Welcome to ExCeL London
SHOW GUIDE 2017

WIRELESS GLOBAL CONGRESS
WIRELESS BROADBAND ALLIANCE

DRIVING NEXT WIRELESS EXPERIENCE

Carrier Wi-Fi Services
Next Generation Wireless
Connected Cities & IoT
Spectrum & Policy

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MULTEFIRE™

#createfuturenow

CONTENTS

Welcome to ExCeL London

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INTRODUCTION FROM OUR CEO

It's my great pleasure to welcome everyone back to the Wireless Global Congress in the beautiful city of London.

The first few months of 2017 have seen our organisation continue to expand its role in the wireless ecosystem. Our membership continues to grow at a remarkable pace, and I look forward to meeting and catching up with all WBA members in London.

In the last calendar year, WBA initiatives and programs have continued to grow and evolve. The Connected City Advisory Board is approaching its second anniversary, and with several cities and governments joining us in recent months, the goal of providing thought-leadership and practical framework for the social and economic development and sustainable operation of the Connected City ecosystem will continue to strengthen.

World Wi-Fi Day will again take place on 20 June this year after a very successful debut in 2016. WBA programs, including Carrier Wi-Fi, Next Generation Wireless, Connected Cities and IoT and Service Enablement and Standardisation, have and will continue to provide valuable resources and results to our members and to the ecosystem as a whole.

This year's conference programme will focus on two specific themes: Innovating the Wireless Ecosystem, and Sustainability & Disruption. The two-day programme will see key speakers from all corners of the wireless ecosystem take the stage - from top-level executives to key industry leaders - to discuss, share, and debate the hottest topics in the wireless industry, including 5G, Monetisation Strategies, Smart Cities and IoT, Wi-Fi Roaming and much more.

Again, allow me to warmly welcome you to the Wireless Global Congress. I look forward to meeting and speaking with many of you over the course of the next few days, and I hope that you have a productive and enjoyable week here in London.

Shrikant Shenwai
Chief Executive Officer
Wireless Broadband Alliance

I'm very happy to welcome you to the Wireless Global Congress, back in the great city of London for the first time in two years. At this, our first Congress of 2017, we look forward to our attendees experiencing what a Wireless Broadband Alliance event is known for: top-level speakers from around the world taking the stage to share ideas and opinions on the most prevalent issues facing our ecosystem today, along with exhibiting companies displaying their products and innovations.

2016 was a year of strong growth for WBA, and 2017 is showing more of the same - truly, our organisation has never been stronger. With WBA programs continuing to evolve on a regular basis, and with initiatives such as the Connected City Advisory Board and World Wi-Fi Day attracting many new participants from around the globe annually, we couldn't be more excited for what the future holds - and we're very happy that all of you are a part of it.

This event is an exciting one for WBA, as it promises to be our strongest one yet. The two-day conference programme will give attendees the opportunity to listen to some of the brightest and best individuals that our ecosystem has to offer as they participate in presentations and panel discussions on a number of significant topics. The WBA Innovation Lounge will see participating companies give short power demos on new and exciting product innovations that will be sure to have people talking. The WBA Accelerator presents up-and coming technology companies with the opportunity to pitch their services and products to a group of invited investors and Congress attendees. And the WBA Juniors Panel is sure to be a heartwarming and fun session, as several children will take the stage to share their hopes for the future of wireless technology.

It's a great time to be a part of the WBA, and I thank you for being here in London with us. It promises to be an informative and enjoyable event for all.

JR Wilson
Chairman
Wireless Broadband Alliance

Join us - Accelerate the Global Leadership with WBA
Accelerating global leadership for wireless service enablement that is seamless, secure and interoperable

EVENT SPONSORS

PRINCIPAL SPONSORS

CISCO

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.

Ruckus — Simply Better Wireless.

Ruckus Wireless, now part of Brocade, delivers simply better wireless for approximately 70,000 enterprise, service provider, government and small business customers worldwide. The company is focused on technology innovation, partner ecosystems and customer service—yielding the best possible wireless experience for the most challenging indoor and outdoor environments. Its Smart Wi-Fi platform delivers scalable, high-performance Wi-Fi with simplified control and management for on-premise and cloud-based Wi-Fi deployments, along with new services for secure on-boarding, policy management, location services and analytics that enable new business opportunities.

