



2020 World Summit

February 27TH, 2020 at
Serena Hotel, Islamabad

The Event for the Industry Backed by the Industry.

WANT TO GROW YOUR BUSINESS IN 2020?

GET INVOLVED IN THE LEADING 5G EVENT IN PAKISTAN TO ENCOMPASS THE FULL CONNECTED ECOSYSTEM!

Meet hundred of buyers, senior level operators leading enterprises and IoT specialists to generate new business relationships.

 #TPNPAKISTAN

ORGANIZED BY:

 THE PROFESSIONALS NETWORK



5G

CAN YOU AFFORD TO MISS 5G ASIA?

5G technology is here but the monetization opportunities, ROI and network architecture options are still unclear. To truly uncover the added value of 5G, carriers need to make the right investment and strategy decisions today, or risk falling behind.

With a comprehensive conference program, unrivalled networking opportunities and an interactive exhibition, this is your chance to find out about the latest launches & roll outs, tests & trials, monetization strategies, technology innovations as well as source innovative partners and network with peers – all under one roof!

ATTEND THE SHOW THAT DEFINES THE FUTURE OF 5G

A unique opportunity to meet and network with 250+ experts in telecommunications. 5G World Pakistan brings together the 5G ecosystem to define the next steps toward 5G roll out and monetization. With a comprehensive conference programme of CTO's, unrivalled networking opportunities and an interactive exhibition, there is no better place to discover where 5G is today and what the future holds. Find out about the latest tests, trials and roll-outs, monetization strategies, technology innovations and source innovative partners who will change your business– all under one roof!

5G will revolutionize how people communicate with one another, how cities function and how business is conducted in the coming decade.

At 5G World Pakistan this February 27th, 2020 in Islamabad, you will get the chance to get ahead of the game and get exclusive insights into early 5G deployments and gain unprecedented access to 5G use cases from the leading global operators.

Secure your place at this year's 5G World Pakistan summit before it's too late.

Topics **Covered** will be:

INNOVATION IN REGULATION:

01 CAPTURING THE OPTIMAL REGULATORY MODELS FOR 5G

04 OVERCOMING THE KEY STANDARDS AND SPECTRUM CHALLENGES

07 DESIGNING A SERVICE-ORIENTED ARCHITECTURE IN THE 5G ERA

10 SECURING NETWORK ASSURANCE AND OPTIMISATION IN 5G

13 SIGNALING SECURITY AND FRAUD CHALLENGES WITH 5G

02 CREATING THE SPECTRUM AND REGULATORY LANDSCAPE THAT ENABLES A WIDE 5G ENTERPRISE UPTAKE

05 MITIGATING THREATS IN 5G AND THE EVOLVING ARCHITECTURES

08 CREATING AN END-TO-END CHAIN OF TRUST IN 5G NETWORKS THROUGH ADVANCED 5G SECURITY

11 THE NEXT-WAVE OF SECURITY NEEDS: IOT , 5G, EDGE, NFV AND A.I.

14 SIGNALING IN 5G AND BACKWARDS COMPATIBILITY TO LTE

03 GLOBAL STATE OF PLAY OF 5G AND EXPECTATIONS FOR THE NEXT 24 MONTHS

06 REALITY CHECK: WHAT HAVE WE ACHIEVED AND WHERE DO WE GO FROM HERE?

09 CONTAINER BASED 5G NETWORKS VIRTUALISATION TO MAXIMIZE EFFICIENCY AND AGILITY

12 WHAT DOES EDGE COMPUTING MEAN FOR 5G?

15 ADVANCED TRANSPORT NETWORK INTEGRATION FOR NETWORK SLICING



Topics Covered will be:

Hear expert insights from our Keynote C-level speakers

Don't miss out on the keynote presentations from global CTOs and CEOs from various companies



5G

Meet, network and partner with the 5G ecosystem

Make connections with senior telco executives from across the country. 5G World Summit Pakistan offers unrivalled networking opportunities to meet and source new partners - don't miss out!

Join our Expo Tours

Join the 5G World Pakistan Expo Tours to discover and interact with cutting-edge 5G technologies. With 10+ innovative exhibitors, this is the place to discover new partners to support your 5G transformation.

Executive 5G Keynotes

Inspiring high level executives from the global telecoms industry will talk about 5G beyond the hype.

5G Live! Demo Zone & Content Theatre

VR/AR headsets, flying drones and more...this is 5G Live! Visitors experienced proof-of-concept demos and showcases of cutting edge technologies.

