### Chairperson’s Opening Remarks
09:00 - 09:05
Antenna Evolution

### Market Status Update: Setting The Scene For Future Innovation
09:05 - 09:25
Antenna Evolution
- Examining key industry developments in the past year.
- Which new technologies are poised to hit the mass market?
- Exploring challenges and opportunities for the ecosystem in the coming 12 months.

**Participants**
Khaled Mokhtar, Program Management Senior Team Leader, Etisalat & Vice Chairman - IEEE Egypt, Etisalat

### Antenna Evolution - 4G Towards 5G
09:25 - 09:45
Antenna Evolution
- Driving challenges.
- Where are we today with 4G?
- How to migrate to 5G?
- Demands on future antennas.

### PANEL DISCUSSION: 5G Networks on the Horizon: Lessons Learnt From 4G Rollouts
09:45 - 10:15
Antenna Evolution
- Global continuous LTE deployment and capacity expansions.
- Active antenna, 5G antenna and multi-band antenna miniaturization/s.
- Small cells and DAS as complementary options that will deliver successful 5G services.

**Moderator:** Graham Carter, Managing Director - Wireless International Consultants

**Participants**
Graham Carter, Managing Director - Wireless International Consultants
Roman Lapszow, Senior Project Manager - Orange Lab Networks, Orange Lab Networks
Andy Cliff, Senior RAN E-2-E Designer - EE, EE

### Massive MIMO Today? Curent Market Conditions and Future Evolutions
10:15 - 10:35
Antenna Evolution
- Visions for realising massive MIMO cost effectively and practically.
- Continued co-existence with LTE pro and LTE advanced.
- Generating interest within the operator community.

### Coffee & Speed Networking
10:35 - 11:30
Antenna Evolution

### PANEL DISCUSSION: Mitigating Passive Intermodulation
12:10 - 12:40
Antenna Evolution
- Advancements in detecting and troubleshooting PIM.
- Effective practices in deploying cell sites to mitigate PIM.
- Technological innovations for PIM mitigation (Factory assembly vs Onsite maintenance).

**Participants**
Marjan Mursec, Technical Expert - Telekom Slovenije, Telekom Slovenije

### Antenna Modernization, Bridging The Way To Giga Mobile
12:40 - 13:00
Antenna Evolution
- Usage of millimeter wave frequencies for 5G systems.
- Complete system integration of new frequencies with existing.
- Operators Challenges: How to buy and how to manage millimeter wave frequencies.

### Small Cell Deployment - A Solution To Coverage and Capacity Challenges?
11:30 - 11:50
Antenna Evolution
- Is the onus on the operators to introduce small cells?
- Is there a take-off of small cells?
- When to deploy small cells and what are the tendencies?
- Mitigating the expenses of backhaul and power for widespread small cell deployment.

**Participants**
Syed Hasan, RAN Planning & Optimisation - Vodafone UK, Vodafone UK

### TECHNOLOGY & INFRASTRUCTURE ADVANCEMENT.

### Smart / Active Antennas For Higher Integration With More Capacity
14:30 - 14:50
Antenna Evolution
- What Frequencies need to be in play for the smart antenna?
- Trade-offs between flexibility, Space utilization and performance.
- Understanding the limitations and possibilities of existing operator spectrum bands.
- Cost-effective antenna solutions for dense urban deployments.

**RESERVED FOR SPONSOR.**
PANEL DISCUSSION: Is NFV Enabling an Infrastructure Transition:
14:50 - 15:20
Antenna Evolution

• Can could software be efficiently adopted to control 3D beam forming on different sites?
• Offloading capacity to the cloud cost effectively - Can it be done?
• CRAN: reducing both CAPEX and OPEX for mobile networks.

Participants
Takehiro Nakamura, VP & Managing Director of 5G Labs - NTT DOCOMO, NTT Docomo

Advancements In 'In Building' Coverage
15:20 - 15:40
Antenna Evolution

• Drivers for increasing flexibility with distributed antenna systems (DAS)
• What are the drivers for digital DAS?
• Recent advancements in digital DAS.
• Do neutral host deployments make sense in Europe?

CASE STUDY: Suitability of DAS for Outdoor Coverage
15:40 - 16:00
Antenna Evolution

• Assessing the capability, Coverage and capacity of DAS for outdoor.
• Delivering roll out to meet customer needs and capacity demands.
• Ensuring time efficient commissioning and accurate remote monitoring.

Coffee & Networking
16:00 - 16:30
Antenna Evolution

PRODUCT DEVELOPMENT & FUTURE INSIGHTS.

Multi-Antenna Solutions for Connected Cars in a 5G Ecosystem
16:30 - 16:50
Antenna Evolution

Participants
Seungpyo Hong, Project Manager - SK Telecom, SK Telecom

AUDIENCE ROUNDTABLES: Forecasting the 5G Future
16:50 - 17:25
Antenna Evolution

1. Impacts of 5G technology on antenna ecosystem.
2. Change of antenna architecture and technologies.
3. Active antenna technology: An integral part of the 5G ‘Puzzle’
4. Extending coverage to provide higher data rates in sparse deployments.
5. Ecosystem consolidation and impact on future traffic demands.

