End-to-End Service Enablement
Wi-Fi Monetization Strategies
Customer Experience in a Convergence Era
Connected Cities Roadmap

UNSTOPPABLE WI-FI EVOLUTION IN THE 5G ERA

Meet the industry leaders who are shaping the future of Wi-Fi in the 5G era in the Connected Cities, Carrier & Service Providers and Hospitality & Enterprise ecosystems

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Supercharge your network performance

Protect users with best-in-class security

Fuel business application efficiency

Rise up and demand more from your network

Simply brilliant cloud WiFi

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This guide has been published on behalf of the Wireless Broadband Alliance by:

**Fresh01**

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www.fresh01.com  

Please note: while every effort is made to ensure the accuracy of this publication, the organisers Wireless Broadband Alliance and the publishers Fresh01 ltd cannot accept liability for any statement or error contained herein.
ON behalf of the entire Wireless Broadband Alliance, please allow us to warmly welcome you to the Wireless Global Congress in beautiful New York City. This year marks the first WBA event in NYC, and we couldn’t be happier to bring our event to "The City That Never Sleeps."

2017 has been a year of considerable evolution and change in our ecosystem, and the same is true for the WBA. The global reach of our membership offers a comprehensive representation of the wireless industry, brought together with one key goal in mind: to champion the development of a converged wireless ecosystem through seamless, secure and interoperable technologies and services that enable an outstanding user experience. After a very successful Congress in London this past May, we’re excited to offer a completely revamped Conference Program for our attendees and guests in NYC. Wednesday, 15 November will present three Conference Tracks, each focused on a specific topic: The Cable Industry, Connected Cities, and Hospitality & Enterprise. On Thursday, 16 November, a total of four different Workshops will give attendees the opportunity to find out more about our ecosystem’s hottest issues, including Network Densification in the 5G Era; Policy, Identity & Security; Wi-Fi Deployment Best Practices; and more. We’re confident that this format will provide you with the best learning experience possible, and we’re eager to hear your feedback.

In addition to the Conference Tracks and Workshops, we hope you’re as excited as we are to attend the 2017 WBA Industry Awards, where we will celebrate the excellence and innovation in our industry. There are some truly remarkable entries this year, and we invite you to join us for the festivities on Wednesday afternoon to see who takes home each trophy.

Be sure to get the most out of your Congress experience! Check out the power demos taking place during coffee breaks in the WBA Innovation Lounge; hear what the next generation of wireless users is hoping for during the WBA Millennials panel; join us at the WBA Accelerator to see what up-and-coming start-up and scale-up companies have to offer the ecosystem; and relax and unwind with a cocktail or two during the Drinks & Networking Reception. The Wireless Global Congress has a little something for everyone, and we urge you to experience as much of it as you possibly can.

We look forward to meeting you over the next two days, and it’s our sincere hope that your visit to NYC will create some lasting memories for you and your colleagues.

JR Wilson  
Chairman  
Wireless Broadband Alliance

Shrikant Shenwai  
Chief Executive Officer  
Wireless Broadband Alliance
innovation in practice

Paving the path for cable and satellite operators to build a new kind of a mobile network

- Leverage Wi-Fi and unlicensed spectrum to increase coverage
- Accelerate design planning and rollout of your mobile network (fiber, small and macro cell)
- Orchestrate virtual mobile core and radio access network
- Assure and optimize your customers’ network experience

Amdocs at Wireless Global Congress:
Amdocs sponsoring the Outdoor Wireless Deployment panel
Cable Industry Track – 3:00pm Wed Nov 15
Visit Amdocs in the exhibition area

www.amdocs.com
Cisco is the worldwide leader in IT that helps companies seize the opportunities of tomorrow by proving that amazing things can happen when you connect the previously unconnected. At Cisco, customers come first and an integral part of our DNA is creating long-lasting customer partnerships and working with them to identify their needs and provide solutions that support their success.

At Mojo, we’re shaking up the Enterprise Wi-Fi industry. We know that customers are ready for a modern Wi-Fi network that doesn’t rely on outdated controllers and proprietary hardware. Our cloud-managed Wi-Fi solution is based on a radical vision for creating networks that reach new heights in performance, security, scalability, and ease-of-use. Founded in 2003 and headquartered in Mountain View, CA, Mojo Networks delivers brilliant Wi-Fi to many of the world’s top brands and highest levels of government. Learn more about our vision and products at www.mojonetworks.com.

Fon is the world’s leading carrier WiFi provider. Pioneers of residential WiFi sharing, we revolutionised carrier WiFi with our technology, creating a globally connected WiFi network. Today, we continue to innovate through two leading business areas. Fon Solutions offers best-in-class WiFi products and services. Our cutting-edge management solutions enable service providers to configure, deliver and operate their own WiFi services.

Fon Network aggregates residential and premium carrier WiFi footprints creating one coherent global WiFi network. We facilitate WiFi interconnection between carriers, provide access deals to interested parties, and enable seamless user roaming. To learn more, visit fon.com.

