

A Word from our CEO



With the last quarter of 2020 characterized by coronavirus, global lockdowns and the significance of broadband in our lives, our Q2 meeting marks a first in the Forum's history. Although we should find ourselves in the picturesque setting of Melbourne, Australia – and not seeing all of you in person has been strange – this landmark meeting has run as smoothly as possible, enabling our important work to continue.

The virtual sessions further emphasize the importance of fixed broadband. During the pandemic, I have been honored to see how operators have risen to the challenging spike in network traffic and how Broadband Forum standards have played their role.

Operators' impressive responses to the growth and changing patterns in network traffic are testament to the ongoing programs to add capacity and upgrade networks. The necessity for connecting seamlessly with families, friends and colleagues has never been greater and, as more people are confined to working from home and the use of high-bandwidth video conferencing applications, streaming services and gaming rose at an unprecedented rate, networks consistently delivered on this demand. Alongside this, Broadband Forum standards have played their part, with TR-069 playing a particularly crucial role, allowing technicians to solve problems without entering the customer's home.

On the other hand, COVID-19 has shown the digital divide more starkly than ever before. It is no longer acceptable for nearly 50% of the world's population to remain unconnected. Therefore, we must come together to deliver broadband in areas without access. The requirement for operators to continue to deliver on emerging trends such as the Connected Home and zero-touch installations, as well as harness the immense potential of 5G, has also been revealed. It has become abundantly evident that we must continue to future-proof our networks and with more than 60 first-time attendees welcomed to this quarterly meeting, in addition to our longer-serving members, I am confident the work we deliver will help the industry achieve this.

In addition to the new virtual backdrop, the Q2 meeting was the first with our new Chairman John Blackford and our new Senior Director, Strategic Marketing, Craig Thomas. We wish you both well in these new roles and look forward to your ongoing contributions to the Forum. A video interview with John on his new appointment can be viewed [here](#). And congratulations to Bernd Hesse, of Calix, and our Marketing Committee Chair, for his Special Recognition Award.

Continuing our virtual theme, our BAsE "PON Reality Check 2020" Webinars have proven extremely popular. Read on for how you can get involved in these important sessions. We hope to see you in person at our Q3 meeting in Antwerp, Belgium. In the meantime, stay safe and stay connected.

Finally, an affectionate goodbye to my friend, and our departing Chairman, Kevin Foster, of BT, who stood down last quarter. Have a happy retirement!

Broadband Forum unveils USP Certification Program

[Broadband Forum](#) has launched its User Services Platform (USP) Agent Certification Program, providing assurance and confidence for service providers and consumer electronics companies looking to generate new revenues from Internet of Things (IoT) services, cloud-based business models, and Wi-Fi and security management.

In a significant step forward for the [Connected Home](#) market that signals industry readiness, the USP Agent Certification Program is Broadband Forum's first to use a self-certification model – allowing companies to cost-effectively test any broadband or consumer connected device against the [Conformance Test Plan for User Services Platform Agents \(TP-469\)](#) standard.

This will greatly accelerate interoperability by streamlining companies' ability to perform repeatable, automated testing on their own while preserving the integrity of the results and overall value of certified products by testing against rigorous standards.

Companies can self-test their products using an accredited test tool, which provides secure results for validation by a Broadband Forum approved laboratory or can submit products directly to the approved laboratory for testing. Products that have been validated will be recognized with a logo and certification ID and posted on Broadband Forum's product registry website along with a list of the product's supported features.

To read the full news release, please [click here](#). For more information about the program, [click here](#).

Bernd Hesse honored for his pioneering role in the establishment of BAsE events program

A one-time Special Recognition accolade has been presented to the Forum's Marketing and BAsE Chair Bernd Hesse, of [Calix](#), for his introduction and establishment of the Broadband Forum Marketing Councils and [Broadband Acceleration Seminar \(BAsE\) events program](#). The seminars are now established as among the most important broadband events worldwide, with webinars taking the place of physical events so far this year.

"I would like to say thank you to the Board of Directors for this award; I'm honored to work with such a great team of professionals here at Broadband Forum," said Hesse.

"Since its launch, the BAsE series has continued to grow and generate a lot of buzz within the industry, showing the importance of such an industry event. The program keeps the broadband industry informed and inspired, while the Marketing Councils ensure that Broadband Forum's work remains relevant and at the cutting-edge. It is an honor to receive this award which very much reflects the work of the councils and entire Broadband Forum team."