Chairperson's Closing Remarks
17:25 - 17:30
Antenna Evolution

Close of Antenna Focus Day - See you Tomorrow for 5G World 2016!
17:30 - 17:30
Antenna Evolution

Chairperson's Opening Remarks
09:00 - 09:10
Next-Gen Signaling

Participants
Dimitris Mavrakis, Principal Analyst - OVUM, Ovum

AUDIENCE POLL: Which Different Signaling mediums will be utilised in 5G?
09:10 - 09:20
Next-Gen Signaling

Creating a Bridge Between Old And New: Overview of 5G and Signaling
09:20 - 09:40
Next-Gen Signaling

• What are the intermediate steps which need to be taken?
• What are the ecosystem considerations for signaling for 5G?
• Dealing with ‘end of life issues’ in enabling the transition to 5G.
• Signaling architecture for the connected device ecosystem.

RESERVED FOR 3GPP

PANEL DISCUSSION: Evolving the Network Architecture to 5G
09:40 - 10:30
Next-Gen Signaling

• What new components will be introduced?
• How will signaling handle increased traffic (i.e. in stadia?)
• How will core network / RAN change with 5G?
• Meeting strict latency requirements.

Moderator: Gregg Collins, Founder & Principal Analyst - Exact Ventures

Participants
Gregg Collins, Founder & Principal Analyst - Exact Ventures, Exact Ventures
Perry Jackson, Senior Manager, Innovation Voice & Signalling - KPN, KPN

Coffee & Speed Networking
10:30 - 11:30
Next-Gen Signaling

PLANNING FOR NETWORK EVOLUTION

Distributed Signaling for ‘Network Slicing’ to Support 5G Use Cases
11:30 - 11:50
Next-Gen Signaling

• Reducing backhaul cost for the deployment of intelligent small cells.
• Splitting the user control plane and the packet gateway.
• The importance of adding intelligence to the edge to reduce latency.

Signaling for the Internet of Things
11:50 - 12:10
Next-Gen Signaling

• Planning for advanced “signaling storms” in IoT infrastructure.
• Increasing the efficiency of current signaling solutions.
• Securing the IoT Network.

Participants
Matt Rosenberg, Vice President - NetNumber, NetNumbers

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tomas.benjamin@informa.com

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tomas.benjamin@informa.com
IMS Interconnection: A Need for a New ENUM Framework
12:10 - 12:30
Next-Gen Signaling

- IMS Interconnection stakes and limitations.
- A new ENUM framework for a smooth international deployment.

PANEL DISCUSSION: Complexity Reduction To Achieve Secure And Stable Networks
12:30 - 13:00
Next-Gen Signaling

- Can problems of complexity be solved by NFV & Cloud?
- Managing new data streams: VoLTE, VoWiFi, WebRTC.
- Ensuring end-to-end network stability whilst cutting OPEX.
- Ecosystem collaboration.

Moderator: Alberto Diez, Principal Consultant - Mobile Plots

Participants
Alberto Diez, Principal Consultant - Mobile Plots, Mobile Plots
Perry Jackson, Senior Manager, Innovation Voice & Signalling - KPN, KPN

Lunch & Networking
13:00 - 14:00
Next-Gen Signaling

HOSTED OPERATOR LUNCH TABLES
An extended networking lunch with tables being hosted by leading experts will allow you to spend valuable time with key industry figures in an informal setting.

1. Monitoring
   - Signaling at the operator edge.
   - Current operator monitoring tool usage.
   - Options and technologies to reduce CAPEX & OPEX

2. Risk Mitigation
   - What incidents have already occurred?
   - What can the industry do to prevent future breaches?
   - Do you need to invest in a security officer?
   - Moderated by Marc Van Kasteren, Team Lead, Strategy & Policy - KPN

3. Network Integration
   - How does integration evolve on the network?
   - Interworking functions between diameter, Radius and protocol normalisation.
   - Converged signalling solutions.

4. Roaming
   - When will SS7 networks be closed?
   - International roaming strategy: Volume growth up to 2017/18.
   - What happens next?
   - Moderated by Cédric Bonnet, Roaming Technical Domain Manager - Orange

Participants
Marc Van Kasteren, Team Lead, Strategy & Policy - KPN, KPN
Cédric Bonnet, Roaming Technical Domain Manager - Orange, Orange

Security - Introductory Presentation
14:00 - 14:20
Next-Gen Signaling

Standardisation
- Defining security stands within the operators.
- Security issues with IPX roaming systems.
- Are operators ready to scale back SS7?

Strategy & Solutions
- As operators create new strategies, solutions need to adapt in tandem.
- Security architectures are moving to the cloud.
- How can vendors provide solutions to enable and secure new services.

Moderated by: Marc Van Kasteren, Team Lead, Strategy & Policy - KPN

Participants
Marc Van Kasteren, Team Lead, Strategy & Policy - KPN, KPN

Virtualisation - Introductory Presentation
14:50 - 15:10
Next-Gen Signaling

Virtualisation
15:10 - 15:40
Next-Gen Signaling

Cloud
- Delivering the scale and elastic capacity needed for signalling.
- Cost reduction in the core network.
- Will cloud signalling contain DDoS attacks?