CableLabs is a R&D and Innovation platform dedicated to revolutionizing broadband communications and connectivity. We build the future of digital life outside the box, collaborating with the world’s most powerful network of multiple-systems operators, academia, policy makers and device manufacturers to bring tomorrow’s innovation ideas to life. Together with CableLabs’ subsidiaries Kyrio and UpRamp, we launch services vital to the ecosystem, commercialize market-making technologies, validate standards for manufacturers and strategically align partners across the business continuum to deliver global impact for MSOs and their customers.

The CBRS Alliance believes that LTE-based solutions in the CBRS band, utilizing shared spectrum, can enable both in-building and outdoor coverage and capacity expansion at massive scale. In order to maximize CBRS’s full potential, the CBRS Alliance aims to enable a robust ecosystem towards making LTE-based CBRS solutions available. The mission of the CBRS Alliance is to evangelize LTE-based CBRS technology, use cases and business opportunities while simultaneously driving technology developments necessary to fulfill the mission, including multi-operator LTE capabilities. The Alliance will also establish an effective product certification program for LTE equipment in the US 3.5 GHz band ensuring multi-vendor interoperability.

The LoRa Alliance is an open, non-profit association of members that believes the internet of things era is now. It was initiated by industry leaders with a mission to standardize Low Power Wide Area Networks (LPWAN) being deployed around the world to enable Internet of Things (IoT), machine-to-machine (M2M), and smart city, and industrial applications. The Alliance members will collaborate to drive the global success of the LoRa protocol (LoRaWAN), by sharing knowledge and experience to guarantee interoperability between operators in one open global standard.

HTNG - The premier technology solutions association in the hospitality industry, HTNG is a self-funded, nonprofit organization with members from hospitality companies, technology vendors to hospitality, consultants, media and academic experts. HTNG’s members participate in focused workgroups to bring to market open solution sets addressing specific business problems. HTNG fosters the selection and adoption of existing open standards and also develops new open standards to meet the needs of the global hospitality industry.

Currently more than 400 corporate and individual members from across this spectrum, including world leading hospitality companies and technology vendors, are active HTNG participants.

Digital.NYC is the New York City designated hub for all the information and resources that support the tech and startup community. Digital.NYC has up to date listings of over 9,700 startups, hundreds of early stage investors, jobs, events, courses, accelerators, working spaces as well as NYC and NY State resources.
Accuris Networks helps service providers monetise the connectivity between Wi-Fi and Mobile Networks. The Accuris CONNECT cloud platform facilitates the connectivity between Wi-Fi network providers and mobile operators to enable Carrier Wi-Fi services like Offload and Roaming. Accuris Networks is a trusted supplier to blue-chip operators around the world including AT&T, Bell Canada, China Mobile Intl, EDCH, Internet Solutions, Telekom Malaysia, Vivo/Telefonica and more. Visit us at www.accuris-networks.com or tweet @AccurisNetworks.

Aptilo Networks is a leading provider of carrier-class systems to manage data services with advanced functions for authentication, policy control and charging. We help service providers to create growth, save costs and reduce churn while increasing ARPU and customer loyalty through: Public Wi-Fi services, Managed Guest Wi-Fi services to enterprises and venues, Wi-Fi offload, Wi-Fi Calling, IoT services.

The Aptilo Service Management Platform™ is the world’s #1 Wi-Fi service control solution. It has been proven in large-scale deployments with 100+ operators in more than 75 countries in partnership with leading vendors including Arris, Cisco, Ericsson, Fujitsu, HP, Nokia and Ruckus.

Ruckus, a business unit of Brocade, delivers simply better connections, so you can deliver awesome customer experiences. Ruckus’ high-performance network infrastructure provides secure, reliable access to applications and services no matter how tough the environment. Ruckus innovates across wireless and wired technology to meet industry-specific needs. When connectivity really matters, organizations turn to Ruckus. #simplybetterconnections
# NEW YORK AT A GLANCE

## MONDAY 13 NOVEMBER 2017

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## CONFERENCE DAY 1

**WEDNESDAY 15 NOVEMBER**

JR Wilson, Chair WBA and VP Partnerships & Alliances, AT&T  
Michael Pastor, General Counsel NYC Department of Information Technology and Telecommunications (DoITT)  
Shrikant Shenwai, CEO, WBA

**SERVICE ENABLEMENT TOWARDS 5G**
Moderator: Steve Andrews, WBA Board Advisor  
Dr. Derek Peterson, CTO, Boingo Wireless  
Manish Jindal, Group Vice President Wireless, Charter  
JR Wilson, Chair WBA and VP Partnerships & Alliances, AT&T  
Shri Shrivastava, Chairman & Managing Director, BSNL

**COFFEE BREAK & INNOVATION STAGE DEMOS**

**WI-FI MONETIZATION STRATEGIES**
Moderator: Vijay Sammeta, CEO, Civic Foundry  
Rick Wilmer, CEO, Mojo Networks  
James Beldock, Express Wi-Fi, Facebook  
Enrique Farfan, COO, Fon

**LUNCH & NETWORKING BREAK**

**CONFERENCE TRACKS**

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## TUESDAY 14 NOVEMBER 2017

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## CONFERENCE DAY 2

**THURSDAY 16 NOVEMBER**

**CUSTOMER EXPERIENCE IN A CONVERGENCE ERA**
Moderator: Chris Bruce, Co-Chair WBA and BT  
Shri Shrivastava, Chairman & Managing Director, BSNL  
John Graybeal, Mobility Group CTO, Cisco  