GOLD SPONSOR

fon

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. Fon's global clients include British Telecom, the Deutsche Telekom Group, SFR, Proximus, KPN, Cosmote, MWEB, SoftBank, Telstra, and Vodafone. To learn more, **visit fon.com**

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LoRa Alliance
Wide Area Networks for IoT

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Syniverse
We make mobile work

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MULTEFIRE

As an industry body, we want to bring like-minded industry bodies together and are extending the use of our platform to put more spotlight on the wider ecosystem. As long as there are synergies, it's a win-win.

BE OUR INDUSTRY PARTNER IN NEW YORK!

This year, WBA has opened its platform to other Alliances and Industry bodies to co-host an Event within ours, as well as Senior Roundtables, Conference Tracks, Workshops, Seminars, and Innovation Showcases. Want to co-host with us in New York or in our 2018 events? **Email Pooja@wballiance.com**

Host a Conference Track
If you want to promote industry trends, then a track is the right option

Host a Workshop
To educate people at a working level in an interactive way on technology you are shaping - host a workshop

Media & Analyst Engagement
Interviews, webinars, live coverage and more

Be part of the Innovation Lounge
To showcase innovations within your market segment, be part of the Innovation Lounge Showcase

Host a Roundtable of 30+ senior Execs
To engage thought leaders and create interaction with senior execs, opt for a Roundtable

WBA's London show brings you even more innovation, disruption, and hot topics this year with some of the industry's headline topics taking centre stage with a faculty of experts sharing their thoughts and exclusive insights. We hope you enjoy this year's Congress with:

- Live debates and exclusive case studies on the main stage
- Innovation Lounge showcase of trending technologies
- Accelerator powered by WBA & LoRa Alliance
- Exhibition Floor
- Cocktail Networking Reception
- Coffee Lounge
- WBA Members Only Sessions
- Exclusive Roundtables

WIRELESS BROADBAND ALLIANCE

EVENT APP

The Wireless Broadband Alliance Events App Now Available.

DOWNLOAD NOW!

This is a brand new service that we are providing to our attendees at the London conference this May, the app has key features attendees will enjoy, here are the highlights:

- A searchable agenda by day, speaker, and topic

- The option to create your own event itinerary to integrate with your calendar

- A feature to schedule meetings with other attendees

- A floor map of Exhibitors

DOWNLOADING AND ACTIVATING THE APP

> The Wireless Broadband Alliance App is now available for free download from the iTunes store (for iOS users) and Google Play (for Android users).

> To download the app, just search for Wireless Broadband Alliance Events or scan this QR code with your mobile device. Alternatively, type https://crowd.cc/s/DT6k 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.
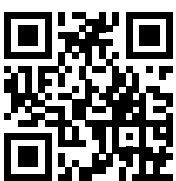
ADLANE FELLAH	ASIMAKIS KOKKOS	CARLEEN CHOU	CEDRIC GONIN
CEO	Head of Industry Environment Strategy	Head of Business Development and Sales	Senior Director Marketing
MARAVEDIS	NOKIA	FON	ORANGE

CHRIS BRUCE	DAN WARREN	DAVID PLEASANCE	DR. DEREK PETERSON
Co-Chairman of the WBA	Director of 5G Research	Chairman TM Forum, Partner Strategic Relationship Management Group, Deloitte	CTO
BT	SAMSUNG	TM FORUM	BOINGO WIRELESS

EDGAR FIGUEROA	ELDAR TUZMUKHAMETOV	ENRIQUE FARFAN	GAVIN SHELDON
CEO	Head of Smart City Lab	COO and Director of Wi-Fi Solutions	Vice President, Connectivity
WI-FI ALLIANCE	CITY OF MOSKOW	FON	LIBERTY GLOBAL

GEOFF NELSON	GERRY MCQUADE	HERVE DUPUY	JIN-HYEOK YANG
	CEO Wholesale & Ventures	Acting Head of Unit, Directorate-General for Communication Networks, Content & Technologies	Senior Manager Global Alliance Team
CITY OF MILTON KEYNES	BT	EUROPEAN COMMISSION	KT

JR WILSON	KEITH DYER	KHOONG HOCK YUN	KISHORE RAJA
Chairman of the WBA	Editor	Assistant CEO Development	Vice President R&D
AT&T	THE MOBILE NETWORK	IMDA	BOINGO WIRELESS

LOUIS SAMUEL	MANSOOR HANIF	MIKE SHORT	MISCHA DOHLER
Cisco Mobility CTO, SP Mobility Group	Director of Converged Networks & Innovation	CEO Airedale and former Vice President - Telefonica	Professor King's College London, Fellow IEEE & RSA, Cofounder Worldsensing
CISCO	BT	AIREDALE ADVISORS	KINGS COLLEGE