NFV
- Handling Signaling as well as data.
- Virtualising the diameter controller.
- Re-Configuring the network ‘on the fly’ (for mission critical services, etc.)

Roundtable Round-Up
15:40 - 15:45
Next-Gen Signaling

Feedback session in which all of the roundtables summarise the key learnings form their session to the delegate audience.

Coffee & Networking
15:45 - 16:15
Next-Gen Signaling
Future Insights Discussion Groups
16:15 - 17:00
Next-Gen Signaling

Joining a discussion group is much like entering a conversation in your living room. The room will be split into three parts to focus on the topics below. The facilitators will speak no more than any of the other delegates, providing an opportunity for genuinely new content and views in the conference programme and frank discussion.

1. Changing the nature of the game: OTT players' network ambitions
   - How will OTTS architect the network?
   - Impact of freedom from legacy network constraints.
   - Advantages of WebRTC for signaling.
   - What can the operator do?

2. How will C-RAN affect signaling?
   - Impact of security at the radio layer.
   - Will it have an affect on the core network and security?
   - What is holding C-RAN back - fibre connectivity, CPRI?

3. Examining the function of MEC and signaling
   - Edge functionality in coping with roaming burden.
   - Protecting the network through analysing the signaling payload.
   - Topology hiding, monitoring and DPI on the edge.

Participants
Alberto Diez, Principal Consultant - Mobile Plots, Mobile Plots

Feedback Session and Audience Insight Sharing
17:00 - 17:20
Next-Gen Signaling

The groups will synch up to discuss their findings and share their learnings with the other half of the audience. You will have the chance to pit your questions on the insights being shared to the other section of the audience!

Chairman's Close
17:20 - 17:30
Next-Gen Signaling

End of Signaling Focus Day
17:30 - 17:30
Next-Gen Signaling
5G & IoT Connectivity Challenges
16:00 - 17:30
Operator Mindshare

Participants
Matt Stagg, Head of Mobile Video & Content - EE, EE
Erol Hepsaydir, Head of RAN and Device Strategy & Architecture - Three UK, Three
Perry Jackson, Director, Innovation Voice & Signaling - KPN, KPN
Patrice Crutel, Senior Architect, Core and Service Network Layer - Bouygues Telecom, Bouygues Telecom
Eewei Chen, Head of User Experience - Ooredoo, Ooredoo
Aaron Partouche, Network Services Business Development & Telecom Director - Colt Telecom, Colt Telecom
Christian Menini, Senior Project Manager, Program Manager, VoLTE - Swisscom, Swisscom
Andreas Neubacher, CTO SGP, Standardization & IPR Management - Deutsche Telekom, Deutsche Telecom
Marjan Mursec, Technical Expert - Telekom Slovenije, Telekom Slovenije

End of Operator Mindshare
17:30 - 17:30
Main agenda
<table>
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<tr>
<th>TIME</th>
<th>MAIN AGENDA</th>
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<td>11:30 - Creating an Overall Strategy for Both Software and Physical Antenna</td>
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**Additional Information:**

- **Venue:** Kensington Olympia, London
- **Contact:**
  - Phone: +44 (0) 20 3551 9476
  - Email: tomas.benjamin@informa.com
  - Website: tmt.knect365.com/5gworldevent
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<td>17:30 - End of Signaling Focus Day</td>
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5G Networks, Where are we today?
09:00 - 09:20
Main agenda
• R&D efforts and use case outline.
• Standardisation and definition updates.
• Next steps in development, trials and deployment.

Participants
Stephen Harris, Chief Corporate & Strategy Officer - EE, EE
Fotis Karonis, Managing Director, IT & Mobile - BT, BT

Update of NTT DOCOMO activities toward 5G deployment in 2020 and beyond
09:20 - 09:40
Main agenda
• 5G technical concept.
• 5G deployment plan.
• 5G trials.

Participants
Takehiro Nakamura, VP & General Manager 5G Lab - NTT Docomo, NTT Docomo

HETNET 2020, What RAN Developments will make 5G Reality
09:40 - 10:00
Main agenda

Coffee Break
10:00 - 11:15
Main agenda

5G Moves Out of the Labs and into the Neighbourhood
11:15 - 11:35
Main agenda

Participants
Arun Bansal, Senior Vice President and Head of Business Unit Radio - Ericsson, Ericsson

PANEL DISCUSSION: Cellular Networks Evolving to Facilitate 5G Services
11:35 - 12:05
Main agenda
• Spectrum considerations for 5G and beyond.
• 5G technical concept.
• The role of Wi-Fi and LTE-U/LAA in 5G networks.
• LPWA / NB-IoT networks

Participants
Mark Newman, Moderator - Chief Research Officer - Ovum, Ovum
Alain Maloberti, Panelist - SVP, Networks - Orange, Orange
Adrian Scrase, Panelist - CTO - ETSI, ETSI
Sami Susiaho, Panelist - Head of Edge Technologies - BSKyb, BSKyb
Enrico Salvatori, Panelist - Senior Vice President & President - Qualcomm EMEA, Qualcomm EMEA