Create Future Now – Millennials Panel

**COFFEE BREAK & INNOVATION STAGE DEMOS**

**A CONNECTED WORLD LIFESTYLE**
Moderator: Chris Bruce, Co-Chair WBA and BT  
Phil McKinney, CEO, CableLabs  
SungHoon Seo, Ph.D. Principal R&D Engineer, KT Labs  
Daisuke Nojima, Principal Researcher, NTT DOCOMO

**PANEL DISCUSSION - WOMEN IN TECH LEADERSHIP**
Moderator: Angie Wiskocil, WBA Board Advisor

**LUNCH & NETWORKING BREAK**

**WORKSHOPS**

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## WBA ACCELERATOR

**INTRODUCTION:**
- Steve Andrews, WBA  
- Marcos Dinnerstein, Digital.NYC

**PANEL OF EXPERTS:**
- Cole Reinwand, VP XFINITY Wi-Fi at Comcast  
- Nicholas Pascaretti, Chief Broadband Architect at Mayor’s Office of Technology & Innovation  
- Clayton Banks, Co-Founder and CEO at Silicon Harlem

**PARTICIPATING COMPANIES:**
- Galgus - Jose Gonzalez, CEO  
- Edgewater Wireless - Eric Smith VP of Product at Edgewater  
- ShareG - Suruchi Gupta, CEO and Founder  
- Spot On Networks - Richard Sherwin, CEO  
- Angie Hospitality - Ted Helvey, CEO  
- WindyCitySDR - Martin O’Shield, Founder  
- Greenerwave - Geoffroy Lerosey, Co-Founder & CEO

**DETAILED AGENDA IS AVAILABLE ON THE EVENT APP**

Correct as of end of October
Home WiFi Solution
Improve and control your subscribers’ home WiFi experience

- Improve Net Promoter Score
- Reduce customer support costs
- Differentiate from competitors
- Strategic move versus OTT home WiFi providers

The solution at a glance

OTT-autonomous home WiFi

CPE-integrated, whole home WiFi

Visit us at space 13 or get in touch with us at solutions.fon.com
Need more info? Visit solutions.fon.com
Welcome to WBA’s NEW YORK Show here at The Roosevelt Hotel. We’ll be bringing you even more innovation, disruption, and hot debates this year with some of the industry’s headline topics taking centre stage with a faculty of experts sharing their thoughts and exclusive insights. This year’s Congress is about Wi-fi evolution in the 5G era, looking at wireless services in-home, outdoors, at work and leisure, from the perspective of:

- End-to-end service enablement
- Wi-Fi monetization strategies
- Customer experience in a convergence era
- The Connected cities roadmap

WE HOPE YOU ENJOY THIS YEAR’S CONGRESS WITH:

- Live debates and exclusive case studies on the main stage
  GRAND BALLROOM, MEZZANINE LEVEL

- Innovation Lounge showcase of trending technologies
  GRAND BALLROOM, MEZZANINE LEVEL

- WBA Accelerator bringing you upcoming industry innovators and disruptors
  PLAZA SUITE, MEZZANINE LEVEL

- Exhibition floor
  GRAND BALLROOM FOYER AND CORRIDOR, MEZZANINE LEVEL

- Drinks Reception on November 15, Wednesday evening after the Conference
  PALM ROOM ON LOBBY LEVEL

3x Exclusive Conference Tracks on November 15, Wednesday afternoon
CABLE TRACK
CONNECTED CITY
HOSPITALITY & ENTERPRISE

4x Dedicated Workshops on November 16, Thursday afternoon
WORKSHOP 1:
Wi-Fi Monetization & NGH for Carriers, Cities & Enterprises
WORKSHOP 2:
Network Densification in the 5G Era & Policy, Identity and Security
WORKSHOP 3:
Wi-Fi Deployment Best Practices
WORKSHOP 4:
Connected City

WIRELESS BROADBAND ALLIANCE EVENT APP

DOWNLOAD THE FREE EVENT APP WHICH WILL ENABLE YOU TO:
- Search the agenda by day, speaker, and topic
- Create your own event itinerary to integrate with your calendar
- Schedule meetings with other attendees
- View the Exhibitor Hall & Floor Map

DOWNLOAD NOW!

DOWNLOADING AND ACTIVATING THE APP
- The Wireless Broadband Alliance App is free from the App Store (for iOS users) and Google Play (for Android users).
- Search for Wireless Broadband Alliance Events or scan this QR code with your mobile device. Alternatively, type https://crowd.cc/s/ZPZO into your mobile device’s browser.
- This link will automatically detect your mobile type and take you to the right place to download the app.
- All users must create an account in order to use the app.
- If you have any questions or need technical assistance, click on the “Help” icon within the app.
CONFERENCE TRACK SUMMARY

CABLE INDUSTRY TRACK

The Cable Industry Conference Track will provide a clear understanding of the cable industry roadmap and evolution in terms of business proposition and technologies. Lead by CableLabs, Comcast and Liberty Global, sessions in this Track will provide insights on the latest trends and developments that affect business critical areas for the cable industry.