THE EVENT SPEAKERS

NANDA MENON
Director - Corporate Development

ATHONET

NICK WATSON
VP Sales and Business Development

RUCKUS WIRELESS

NICOLA MILLARD
Futureologist

BT

PAUL MIKKELSON
CEO

APTILO

RANDALL SCHWARTZ
Founder

WIRELESS 20/20

RAO YALLAPRAGADA
Director

INTEL

REZA JAFARI
CEO

E-DEVELOPMENT

ROBERTO ERCOLE
Director

SPECTRUM TELECOMS AND CONSULTING LTD

RON MALENFANT

CISCO

RUSS SHAW
Founder, Tech London Advocates & Global Tech Advocates

UK

SHADI MAHASSEL
VP Product

VENIAM

SHANE ROONEY
VP Mobile IoT

GSMA

SHRIKANT SHENWAI
CEO

WBA

STEVE ANDREWS
CEO

ABBEYBARN COMMUNICATIONS

STEVE BLYTHE
Group Spectrum Office

ORANGE

SUDHIR GUPTA
Secretary

TRAI INDIA

SUZANNE HELLWIG
AVP Global Alliances

AT&T

TENGKU MOHD AZRUL BIN TG AZHAR

CYBERVIEW

SIR TERRY MATTHEWS
Chairman

WESLEY CLOVER INTERNATIONAL

TRACY HOPKINS
CCO Everynet Ltd

LORA ALLIANCE

COCKTAIL RECEPTION

SPONSORED BY

Join WBA for an evening of drinks and networking at the Cocktail Reception, sponsored by Boingo, on the evening of Wednesday 10th May on the second floor of the Platinum Suite.

Simply make your way downstairs from the conference at 17:30 and you'll be welcomed with a drink!

Mingle with conference attendees and hear from Boingo CTO Dr. Derek Peterson as he issues a 'Call for Convergence' Manifesto and shares a vision for merging licensed and unlicensed spectrum to create a more seamlessly connected society.

SEE YOU THERE!

JOIN US ON THE SECOND FLOOR OF THE PLATINUM SUITE
WEDNESDAY 10TH MAY AT 17:30

KEY TAKEAWAYS OF THE WBA MARKET RESEARCH
"ROADMAP FOR COEXISTENCE AND CONVERGENCE IN 5G"

Anticipated time frame for 5G standardization

75% expect that 5G will be standardized by **2020**

21% expect the standardization process will run until **2025**

5G deployment timelines

36% have deployments in place by **2020**

52% have deployments in place by **2025**

80% think Wi-Fi will play a relevant role in **5G**

62% think that 5G will be a combination of **Licensed and Unlicensed** TECHNOLOGIES

Main drivers are
- Cost and coverage
- Energy/battery life
- Latency

How relevant are unlicensed spectrum technologies for 5G?

88% find unlicensed spectrum critical or important for **5G**

The TOP 3 critical topics for 5G:

1 Convergence of services and technologies

2 Regulation of shared spectrum models

3 Virtualization

What major applications and/or services will be enabled/improved by using unlicensed technologies as part of 5G?

Smart Cities — IoT Sensor Networks — Safety & Surveillance — Smart Home — Healthcare

Download full document from the WBA resource Centre:
wballiance.com/resources/wba-white-papers/

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 different demos.

– Don't miss out!

INNOVATION LOUNGE PARTNER

MULTEFIRE™

THE WBA MISSION

Founded in 2003, the Wireless Broadband Alliance (WBA) works tirelessly to champion the development of a converged wireless broadband ecosystem; through the seamless, secure and interoperable unlicensed wireless broadband services, and enable outstanding user experience for more than 2 billion global subscribers through our member operators.

Wi-Fi and unlicensed wireless have now become a serious part in the telecommunications field, and are stepping outside their traditional role of providing connectivity to consumers toward vertical market specific sectors such as Cities, IoT service platforms, etc. Interoperability and security between different technologies is rapidly becoming a key requirement in developing new services.

Wi-Fi is poised to play an important role in the development of 5G. The adoption of Next-Generation Wi-Fi services will need the coexistence and convergence of unlicensed and licensed networks in order to have significant impact on the future of wireless communications.

LEARN

Learn from the combined expertise and experience of our members. Get insight into global trends in the converged and unlicensed wireless ecosystems in addition to industry best practices.

