



2020 Annual Report

Chairman's Letter

Dear members and industry colleagues,

2020 was undoubtedly a year of challenges, change, and success for our industry and for The Broadband Forum. During a year where the Covid-19 epidemic was a backdrop to everything we did, the importance of fast reliable broadband was more important than ever. Home schooling, homeworking, eCare, and home entertainment and gaming became critical applications that we as a broadband community were measured against and successfully delivered upon. It is with little doubt that we as an industry are no longer measured just on broadband connectivity speed and availability but on the application and service experience.

It is a credit to operators that throughout the COVID-19 crisis, notwithstanding the strong increases and changing patterns in data traffic, there has been no significant disruption to broadband services across the world.

In this, my first year as Chairman, replacing Kevin Foster after many successful years of his leading of the forum was a challenge in itself. Moving rapidly to virtualize nearly all of our work and meetings was an additional challenge, which I am glad all of us were ready and equal to.

I would like to thank all of our contributing members for their dedication and flexibility in enabling this to happen, especially as at one time or another this has meant your valued input in interim and quarterly meetings had to be supplied at times that was not conducive to normal waking hours.

This virtualization of our work certainly did not impede the velocity and quality of our work with over 100 active broadband forum projects. We continue to launch new projects and produce the Open Standards and Open Broadband work that our industry relies upon to advance a better subscriber experience. Through 2020 this has included a total of 39 new Test Plans, Technical Reports, and Marketing Reports.

With so much great work it is always a difficult task to highlight any particular achievements however two major areas of work that has major impact on future broadband ecosystem were:

- Fixed / 5G convergence was not only the foundation of driving convergence between mobile and fixed broadband access, but really demonstrated the successful collaboration between the BBF and 3GPP to enable the following work.
 - TR-124i6: CPE device requirements (5G-RG / FN-RG stuff)
 - TR-181i2a14: Data model (5G-RG / FN-RG)
 - TR-470: FMC Architectural Overview
 - TR-456: AGF Functional Requirements
 - Plus the work on the 5G transport (WT-521)
- The continued march towards software defined broadband networks including the following published work:
 - TR-459: dBNG
 - WT-474: Subscriber Session Steering
 - All the YANG models for this (WT-355, WT-435, WT-385, etc.)
 - The start of the WT-477 (Disagg-AN) and WT-484 (BAA definition)

Industry education is a key responsibility of the Broadband Forum. Due to the global pandemic The Broadband Forum's BAsE events had to move rapidly from "in-person" industry events to virtualizing all its planned sponsored workshops, plenary sessions, and panelist events. Thanks to the flexibility of our member sponsors this proved to be a major success. We held 16 separate virtual events with over 80 total industry speakers attracting on average nearly 400 registrants per event.

In addition, we ran a significant number of work area update virtual sessions and also managed to virtualize our whole Cloud CO, OB-BAA, USP, and Closed-Loop Automation demonstration into

a video. In total we made available over 20 hours of industry educational videos. These can be found via our website or via our YouTube channel.

From a testing and certification perspective we welcomed new Open Broadband Labs members, updated BBF.247 to include XG-PON and XGS-PON certifications, and introduced our first self-test / lab-verify compliance program with BBF.369 for USP compliance, which as a concept is now being extended out to other programs.

2021 represents continued acceleration in our activity with a large number of new projects in process and ever-increasing number of service providers and vendors contributing to our work. Therefore, on behalf of the Board and staff, may I take this opportunity to express our continued appreciation and thanks for your continued support.

It is undoubtedly our members that make the Open Standards and Open Broadband work we do so critical for the future success of broadband services.

Yours Sincerely,



John Blackford
Chairman of the Board

In the 2020 Annual Report

Chairman's Letter	2
Forum Leadership	3
Completed Projects	4
Forum Organization	5
Leadership Groups	6
Open Broadband	7
Open Broadband Labs	8
Certification Program Impact	9
BASe Series	10
Technology Councils	11
Member Recognition	12
Participating & Membership Listings	13
Financial Report	14
BBF Team Links & Contact	16