The Conference Track will address three major topics:
1. In-home Broadband
2. Indoor/Outdoor Mobile solutions
3. Enterprise managed services opportunities

CONNECTED CITY TRACK

The Connected City Conference Track is the perfect opportunity to engage with City Officials and those are the forefront of leading developments on smart cities, where they will be sharing the latest trends for a better connected city strategy, acknowledging all the current opportunities and challenges.

The conference track will address three major topics:
1. Broadband Planning
2. City Real Estate Management for Telecoms Networks
3. City Wi-Fi opportunities

HOSPITALITY & ENTERPRISE TRACK

The Hospitality & Enterprise Wireless Services Conference Track will focus on the wireless technologies that can improve the Wi-Fi experience within the Hospitality sector, with focus on key strategies and the implementation implications on the short and long term guest and brand experience. Attendees will walk away with a strong understanding of Next Gen Wi-Fi with knowledge of the current opportunities and challenges from experts who are at the forefront of wireless technology, the hospitality sector and experts from other sectors who will share use cases that can be applied within hospitality.

The conference track will address three major topics:
1. Wireless Guest Experience for Hospitality
2. Next Gen Wi-Fi and monetization
3. Enterprise Wireless Connectivity

TAKE AWAY ANSWERS TO SOME OF YOUR BUSINESS CRITICAL ISSUES...

• How to improve the in-home experience through on-boarding, connectivity and coverage,
• Addressing the challenge of creating the smart home from new build to home improvements, identifying commercial models, partnerships and the right technologies to deploy,
• Defining the mobile strategy of a cable operator,
• Identifying the opportunities as Cable operators focus on the enterprise segment,
• Understanding the deployment issues to address city wide broadband coverage in a commercially-viable way.
• Maximising the city assets for deploying telecoms networks,
• How to deploy and manage seamless, secure and interoperable City Wi-Fi networks
• How to deliver an excellent guest experience with Wi-Fi
• Understand and build the business case for Wi-Fi to increase customer retention and brand loyalty,
• Improve productivity and user experience with new wireless technologies in the enterprise
WORKSHOP OVERVIEW

This Workshop will present a series of success stories and case studies related to Wi-Fi monetization opportunities including Wi-Fi Roaming, Wi-Fi Calling and Location-based Services (LBS) and how these services can provide extra revenue to your company’s Wi-Fi assets to make your business case more viable.

The Workshop will be an opportunity to learn the deployment best practices first-hand for these services, what the key challenges are and how they can be overcome and educate participants on how to improve the customer experience on Next Generation Hotspot (NGH)/Passpoint™ networks by eliminating the barriers that are still perceived to exist. NGH is a powerful technology that enables a set of services, like Wi-Fi Offload, Wi-Fi Roaming, Wi-Fi Calling among others and applies to a wide set of market segments, like Carriers / Service Providers, Hospitality, Retail, Cities, Transportation, and many more.

Leading carriers and cities will share their case studies and best practices on deploying NGH, sharing what services have been enabled and what are the benefits and challenges to deploy NGH. These case studies will boost confidence for service providers to invest in rolling out NGH and provide more encouragement to device vendors to support NGH. By looking at use cases, the Workshop will share crucial details on how to remove barriers to invest in NGH, and reinforce the business case based on different verticals. In particular, we will be looking at the specific benefits and challenges of deploying NGH networks for the Hospitality/Enterprise segment; how to use NGH networks to improve the customer experience; which new services can be deployed and the new monetization opportunities available.

TOPICS TO BE COVERED DURING THE WORKSHOP

- Wi-Fi Roaming
- Wi-Fi Calling
- Location Based Services (LBS)
WORKSHOP OVERVIEW

With the growth in the number of users, devices and things being connected, an ongoing issue has become the need for Carriers to have a strategy to deal with network densification and the growing demand, especially in high density locations. This Workshop will look at the role of various technologies will play as we move towards 5G. The Workshop will help participants understand how to take advantage of the various technologies to support network densification in the 5G era.

We will look at the indoor environment, especially the enterprise segment, where the industry is struggling with use of new private LTE technologies like CBRS, Multi-x or others that will make it more viable with neutral host capabilities as part of the solution to use private LTE services.

Densification is not a just cellular issue, as there is a need for support from the unlicensed technologies; many companies are advancing their Wi-Fi capabilities but are in the process of assessing how exactly existing Wi-Fi capabilities can comply and fit in with 5G. Many service providers offer combined and integrated products but several common service enablers, including interoperability, identity, and others at a support level still need to be better established. The issues will all be discussed together with what architecture requirements.

Additionally, this Workshop will address the state-of-art security for Wi-Fi networks and the importance to the industry of improving identity management. The Workshop will also take a deep-dive into the current Policy mechanism to differentiate services from a capacity, cost and priority perspective in order to deliver the best user experience to customers.

WBA Member’s experts will share the latest industry developments on Wi-Fi security and identity management by sharing the status from multiple standardization bodies’ work and current industry solutions and trends. This includes some of the latest regulatory requirements from multiple countries and how security and privacy have been addressed.