To watch a video interview with Bernd, [click here](#).

Broadband Forum and LAN Laboratory expand certification to XGS-PON

As demand for fiber networks continues to grow, [Broadband Forum](#) has expanded its [BBF.247](#) Optical Network Unit (ONU) Certification Program to include XGS-PON.



This latest update extends the program to a variety of key features needed by operators deploying XGS-PON networks. The certification is just one piece of Broadband Forum's vision to provide network operators with the tools, open specifications, and open source references necessary to bring new services and technologies to their customers more rapidly. Certified ONU products can be deployed quickly, with improved interoperability to existing Optical Line Terminal (OLT) equipment already deployed. Similarly, certified ONU products will also work directly with newer Broadband Forum specifications, including the forthcoming virtual ONU Management Control Interface (vOMCI) specifications and software defined access networks.

The XGS-PON extensions add to the BBF.247 G-PON initiative – which has now certified nearly 100 products since its launch in 2011. The new test plan will see ONUs undergo rigorous testing at Broadband Forum's official certification program test laboratory [Laboratoire des Applications Numeriques](#) (LAN Laboratory), using [MT2's](#) ONU testing solution. The work will confirm conformance to the latest PON ITU-T standards, providing network operators with assurance that they can deliver efficient networks and a high-quality customer experience. New additions to the technology are also now tested, including extended OMCI messages format, Enhanced Unicast & Multicast Operations, and Capacity Tests & Performance Monitoring. This increases the number of certification test cases by more than 50% compared to the previous version.

Eight products, including single or multi-user port ONUs/L2 and Residential Gateways from Altice Labs, CommScope, Huawei, Humax, KAONMEDIA, Sagemcom, Sercomm and ZTE have already been certified under the new BBF.247 certification program.

For more information about the new certification program, please [click here](#).

Broadband Forum appoints new marketing director as it continues to lead and expand industry discussion on standards



Experienced and highly-respected B2B marketing professional Craig Thomas has joined [Broadband Forum](#) as its new Senior Director, Strategic Marketing, reinforcing the open organization's position as the broadband industry's most relevant standards initiative.

Bringing extensive experience in technical and commercial sales and marketing, Thomas will ensure Broadband Forum continues to be central to the industry discussion on standardization. This is especially important as service providers evolve their networks to [Cloud](#)-based infrastructures, integrate open source software and prepare for the era of [5G](#) and the [Connected Home](#).

"I am delighted to join the communications industry's leading organization focused on shaping the future of broadband and driving innovation across the industry," said Thomas. "The conversation around standards remains as important as ever, perhaps even more so, as new technologies play an increasing role in broadband networks. With the expertise of Broadband Forum, we can ensure a smooth evolution and continue to play a pivotal role in building the broadband foundations of the future."

Broadband Forum expands 2020 BAsE line-up

Broadband Forum has announced new dates for its [Broadband Acceleration Seminar \(BAsE\) series](#) which will run throughout



2020. Providing the broadband industry with the latest information on developments in next-generation broadband and attracting proven leading industry experts globally, the BAsE series delivers insights into the future of broadband from the world's largest service providers, top-tier analysts and leading vendors and suppliers.

At a time when full broadband connectivity services, the Connected Home and the customer experience is more critical than ever, Broadband Forum and its BAsE series has a responsibility of keeping the industry informed and inspired. Following last year's success which saw hundreds of experts attend the BAsE series, virtual BAsE (vBAsE) sessions have become and will continue to be a big part of the 2020 schedule. Fiber Broadband Association and Fiber to the Home (FTTH) Council Europe joined Broadband Forum for the 90-minute kick-off session of the BAsE webinar series on the theme of "PON Reality Check 2020." Following this, vBAsE webinars have taken place every other week so far. The next session – titled "**Best Practices - PON Challenges today and in the future**" – is scheduled for Thursday, July 9, featuring presentations from Google, F-Secure, EXFO, DOMOS and GoFoton.