John Blackford
Chairman, Commscope



Bernd Hesse
President and Marketing
Chair, Calix



Dave Sinicrope
Vice President, Ericsson



**Frank Van
der Puten**
Treasurer, Nokia



**Aleksandra
Kozarev**
Board Member and
Secretary, MaxLinear



**Francisco
de Carvalho**
Board Member, BT



Ning Zong
Board Member, Huawei



Helge Tainen
Board Member, InCoax



Mauro Tilocca
Board Member,
Telecom Italia



Manuel Paul
Board Member,
Deutsche Telecom



Ding Hai
Board Member,
China Unicom



Mike Talbert
Board Member, Verizon



Lincoln Lavoie
Technical Committee
Chair, UNH-IOL



Robin Mersh
CEO, BBF



Ken Ko
Managing Director, BBF

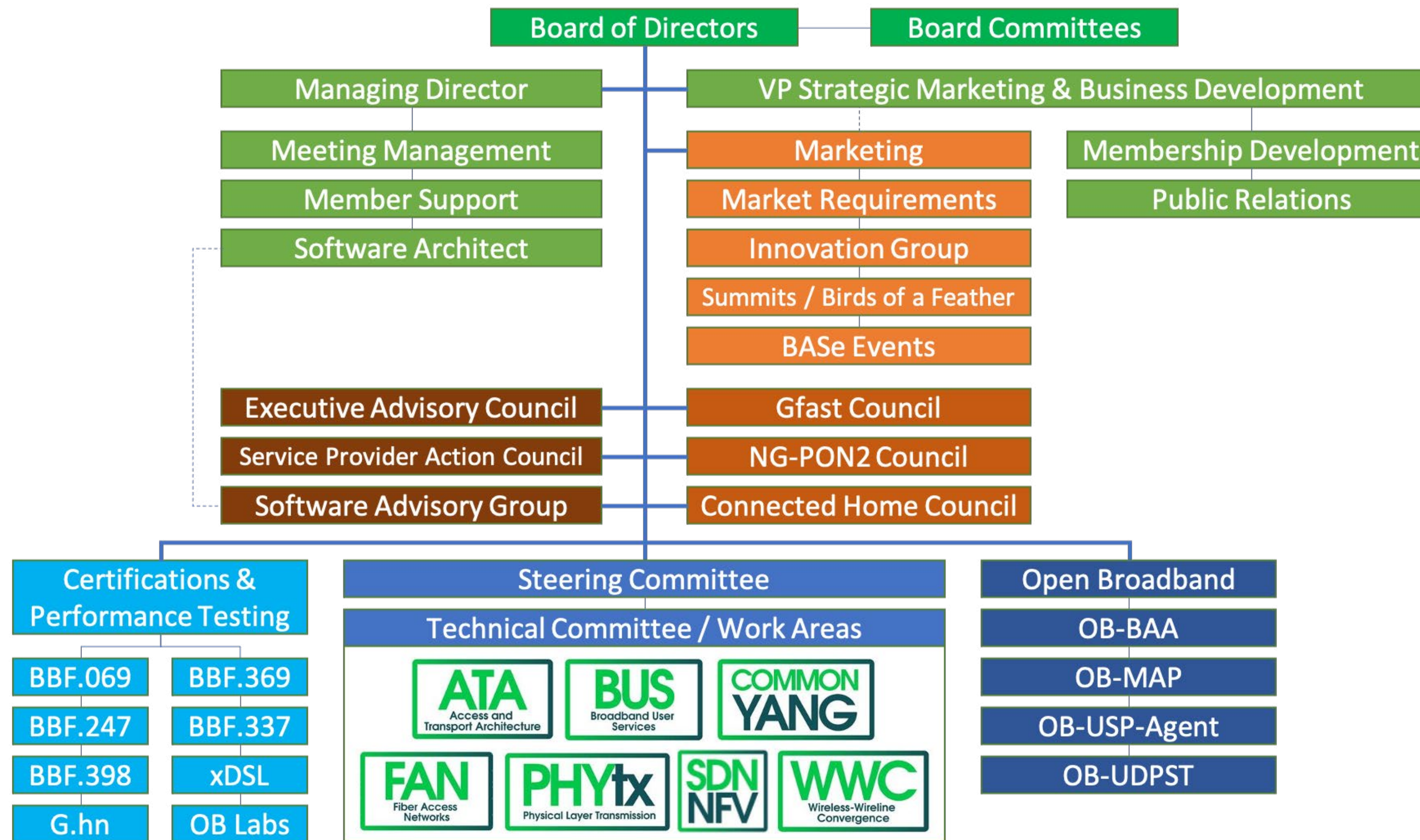


Craig Thomas
VP SM and BD, BBF

2020 Published Work

CloudCO-APPN-446	ONAP Integration for Residential Broadband HSIA Service	TR-309 Issue 2 A1	XG-PON and XGS-PON TC Layer Interoperability Test Plan
CloudCO-APPN-463	EasyMesh Cloud Controller	TR-338 Issue 2	Reverse Power Feed Testing
MR-459.2	Improving Service Resilience through BNG Disaggregation	TR-352 Issue 2	Multi-wavelength PON Inter-Channel-Termination Protocol (ICTP) Specification
MR-459.3	Five Key Questions on the Disaggregated BNG	TR-355 A3	YANG Modules for FTTdp Management
MR-471.1	Maximum IP-Layer Capacity Metric and Measurement	TR-369 A1	User Services Platform (USP)
MR-471.2	Maximum IP-Layer Capacity Metric and Measurement	TR-370 Issue 2	Fixed Access Network Sharing – Architecture and Nodal Requirements
MR-521.1	Marketing Report on 5G Network Architecture - Overview	TR-380	G.fast Performance Test Plan
MU-478	Access Agnostic CPE Management	TR-383 A3	Common YANG Modules for Access Networks
TP-181 C1	CWMP Interoperability and Functionality Test Plan	TR-385 Issue 2	ITU-T PON YANG Modules
TP-247 Issue 4	G-PON & XG-PON & XGS-PON ONU Conformance Test Plan	TR-390.2	Performance Measurement from IP Edge to Customer Equipment using STAMP
TP-337 Issue 2 A1	G.fast Certification Test Plan	TR-408	Cloud CO Migration and Coexistence
TP-337 Issue 3	G.fast Certification Test Plan	TR-419	Fiber Access Extension Over Existing Copper Infrastructure
TP-469 C2	Conformance Test Plan for User Services Platform Agents	TR-435	NETCONF requirements for Access Nodes and Broadband Access Abstraction
TP-469 C3	Conformance Test Plan for User Services Platform Agents	TR-452.1	Quality Attenuation Measurement Architecture and Requirements
TR-069 A6 C1	CPE WAN Management Protocol	TR-456	AGF Functional Requirements
TR-106 A10	Data Model Template for CWMP Endpoints and USP Agents	TR-459	Control and User Plane Separation for a Disaggregated BNG
TR-124 Issue 6	Functional Requirements for Broadband Residential Gateway Devices	TR-470	5G Wireless Wireline Convergence Architecture
TR-181 Issue 2 A14	Device Data Model for TR-069	TR-471	Maximum IP-Layer Capacity Metric, Related Metrics, and Measurements
TR-249 Issue 2	Testing of G.993.2 Self-FEXT Cancellation (vectoring)		
TR-280 A 1	ITU-T PON in the context of TR-178		
TR-301 Issue 2 A1	Architecture and Requirements for Fiber to the Distribution Point		

Forum Organization



Leadership Groups

Broadband Innovation Group

The Broadband Innovation Group was formed as the incubator for new projects such as the developments in 5G. As envisaged in the Broadband 20/20 vision document, the Innovation Track began work on Broadband Assured IP Services. The Forum has long recognized the need for performance-assured services that are secure, standardized, on-demand and user-initiated and is leveraging several new technologies (SDN, NFV, Gfast, NG-PON2, etc.), its IP expertise and experience with more than 1 billion TR-069 installations. The Broadband Innovation Group also works with various member groups to host “Birds of a Feather” events held at most quarterly meetings.