TOPICS TO BE COVERED DURING THE WORKSHOP

- 5G Densification and Technology Roadmap for 5G
- Indoor Private LTE Use Cases
- IoT LWPAN on 5G
WORKSHOP OVERVIEW

The purpose of this Workshop is to provide a set of guidelines and industry best practices for the deployment of Wi-Fi networks, will provide practical information and recommendations to best deploy and manage your Wi-Fi assets.

Deploying a Wi-Fi infrastructure should follow a set of specifics steps to maximize the investments and maintenance costs. From the initial site survey to the location to the state of the art monitoring tools to maintain your networks, WBA member’s experts will share their recommendations and best practices with relevant case studies.

The complexity of Wi-Fi really increases when we are talking about high density venues, like Sports Stadiums, Airports, Trains/subway or Downtown areas, with a high volume of users and data consumption. The requirements for these types of deployments are quite high and requires a substantial level of knowledge and expertise, WBA members experts will provide their recommendations and present the case studies on some of the most complex deployments on earth.

This Workshop will delve into the state of the art of cloud base Wi-Fi services based on SDN/NFV. Benefits of using cloud management services will be shared among side with industry best practices and a set of case studies from the WBA experts.

TOPICS TO BE COVERED DURING THE WORKSHOP

- Case studies of NGH deployment at a wide level, by carriers and cities
- Benefits of NGH deployment for the Hospitality/Enterprise sector
- NGH/Passpoint technology evolution
WORKSHOP OVERVIEW

This Workshop is the perfect opportunity to engage in practical discussions to identify the business opportunities and challenges for a Connected City. It will take a deep dive into the requirements around facilitating connectivity management guidelines to support cities and government authorities in developing their connected city plans, and for the broader wireless industry, including citizens, entrepreneurs, operators, regulators, equipment manufacturers and service developers to better understand the challenges and opportunities of the Connected City and Smart City ecosystem.

City wide Public Wi-Fi deployments have been a hot topic in the industry recently, also many discussions have been held with many City CIOs and City Officials around this topic with WBA. In this context, WBA experts will provide their views on the latest trends and industry developments for City Wi-Fi deployments.

Urban scenarios are a challenge for wireless broadband deployment, both due to legacy infrastructure facilities and density of users and data consumption. Alternative technologies to work as wireless backhaul are getting more and more relevancy due to its costs of deployment and available spectrum, WBA experts will provide an overview of these technologies and the role can play on the urban environment.

Cities are facing a wide spectrum of different wireless connectivity technologies both for broadband and the Internet of Things (IoT) applications, special with all recent evolutions in terms of unlicensed technologies both for IoT and broadband proliferation. The workshop identifies the most relevant wireless technologies and their main applications in the industry, in order to facilitate the understanding and roadmap that cities should pursuit.

TOPICS TO BE COVERED DURING THE WORKSHOP

- Understanding state of the art offerings to facilitate security and identity management
- Overview of the latest industry standardization bodies work on policy security and privacy
- Identifying policy interoperation gaps and working towards improvements of current mechanisms
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<td>Finbarr Coghan</td>
<td>Accuris Networks</td>
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<td>Sonia Jorge</td>
<td>Alliance for Affordable Internet (A4AI)</td>
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<td>Angela Logothetis</td>
<td>Amdocs</td>
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<td>Cole Reinwand</td>
<td>Comcast</td>
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<td>Eric Schaefer</td>
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<td>Christopher Fisher</td>
<td>Cuddy Feder</td>
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<td>James Beldock</td>
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<td>Enrique Farfan</td>
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**Download the free Event App which will enable you to:**
- Search the agenda by day, speaker, and topic
- Create your own event itinerary to integrate with your calendar
- Schedule meetings with other attendees
- View the Exhibitor Hall & Floor Map

**The Wireless Broadband Alliance Event App Now Available.**

**DOWNLOAD NOW!**
### MEET THE SPEAKERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>SHRIKANT SHENWAI</td>
<td>WBA</td>
</tr>
<tr>
<td>RICK WILMER</td>
<td>Mojo Networks</td>
</tr>
<tr>
<td>DAISUKE NOJIMA</td>
<td>NTT DOCOMO</td>
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<tr>
<td>STEVE ANDREWS</td>
<td>WBA</td>
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<tr>
<td>REZA JAFARI</td>
<td>WBA</td>
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<tr>
<td>ANTHONY PALADINO</td>
<td>Mojo Networks</td>
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<tr>
<td>NICHOLAS PASCARETTI</td>
<td>NYC Mayor’s Office</td>
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<tr>
<td>JOSHUA BREITBART</td>
<td>Office of the NYC Mayor</td>
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<tr>
<td>ARMAND RABINOWITZ</td>
<td>HTNG</td>
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<tr>
<td>JEFFREY PARKER</td>
<td>Red Lion Hotels</td>
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<tr>
<td>NECATI CANPOLAT</td>
<td>Intel</td>
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<td>SHANNON AYLESWORTH</td>
<td>Ruckus</td>
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<td>CLAYTON BANKS</td>
<td>Silicon Harlem</td>
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<td>DEEPTI BUSIREDDY</td>
<td>T-Mobile US</td>
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<tr>
<td>GAVIN SHELDON</td>
<td>Liberty Global</td>
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<tr>
<td>GLENNA COLAPRETE-HUDSON</td>
<td>Verizon Wireless</td>
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<tr>
<td>OLIVIER BEAUJARD</td>
<td>LoRa Alliance</td>
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<td>ANGIE WISKOCIL</td>
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<td>ADLANE FELLAH</td>
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<td>TIAGO RODRIGUES</td>
<td>WBA</td>
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<td>NICHOLAS PASCARETTI</td>
<td>NYC Mayor’s Office</td>
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List correct as of end of October