LEVERAGE

Leverage networking and partnership-building opportunities at our world-class industry events. Join us at the Wireless Global Congress, Vision Forum, or one of our many one-on-one meeting opportunities, attended by the world's largest telecommunications companies.
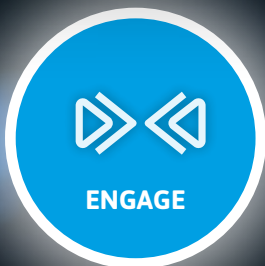
ENGAGE

Engage the community of operators, global LTE and Wi-Fi convergence partners, business leaders and technical experts that form our membership.

INFLUENCE

Influence The development of technical specifications and frameworks and have you say on key WBA initiatives through involvement in our working groups or on our projects.

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Wide Area Networks for IoT

JOIN US IN ROOM 3+4, ON WEDNESDAY 10TH MAY AT 18:00

Meet the Innovators and Disruptors at the WBA Accelerator.

Join us in Room 3+4, on Wednesday 10th May at 18:00
where the WBA Accelerator will be featuring start-up and scale-up
companies to pitch their business ideas and propositions to a panel
of industry specialists, an audience of (invited) investors and conference
attendees. 6 companies will be trying to get your vote of confidence and gain
support from important industry players.

Before we start the session, Nicola Millard, Futreologist at BT will give her insights
on consumer and enterprise expectations of future wireless services and provide some
food-for-thought to the wireless ecosystem.

DON'T MISS THIS OPPORTUNITY TO TAKE A PEEK INTO FUTURE WIRELESS SERVICES AND APPLICATIONS!

ACCELERATOR
Program

JOIN THE WBA

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 $50m (USD).

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.

BENEFITS EXCLUSIVELY FOR WBA MEMBERS

Program and Projects Participation and Networking Opportunities

WBA Facilitated programmes, projects and working groups enable Members to work together in a structured and efficient way towards a common goal. WBA Members are encouraged to participate in a range of forums

Collaboration Tools & Extranet

Exclusively for WBA Members, WBA Extranet is your place to connect with a global community of industry experts. Collaborate, network, search and share information. Get marketing intelligence and the resources that you need to influence and grow your business within the Wi-Fi ecosystem

WBA Event Participation Opportunities

The world's leading wireless industry events for the ecosystem, Wireless Global Congress, attracts over 1,700 people from across the globe annually

Integrated Marketing & Market Intelligence

WBA Membership gives you the platform to raise your business profile and influence with your brand on the World

To view all of the benefits available to WBA Members, please visit: wballiance.com/join-us/membership-benefits alternatively scan the QR Code

INTERESTED IN JOINING THE WORLD'S MOST INFLUENTIAL WIRELESS ADVOCATE?

Visit: www.wballiance.com
Or Email: membership@wballiance.com

Join us NOW!

NEXT GEN WI-FI

Set up your device now!

NEXT GEN WI-FI

8 - 11 MAY

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.

The Next Gen Wi-Fi Experience is brought to you by

WIRELESS
BROADBAND ALLIANCE
DRIVING NEXT WIRELESS EXPERIENCE

HOW DO I USE NEXT GEN WI-FI?

The Next Gen Wi-Fi Live Experience will be featured throughout the entire Wireless Global Congress (8-11 May)

To prepare your smart device* visit:
https://wba.odyssys.net to register your device for the
Next Gen Wi-Fi experience @ London.

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

Provisioning SSID: WBA_NGH_Setup

HS2.0 SSID: WBA_NGH

*for a full list of supported devices please visit:
https://wba.odyssys.net

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

**Do you 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

COMPANIES PARTICIPATING IN NEXT GEN WI-FI

at&t · Bell · boingo
BT · China Mobile · du · fon · !dea · kt
MegaFon · mobily · docomo · orange · csl. wi-fi · PT
Telkom Indonesia · STC · Shaw) · SK telecom · SmarTone · Sprint
swisscom · TATA · T · TELUS · T · true

Coverage Area
High Density Venue, Public Places, etc.
ExCeL LONDON — An ADNEC Group Company

Services & Apps
- NGH / Location based Apps
- Live analytics on network usage
globalreach · frontporch

Interconnect players / hubs
Accuris · Syniverse · BSG WIRELESS

+40 Global Operators as Home Service Providers
WBA Members (EAP-SIM & EAP-TTLS)
boingo · BT · kt · T · docomo · at&t

10,000+ end users
Event Participants, tourists & exhibitors
WIRELESS GLOBAL CONGRESS — WIRELESS BROADBAND ALLIANCE, DRIVING NEXT WIRELESS EXPERIENCE

Passpoint™ Devices
(Wide range of certified devices)
Android · Windows 10

Host Operator & Infrastructure Provider
Visited Service Provider
Ruckus — Simply Better Wireless.