Christele Bouchat, Nokia and Mauro Tilocca, Telecom Italia—Co-Chairs

Executive Advisory Council

Introduced in 2017, the Executive Advisory Council was established to provide an executive C-level and forward-thinking lens through which the Forum can keep an insight on industry trends to shape our future. The genesis of the Council is the profound changes in the industry—a paradigm shift both in terms of technology and methodology. The questions regarding the impact on business value and what sort of deliverables are required is the main conversation of the BBF’s Executive Advisory Council.

Craig Thomas, BBF—Chair

Service Provider Action Council

The SPAC (Service Provider Action Council) is a key influential standing committee keeping the Forum connected to user requirements—the key financial realities of the market. Open exclusively to the service provider membership, it offers continuous direction on requirements to ensure that strategic work has the service provider engagement needed to achieve timely standards development.

Mauro Tilocca, Telecom Italia—Chair

Software Advisory Group

The SAG (Software Advisory Group) comprises contributing Forum member companies and provides a center of software expertise acting as a “think tank” within the Forum. It advises on engagement with external SDOs and open source organizations on the processes and modeling tools needed to enable the Forum to work as an agile software-focused organization, the challenges of IPR, and balancing the Forum’s role on the definition of requirements and service attributes with the implementation of code and prototyping.

William Lupton, BBF—Chair

Steering Committee

The Steering Committee’s primary goal is to execute the Forum’s strategy via the Work Areas of the Technical Committee. It is the main conduit for the leadership to monitor work in progress across the Forum. The Steering Committee influences the technical work and acts as a clearinghouse for new projects. It also oversees the formation of project streams (groups of related projects) and the appointment of Work Area Directors. Implementation of procedures and use of tools and the technical content of Broadband Forum meetings also fall to the Steering Committee, as well as coordination of the important items in the Forum’s Liaison Program with almost every industry standards body and open source organization.

Lincoln Lavoie, UNH-IOL—Technical Committee and Steering Committee Chair

Open Broadband

Broadband Forum's Open Broadband initiative brings open source and open standards together, paving the way to dramatically change our industry and bring the full promise of broadband to fruition.

The future of broadband will be the result of the marriage between the flexibility, innovation, and speed of "open software" and with the discipline, efficiencies, and global scale made possible by "open standards".

Delivering excellent point solutions will always be critical. However, in a broadband ecosystem undergoing radical change of technology and approaches, focusing on individual elements alone is likely to be a limiting strategy. This is why the Forum is taking an approach to the drivers and technologies that feed broadband transformation to serve the industry and our members. By bringing the best ideas of open source together with the interoperability and standards required for mass market solutions, the Forum is bringing true innovation and scale to the industry.

Open Broadband projects within the forum continue to thrive since their inception in 2017. The following are currently active Open Broadband projects:

Open Broadband—Broadband Access Abstraction (OB-BAA)

Enabling standardized, automated and accelerated deployment of new cloud-based access infrastructure and services. Link [here](#) for more information.