### DOWNLOADING AND ACTIVATING THE APP

- The Wireless Broadband Alliance App is free from the App Store (for iOS users) and Google Play (for Android users).
- Search for Wireless Broadband Alliance Events or scan this QR code with your mobile device. Alternatively, type [https://crowd.cc/s/ZPZO](https://crowd.cc/s/ZPZO) into your mobile device’s browser.
- This link will automatically detect your mobile type and take you to the right place to download the app.
- All users must create an account in order to use the app.
- If you have any questions or need technical assistance, click on the “Help” icon within the app.
Save the date for our webinar:
Next Generation Hotspot Provisioning Standardization

Wednesday, December 6 at 10am EST

For more information on this Comcast sponsored webinar, visit www.wballiance.com.
Founded in 2003, the Wireless Broadband Alliance works tirelessly to champion the development of a converged wireless broadband ecosystem. Our mission - Resolving business issues and enabling collaborative opportunities for service providers, enterprises and cities, enabling them to enhance the customer experience on Wi-Fi and significant adjacent technologies.

As the traditional role of Wi-Fi and unlicensed wireless is changing from connectivity provision to consumers towards vertical market specific sectors, such as Cities, Hospitality, Enterprise and IoT service platforms etc. the interoperability and security between different technologies is becoming a key requirement in developing new services.

Wi-Fi has a pivotal role to play in the development of 5G and the need for co-existence and convergence of licenced and unlicensed networks will drive the adoption of the next generation of Wi-Fi services. In 2018, we remain committed to focusing on four key pillars that ultimately meet the mission and goals of our Membership.

**MEMBERSHIP CATEGORIES**

**GENERAL MEMBER**
For network operators or technology companies interested in full participation in WBA Members Meeting and full voting rights.

**OBSERVER MEMBER**
Open to operators and vendors with an annual revenue below USD 50 million. Restricted participation in WBA projects and no voting rights.

**GROUP MEMBER**
Open to affiliate companies of existing WBA Board or general members. Participation in WBA projects allowed but voting rights via parent member companies.

WBA members not only work together to resolve their business issues and collaborate on opportunities, they help to shape the future of wireless and raise their profile and influence on the global stage. Talk to us today about joining and how you can get involved.

contactus@wballiance.com
WBA CORE COMPETENCE AND PROGRAMS

BUILDING ON OUR PIONEERING NEXT GEN WI-FI FOUNDATIONS
The key activities of the WBA aim to address the ever-changing market requirements and opportunities through the following programmes and objectives:

<table>
<thead>
<tr>
<th>WBA ACTIVITIES</th>
<th>OBJECTIVES</th>
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<tbody>
<tr>
<td>Services Enablement, Develop Guidelines and Standardization</td>
<td>Testing &amp; Interoperability, Carrier Wi-Fi Services Certification, NGH Provisioning Standardization, Wi-Fi Calling / Deployment Guidelines</td>
</tr>
<tr>
<td>End-to-end Interoperability, Fields Trials, and Roaming</td>
<td>Unlicensed Integration with 5G Networks, Multi-Access Edge Computing, 802.11ax Super Wi-Fi, Wireless Technologies Trial (LTE un., CBRS)</td>
</tr>
<tr>
<td>Services Certification and Compliancy</td>
<td>Connected City Advisory Board, IoT Interoperability, Dynamic Roaming, Identity, IoT Financial and Data Clearing, WRIX Evolution</td>
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<table>
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<tr>
<th>PROGRAMS</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARRIER WI-FI SERVICES (includes Trials, Testing and Interoperability, Certification)</td>
<td>Policy Work Group, Roaming Work Group, Security and Privacy over Wireless Networks, Wi-Fi Value-add (Advertising &amp; Data)</td>
</tr>
<tr>
<td>NEXT GENERATION WIRELESS (5G and unlicensed)</td>
<td></td>
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<tr>
<td>CONNECTED CITIES AND INTERNET OF THINGS</td>
<td></td>
</tr>
<tr>
<td>POLICY, SPECTRUM &amp; INDUSTRY ENGAGEMENT</td>
<td></td>
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To engage with WBA Programs & Projects - contact our PMO team: pmo@wballiance.com

Want to become a WBA Member? contact: membership@wballiance.com
INNOVATION STAGE

Each day join us in the Innovation Lounge, just before the morning coffee break where you’ll catch some of the latest trends globally being showcased on the Innovation Stage in power demos. Each demo has 6 minutes to catch your attention before you move to the next. Over the two main conference days, you’ll see 6 demos. It’s the ideal way to get a snapshot of some key trends across the industry, be they from some of the most established organisations or some hot up-and-coming innovators.