Break to Tracks 1 - 4
12:05 - 12:10
Main agenda

The Role of the MNO in IoT Networks
12:10 - 12:30
Track 1 - IoT Connect

Participants
Dr Mike Short, Vice President - Telefonica Europe, Telefonica

PANEL DISCUSSION: Alternative Technologies Driving IoT: SigFox, Bluetooth & LoRa
12:30 - 13:00
Track 1 - IoT Connect
• Discussing opportunities for such networks.
• Where does 5G networks leave your technology?
• Considerations for 5G networks with LoRa services

Participants
Anne Lauvergeon, Chairman - SigFox, Sigfox

Lunch
13:00 - 14:00
Track 1 - IoT Connect

Growing Importance of Cyber+ Network Security for the Government
14:00 - 14:20
Track 1 - IoT Connect

Participants
Ioana Surpateanu, Head Political Adviser - European Parliament, European Parliament

IoT in Oil and Gas: BP’s Vision
14:20 - 14:40
Track 1 - IoT Connect

Participants
Charles Cai, Head of Data Science Technology - BP, BP

Data Analytics for Smart Energy
14:40 - 15:00
Track 1 - IoT Connect

Participants
Anna Kleber-Yilmaz, Senior Data Mining Manager, Government R&D - Bosch, Bosch

Orange’s Smart Home Experience
15:00 - 15:20
Track 1 - IoT Connect

Participants
Valerie Coscas, Open & Digital Strategy Director - Orange, Orange

Coffee Break
15:20 - 16:20
Track 1 - IoT Connect

Connected Devices & Supply Chain Management
16:20 - 16:40
Track 1 - IoT Connect

Participants
Dennis Curry, Senior Director, Business Innovation & R&D - Konica Minolta, Konica Minolta

Ocado’s ‘RCom’ Technology
16:40 - 17:00
Track 1 - IoT Connect

Participants
Dr David Sharp, Head of Technology - Ocado, Ocado
Key challenges in rolling-out IoT networks and services
17:00 - 17:30
Track 1 - IoT Connect

End of Day 1
17:30 - 17:30
Track 1 - IoT Connect

PANEL DISCUSSION: What will LTE Video and Voice look like in 2025?
12:10 - 12:30
Track 2 - LTE Service Evolution
Participants
Nuno Silva, Project Manager - Portugal Telecom, Portugal Telecom
Mansoor Hanif, Director of Network Access Networks - EE, EE

LTE Services Deployment Case Study, From trial to realisation
12:30 - 13:10
Track 2 - LTE Service Evolution
Participants
Ron Shvili, CTO - Cellcom Israel, Cellcom Israel

Lunch Break
13:10 - 14:00
Track 2 - LTE Service Evolution

PANEL DISCUSSION: LTE Broadcast, how far can this technology reach?
14:00 - 14:30
Track 2 - LTE Service Evolution
Participants
Matt Stagg, Senior Manager, Network Strategy - EE, EE
Christian Kloch, Technology Manager - TDC, TDC
Thomas Neubauer, Vice President of Business Development & RAN Solutions - TEOCO, TEOCO

Self-Organizing Networks - Self-learning, location-aware
14:30 - 14:50
Track 2 - LTE Service Evolution
Participants
Chris Murphy, Director of Research - Viavi Solutions, Viavi Solutions

Delivering LTE services, TDC Case Study
14:50 - 15:10
Track 2 - LTE Service Evolution
Participants
Christian Kloch, Technology Manager - TDC, TDC

Evaluating the Underlying Complexities and Challenges of VoLTE
15:10 - 15:30
Track 2 - LTE Service Evolution
Participants
Rahul Joshi, Deputy CTO - Reliance JIO, Reliance Jio

Coffee Break
15:30 - 16:30
Track 2 - LTE Service Evolution

PANEL DISCUSSION: The VoLTE & VoWi-Fi Device Landscape
16:30 - 17:00
Track 2 - LTE Service Evolution
Participants
Shavin Wijetunge, Panelist - Manager, Network Architecture Planning - Mobitel Sri Lanka, Mobitel Sri Lanka
Thierry Jacq, Global Solution Marketing Director - Astellia, Astellia

DU’s 5G Perspective
17:00 - 17:20
Track 2 - LTE Service Evolution
Participants
Khalid Siddique, Senior Manager, Consumer Launch Management - DU, DU

End of Day 1
17:20 - 17:20
Track 2 - LTE Service Evolution

End-to-End Network Slicing – threats and opportunities
12:10 - 12:30
Track 3 - Road to 5G
Participants
Maria Cuevas, Head of Core Network Research - BT, BT

PANEL DISCUSSION: Key technical and business considerations to build the bridge between LTE and 5G
12:30 - 13:00
Track 3 - Road to 5G
Participants
Marjan Mursec, Panelist - Technical Expert - Telekom Slovenia, Telekom Slovenije
Paul Ceely, Panelist - Head of Network Strategy - EE, EE
Sameh Yamany, Panelist - CTO - Viavi Solutions, Viavi Solutions
Amila Aluthwala, Panelist - Senior Manager, Network Implementation - Mobitel Sri Lanka, Mobitel Sri Lanka