Open Broadband Multi Access Point (OB-MAP)

Ensuring that the software of open-source innovators like [prpl Foundation](#), and their mesh software projects will be scalable to large service providers deployments via carrier grade manageability. Link [here](#) for more information.

Open Broadband—UDP Speed Test (OB-UDPST)

Enabling an open source implementation tool to perform IP Layer Capacity metrics and measurement for gigabit broadband connectivity. Link [here](#) for more information

Open Broadband—User Services Platform Agent (OB-USP-Agent)

Creating a reference implementation of the User Services Platform (USP) specification from an "agent" perspective. Link [here](#) for more information.

OB-BAA | Virtual Demonstration 2020



OB-USP-Agent | Video Workshops and Tutorials



Open Broadband Labs

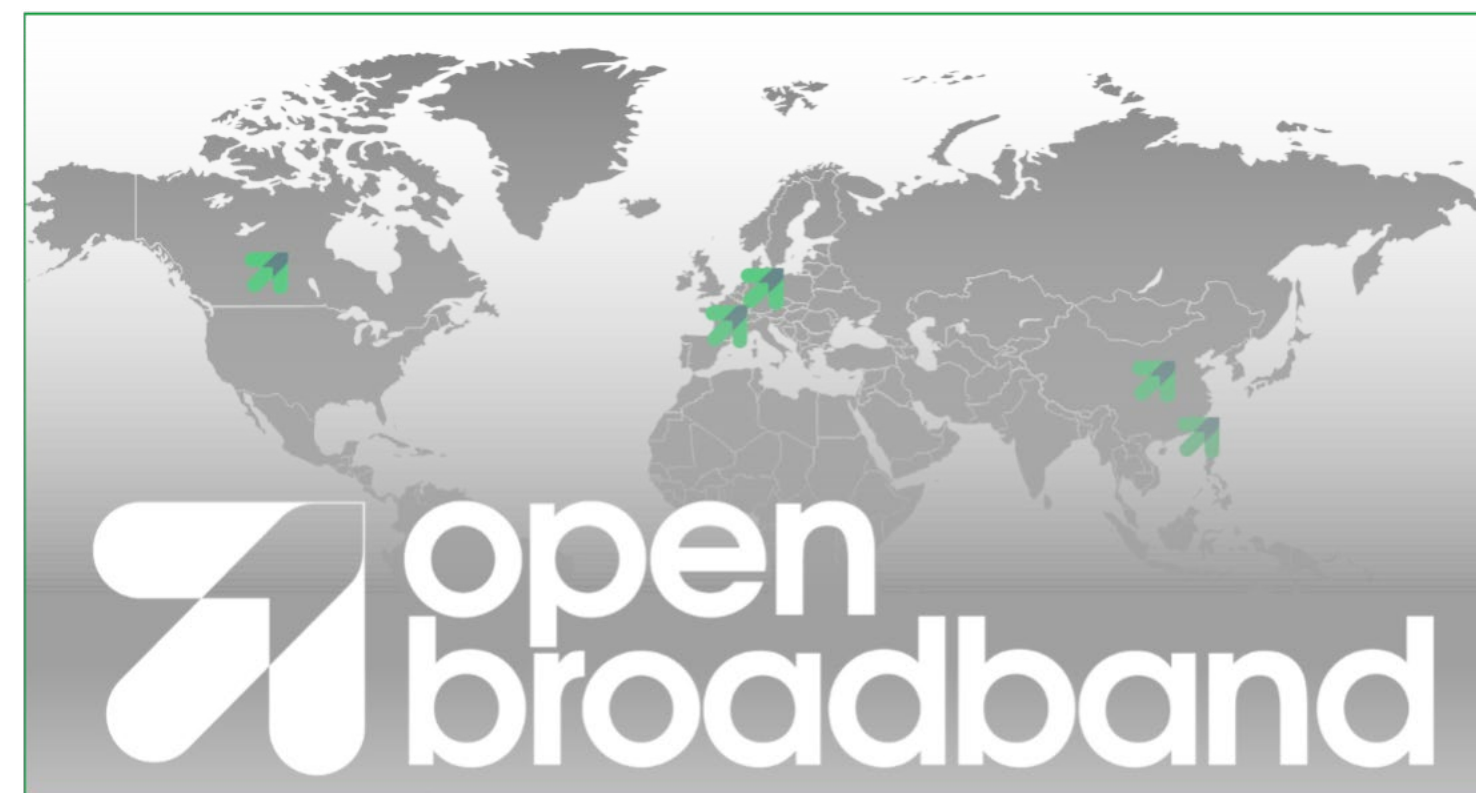
Open Broadband Labs offer a common hardware and software platform for an open laboratory to promote the development of network transformation and cloud evolution leveraging open source software. Each Open Broadband Lab is a collaborative industry resource that encompasses proprietary, "open" source and standard implementations coming together to represent service provider existing and planned deployments. The initial intention for the scope of the Open Broadband Labs is:

- A rich set of test resources to be used for staging, functional, performance, interoperability, testing and continuous integration of broadband NFV/SDN, CloudCo, cloud-based services and applications, management, and orchestration
- Provides the industry and BBF members with defined interfaces and reference test environment for how their products and solutions can fit into the NFV/SDN cloud-based architecture
- The Forum's motivation stems from requirements related to BBF projects and is not a constraint for third parties
- The BBF's role is to select labs based on regional requirements, available funding
- Broadband Forum does not fund each Open Broadband Lab— but helps facilitate funding (Hosting Labs are independent of the BBF and independently funded)
- OB-Labs provide services according to fair, reasonable, and nondiscriminatory terms
- Make services available to the entire industry (without limitation), platforms may vary

The combination of Broadband Forum's Open Broadband, Open Broadband Labs, and Open Standards initiatives are providing an industry sandbox to accelerate multi-vendor innovation and incubation in areas like 5G, CloudCO, network slicing, and wire-less-wireline convergence.

These areas define a number of operator use cases and act as a blueprint for tests to be performed in the labs. Together, these initiatives are accelerating network transformation and migration to a cloud-based broadband infrastructure for carriers globally, and bringing the promise of SDN and NFV to fruition.

The future of broadband will be the result of the marriage between the flexibility, innovation, and speed of an "open software" with the discipline, efficiencies, and global scale made possible by "open standards". The Open Broadband initiative brings together the best ideas of an open source with the interoperability and standards required for mass market solutions, thereby acceleration true innovation and scale in the industry. Key to this strategy has been the creation of an array of Open Broadband Labs around the world to enable open source collaboration and ensure interoperability. In 2019, the number of recognized Open Broadband Labs expanded to include a second lab in Asia, as well as in Europe (2), and North America. More information on the Open Broadband Labs can be found [here](#).



Interop and Certification

Since its inception the Forum has had an objective to establish interoperability in the broadband marketplace. Today, the Broadband Forum Interoperability and Certification program encompasses end-to-end broadband testing requirements including fiber, DSL, MPLS and home networking related interoperability and conformance testing.

The BBF Testing and Certification programs include:

1. Developing common test requirements
2. Establishing a test suite which normally includes functional and performance tests
3. Hosting test events also known as plugfests, which can include private members only multivendor plugfests, conformance testing, public interoperability demonstrations and/or certification

Certification Program Impact

- Creates confidence and minimizes risks
- Establishes a trusted industry standard for implementation and high customer satisfaction
- Leverages vast experience and expertise
- Avoids extensive provider testing before purchase
- Significantly reduces costs and accelerates time to revenue for all stakeholders
- Provides a starting point for service provider integration and fosters a diverse marketplace across silicon and products



welcome to



Broadband Acceleration Seminar



BAsE Series

Broadband Forum is the industry's most respected organization for accelerating broadband innovation and deployment, and its fast-growing Broadband Acceleration Seminar (BAsE) series provides key insights into the state of broadband innovation, technology, standards, and ecosystems.

Held in conjunction with major industry conferences, each BAsE event draws hundreds of key influencers from global broadband service providers, suppliers, analysts, and government officials who appreciate our uncompromising educational focus and our member's leading-edge perspectives.

BAsE series touches upon the areas of focus of the Forum—5G, Connected Home, Cloud, and Access | Next—and provides sponsors with unparalleled access to broadband industry innovators and leaders. BAsE events have become renowned throughout the industry as unique events created by tech innovators for tech leaders.

In response to the global coronavirus pandemic, we rapidly transformed the BAsE initiative into a virtual series of events. Successfully running 16 virtual

sessions from webinars to full virtual conference platforms. Including our 3-day virtual Ultra-fast Broadband (UFBB) vBAsE conference in partnership with leading consulting firm TNO.

Meeting the challenge of remote events vBAsE (virtual BAsE) attracted an even wider participation audience to all our industry leading events with an average attendance of nearly 400 registration per event representing regularly over 45 countries. This has set the stage for continued success in 2021 with a mixture of vBAsE and tradition BAsE 'in-person' events when business travel proves once again feasible.

In total 11 companies took advantage of a variety of sponsorship opportunities to reach a global audience of operators and vendors. For more information on BAsE sponsorship and events, link [here](#).

