mimosa.co](http://mimosa.co)



## Presentation: **The Challenge! Build Gigabit Fibre Network in Rural BC**

**Tim Ryan** - Board of Director - Kaslo Infonet Society and BCBA



Tim Ryan has been involved in imaging businesses and imaging related IT applications for more than 35 years. He was the founder of Technicare Inc. a systems integrator, technical materials, and systems engineering company in the photography industry.

He and partners formed Technicare Imaging which today is one of the largest online digital imaged goods manufacturers in Canada and serves professional photographers from coast to coast. In 2017 Tim retired from the Imaging industry.

In 2003, Tim and his wife moved to Kaslo, BC, only to realize just how limited rural connectivity is. Tim participated in a Village of Kaslo Broadband Committee in 2012, and joined the board of Kaslo InfoNet Society in 2013 bringing his experience with fibre served facilities and high performance networking. KiN as it is known was the first rural ISP to begin construction of Fibre to the Premises in 2014, and conducted the 2015 proof of concept trials for the innovative Fibre in the Lake Project. This recently completed backhaul project provides a 34 Km multiple 10 Gigabit backhaul to the CBBC network and a multi community 10 Gigabit feeder service to Kaslo and five more small communities. This project was a joint effort with KiN and Baylink Networks technical construction for Columbia Basin Broadband Corporation with funding from Columbia Basin Trust and NDIIT / Networks BC.

## Presentation: **Network security & ownership autonomy for SMEs**

**Abstract:** In today's world of highly automated computerised & networked business environment; the prospect of imminent implementation of 5G networks & IOT devices for SMEs is frightening. Not big or rich enough to employ expertise to secure their network & take ownership of their infrastructure; they are totally vulnerable to hackers or network services companies which overtake their network & give them no ownership or control.

What is the solution?

**Nader Kashani** - Founder of Solimedia Technology Inc.



The presenter Nader Kashani is the founder of Solimedia Technology Inc. of Canada; IP Network gear distributors in Canada (North America). He is a University of Birmingham (UK) graduate & completed his masters in computing system design by implementing a unique data network topology for Cambridge University (UK). He started his network design work with Ericsson Business Communications of Sweden.

Presentation: **Advances in Underground Construction Methodologies**

**Scott Grant** - VP-Global Sales - LiteAccess Technologies



Scott has been in the telecom business for over 20 years. In his role as Vice President, Global Sales, Scott promotes the benefits of alternate fiber deployment techniques to government, carriers and ISPs around the world. Having done business in over 25 countries, Scott is actively involved with MISA and other organisations helping Canadian municipalities build their fiber networks faster, more economically and with minimal disruption to the community. Scott is a graduate of the University of Victoria.



**LITEACCESS**  
TECHNOLOGIES INC

Innovating  
Narrow/Micro-Trench  
solutions since 2004

Specializing in Micro/Narrow trench alternative fibre optic deployment methodologies since 2004...

Call us today to "Extend your network, Extend your Gigs, Extend your capital"

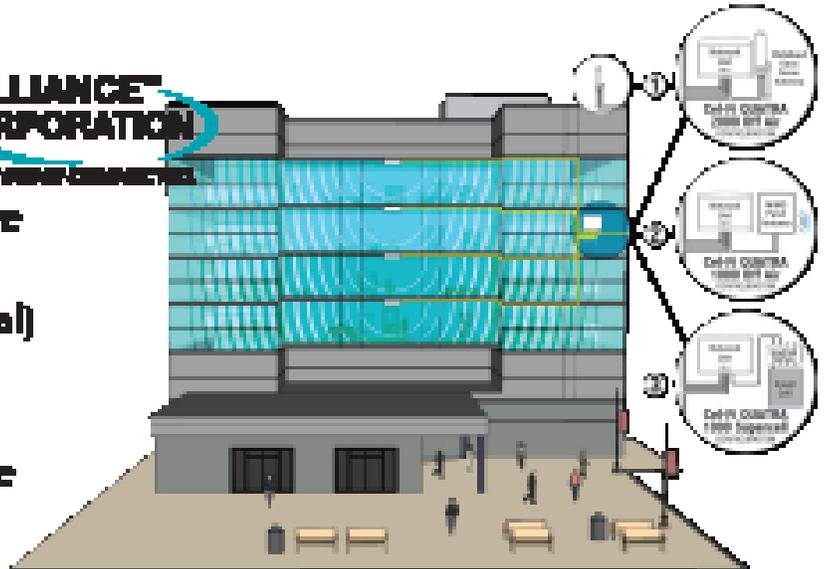


1.604.247.4704 | [info@liteaccess.com](mailto:info@liteaccess.com) | [liteaccess.com](http://liteaccess.com) | 800.252.0893