– MAKE SURE YOU JOIN US!

WBA MILLENNIALS

Once again, we have a specially reserved slot on the main stage where we’ll present a unique perspective and let today’s youth do the talking. As the experts present and debate on the next generation of wireless technology, we want to have young people on stage as our next generation of users to give their honest opinion on how they want their future to look! We’ve given you heart-warming insights in San Jose with 7 year olds putting a smile on everyone’s face; edgy ideas from 13 year olds in London, and coming up in New York we’ll bring you students from Staten Island who live and breathe innovation. Don’t miss out on yet another fantastic and truly unique session.

Live on the main stage on THURSDAY, November 16
10:10 GRAND BALLROOM, MEZZANINE LEVEL!

WBA ACCELERATOR

The WBA Accelerator is a dedicated session that allows companies to pitch their business ideas and propositions to a panel of industry specialists, an audience of (invited) investors and conference attendees. Participating companies will be given 5 minutes to present to the expert panel, followed by 5 minutes for questions.

This initiative is a collaboration partnership between Digital.NYC (www.digital.nyc) and the Wireless Broadband Alliance (WBA)

Join us at the WBA Accelerator on THURSDAY, November 16
17:45 AT PLAZA SUITE, MEZZANINE LEVEL
Join WBA for an evening of drinks and networking at the Drinks Reception, sponsored by Boingo, on the evening of Wednesday 15 November in the Palm Room on the Lobby Level. Simply make your way once the conference finishes and you’ll be welcomed with a drink!

Mingle with conference attendees, meet the WBA Award Winners and hear from Boingo CTO Dr. Derek Peterson as he shares excitement for hosting the event in the heart of New York, where Boingo powers the wireless networks for the World Trade Center Oculus, major airports like JFK and LaGuardia, and more.

There’ll be plenty of conversations continuing throughout the evening from the hot topics at the conference. Make sure you’re there to enjoy the dialogue, make new contacts, and of course, enjoy being in the city that never sleeps!

17:30 in the Palm Room on the Lobby Level - SEE YOU THERE!
When you’re in the Coverage Area of the Next Gen Wi-Fi network, you will automatically and securely connect on to the network based on your user identity credentials (either SIM card or Cable operator profile).

The Next Gen Wi-Fi network will be available in all the areas highlighted on the Coverage Area where FREE Wi-Fi is available.

To prepare your smart device* visit: https://wba.odyssys.net to register your device.

Once you arrive at Congress, you will be automatically connected to the WBA_NGH (HS2.0) Wi-Fi

If you have further questions or require further technical support please email: nghlive@wballiance.com

OBJECTIVES OF NEXT GEN WI-FI LIVE EXPERIENCE:

• Promote the adoption and awareness around Next Gen Wi-Fi for Carriers and End Users
• Showcase seamless and automatic roaming between Wi-Fi and cellular networks (3G, 4G) with an outstanding user experience
• Mobilize a large number of Carriers to participate on the NGH Live Experience
• Attendees and citizens benefit from the seamless and secure Wi-Fi experience
• Engage the local community around Next Gen Wi-Fi benefits and foster live deployments

If you have further questions or require further technical support please email: nghlive@wballiance.com

NEXT GEN WI-FI: SET UP YOUR DEVICE NOW!

Want to provide the Next Gen Wi-Fi to your customers?
contact nghlive@wballiance.com to join the initiative now!

NEXT GEN WI-FI NOW SUPPORTS THE FOLLOWING DEVICES:

- Apple
- Windows 10
- Android

Provisioning SSID: WBA_NGH_Setup
HS2.0 SSID: WBA_NGH
*for a full list of supported devices please visit: https://wba.odyssys.net
BandwidthX is the missing piece of your network capacity puzzle

Service providers to tens of millions of devices and access points are already experiencing the benefits!

Seamless, automated connections and radio management

Quality of service thresholds ensure an outstanding experience for all

Real-time policy controls that help respond to network load automatically

Comprehensive data analytics to monitor your expanded network

Dynamic pricing guarantees a fair price for every connection

Alternative mobile data capacity to optimize your network usage

iOS and Android apps for all your device needs

www.bandwidthx.com

Looking for a better way to buy or sell Wi-Fi? We have you covered.

Bringing unprecedented innovation and efficiency to the trading of Wi-Fi services around the globe, the Syniverse Mobile Marketplace provides a centralized, user-friendly platform for Wi-Fi buyers and sellers to assess Wi-Fi capabilities, negotiate terms, enable services, and settle financially.

Want to know more?

Stop by the innovation Lounge or contact dan.klaeren@syniverse.com to find out how you can embrace the full power of Wi-Fi.
WHAT IS THE CONNECTED CITY ADVISORY BOARD?

The Connected City Advisory Board (CCAB) develops, shares and promotes thought-leadership and practical framework for the social and economic development and sustainable operation of the Connected City ecosystem.

It’s a unique platform for City Managers and CIOs to knowledge-share challenges and opportunities in the development and execution of Smart Cities, establish best practice and determine a strategy to leverage public-private partnerships.