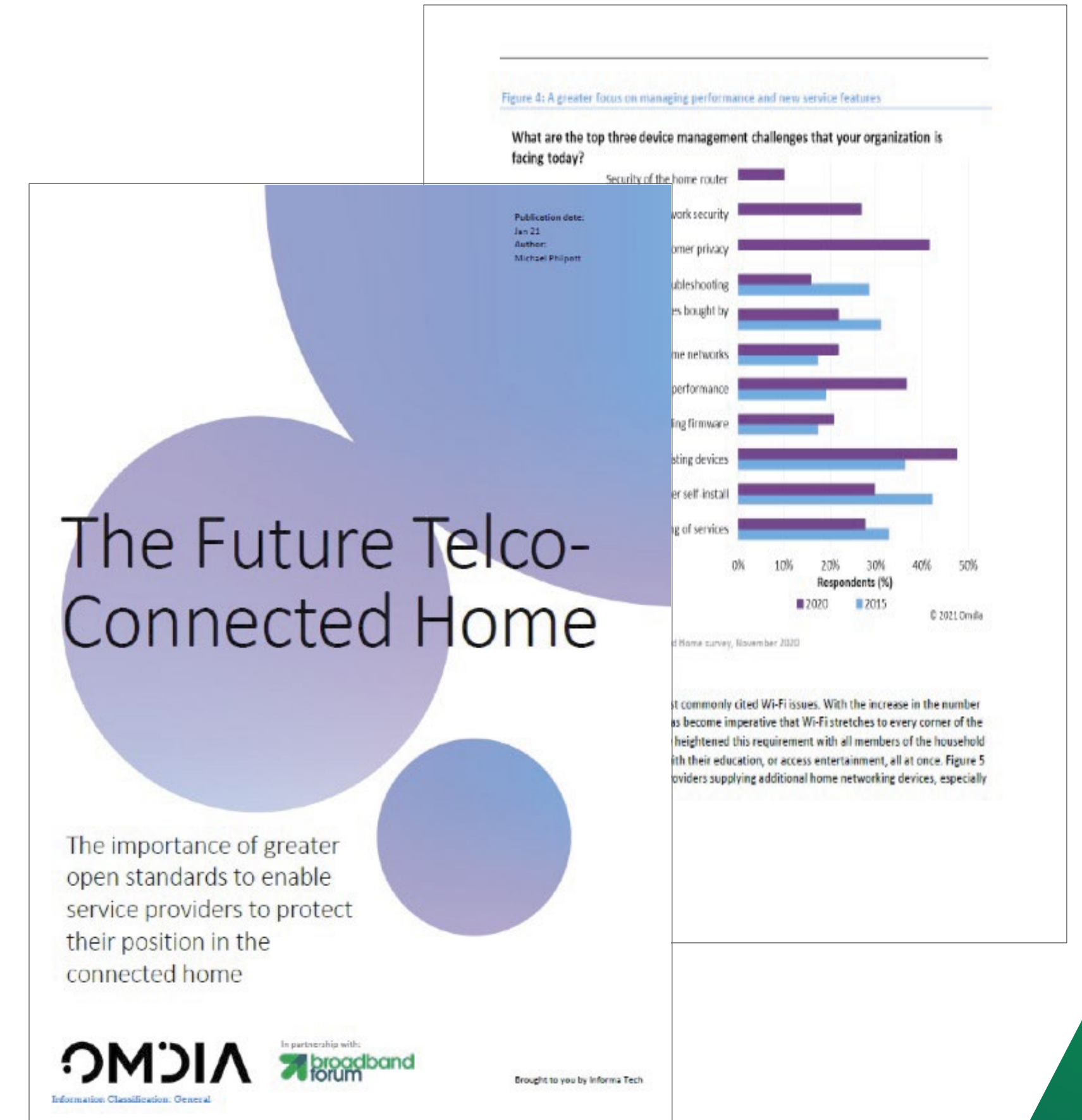
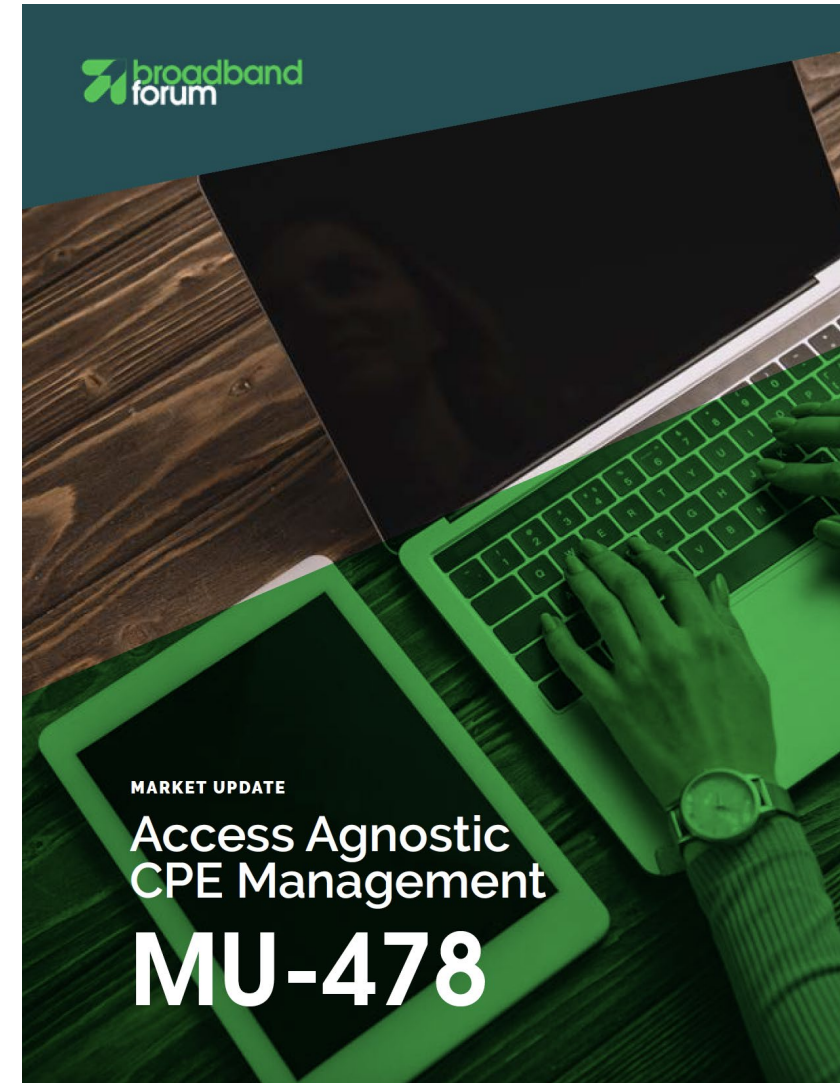