Lunch Break
13:00 - 14:00
Track 3 - Road to 5G

14:00 - 14:20
Track 3 - Road to 5G
Participants
Graziano Bini, Director, Wireless Access Engineering & Devices - Telecom Italia, Telecom Italia

IoT networks and 5G - Why & how Orange launched a LoRa network on the road to 5G
14:20 - 14:40
Track 3 - Road to 5G
Participants
Jean-Pierre Casara, Head of 4G Innovation - Orange, Orange

Introduction to OTFS, and new waveform for 5G
14:40 - 14:50
Track 3 - Road to 5G
Participants
Shlomo Rakib, CEO & Founder - Cohere Technologies, Cohere Technologies

PANEL DISCUSSION: Standards & Release Road-Map Towards 5G
14:50 - 15:10
Track 3 - Road to 5G
Participants
Iain Sharp, Panelist - ATIS, ATIS
Dino Fiore, Panelist - Chairman - 3GPP, 3GPP
Network Interfaces for 5G networks
15:10 - 15:30
Track 3 - Road to 5G

Participants
Jan Johansson, Principal Architect - ZTE Sweden R&D Centre, ZTE Sweden R&D Centre

Coffee Break
15:30 - 16:30
Track 3 - Road to 5G

Building the road to 5G through contextual Connectivity
16:30 - 16:50
Track 3 - Road to 5G

Participants
Foo Sze Ern, Head of Network Technology, Strategy - Celcom Axiata Bhd, Celcom Axiata Bhd

How Mobile Security Events Carriers Can’t See are Actually Causing Churn & What can Be Done
16:50 - 17:10
Track 3 - Road to 5G

Participants
Michael O'Malley, Vice President, Strategy - Radware, Radware

5G: Opportunities for fixed operators
17:10 - 17:30
Track 3 - Road to 5G

Participants
Peter Smyth, VP of Wireless, Head of Broadband Evolution - CableLabs, CableLabs

End of Day 1
17:30 - 17:30
Track 3 - Road to 5G

PANEL DISCUSSION: Next generation backhaul & small cells
12:10 - 12:40
Track 4 - HETNET 2020

Participants
Kimon Nicolaides, Moderator - Head of Product Development Management - BT Consumer Mobile Devices, BT Consumer Mobile Devices
Aaron Partouche, Panelist - Network Services Business Development & Director - Colt Telecom, Colt Telecom

3GPP RAN Status report
12:40 - 13:00
Track 4 - HETNET 2020

Participants
Dino Fiore, RAN Chairman - 3GPP, 3GPP

Lunch Break
13:00 - 14:00
Track 4 - HETNET 2020

The role of Wi-Fi in 5G
14:00 - 14:20
Track 4 - HETNET 2020

Small cell deployments in a 5G environment
14:20 - 14:40
Track 4 - HETNET 2020

Participants
Brian Donohue, Vice President, Business Development - Comba Telecom, Comba Telecom

PANEL DISCUSSION: Test & Measurement for 5G Networks
14:40 - 15:10
Track 4 - HETNET 2020

Participants
Henrik Nydell, Senior Product Manager - Accedian, Accedian
Meik Kottkamp, Technology Manager - Rohde & Schwarz, Rohde & Schwarz

Managing Today’s Complex Radio Access Network
15:10 - 15:30
Track 4 - HETNET 2020

Participants
Kethees Ketheesan, Chief Technologist, Radio Access - Netscout Systems, Netscout Systems

Coffee Break
15:30 - 16:30
Track 4 - HETNET 2020

PANEL DISCUSSION: Advanced 5G Core Network Architecture
16:30 - 17:00
Track 4 - HETNET 2020

Managing Interference & Overlay in Complex Network Scenarios
17:00 - 17:20
Track 4 - HETNET 2020

Participants
Yariv Waits, Radio Planning Group Manager - Cellcom Israel, Cellcom Israel

End of Day 1
17:20 - 17:20
Track 4 - HETNET 2020
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<tr>
<th>TIME</th>
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<th>TRACK 1 - IOT CONNECT</th>
<th>TRACK 2 - LTE SERVICE EVOLUTION</th>
<th>TRACK 3 - ROAD TO 5G</th>
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<tr>
<td>09:00</td>
<td>09:00 - 5G Networks, Where are we today? 09:20 - Update of NTT DOCOMO activities toward 5G deployment in 2020 and beyond 09:40 - HETNET 2020, What RAN Developments will make 5G Reality</td>
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<td>10:00</td>
<td>10:00 - Coffee Break</td>
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<td>11:00</td>
<td>11:15 - 5G Moves Out of the Labs and into the Neighbourhood 11:35 - PANEL DISCUSSION: Cellular Networks Evolving to Facilitate 5G Services</td>
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<td>12:00</td>
<td>12:05 - Break to Tracks 1 - 4 12:10 - The Role of the MNO in IoT Networks 12:30 - PANEL DISCUSSION: Alternative Technologies Driving IoT: SigFox, Bluetooth &amp; LoRa</td>
<td>12:10 - PANEL DISCUSSION: What will LTE Video and Voice look like in 2025? 12:30 - LTE Services Deployment Case Study, From trial to realisation</td>
<td>12:10 - End-to-End Network Slicing – threats and opportunities 12:30 - PANEL DISCUSSION: Key technical and business considerations to build the bridge between LTE and 5G</td>
<td>12:10 - PANEL DISCUSSION: Next generation backhaul &amp; small cells 12:40 - 3GPP RAN Status report</td>
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### SCHEDULE