**Offer DAS to your customers  
Cell-Fi QUATRA**



- Scalable All-Digital PoE Cat5e Active DAS Hybrid for Middleprise
- Up to 100 dB (1000x Stronger Signal)
- Single or Multi-Carrier Solution
- 3G / 4G / LTE for Voice and Data
- Carrier-Approved and Network Safe



**Presentation: An Introduction to How Spectrum Auctions Work**

**Brenda Bouchette - P.Eng. - ABC Communications**



Brenda Bouchette has worked in the telecommunications industry for 20 years. Brenda has extensive experience designing and implementing both microwave backhaul networks and fixed wireless access networks. She has worked with large carriers and small operators, across Canada and internationally. At ABC Communications, Brenda is responsible for engineering wireless networks. Brenda analyses and authors responses to regulatory policy proceedings and consultations, for both ABC and the BC Broadband Association.

Brenda holds a B.A.Sc. in electrical engineering from the University of Waterloo, and a Master's degree in economics from the University of British Columbia.



# Celebrating 30 Years of Building Your Trust!



Serving both residential and business customers, ABC Communications delivers Internet, Telephone and Home TV



ABC'S Fixed Wireless networks covers large parts of rural BC. We provide connectivity where most providers cannot.



Home phone service using Voice over Internet allowing for great features at a reduced rate.



Transform your living room with the latest IPTV technology, on-demand entertainment, Internet browsing and full access to the Google Play store.

[www.abccommunications.com](http://www.abccommunications.com)