Leaders In 5G Summit

The Leaders In 5G Summit will allow the executives in attendance to have Chatham House Rule discussions in small groups on specific themes.

Speakers' Corner

New for 2019, the speakers' corner will allow you to ask our expert speakers your burning questions in private.

Global state of play of 5G and expectations for the next 24 months

- Reviewing the global operator 5G test and trials scene
- Analysing trends in Telco 5G technology approaches
- The road ahead from WRC
- Standards and Release 16 expectations
- 5G enabled devices and smartphones; what are the roll out and uptake expectations?

What have we achieved and where do we go from here?

- 5G fixed broadband efforts
- Getting ready to launch a truly mobile 5G
- Densifying your network and capitalising on the small cell opportunity

The 5G realization beyond first deployments

- Beyond home broadband
- Learnings from innovations in global regulatory frameworks
- Anticipating the technologies that will change network services forever
- 5G smartphones and expected consumer uptake
- What are the market tools that will unlock innovation?

Connecting and accelerating at the speed of innovation

- Rethinking your network architecture
- Bringing in an accelerated speed of change
- Virtualization at the heart of your 5G preparation

Embracing the 5G era

- Rethinking your network architecture
- Bringing in an accelerated speed of change
- Virtualization at the heart of your 5G preparation

Is the automotive industry truly a driver for 5G?

- Reviewing the state of play of 5G and autonomous vehicles
- Operators betting on smart cars
- What are the in-vehicle infotainment opportunities of 5G?
- Will consumers pay for smart vehicles?

TRANSFORMING MOBILE NETWORK ECONOMICS



Realizing the new, distributed & dynamic value architecture

- Building a smart network fabric on top of devices, sensors and the cloud
- Digitizing and automating processes to cut down deployment time and costs
- Re-examining the network architecture and reliability - Is it built for 5G?
- Securing access to critical 5G resources; fibre, towers and street furniture
- Should Operators share the 5G network costs?
- Working closely with regulatory authorities and developing a spectrum strategy

5G for a connected traffic & management

- What are the grounds of collaboration between road authorities, telcos, car manufactures and more?
- What are the data, edge, networking or other supporting technologies to achieve a safe transition to smart mobility?
- Reviewing the network and spectrum requirements
- OpenRAN and 5G network economics

Infotainment for the mobility industry

- What can the train, car and airport industries learn from each other?
- The passenger metamorphosis to the data consumer
- What infotainment opportunities will 5G bring?

Design and planning for 5G with propagation modeling

- Studies based on 1000s of measurements in 3.5, 28, and 39 GHz
- Key learnings from RF propagation modeling studies
- Assuring applications in 5G network design



5G Commercialization & Beyond

- Open the 5G era: World's first 5G commercialization
- Differentiated 5G infrastructure & services
- 5G trial activities

Building a 5G enterprise business

- How are Operators preparing internal functions for 5G monetization
- Consumer Vs enterprise; who will adopt 5G first?
- The network slicing opportunity
- Packaging and selling 5G successfully

Can 5G exist without virtualized networks?

- Creating the ability to adapt to the dynamic nature of mobile traffic
- What are the transformation timelines the industry should be looking at for virtualization and cloudification?
- What are the next steps after virtualization?
- Will public cloud rise soon?

Smart city initiatives

- How are municipalities supporting 5G innovation?
- Reviewing existing 5G smart city initiatives
- Best practice for municipality and Telco collaboration

Container based 5G networks virtualization to maximize efficiency and agility

- Deploying 5G Core control and user plane on containers
- Accelerating service delivery on edge clouds
- How does the ecosystem change after virtualization containerization?
- Have we reached the era of API first?
- Orchestration to the edge and multi-tenancy

Embarking on the Journey to 5G

- How operators can transform their networks today to support 5G services tomorrow
- The importance of a software-defined signaling core
- Recommendations for moving to virtualized infrastructure and use of data and analytics to secure the signaling core

Taking immediate advantage of IoT

- Taking an impactful position in the IoT ecosystem
- Deploying low-power wide-area networks (LPWANs)
- Developing NB-IoT products

Is the future O-RAN?