**MAIN CONFERENCE DAY 1 - 29/06/2016**

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| 14:00| 14:00 - Growing Importance of Cyber+ Network Security for the Government  
14:20 - IoT in Oil and Gas: BP’s Vision  
14:40 - Data Analytics for Smart Energy | 14:00 - PANEL DISCUSSION: LTE Broadcast, how far can this technology reach?  
14:30 - Self-Organizing Networks - Self-learning, location-aware  
14:50 - Delivering LTE services, TDC Case Study | 14:00 - LTE-Advanced: Innovative Network Design & Deployment for 2015 - 2016 global events with TIM Italy: Expo Milan 2015 & Rome Jubilee  
14:20 - IoT networks and 5G - Why & how Orange launched a LoRa network on the road to 5G  
14:50 - PANEL DISCUSSION: Test & Measurement for 5G Networks | 14:00 - The role of Wi-Fi in 5G  
14:20 - Small cell deployments in a 5G environment  
14:40 - PANEL DISCUSSION: Test & Measurement for 5G Networks |
| 15:00| 15:00 - Orange's Smart Home Experience  
15:20 - Coffee Break | 15:10 - Evaluating the Underlying Complexities and Challenges of VoLTE  
15:30 - Coffee Break | 15:10 - Network Interfaces for 5G networks  
15:30 - Coffee Break |
| 16:00| 16:20 - Connected Devices & Supply Chain Management  
16:40 - Ocado’s ‘RCom’ Technology | 16:30 - PANEL DISCUSSION: The VoLTE & VoWi-Fi Device Landscape | 16:30 - Building the road to 5G through contextual Connectivity  
16:50 - How Mobile Security Events Carriers Can’t See are Actually Causing Churn & What can Be Done | 16:30 - PANEL DISCUSSION: Advanced 5G Core Network Architecture |
| 17:00| 17:00 - Key challenges in rolling-out IoT networks and services  
17:30 - End of Day 1 | 17:00 - DU’s 5G Perspective  
17:20 - End of Day 1 | 17:10 - 5G: Opportunities for fixed operators  
17:30 - End of Day 1 | 17:00 - Managing Interference & Overlay in Complex Network Scenarios  
17:20 - End of Day 1 |
Leveraging 4G infrastructure and expertise to roll-out 5G networks
09:00 - 09:20
Main agenda

Participants
Chang-Seok Seo, SVP & Head of Network Strategy Business Unit - Korea Telecom, KT

Delivering the Smart City Vision in Turkey
09:20 - 09:40
Main agenda

Participants
Mehmet Ali Akarca, CEO Corporate Business Unit - Turk Telekom, Turk Telecom

LTE & 5G networks and the Now Economy
09:40 - 10:00
Main agenda

Participants
Jason Emery, VP Signalling Products - Oracle, Oracle

Coffee Break
10:00 - 11:15
Main agenda

5G: How Technology is going to deliver on various Business demands
11:15 - 11:35
Main agenda

• Business demands for a few selected use cases (e.g. verticals)
• Analysing the capabilities needed for delivery.
• Potential solutions from a technology perspective.
• Field trials of Deutsche Telekom to proof technology claims

Participants
Franz Sieser, Vice President, Core Networks and Services - Deutsche Telekom
Antje Williams, 5G Executive Program Manager - Deutsche Telekom

Creating an Open Ecosystem to Develop IoT Services
12:10 - 12:30
Track 1 - IoT Connect

Participants
Andreas Neubacher, CTO SGP, Standardization & IPR Management - Deutsche Telekom, Deutsche Telekom

Trends in the Industrial IoT market, The Russian Perspective
12:30 - 12:50
Track 1 - IoT Connect

Participants
Dmitrii Kulakovskii, CMO - JSC MGTS, JSC MGTS (Russia)

Lunch Break
12:50 - 14:00
Track 1 - IoT Connect

Sharing Experiences: IoT, Mobility & Big Data at Sony
14:00 - 14:20
Track 1 - IoT Connect

Participants
Renaud Di Francesco, Director, Europe Technology Standards - Sony Corporation, Sony Corporation

Bentleys Enhanced Customer Experience Enabled by 5G
14:20 - 14:40
Track 1 - IoT Connect

Participants
Elliot Messenger, Connected Car Digital Integrating Manager - Bentley Motors, Bentley Motors

PANEL DISCUSSION: Delivering IoT services through 5G
11:35 - 12:05
Main agenda

Participants
Iain Gillott, Moderator - President & Founder - IGR Research
Dr Mike Short, Panelist - VP - Telefonica Europe, Telefonica
Uday Deshpande, CISO - Tata Motors, Tata Motors