SOMETHING A LITTLE DIFFERENT...

While the WBA, and everyone taking the stage, lead discussions on the next generation of wireless and smart cities, we've taken the liberty to invite the next generation of users to the stage – that's right, you'll meet our mini-experts for a fun and entertaining showcase of children sharing their ideas with you – the audience!

Don't miss out, this session will surely put a smile on your face and who knows, perhaps even help shape the next gen of services we're all working on!

**JOIN US ON THE MAIN STAGE
LIVE ON THURSDAY 11TH MAY AT 12:15**

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.

Syniverse®
We make mobile work

MEDIA & ANALYSTS PARTNERS
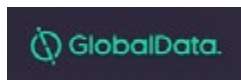
WBA INDUSTRY Awards 2017

CELEBRATING ECOSYSTEM EXCELLENCE

JUDGING PANEL

Adlane Fellah
Maravedis

Caroline Gabriel
Co-founder and
Research Director, Rethink
Technology Research

Frank Rayal
XONA Partners

Monica Paolini
Senza Fili Consulting

Richard Webb
Research Director,
IHS Technology

Susan Welsh de Grimaldo
Director, Service Provider
Strategies, Strategy Analytics

WIRELESS GLOBAL CONGRESS NEW YORK, USA

AWARD CATEGORIES

Best Next Gen Wireless Broadband Operator Deployment

Best Converged Operator Deployment

Best Next Gen Wireless Broadband Network Infrastructure

Best Converged 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*)

JUDGING PANEL

Alexander Richardson
Market Analyst,
IHS Markit

Christian Kim
Senior Analyst, IoT &
Connectivity, IHS Technology

Kyung Mun
Mobile Experts LLC

Peter Jarich
Chief Analyst,
Global Data Technology

Roz Euan-Smith
STL Partners

Vijay Sammeta
CEO, Civic Foundry, LLC

ENTRIES OPEN NOW!

awards.wirelessglobalcongress.com

WBA'S PROGRAMS AND OBJECTIVES

ACCELERATING GLOBAL LEADERSHIP FOR WIRELESS SERVICE ENABLEMENT THAT IS SEAMLESS, SECURE AND INTEROPERABLE.

Carrier Wi-Fi Services	Next Generation Wireless (5G and unlicensed)	Connected Cities & Internet of Things	Policy, Spectrum & Industry Engagement

Services Enablement, Develop Guidelines and Standardization

End-to-end Interoperability, Fields Trials, and Roaming

Services Certification and Compliancy

BUILDING ON OUR PIONEERING NEXT GEN WI-FI CREDENTIALS

The key activities of the WBA aim to address the ever-changing market requirements and opportunities through the following 5 programmes and objectives:

PROGRAMS	OBJECTIVES
CARRIER WI-FI SERVICES (includes Trials, Testing and Interoperability, Certification)	**Developing Wi-Fi & unlicensed wireless services to address the current and future needs of the customers**
NEXT GENERATION WIRELESS (5G and unlicensed)	**Accelerate Next Generation Wireless service opportunities across existing and new ecosystems towards 5G**
CONNECTED CITIES AND INTERNET OF THINGS	**Driving the connected cities and IoT ecosystem through guidelines, best practices and development of public-private collaboration**
SERVICES ENABLEMENT AND STANDARDIZATION	**Champion the convergence and co-existence of seamless, secure and interoperable services through licensed & unlicensed wireless networks**
POLICY, SPECTRUM & INDUSTRY ENGAGEMENT	**Contributing to spectrum development and alignment across organizations worldwide, while driving industry engagement through events, executive sessions and regional workshops**

CONNECTED CITY
Advisory Board

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.

What's coming up?
Get involved now!

- **2017 edition for Connected City Blueprint**

- **City Wi-Fi Roaming Project**
  The latest participants for this project include: Barcelona, Dublin, New York, Osaka, San Jose, Singapore and many more...

OUR GOALS

5 City CIO networking

1 Development of **Connected City plans and Blue prints**

4 Create an environment for City Managers and CIOs to **Knowledge Share**

2 Recognize and disseminate information about the **Best Practices**

3 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.