- Why are global Operators supporting an open RAN business model; what are the benefits?
- RAN evolution to become more open and smarter
- Using real-time analytics for machine learning systems and artificial intelligence

The Journey to Cloud-Native

- Should cloud-native be the goal for 5G operators?
- What are the challenges CSPs can expect along the way
- Expected benefits Operators can achieve at each Cloud-Native step

Realising 5G with 'anyhaul' transport

- How is anyhaul becoming a critical component of 5G?
- Key considerations on anyhaul transport (including CPRI, eCPRI, xPON, DOCSIS 3.1, OTN etc)
- Identifying the key industry players delivering this connectivity

5G and automotive security

- Who is responsible for the vehicles security and liable?
- Autonomous vs Cooperative systems
- Reviewing dedicating test solutions for smart cars



Operators as the true enablers of smart cities

- Reviewing business models that place the Telco at the heart of a smart city
- Winning strategies and collaborations that will accelerate an Operator's role in the smart city ecosystem

The cloudified networks rolling out today

- How in reach is a fully cloud-native network?
- Fully virtualized and highly automated from the RAN to the core
- Tackling orchestration and preparing to capitalize on network slicing opportunity

5G enabling autonomous maritime

- Which technologies will allow a vessel to operate autonomously, miles from shore?
- Overview of the industry's latest R&D developments

Data analytics: leveraging the intelligence in your network

- Can you afford not to make best use of your data?
- Separating the data you need from the data you don't
- The latest approach to utilising big data efficiently and effectively

Fixed Wireless Access as an economic alternative to address network densification

- What is the broadband connectivity proposition for consumers and enterprises?
- FWA as cost effective network deployment solution
- FWA; complementing or competing with fibre?

Orchestration and the Open Source Conundrum

- Dealing with the new levels of network complexity
- What are the implications of using open source?
- What are the key learning from orchestration developments

Small cell mobile backhaul

- Achieving increased flexibility in available backhaul solutions
- Technology and backhaul options for small cells
- How to avoid backhaul becoming the cost and performance bottleneck in small cell deployment

Making vehicles smarter, safer while improving the driving experience with C-V2X

- LTE, 5G and C-V2X
- Supporting short and long range transmissions between vehicles and roadside infrastructure
- Reviewing the C-V2X transmission modes; employing conventional networks and working independently of cellular networks

Reviewing the FWA value proposition in developed, rural and developing markets

- Competing profitably against wired incumbents
- 5G, FWA, satellites and & mission critical communications
- Maximizing spectral utilisation with FWA
- Leveraging LTE and 5G NR networks for FWA
- Monetizing the rural connectivity opportunity

Infrastructure sharing; dealing with the inevitable growth of infrastructure requirements

- Reviewing global efforts of infrastructure sharing and results
- Where does spectrum sharing come in?
- Easing capital and total cost of ownership
- Should Operators focus on their network strengths and let the infrastructure management to others?

Increasing network flexibility with vEPC

- Reducing time to market for new services
- Providing a large number of applications and services with open APIs & data centre sharing

Beyond fixed wireless access: The 5G Services that will make a difference

- What impact will services like FWA or eMBB have on the top and bottom lines of service provider financials?
- Where's the business case for 5G services?
- Which are the industries that will consume 5G first?

Multi-access Edge Computing in 5G

- The relevance of ETSI MEC in 5G
- Developing the edge computing ecosystem
- MEC as a slicing enabler
- Addressing the multi-vendor/network/access challenge

Results and learnings from 5G NR field testing

- The 5G NR key technology components to be measured
- Propagation at sub6 and cm-/mm-wave spectrum
- Results from deployed 5G NR networks

5G and the upper layers of orchestration

- What orchestration is needed for 5G and how does it differ from existing practices?
- What does 5G bring to operation and business services and how to assure them?
- How to do dynamic network slicing?

Timing and synchronization in high performance 5G networks

- What the new challenges in timing and synchronization throughout the network
- Reviewing innovative industry solutions such as Time Sensitive Networking for Front haul (IEEE 802.1CM) or eCPRI
- Current standards

Advanced transport network integration for network slicing

- Reviewing the transport requirements
- Slicing technologies and expectations: FlexEthernet, OTN, VPNs
- Higher speed interfaces, increased network capacity and other 5G transport benefits
- The technology roadmap options to 5G orchestration; evolving existing solutions vs Open-Source
- The need for a unified, multi-domain 5G network orchestration approach

5G RAN optimization with machine learning & SON

- Improving operations, administration and maintenance with SON
- Extending the autonomous management vision to the end to end network
- Market drivers for SON adoption
- SON technology, use cases & implementation architectures
- Key trends in next gen LTE & 5G SON implementations



For Sponsorship Opportunities and Exhibit

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A large, 3D-rendered logo of the letters '5G' in a light grey color. The letters are blocky and have a slight shadow, giving them a three-dimensional appearance. The '5' and 'G' are connected at the top.