Break to Tracks 1 - 4
12:05 - 12:10
Main agenda

PANEL DISCUSSION: Delivering Intelligent Transportation Systems
14:40 - 15:10
Track 1 - IoT Connect

Participants
Ashutosh Tomar, Principal Engineer, Technical Strategy - Jaguar Land Rover, Jaguar Land Rover
Uday Deshpande, CISO - Tata Motors, Tata Motors
Nicholas Cary, Head of Digital Transformation - Department for Transport, Department of Transport
Mohamad El Assad, Senior Manager, Inflight communication services + products - Gulf Air, Gulf Air

Coffee Break
15:10 - 16:10
Track 1 - IoT Connect

PANEL DISCUSSION: Delivering the smart city through IoT
16:10 - 16:40
Track 1 - IoT Connect

Participants
Paul Copping, Smart Cities Advisor - Digital Greenwich, Digital Greenwich

Modernizing the Mining Industry with the Internet of Things
16:40 - 17:00
Track 1 - IoT Connect

Participants
Rafael Laskier, Strategy & Innovation Head - Vale, Vale

University Panel: Academics lead the way
17:00 - 17:30
Track 1 - IoT Connect

Participants
Dr Mike Short, Moderator - Vice President - Telefonica Europe, Telefonica
Mischa Dohler, Professor in Wireless Communication & Fellow - Kings College London + IEEE, Kings College London + IEEE
Mark Skilton, Digital Leader + Professor - Warwick University, Warwick University

End of Day 2
17:30 - 17:30
Track 1 - IoT Connect

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SESSIONS
MAIN CONFERENCE DAY 2 - 30/06/2016

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5G World
28 - 30 June 2016
Kensington Olympia
London
### Economics of 5G Spectrum
12:10 - 12:30  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Uwe Loewenstein, Spectrum Technology Manager, Regulatory Affairs - Telefonica DE, Telefonica O2 Europe

### Suitability of Potential Candidate Frequency Bands above 6GHz
12:30 - 12:50  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Lora Mihova, Strategy & Business Development Manager - Telefonica Dynamic Insights, Telefonica Dynamic Insights

### PANEL DISCUSSION: The future of spectrum for 5G and beyond
12:50 - 13:20  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Heinz Bernold, Moderator - Associate Director - The Boston Consulting Group, The Boston Consulting Group

### Lunch Break
13:20 - 14:20  
Track 2 - Spectrum, Security & Roaming

### Ofcom Case Study, Considerations for 5G
14:20 - 14:40  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Philip Marnick, Group Director of Spectrum - OFCOM, Ofcom

### PANEL DISCUSSION: Ensuring Effective & Highly Efficient Security Solutions for LTE Networks
14:40 - 15:00  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Michael O'Malley, Panelist - VP, Strategy - Radware, Radware

### Data management in 5G networks
12:50 - 13:10  
Track 3 - Network Optimisation  
**Participants**  
Oliver Korfmacher, Head of Product Management - Siemens Convergence Creators, Siemens Convergence Creators

### Lunch Break
13:10 - 14:10  
Track 3 - Network Optimisation

### PANEL DISCUSSION: OTT partnerships, IoT & Big Data
14:10 - 14:40  
Track 3 - Network Optimisation  
**Participants**  
Mila Milenkovic, Panelist - Head of Autonomous for Business Development - Telekom Serbia, Telekom Srbija
Kobus Smit, Panelist - VP, Communication, SW Management & TV - Deutsche Telekom, Deutsche Telecom
Brian Lwetutte, Panelist - Revenue Assurance & Fraud, Fixed Data Services - MTN Nigeria, MTN Nigeria

### The benefits of NB-IoT
14:40 - 15:00  
Track 3 - Network Optimisation  
**Participants**  
Ivano Collotta, Project Manager - Telecom Italia, Telecom Italia

### Coffee Break
15:00 - 16:00  
Track 3 - Network Optimisation

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### Coffee Break
15:20 - 16:00  
Track 2 - Spectrum, Security & Roaming

### Smart Steps from, empowering better business decisions
16:00 - 16:20  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Lora Mihova, Strategy & Business Development Manager - Telefonica Dynamic Insights, Telefonica Dynamic Insights

### PANEL DISCUSSION: Ensuring Effective & Highly Efficient Security Solutions for LTE Networks
16:20 - 16:40  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Michael O'Malley, Panelist - VP, Strategy - Radware, Radware

### Monetizing Digital Services on LTE Networks – GCC Case Study
16:40 - 17:00  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Safdar Imam, Senior Expert, Costing and Strategic Finance - Omantel, Omantel

### End of Day 2
17:00 - 17:00  
Track 2 - Spectrum, Security & Roaming

### OSS/BSS evolution for 5G Networks
12:10 - 12:30  
Track 3 - Network Optimisation  
**Participants**  
Rami Assoum, Head of VAS Engineering - Alfa Mobile Lebanon, Alfa (Lebanon)

### The benefits of NB-IoT
14:40 - 15:00  
Track 3 - Network Optimisation  
**Participants**  
Ivano Collotta, Project Manager - Telecom Italia, Telecom Italia