HAVE A VOICE IN THE FUTURE OF CONNECTED CITIES

Cities and associations that are interested in participating are invited to contact us at:

contactus@wballiance.com

For more information about the CCAB please visit:

wballiance.com

Download the latest Connected City Blueprint now:
wballiance.com/our-leadership/connected-city-advisory-board

WBA'S LATEST 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

Coordinated Shared Spectrum

Overview

Convergence of Cellular and N Networks – ANDSF and HS2.0 I

Policy Interworking

Quality of Service on Carrier

Internet of Things

New Vertical Value Chains & Inte

Source: WBA Members
Author(s): WBA Policy Workgroup
Issue date: April 2017
Version: 1.00
Document status: Final

Source: Spectrum Wo
Author(s): WBA Mem
Issue date: April 201
Document status:

★ A CALL FOR ★
CONVERGENCE
A MANIFESTO

A SEAMLESSLY CONNECTED SOCIETY. NEW ENVIRONMENTS THAT DRIVE SOCIAL AND ECONOMIC DEVELOPMENT. SMART CITIES, SMART HOMES, SMART BODIES. A VAST WORLD OF POSSIBILITIES YET TO BE IMAGINED.

THIS IS OUR VISION

Since 2001, Boingo has been a pioneer in wireless connectivity, driving innovation in both licensed and unlicensed spectrum. Today, as we survey the ever-evolving wireless landscape, it is clear that we are at a tipping point. The physical and digital worlds are coming together at a pace that requires new thinking, new paths forward, and a new way of working together. We have the opportunity to leap into the next decade of innovation. But it will require all of us, as a wireless industry, to work in concert. And it will begin with a deep commitment to convergence at every level.

WE SUBMIT THE FOLLOWING

CONVERGENCE WILL PROPEL OUR CONNECTED LIFESTYLES

Mobile is no longer a device, it's a lifestyle. Our phones, tablets, cars, refrigerators–even our pets are connected 24/7. Mobile data consumption is skyrocketing–and forecasters predict it will grow sevenfold by 2021. Our current licensed infrastructure can't support the coming tsunami of data, so we must embrace new converged solutions that can survive the extraordinary pressures coming our way. The lifeboat has two paddles: one labeled "licensed" and the other labeled "unlicensed." We'll need both to survive the storm.

THERE'S NO "I" IN CONVERGENCE

Mobile network operators, carriers, OEMs, device manufacturers, government entities, cable operators–we're all in this together. The new wireless frontier is at our fingertips and together we are at the cornerstone of influencing tomorrow's converged network. We must depend on each other; challenge each other; and leverage our strengths.

CONVERGENCE MAKES THE CONNECTED WORLD OF TOMORROW POSSIBLE

Powering a new generation of connections requires access to more airwaves. This is why the upcoming 5G capacity will be based on the unified aggregation of multiple bands. The industry has largely accepted that this will include the convergence of licensed and unlicensed spectrum, as 5G is not economically practical without coexistence. Merging licensed and unlicensed networks gives us more throughput, reduced latency, better coverage and lower costs. Convergence opens a larger pool of airwaves, creating more lanes and less RF congestion. This is a win-win as it allows us to answer the demand for more mobile data, more wireless connectivity and new horizons. The best part? Users will not know if their connectivity is coming from licensed or unlicensed bands as networks will be blended through a centralized controller.

SUCCESSFUL CONVERGENCE CALLS FOR UNLICENSED SPECTRUM

Data-heavy innovations like M2M communication, autonomous vehicles, virtual reality, and instant streaming demonstrate both the potential and the challenge to our networks. To solve the data onslaught, industry players like the MulteFire Alliance and LTE-U Forum are working on new network trials and deployments where unlicensed technologies are front and center. Wi-Fi in particular is crucial for enabling next generation networks the ability to handle 5G requirements that include one gigabyte of speed, one millisecond of latency and extraordinary user demand. But it doesn't stop there. The unlicensed wireless portfolio is full of frequencies we can take advantage of for a more seamless connected experience. Short range, medium range and long range unlicensed technologies such as WiGig, Wi-Fi HaLow and LoRa have shown encouraging momentum for facilitating broad interoperability and roaming capabilities–key attributes for deployments like IoT and smart homes. Unlicensed means more power, more signals, more range and more connected opportunities. It's already made significant impact and will continue to push us forward.