It will also be a very busy last quarter of 2020 as UFBB BAsE 2020 returns in November, in Den Haag, The Netherlands, for the twelfth consecutive year. This follows the three October events – two BAsE BBWF 2020 Workshops to kick-off Broadband World Forum 2020 in Amsterdam, The Netherlands, and BAsE North America, in Las Vegas, USA. In addition, the first ever BAsE FTTH Europe 2020 will take place at FTTH Conference, in Berlin, Germany, in December. These face-to-face events will only take place if the COVID-19 situation has eased sufficiently by then. Otherwise, Broadband Forum will convert them into vBAsE sessions.

If you are interested in sponsoring any of the events in the 2020 BAsE series calendar or would like any more information, please email info@broadband-forum.org.

Work Area Updates

For a full list of all Technical Reports published by Broadband Forum, [click here](#). Please feel free to share this information with your colleagues, so they are engaged and aware of the developments of this work. For additional insight and to get involved, [sign up for access to Broadband Forum tools](#) and access your account using your company email address.

ATA's First Ever Worldwide Virtual Meeting



Target: The Access & Transport Architecture Work Area maintains primary architectural work of the Broadband Forum. This work reflects the control, management and data plane aspects of the Broadband Forum's defined and new architectures. These architectures are augmented to leverage new industry practices, while protecting the investment in broadband networks already deployed.

Progress/Outcomes:

5G Transport (WT-521): The 5G transport architecture is nearly ready to start approval. A last list of contribution topics was compiled for work over the next months. This architecture provides

the standardized roles and interfaces based on existing standard protocols to facilitate automation and reduce complexity in 5G deployments. In addition, it provides architecture for collocated 4G and 5G, previous mobile generations (3G and 2G), in scope backhaul and fronthaul network segments and application types such as eMBB and uRLLC services.

Disaggregated Broadband Network Gateway (DBNG) (WT-459): In the May 2020 interim meeting, a wiki page was created to track new topics of interest, additional use cases, and requirements yet to be covered in the Technical Report. New contributions were brought into the Q2 meeting to address these various DBNG topics. A discussion was started to ensure accepted contributions are tracked and a procedure to incorporate accepted contributions in future Work Text(s) was established.

IP Capacity Metrics and Measurement (WT-471): The Working Text was in Final Ballot throughout the meeting, closing June 29. But that didn't stop ATA/PEAT from recognizing that there needs to be a concerted marketing effort that follows, with discussions taking place on the various forms the campaign might take (webinars, demonstrations, etc.). A related Open Broadband Source code project is also on the way.

Quality Attenuation (WT-452): With WT-452.1 still in Straw Ballot, attention shifted to drafts of two further WTs identified in the NPIF:

- CONTRIBUT-22056 - Quality Attenuation Measurements using Active Test Protocols.
- CONTRIBUT-22147 - Outline draft of WT-452.3 following NPIF.

A series of edits to the former following the Q1 Budapest meeting were approved, and the contribution was accepted as a baseline for the Working Text. Contributions are invited to start filling in the agreed sections on using specific active two-way test protocols to perform Quality Attenuation measurements, and volunteers to assist with the editing would also be welcome. There was a lengthy discussion on the second contribution, on potential Conformance Tests for Quality Attenuation measurements, leading to the conclusion that the objective of this specification would be for a service provider to test conformance of their ΔQ measurement system (comprised of several elements, not necessarily from the same vendor) to ensure it complies with 452.1 requirements. A suitably revised version will be considered at the forthcoming virtual Q3 meeting.

Additionally, the group brainstormed ideas for continued Broadband Quality Experience Delivered (QED) work. It was noted that another Market Report spelling out some of the use cases discussed during the scope discussion would be helpful to drive motivation for the work and industry interest in the work. Another possible Technical Report would be for conformance of the elements that go into a ΔQ measurement system (e.g., whether separate box, router software, etc.). A potential webinar to bring out the business drivers behind ΔQ , provide some technical description and bring out industry opinion on the topic from (operators, access and BNG vendors, and ΔQ system vendors) was also discussed, along with another possible Market Report on how to use ΔQ to create an SLA or how it would contribute to an SLA. Finally, a third Market Report was proposed on the need for more reliable networking and how ΔQ is an integral part of providing it.

Finally, work also continued on 5G Transport Network Slicing (WT-522) and IP Performance Measurement (WT-390), and the group agreed to start the Working Text for Carrier Grade NAT for DBNG (CGN4DBNG).