# This year's Sponsors and Exhibitors



LINDSAY  
BROADBAND



LITEACCESS  
TECHNOLOGIES INC



KGP Co



Internet  
Society

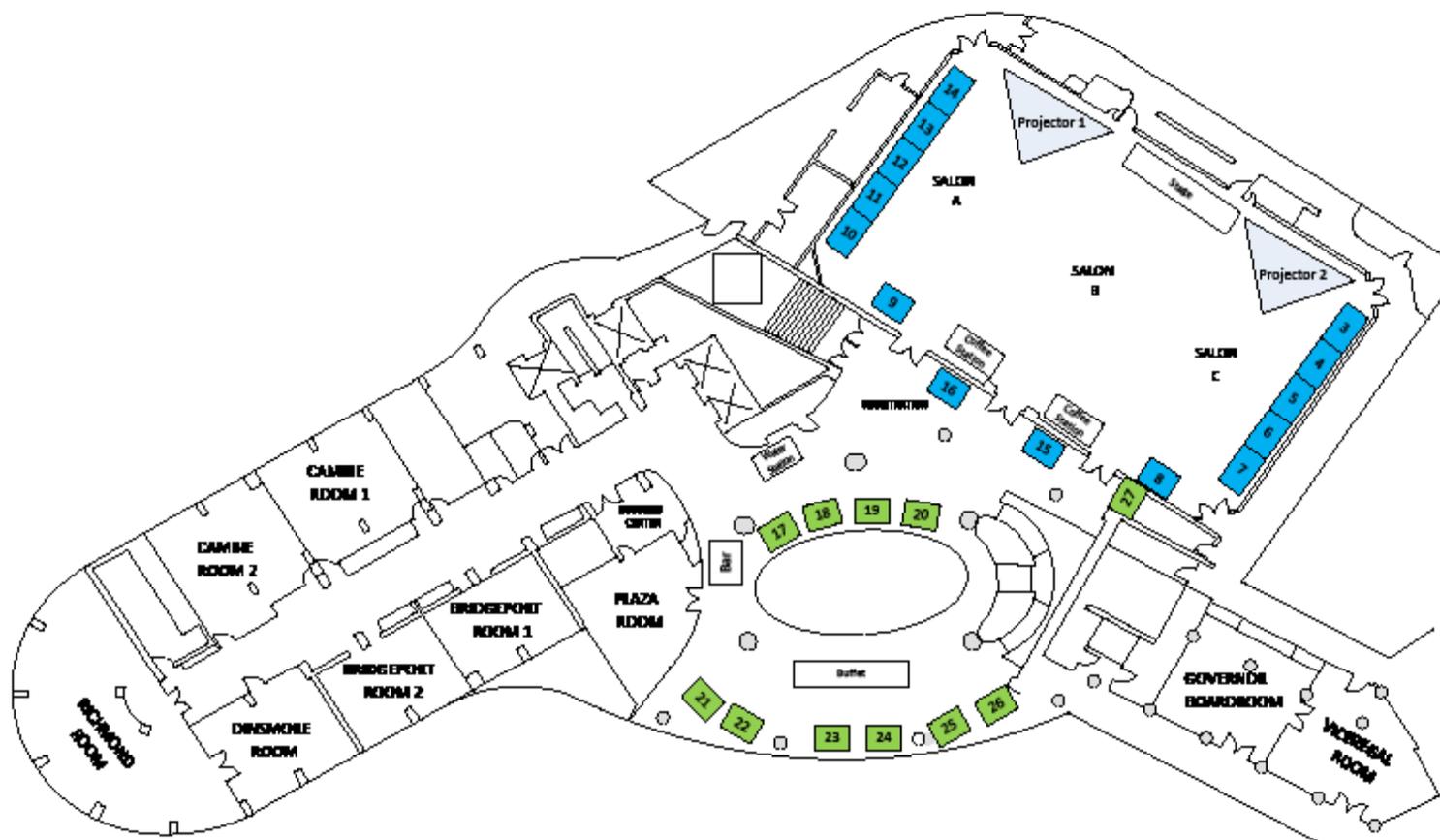


TELUS

the future is friendly®



# Floor Plan



- |              |                          |                       |
|--------------|--------------------------|-----------------------|
| 1. On Hold   | 11. Xplornet             | 21. Star Solution     |
| 2. On Hold   | 12. Bell                 | 22. Lite Access       |
| 3. AFL       | 13. Internet Society     | 23. Fibnet Inc        |
| 4. TELUS     | 14. Focus Communicaitons | 24. Preseem           |
| 5. Huawei    | 15. ADTRAN               | 25. Lindsay Broadband |
| 6. Broadnet  | 16. AirSpan              | 26. CipherTV          |
| 7. KGP Co    | 17. ThinkTel             | 27. Com Com Services  |
| 8. Alliance  | 18. MBSI WAV             |                       |
| 9. Solimedia | 19. Baicells             |                       |
| 10. Calix    | 20. Trispec              |                       |

# Together We Can Build A Trusted Online Future.

## We Need Your Help.

**The number of consumer connected devices is estimated to reach as high as 30 billion by 2020\*.**

There is no doubt digitizing the physical world has transformed the way we live, work, and play. This digital transformation, known as Internet of Things (IoT) has also opened up risks, particularly around security and privacy.

In 2018, the Internet Society worked with partners and more than 100 stakeholder organizations in a year-long multistakeholder process to secure the IoT for Canadians. As a result, a set of best practices, recommendations, and implementation steps on IoT consumer education, labeling, and network resiliency was developed.

**As digital leaders, we all have a responsibility to protect citizens online.**

**Join the IoT Action Committee leading Canada to a safer connected future.**

**Go to [iotsecurity.ca](https://www.iosociety.org/iotsecurity) to learn how you can help.**

For more information contact:  
[jordan@isoc.org](mailto:jordan@isoc.org).

\*Juniper Research

## Have you heard of MANRS?

The Internet Society partnered with network operators across the world to create Mutually Agreed Norms for Routing Security, known as MANRS. An actionable framework for ISPs, MANRS is comprised of a simple four simple process to improve routing security and reliability. 140+ network operators and Internet Exchange Points have joined MANRS.

Learn more about becoming a MANRS member:  
[manrs.org/isps/join/](https://manrs.org/isps/join/)