Technology Councils

The charter of each technology council is to foster the global market development of its representative technology through educational and awareness initiatives.

Each council, the Gfast Council, the NG-PON2 Council, and the Connected Home Council, was formed to centralize and disseminate the expertise and experience of each respective market in order to facilitate the rapid deployment of each technology. Each council meets regularly, and develops a roadmap for educating the market on their respective technology and providing deployment updates. Typical vehicles are formal published Market Updates, technology White Papers, webinars, wall charts and surveys. In addition, the technology councils are very active as content engines in developing content for BAsE events and moderating BAsE panels. Lastly, as the technology councils are monitoring market trends and conducting surveys, they provide use case ideas back into the working areas and interoperability/certification programs to stimulate market expansion and ecosystem development.

Examples of Market Updates created by technology councils include:



Recognizing Member Contributions

The BBF recognizes the outstanding contributions of those who have shaped the growth of Broadband, worldwide.

Distinguished Fellow Award

The Distinguished Fellow title is bestowed by the Broadband Forum to exceptional individuals who have over time provided a major influence on the direction and success of broadband development

2020 Recipients:

- Robin Mersh, BBF
- Aleksandra Kozarev, MaxLinear

Circle of Excellence

The Broadband Forum recognizes the exceptional contributions of its members through the "Circle of Excellence" award, which is awarded at our annual meetings.

2020 Recipients:

- Jonathan Newton, Vodafone
- Daniel Egger, Axiros

Outstanding Contributors

Once a year, at the annual meeting, the Outstanding Contributor awards are given to individuals who, during the previous year, went above and beyond the call of duty within the Forum work areas.

2020 Recipients:

- Al Morton, AT&T
- David Woolley, Telstra
- Mateusz Lech, Orange
- Marcos Martinez, MaxLinear
- Nick Hancock, Adtran
- Peter Thompson, PNSol
- Rosaria Persico, TIM
- Ruobin Zheng, Huawei

Visit broadband-forum.org/contributors for information on BBF member recognition

Participating Organizations

2020 recognized an increase in membership and participation. Below is a list of member companies organized alphabetically by membership level. Please note that Open Broadband initiative projects include a wide variety of non-member companies and industry organizations not listed.

PRINCIPAL LEVEL

A1 Telekom Austria AG
ADTRAN
Advanced Digital Broadcast S.A.
AEPONYX
Affirmed Networks
Airoha Technology
Allion Labs
Altice Labs, S.A.
Altran
ASSIA, Inc.
AT&T
AVM
AVSystem
Axiros
Bell Canada
Benu Networks
BiFrost Communications
Broadcom Corporation
BT
Calix Networks
Cambridge Industries Group Limited
Candela Technologies
Casa Systems
CenturyLink
Charter Communications
China Mobile Research Institute
China Telecom Global Limited
China Unicom

Chunghwa Telecom Labs
Cisco Systems
CommScope
Cyta
DASAN Zhone Solutions
Deutsche Telekom AG
D-Link
Domos AS
Dot11 Labs
EANTC
Ericsson
EXFO Inc
Friendly Technologies (FTL) Ltd.
F-Secure
Futurewei Technologies Inc.
Genesis Technical Systems
Go Foton
Honu Ltd
Huawei Technologies Co., Ltd.
Hybrid Access Technologies
InCoax Networks AB
Incognito Software Systems Inc.
Intel
Inteno Group AB (Genexis BV)
Interlink
IO Intelligence
Juniper Networks
Kaloom
KAONMEDIA Co., Ltd.