★

WE STAND FOR CHAMPIONING CONVERGENCE AND ACCOMPLISHING INCREDIBLE THINGS. TOGETHER WE'RE BETTER. LET'S START NOW.

Derek Peterson, Ph.D., is chief technology officer at Boingo Wireless, a leading DAS and Wi-Fi provider. He is responsible for Boingo's technical vision and strategy, and pioneering the adoption and deployment of the latest wireless network technologies, including Passpoint, network virtualization and convergence.

WORLD™ Wi-Fi Day

Join us and celebrate World Wi-Fi Day on 20 June every year!

WHAT IS WORLD WI-FI DAY?

World Wi-Fi day is a global initiative to help bridge the digital divide.

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'.

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

HOPE FOR CONNECTIVITY CHARTER

Our HOPE for Connectivity charter calls on cities, government bodies, fixed and mobile operators, technology vendors and Internet giants. Help us bridge the digital divide and create the critical influence to bring wireless connectivity by pledging your support to our initiative.

Help
Fund and support Wi-Fi deployments for underserved & unconnected

Offer
Access to more affordable internet through public Wi-Fi networks

Promote
Wi-Fi initiatives of industry & governments to connect the unconnected

Engage
Recognize the role of Wi-Fi in addressing the digital divide

"
Connectivity continues to transform and improve the way we live in the world. There's tremendous opportunity and responsibility for government leaders, technology providers, and innovators to participate and collaborate to make Wi-Fi available to anyone and everyone. World Wi-Fi Day gives the world a day to celebrate and commit to a connected life. "
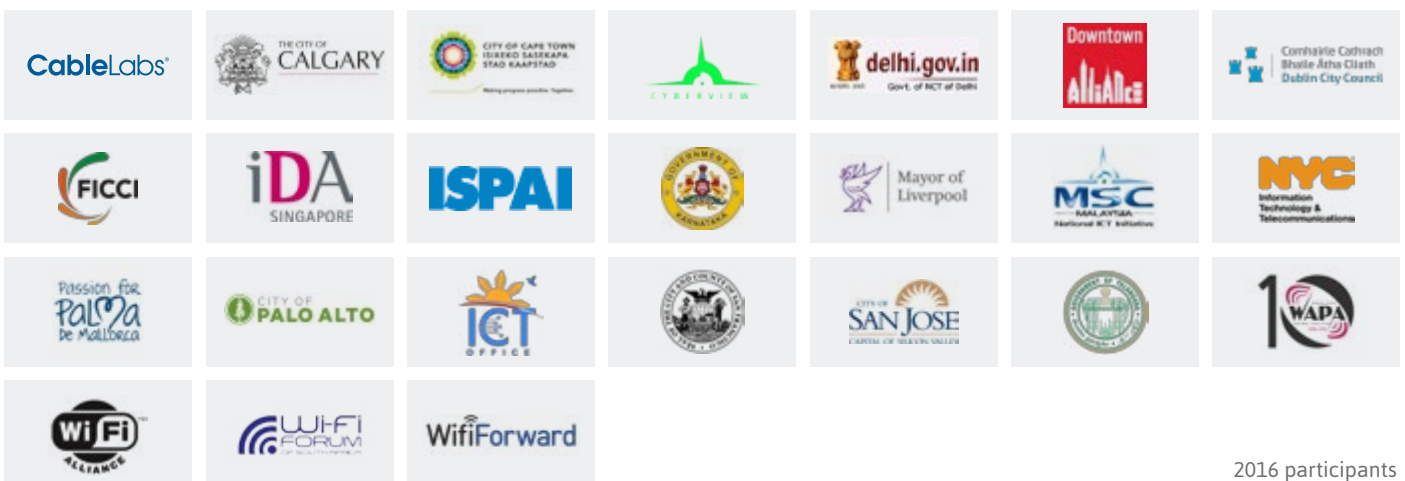
Miguel Gamino
CTO of New York

Operator / Carriers

AirJaldi · airmesh · AlwaysOn · at&t · bai communications · boingo · BT

China Telecom · csl. wi-fi · COMCAST · COSMOTE · fon · ISOCEL · kpn

kt · LIBERTY GLOBAL · LIQUID TELECOM · mallorcawifi.com · MAWINGU wi-fi · meteor network · (etisalat)

docomo · NTTBP · TalkTalk Group · orange · PROJECT ISIZWE · proximus · Jio

Shaw) · Spark · TATA · T··· · Telstra · RAILTEL · wi Fibre & Wireless

Technology Providers

Accuris NETWORKS · aptilo NETWORKS · aruba · bandwidthX · benu NETWORKS · BROADCOM · BrightWave

BSG WIRELESS · cataleya · CISCO · Sterlite Tech · frontporch · globalreach · Google

HOT TELECOM · HUAWEI · iBwave · intel · Intersection · iPass ·

Microsense · NOKIA · purple · Ruckus · Syniverse · Transit Wireless WIFI · VENIAM

YO!