For more information on ATA Work Area's ongoing work, visit: <https://wiki.broadband-forum.org/display/BBF/Access+and+Transport+Architecture>.



BUS successfully launches USP Agent Conformance Test Program



Target: Help service providers control the connected home business model.

Progress: The group is finalizing work with the Wireline-Wireless Convergence (WWC) Work Area, for devices implementing 5G fixed wireless devices. Its Device:2.14 (TR-181i2a14) data model, and the requirements in TR-124, will be ready by the end of the year.

Outcomes: The USP Agent Conformance Test Program was successfully launched for vendors to prove their implementations work in the User Services Platform (USP) ecosystem. A special ten-session workshop on USP was hosted for interested developers.

The Broadband User Services (BUS) Work Area is finalizing work with the WWC Work Area, building clear requirements for devices implementing 5G fixed wireless devices and expanding the capabilities of Broadband Forum's powerful management protocols (TR-069 and USP/TR-369) through the TR-181 data model to support 5G interfaces. Its Device:2.14 (TR-181i2a14) data model, and the requirements in TR-124, will be ready by the end of the year.

The group also successfully launched its USP Agent Conformance Test Program, allowing vendors to prove their implementations will work in the USP ecosystem. This comes at a time when more and more service providers are adopting USP as the standard for Wi-Fi management, smart home deployments, and a truly application-enabled connected home. Developers interested in USP also participated in a special ten-session workshop on USP, paving the way for quality implementations of this new and powerful protocol.

For more information on BUS' ongoing work, visit: <https://wiki.broadband-forum.org/display/BBF/Broadband+User+Services>.

Common YANG did not draw the Virtual Short Straw!



- **Target:** Specify YANG modules that are applicable to multiple Work Areas, NETCONF/YANG test plans and certification for the defined YANG modules, and maintain YANG Best Current Practices, processes, procedures and tools.

- **Progress:** Progressing Straw Ballot comment resolution of Common YANG Modules (WT-383a3), YANG Modules for Fiber-to-the-distribution-point (FTTdp) Management (WT-355a3) and Persistent Management Agent Aggregator (PMAA) Management Models (WT-393). There was a joint review with the SDN/NFV Work Area on YANG for access network mapping and equipment inventory and a joint review with the Access Transport Architecture (ATA) Work Area on YANG for managing Broadband Network Gateways (BNGs).

- **Outcomes:** Continue Straw Ballot comment resolution in a series of conference calls to complete the review prior to the Q3 meeting.

The virtual Common YANG meetings were well attended, and the group is well on its way to get a series of new YANG modules for broadband access networks published later this year.

The group is working its way through the Straw Ballot comments for Amendment 3 of the Common YANG Modules for Access Nodes (WT-383a3). This work further enhances the suite of YANG Modules by including software management, Quality of Service (QoS) enhancements

and Access Node Control Protocol (ANCP), as well as several other updates facilitating flexible service configuration and troubleshooting. WT-383a3 will allow service providers to further facilitate the deployment of YANG-enabled ultrafast broadband over VDSL, FAST and Passive Optical Networks (PON).

Straw Ballot comment resolution is also ongoing for Amendment 3 of the YANG Modules for FTTdp Management (WT-355a3). This amendment enables management of bonded DSL lines and eases the path towards supporting the IETF Network Management Datastore Architecture (NMDA) in the near future.

The group has completed the Straw Ballot review for the Persistent Management Agent Aggregator (PMAA) Management Models (WT-393). A few homework items were agreed upon and will be addressed in a conference call. This work defines the overall architecture of aggregating multiple PMAs and presenting a single Northbound Management Interface (NBI) towards the OSS systems.

For an overview of the Common YANG Work Area's current activities, please visit: <https://wiki.broadband-forum.org/display/BBF/Common+YANG+Work+Area>.

Substantial progress for FAN at virtual Q2 meeting



Target: WT-385 Issue 2 ITU-T xPON YANG commenced its straw ballot comment resolution and is targeted to complete after 2020 interim Q2. TR-280 Issue 1 Corrigendum 1 is progressing and targeted to finish interim Q2/Q3 meeting.

Progress: At the Q2 interim meeting, WT-385 Issue 2 ITU-T xPON YANG and WT-352 Inter-Channel Termination Protocol (WT-352) were preparing for straw ballot. At the Q2 meeting, WT-385 was resolving straw ballot comments. WT-352 will start resolving its straw ballot comment after the Q2 meeting.