Lambda Networks AS
LAN
Luster Teraband Photonics Co., Ltd.
Maxlinear
Metanoia Communications
Methode Electronics
MT2 SAS
National Broadband Network
National Information Solutions Cooperative (NISC)
NEC
Netsia
Nokia
NTT Corporation
Octoscope
OpenVault
Orange
OutSys
PBN INNOVATION (BEIJING) CO., LTD.
PIC Advanced SA
Plume
Predictable Network Solutions Ltd
Proximus
QA Cafe
Qualcomm
RAD Data Communications
Radisys Corporation
Roqos, Inc.
Sagemcom Broadband

SaskTel
SK Telecom
Snom Technology GmbH
Sparnex Instruments
Spirent Communications GmbH
Stechs
Sterlite Access Solutions BU
Support Robotics Limited
Technicolor
Telebyte, Inc.
Telecom Argentina
Telecom Italia S.p.A
Telefonica S.A.
Telenet NV
Telstra Corporation Ltd
TELUS Communications, Inc.
Tessares
Tibit Communications
Ubilinx Technology, Inc.
UNH InterOperability Lab
VCTI
Verizon
Viavi Solutions
VMware
Vodafone Group Services
Zoom Telephonics
ZTE

AUDITING LEVEL

Actiontec Electronics
Arcadyan Technology Corp.
Askey Computer Corp.
EZconn Corporation
Fiberhome Telecommunications Technologies CO., LTD.
Furukawa Latam
Gemtek Technology Co.
Humax Networks, Inc.
Microsoft (formally Metaswitch)
Sercomm
Sumitomo Electric Industries
TDC A/S
Telekom Slovenije, d.d.
Telenor Norge As (SY)
Telkom SA Ltd
Wistron NeWeb Corp.
Zyxel Communications Corporation
Comtrend Corporation
Friendly Technologies (FTL) Ltd.
Icotera Sp. z o.o.
Intec
Reply AG
Seliro
Shenzhen Skyworth
Digital Technology
Teldat
Triductor Technology
Westermo

ASSOCIATE & OBSERVER LEVEL

CableLabs
CAICT
CABA
ETRI
Industry Development
Augmentation Division
Informa T & M
Layer123
Mocalliance (MoCA)
National Exchange
National Media and
Infocommunications
Authority
Point Topic
TNO
Trinity College Dublin
University of New South
Wales
netplus.ch S.A.
POST Luxembourg
SaskTel
Comcast
Swisscom (Schweiz) AG
Northforge Innovations

Financial Report

John Waddell & Co, Certified Public Accountants, conducted the review of the 2020 Broadband Forum financial statements. The following tables provide an overview of the financial position and key financial metrics of the organization at the close of 2020.

Statement of Financial Position
December 31, 2020
(With Comparative Totals for December 31, 2019)

ASSETS		
	(Audited) 2020	(Reviewed) 2019
Cash	\$ 888,184	\$ 562,449
Accounts receivable	10,000	24,050
Prepaid expenses and deposits	98,430	24,720
Website, net of accumulated amortization	10,874	11,405
Investment in marketable securities	1,747,059	1,556,944
	\$ 2,754,547	\$ 2,179,568
LIABILITIES AND NET ASSETS		
Liabilities		
Accounts payable	\$ 174,064	\$ 224,756
Deferred membership dues	707,750	643,250
Total Liabilities	881,814	868,006
Net Assets		
With donor restrictions	16,083	16,083
Without donor restrictions		
Designated for reserves	1,000,000	1,000,000
Undesignated	856,650	295,479
Total Net Assets	1,872,733	1,311,562
	\$ 2,754,547	\$ 2,179,568

Statement of Activities
 For the Year Ended December 31, 2020
 (With Comparative Totals for December 31, 2019)

	Without Donor Restrictions	With Donor Restrictions	(Audited) 2020 Total	(Reviewed) 2019 Total
Revenue				
Membership dues	\$ 1,381,150	\$ -	\$ 1,381,150	\$ 1,432,274
Meeting fees	31,500	-	31,500	183,755
BASe events	-	-	-	24,800
Sponsorship	258,250	-	258,250	214,510
Interest and investment income (loss)	190,220	-	190,220	239,415
Total Revenue	1,861,120	-	1,861,120	2,094,754
Expenses				
Program services:				
Meetings	214,143	-	214,143	555,988
Member services, tools, and other	136,428	-	136,428	133,888
Trade shows, marketing and PR	496,325	-	496,325	721,425
Total program services	846,896	-	846,896	1,411,301
General and administration	453,053	-	453,053	554,266
Total Expenses	1,299,949	-	1,299,949	1,965,567
Change in Net Assets	561,171	-	561,171	129,187
Net Assets				
Beginning of Year	1,295,479	16,083	1,311,562	1,182,375
End of Year	\$ 1,856,650	\$ 16,083	\$ 1,872,733	\$ 1,311,562

BBF Team

Managing Director | Ken Ko | kko@broadband-forum.org
VP SM & BD | Craig Thomas | cthomas@broadband-forum.org
Membership Development | Rhonda Heier | rheier@broadband-forum.org
Member Support | April Nowicki | anowicki@broadband-forum.org
Secretariat | Gabby Bond | gbond@broadband-forum.org
Software Architect | William Lupton | wlupton@broadband-forum.org
Marketing Coordinator | Tiffany Cracknell | tcracknell@broadband-forum.org
Media & Public Relations | Brian Dolby | brian.dolby@proactive-pr.com

Links and Contacts

Enquiries | info@broadband-forum.org
Support | tools@broadband-forum.org
Member Sites and Sign-up | wiki.broadband-forum.org
Public Site | broadband-forum.org
Download this report | broadband-forum.org/about-bbf/annual-report