Cities & Industry Forums

CableLabs · THE CITY OF CALGARY · CITY OF CAPE TOWN · CYBERVIEW · delhi.gov.in · Downtown Alliance · Comhairle Cathrach Bhaile Átha Cliath Dublin City Council

FICCI · iDA SINGAPORE · ISPAI · · Mayor of Liverpool · MSC MALAYSIA · NYC Information Technology & Telecommunications

Passion for Palma de Mallorca · CITY OF PALO ALTO · ICT OFFICE · · SAN JOSE · · WAPA

Wi-Fi ALLIANCE · Wi-Fi FORUM · WifiForward

HOPE FOR CONNECTIVITY

WBA's World Wi-Fi Day and the HOPE for Connectivity charter has already received support from over 100 of the industry's biggest names

Who Should Participate

- Systems Integrators
- Operators
- Technology Players
- Citizens
- Cities and Governments
- Industry Forums

WORLD™ Wi-Fi Day

The World Wi-Fi Day will offer an excellent opportunity for different stakeholders to support the World Wi-Fi Day by identifying and supporting a significant number of activities based on their areas of interest and focus.

Pledge your support now and be part of this initiative for the coming years!

The Wireless Broadband Alliance invites and urges you to take part in World Wi-Fi Day.
For information on how to participate please visit: worldwifiday.com
alternatively e-mail us at: contactus@wballiance.com

BETTER CONNECTION
WHERE YOU NEED IT MOST

BETTER MANAGED SERVICES

Our solutions are built to enable service providers to deliver high performance, always-on wireless services at significantly lower cost and complexity of conventional alternatives.

BETTER CONNECTED CITIES

Our Smart Wi-Fi technology delivers carrier-class reliability, simple management and wicked-fast speeds in Smart Cities around the globe.

BETTER INDOOR COVERAGE

OpenG technology combines coordinated shared spectrum capabilities in the U.S. with neutral host capable small cells to enable building owners of all sizes to deploy cost-effective in-building cellular coverage.

COME TALK TO US AT WBA

NEXT STOP: NEW YORK!

WIRELESS GLOBAL CONGRESS
WIRELESS BROADBAND ALLIANCE
DRIVING NEXT WIRELESS EXPERIENCE

NEW YORK
THE ROOSEVELT HOTEL
13 – 16 NOVEMBER 2017

WBA heads to New York this fall for the US edition of the Wireless Global Congress.

JOIN US AT THE ROOSEVELT HOTEL ON 13-16 NOVEMBER WHERE OUR PREPARATIONS ARE ALREADY UNDERWAY. HERE'S WHAT WE'VE LINED UP SO FAR:

BRAND NEW: Join WBA and CableLabs as we host a new conference track, sponsored by Comcast and Liberty Global. This new content stream will be dedicated to exclusive on-pulse cable topics and include the who's who of the cable industry. Contact us early to reserve your seat.

INNOVATION STAGE: What's hitting the headlines in the US? What's going on behind the scenes of the wireless world, the 'underdogs' in new tech and services being launched and deployed? WBA's Innovation Lounge is where you'll see 6 of the industry's hottest ideas in our power-demos.

GLOBAL EXPERTS: The main stage is where you'll catch the Keynotes and live debates in action. Stay tuned to wirelessglobalcongress.com to see the US speakers unravel.

THE ECOSYSTEM UNDER ONE ROOF: WBA'S London show saw us officially open our doors and welcome other industry bodies and Alliances like ours to join forces and grow the ecosystem together. We welcomed LoRa Alliance and Multefire here in London, with more joining us in New York. If you, like us, are pioneers of the future of wireless and want to bring your ideas to life at the next Wireless Global Congress, own a piece of the show and partner with us to bring the industry and future all under one roof.

EXCLUSIVE PRE - LAUNCH OFFER

Register your place before we officially launch New York Wireless Global Congress 2017 and receive a 10% discount on any sponsor package or 30% discount on a pass to attend.

Book your place before 30 June 2017 by emailing events@wballiance.com with 'pre-launch New York' in the subject line.