WHO SHOULD PARTICIPATE?

The membership of the Connected City Advisory Board (CCAB) consists of a select group of City CIOs and senior city and government officials along with invited industry experts and members of the WBA Board of directors.

Current participants of the CCAB include leading cities which includes New York, San Francisco, Barcelona, London, San Jose, Dublin, Delhi, Mexico City, Calgary, Singapore and many more.

WHAT’S COMING UP? GET INVOLVED NOW!

2017 edition for Connected City Blueprint AVAILABLE NOW!

This year’s paper is testament to the progression in the smart technology capability and the commitment of cities to use this technology to deliver benefits for their local communities. It highlights developments in smart capabilities and identifies lessons to be learnt from the most successful early adopters.

Find out more about the CCAB & World Wi-Fi Day’s 2017 City Wi-Fi Roaming Project on the World Wi-Fi Day website.

HAVE A VOICE IN THE FUTURE OF CONNECTED CITIES

Cities and associations are invited to contact WBA at:
contactus@wballiance.com

For more information about the CCAB please visit:
wballiance.com/ccab

Download the latest Connected City Blueprint now:
wballiance.com/ccab
What is World Wi-Fi Day?

World Wi-Fi Day is a unique worldwide initiative organized by Wireless Broadband Alliance under the leadership of Connected City Advisory Board (CCAB).

It is a platform to recognize and celebrate the significant role Wi-Fi is playing in cities and communities around the world by driving exciting and innovative projects to ‘connect the unconnected’ throughout the year.

Key activities include Unconnected research, City Wi-Fi roaming, Funding for projects, case studies and showcasing initiatives to broaden awareness to recognise the social impacts of Wi-Fi.

For more information or to pledge support please visit: www.worldwifiday.com
World Wi-Fi Day will be the foundation for driving and promoting connectivity worldwide. The Wireless Broadband Alliance urges and invites you to participate in World Wi-Fi Day. If you would like to get involved, or support and fund projects to connect the unconnected, please email: contactus@wballiance.com.

To find out more about the 2017 report go to: worldwifiday.com/research2017

MARK YOUR CALENDAR: 20TH JUNE EVERY YEAR
WIRELESS GLOBAL CONGRESS
NEW YORK, USA

AWARD CATEGORIES

Best Next Gen Wi-Fi Operator Deployment
Best Converged Operator Deployment
Best Wireless Network Infrastructure
Best Consumer-Centric Wireless Service Innovation
Best Industrial Wireless Service Innovation
Best Connected City Deployment
Best Wireless Deployment in Rural or Remote areas
Best Wireless Innovation and Excellence in Social Impact
WBA Wireless Leadership Award
Distinguished Member Award (non-operator)
Distinguished Member Award (operator)
AWARD CATEGORIES SHORTLIST

1 - BEST OPERATOR DEPLOYMENT
1a - Best Next Gen Wi-Fi Operator Deployment

Boingo
SK Telecom
XiN Globalreach

1b - Best Converged Operator Deployment

Altice
Boingo
Redrow
Cisco

2 - BEST WIRELESS NETWORK INFRASTRUCTURE

VAST
Cisco
KT

3 - BEST WIRELESS SERVICE INNOVATION
3a - Best Consumer-Centric Wireless Service Innovation

Aptilo
Galgus
MoBoLize

3b - Best Industrial Wireless Service Innovation

Boingo Wireless
FON
INTEL

4 - BEST CONNECTED CITY DEPLOYMENT

AT&T
KT
Sterlite Tech

5 - BEST WIRELESS DEPLOYMENT IN RURAL OR REMOTE AREAS

BrightWave
Kafka
KT

6 - BEST WIRELESS INNOVATION AND EXCELLENCE IN SOCIAL IMPACT

Cloud4Wi
MoVo Networks
Project Ideal Wi-Fi Now

7 - WBA WIRELESS LEADERSHIP AWARD

Boingo Wireless
FON
INTEL

David Hagan: A Wi-Fi Pioneer
Leaders In Carrier Wi-Fi Technology
Intel Wireless Leadership

8 - DISTINGUISHED MEMBER AWARD (NON-OPERATOR)

Cisco

9 - DISTINGUISHED MEMBER AWARD (OPERATOR)

Boingo
DON’T MISS THE LATEST WBA WHITE PAPERS

Download the latest WBA white papers and get equipped for the new business growth, opportunities and success in the Industry!

Scan the QR code or go to: wballiance.com/resources/wba-white-papers
A cost-effective, integrated approach to Wi-Fi

Cisco Enterprise and Service provider Wi-Fi Solutions are proven market leaders, designed to meet your and your business customer’s demands for a simple, cost-effective and integrated approach to Wi-Fi access. With mobile connections set to double and data traffic increasing tenfold over the next five years, the network has never mattered more.

cisco.com/go/mobility
2018 EVENTS
Join WBA in 2018 for our European and USA editions of the Wireless Global Congress

EUROPE - Summer 2018

USA - Fall 2018

EXCLUSIVE PRE - LAUNCH OFFER
Sign up as a sponsor before December 31 2017 and receive 15% off your package!

Get in touch to find out about our 2018 events. Email events@wballiance.com