Outcome: The Optical Network Unit (ONU) interoperability and certification test plan, DTP-247 issue 4 has gone through final ballot during the interim Q1 period. WT-280 amendment 1 straw ballot resolution has gone through final ballot during the interim Q1 period.

For more on the FAN Work Area's ongoing work, please see: <https://wiki.broadband-forum.org/display/BBF/Fiber+Access+Networks>.

Next release of open source software on the horizon for OB-BAA

The OB-BAA project team is mid-stride in the development of the next release of its open source software that will provide a reference implementation of vOMCI used to managed ONUs within the Broadband Forum's CloudCO framework.

In addition, the team is hard at work readying the previously experimental control relay feature that makes control plane traffic available to Access SDN Management and Control functions.

In demonstrating how open source projects can collaborate with standardization activities, the OB-BAA team continuously provides timely feedback to the Forum's Common YANG and SDN/NFV project streams regarding any issues they may find in the specifications, enabling Broadband Forum to make corrections prior to publication of the standard.

OB-MAP continues work with prplMesh

The Open Broadband – Multi Access Point (OB-MAP) project – together with prplMesh) – has been working lately on the detailed definition of the prplMesh APIs. Discussions have centered around both the data model and the bus architecture. Additional work has centered on refining the complete set of use cases that participants would like to see solved by OB-MAP efforts.

Since the last Broadband Forum meeting, SoftAtHome released its gMap database code as open source, so this can be extended into a full topology database that interacts with the prplMesh APIs. OB-MAP will be looking at how it can effectively contribute to the enhancement and extension of this software.

The project continues to ensure that all physical layer technologies are supported in the context of prplMesh APIs and network topology.

In the future, OB-MAP expects to produce vendor extensions to the IEEE 1905.1, a specification that will provide carrier-grade capabilities enhancing EasyMesh operation in operator deployments. Once these are done, the team will also deliver certification requirements for these Broadband Forum extensions that would lead to a certification program.

OB-USP-Agent defines roadmap and progresses Canary Release 3

Recent Accomplishments: OB-USP-Agent project team has worked together to define a roadmap for the community to better understand the project's current state and future direction.

The first version of [the "Example" USP Controller](#) has been uploaded. The goal of this work effort is to provide a means of interacting with the open source USP Agent.

Current Efforts: Regarding the Canary Release (Release 3), the code has been contributed which means that the scope has been met for Release 3. The project team is in the Quality Assurance (QA) phase and hopes to wrap this up during the Summer. Release 3 focuses on providing support for MQTT and Architecture improvements to better support OpenWRT/prplWRT and RDK-based deployments.

Future Plans: The publishing of Release 3 and the roadmap to GitHub. Once this is complete, work will begin on Release 4.

Physical Layer Transmission publishes the G.fast performance test plan TR-380



- **Target:** To help service providers deploy equipment that will provide a better Quality of Experience (QoE) for their end-users.

- **Progress:** The Physical Layer Transmission (PHYtx) group finalized the Technical Review of the Reverse Power Feed Testing recommendation (WT-338i2) and started

resolution of the comments received during the Technical Review of the 'Fiber access extension over existing copper infrastructure' (WT-419) working text. The G.fast certification test plan (DTP-337i3) has been made ready for Technical Review. In addition, a new project started for setting G.hn performance requirements (WT-476).

Outcome: DTP-337i3 is ready for Technical Review (straw ballot). The document WT-338i2 is ready for final approval (final ballot).

Technical Reports G.fast Performance Test Plan (TR-380) and Architecture and Requirements for Fiber to the Distribution Point (TR-301i2a1) have reached final approval and are ready for publication.

The Reverse Power Feed (RPF) Test Plan (WT-338i2) has been technically reviewed and is ready for final approval. New testcases include:

- PSE Touch current test
- PSE Power frequency common mode immunity test
- PSE voltage verification test in the absence of false ELC3 (Off-hook) detection
- PSE Micro-interrupt test
- DPU Signature resistor test
- DPU power sharing test
- System level RPF tests

The review comments received on Fiber Access Extension Over Existing Copper Infrastructure (WT-419) are currently being resolved, preparing the document for final approval at the Q3 meeting. WT-419 provides telecom operators with an overview of Fiber To The Extension Point (FTTep) architectures and technologies they can use to offer fiber-like speeds on their existing copper infrastructure where the installation of fiber to the end-users' premises is not yet economical.