### Coffee Break
15:00 - 16:00  
Track 3 - Network Optimisation

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### A Better way to Secure the Signaling Layer
12:30 - 12:50  
Track 3 - Network Optimisation  
**Participants**  
Matt Rosenberg, Vice President - NetNumber, NetNumbers

### PANEL DISCUSSION: Ensuring Effective & Highly Efficient Security Solutions for LTE Networks
12:50 - 13:10  
Track 3 - Network Optimisation  
**Participants**  
Michael O'Malley, Panelist - VP, Strategy - Radware, Radware

### Monetizing Digital Services on LTE Networks – GCC Case Study
13:10 - 14:10  
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Safdar Imam, Senior Expert, Costing and Strategic Finance - Omantel, Omantel

### End of Day 2
14:10 - 14:40  
Track 3 - Network Optimisation  
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Brian Lwetutte, Panelist - Revenue Assurance & Fraud, Fixed Data Services - MTN Nigeria, MTN Nigeria

### The benefits of NB-IoT
14:40 - 15:00  
Track 3 - Network Optimisation  
**Participants**  
Ivano Collotta, Project Manager - Telecom Italia, Telecom Italia

### Coffee Break
15:00 - 16:00  
Track 3 - Network Optimisation

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### 5G Operating System: from the Things to the Clouds
15:00 - 15:20  
Track 2 - Spectrum, Security & Roaming  
**Participants**  
Antonio Manzalini, Project Manager, Strategy & Innovation - Telecom Italia, Telecom Italia
Benefits and challenges of evolving a network from distributed architecture to centralised architecture
16:00 - 16:20
Track 3 - Network Optimisation
Participants
Marco Caretti, Mobile Radio Access Engineer - Telecom Italia, Telecom Italia

Network Rollout in Asia: Lessons Learned from Sri Lankan Project Management Case Study
16:20 - 16:40
Track 3 - Network Optimisation
Participants
Namal Gayani Dias, Supervisory Engineer, Project Finance - Mobitel, Sri Lanka, Mobitel Sri Lanka

The LTE to 5G transition in a rural environment
16:40 - 17:00
Track 3 - Network Optimisation
Participants
Leo Lundy, Group CTO - Imagine Communication Group, Imagine Communications Group (Ireland)

End of Day 2
17:00 - 17:00
Track 3 - Network Optimisation

PANEL DISCUSSION: Evolving current RAN architecture to Cloud RAN systems
12:10 - 12:30
Track 4 - Cloud RAN & Virtualisation
Participants
Aaron Partouche, Network Services Business Development & Telecom Director - Colt Telecom, Colt Telecom
Kethees Ketheesan, Chief Technologist, Radio Access - Netscout Systems - Netscout, Netscout Systems
Marco Caretti, Mobile Radio Access Engineer - Telecom Italia, Telecom Italia

The role of SDN in 5G networks
12:30 - 12:50
Track 4 - Cloud RAN & Virtualisation
Participants
Aaron Partouche, Network Services Business Development & Telecom Director - Colt Telecom, Colt Telecom

Taking Advantage of SDN in Mobile Networks
12:50 - 13:10
Track 4 - Cloud RAN & Virtualisation
Participants
Isaias Alegria Garcia, Engineering & Operations Manager - Marcatel Mexico, Marcatel Mexico

Lunch Break
13:10 - 14:00
Track 4 - Cloud RAN & Virtualisation

SDN & NFV Networks for LTE Evolution
14:00 - 14:20
Track 4 - Cloud RAN & Virtualisation
Participants
Francisco Fontes, Senior Consultant, Innovation & Services - Portugal Telecom, Portugal Telecom

The now and the future of Network Functions Virtualisation
14:20 - 14:40
Track 4 - Cloud RAN & Virtualisation
Participants
Tommy Ljunggren, Group Director, Architecture & Security - VimpelCom, Vimpelcom Group

Fronthaul ecosystem and use cases
14:40 - 15:00
Track 4 - Cloud RAN & Virtualisation
Participants
Sylvain Lamblot, Vice President, Sales & Partnerships - E-Blink, E-Blink

Coffee Break
15:00 - 16:10
Track 4 - Cloud RAN & Virtualisation

C-RAN Integration, Challenges & Opportunities
16:10 - 16:20
Track 4 - Cloud RAN & Virtualisation
Participants
Ahmad Al-Tarawneh, RAN Optimization Engineer - Zah Jordan, Zain Jordan

Using Open Source SDN/ NFV in developing 5G
16:20 - 16:40
Track 4 - Cloud RAN & Virtualisation
Participants
Marcus Brunner, Head of Standardisation - Swisscom, Swisscom

PANEL DISCUSSION: Leveraging the full potential of advanced LTE and 5G networks through network slicing and NFV
16:40 - 17:10
Track 4 - Cloud RAN & Virtualisation

End of Day 2
17:10 - 17:10
Track 4 - Cloud RAN & Virtualisation

SESSIONS
MAIN CONFERENCE DAY 2 - 30/06/2016

5G World
28 - 30 June 2016
Kensington Olympia
London

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<td>11:15 - 5G: How Technology is going to deliver on various Business demands</td>
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