A new project Performance Test Plan for Use of G.hn Technology in Access Scenarios (WT-476) was started and will be handled in the Fiber Access Network Copper Extensions (FANCE) project stream. The goal is to provide performance requirements between a G.hn Aggregation Multiplexer (GAM) and one or more G.hn Network Terminations (GNTs). The focus is on the device level (DLL and PHY) testing, similar to how TR-380 is defined. This performance test plan will include test setup information, equipment configuration requirements, test procedures, and performance requirements for each test case.

A new amendment to 'Copper Transmission Models for Testing above 30 MHz' (TR-285) was started, adding models for Australian cables.

To gain further insight into what the Physical Layer Transmission Work Area is doing, visit: <https://wiki.broadband-forum.org/display/BBF/Physical+Layer+Transmission>.

Straw ballot hatrick for SDN/NFV Work Area!



Target: To drive the migration of SDN and NFV into all aspects of broadband networks to facilitate the agile deployment of new customized distributed broadband services and applications for operators with greater operational efficiency and lower cost.

Progress: The Cloud Central Office (CloudCO) project encompasses an expanding set of deliverables addressing: Reference Architecture; Interfaces specifications; Software reference implementations; Coexistence and Migration; and exemplary implementations and testing. Some of these activities involve other Broadband Forum Work Areas and this will continue to expand.

Outcomes:

The SDN/NFV Work Area had a busy meeting and is targeting completion of straw ballot resolution before the Q3 2020 meeting on the following specifications:

- Migration and Coexistence (WT-408)

- NETCONF Requirements for Access Nodes and Broadband Access Abstraction (WT-435)
- vOMCI for New Access Nodes (WT-451)

Additionally, the group will start straw ballot comment resolution on YANG Modules for Access Network Map & Equipment Inventory (WT-454) and Interfaces Between CloudCO Functional Modules (WT-411) before Q3 2020.

A good start was also made on a new project – Subscriber Session Steering (WT-474) – which will be coordinated with the ATA Work Area. With broadband networks becoming more dynamic due to SDN control and CloudCO, it is now possible to control which user plane function each individual subscriber should be connected to. This enables an operator to offer different service propositions to different customers. At the same time, user plane functions are becoming increasingly disaggregated and cloud-native, with a centralized control plane that enables additional user plane functions to manage short- or long-term changes in load. As such, WT-474 will define an architecture and interfaces to allow the access network to offer an ingress load-balancing capability towards cloud-native user plane functions.

To further progress work on various specifications, the SDN/NFV Work Area has scheduled additional virtual meetings for every Tuesday, starting June 30 until August 21, with some additional meetings taking place on selected Wednesdays.

With reference to the OB-BAA coordination and planning for Broadband World Forum, the group is working with the OB-BAA project stream to plan this year's demo which will be based on SDN/NFV application notes.

More information about the SDN/NFV Work Area can be found at: <https://wiki.broadband-forum.org/display/BBF/SDN+and+NFV>.

WWC finalizes first set of specifications for 5G



- **Target:** Address the needs of converged operators, which have both wireline and mobile networks deployed and are in a position to leverage all their assets with combined subscriber offerings.
- **Progress:** The WWC Work Area completed review of the first group of specifications that are coordinated with 3GPP Release 16.

These documents will go through a final review to check all agreements have been captured in detail and will progress to the final publication process in a matter of weeks. These documents will be the first normative specifications for the equipment that will connect wireline to the 5G core and the CPE it will serve. The area's target is to have the work for Release 16 complete by year end, with the first set of specifications rolling out from Q2 2020.

- **Outcomes:** Complete solutions to WWC will be delivered in the Release 16 timeframe as originally planned.

Work in the WWC Work Area is transitioning from completing the basic set of specifications to focusing on topics that bring more value to 5G for wireline and provide operators with increased flexibility and deployment options. The goal is to increase the service capabilities of the network to allow operators to fully leverage convergence of their networks while at the same time giving them more paths to transition their networks from legacy to 5G. This work will allow converged operators to provide a uniform experience to their customers irrespective of the access or appliance they are using. This will be supported by a common and streamlined back office and

control plane. This second phase of the work for Release 16 is targeted to complete by year end.

Broadband Forum and 3GPP are now deeply engaged in ensuring the myriad of technical details required to generate detailed specifications are addressed. This is in respect to CPE network equipment and changes to the 5G core.

Broadband Forum is taking an important role in developing 5G, making recommendations for the connection points between the fixed and 5G mobile core networks in order to drive core convergence.

WWC is also working with BUS to extend the TR-181 data models for 5G to leverage TR-069/TR-369 as part of WWC. The Work Area also did a final push to get the CPE changes to a state of completion and critical review.

For more on the WWC Work Area, please see: <https://wiki.broadband-forum.org/display/BBF/Wireline-Wireless+Convergence>.

Welcome to our new and returning members!

We were pleased to welcome a host of new members to the virtual meeting including [Comtrend](#), [Friendly Technologies](#), [Kaloom](#), [OpenVault](#), [POST Luxembourg](#), [Stechs](#), and [Skyworth](#). This resulted in more than 60 first-time attendees at the meeting, with around 25 guests also taking part from 16 potential new or upgrading members.

Are you interested in becoming the next member of the industry's leading standards body in defining broadband networks? Broadband Forum membership will not only accelerate your company's progress but enable you to become a key influencer in developing 5G, the Cloud, the Connected Home and Access Networks.

We have a range of Membership options for companies of all sizes, from startup companies to large corporations and not-for-profit organizations. Our new Regional [Operator Membership category](#) has further opened participation, take a look for further details of the access level privileges, benefits and requirements.

To learn more about the benefits of Membership, watch a video interview with Rhonda Heier, Membership Development Manager, [here](#) or email rheier@broadband-forum.org.

Broadband Forum in the news

As consumers bring more connected devices into the home, service providers will have a golden opportunity to capitalize on this growing market. This was the viewpoint expressed by Jason Walls, Co-Director of the Broadband User Services (BUS) Work Area, in an article published by [IoT Agenda](#). The feature discussed the Forum's work on USP, highlighting that standards are more important than ever to meet an evolving ecosystem.

The May issue of [ISE Magazine](#) discussed the importance of leveraging both fixed and mobile networks to unlock the full potential of the new innovative services and applications enabled by 5G. The piece touched on the Forum's coordinating efforts with the 3rd Generation Partnership Project (3GPP) to develop a converged 5G core network.

Finally, a variety of representatives from the Broadband Forum spoke to [Fibre Systems](#) on some of the upcoming broadband trends that will be making their impact on the industry, and how the current pandemic situation has made its own impact.



Events Calendar

Broadband Forum Meetings and BAsE Events

- Q2: July 9, BAsE Webinar series, PON challenges today and in the future
- Q2: July 23, BAsE Webinar series, The state of PON applications in the MSO market
- Q3: August 31-September 3, Q3 Meeting, Antwerp, Belgium
- Q3: October 13, BAsE Events at BBWF, Amsterdam, The Netherlands
- Q3: October 24, BAsE North America, Las Vegas, USA
- Q4: November 17-19, UFBB BAsE, Amsterdam, The Netherlands
- Q4: December 1, BAsE FTTH Europe 2020, Berlin, Germany
- Q4: December 8-11, Q4 Meeting, Melbourne, Australia
- Q4: BAsE Events, Melbourne, Australia, (date TBC)

Sponsorship opportunities are available for Broadband Forum's 2020 quarterly meetings. Sponsoring a meeting is a great way to highlight your company and exhibit your company's innovation in the broadband industry – including demonstrations or prototypes – while showing your support of Broadband Forum. Opportunities vary and can be customized to accommodate a variety of budgets.

Please view the list of our standard sponsorship packages and benefits at: <https://wiki.broadband-forum.org/display/BBF/Sponsorship+Opportunities>.

If you are interested in sponsoring a meeting, please contact Rhonda Heier at rheier@broadband-forum.org.

Other dates for your diary:

- Broadband World Forum: October 13-15, 2020, Amsterdam, The Netherlands
- Convergence India: October 20-22, 2020, New Delhi, India
- FTTH Conference 2020: December 1-3, 2020, Berlin, Germany

Contact information

Questions or ideas? Contact the Broadband Forum on +1 510.492.4020 or email info@broadband-forum.org.