



MOBILE[™]
WORLD CONGRESS

FUTURE NETWORKS

**MOBILE WORLD CONGRESS 2018 GUIDE
26 FEBRUARY - 1 MARCH 2018
BARCELONA**



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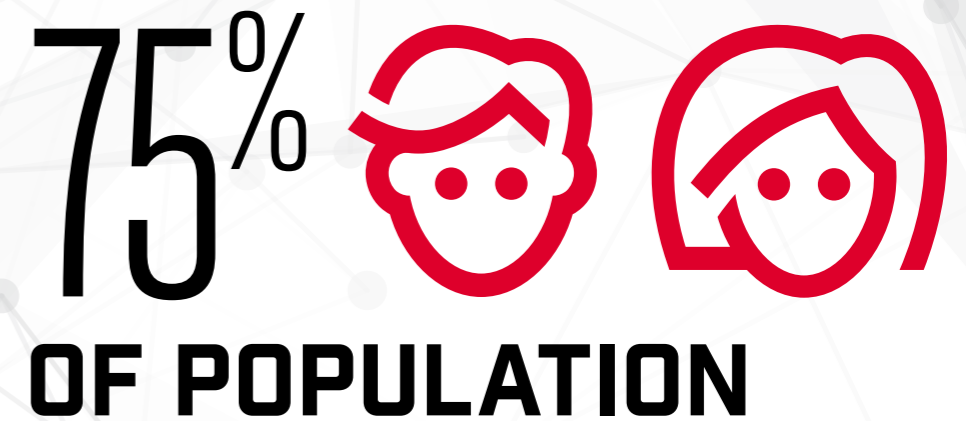
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DELIVERING AN ALL-IP WORLD

LTE launched by



REACHING



RCS

| | |
|---------------------------|-----|
| Operator Launches | 50 |
| Countries | 39 |
| Devices | 398 |
| Hosted Solution Providers | 19 |

VOICE OVER WIFI

| | |
|-------------------|----|
| Operator Launches | 57 |
| Countries | 33 |

HD VOICE

| | |
|-------------------|-----|
| Operator Launches | 164 |
| Countries | 88 |

THE FUTURE NETWORKS PROGRAMME

Across the world, mobile operators are investing almost US\$200 billion a year in their networks. As they expand 4G connectivity and make decisions on 5G investment, operators are harnessing Internet-style technologies to provide compelling and innovative services in an efficient and productive way.

Directed by 16 leading operators in collaboration, the GSMA's Future Networks programme guides the mobile industry on how to use Internet Protocols (IP) to reduce the cost of transferring data, while meeting customers' expectations around reliability, security and interoperability.

The GSMA's global specifications, such as the Universal Profile, will ensure that new IP-based services are reliable, cost-effective and will work across different devices and different networks, in any market.

The Future Networks programme is making it easier for operators to deploy Rich Communications Services (RCS); an evolution in mobile messaging, and is working closely with operators, aggregators, brands and technology providers to ensure that RCS is the future of brand communications.

The GSMA's holistic approach to 5G will ensure that vertical markets and consumers benefit from the opportunities created within the 5G Era. To meet user data demand and vertical capabilities, Future Networks will encourage innovative ways to reduce the capital intensity of the next generational step.



FUTURE NETWORKS AT MOBILE WORLD CONGRESS

RCS

RCS and the Future of Messaging at Mobile World Congress

Rich Communications Services (RCS) is an upgrade to SMS on a global scale, bringing the messaging services of the future to over 5 billion mobile phone users worldwide. RCS is an operator service that will work on any smart device or network, and will give customers the experience they've come to expect from OTTs, natively in their handset.

5G

5G at Mobile World Congress

5G could account for as many as 1.2 billion connections by 2025. By then, 5G networks are likely to cover one third of the world's population. The impact on the mobile industry and its customers will be profound.

5G could bring an evolution in VR (and AR), an area where we have seen growth in devices and applications over the last two years. They have so far been seen as somewhat dispensable functions due to latency and/or low quality of virtual images, but trials such as these could very well showcase the improvements made with 5G.

GSMA RCS A2P FUTURE MESSAGING LAB

RCS

Private Event by Invitation Only

**Sunday, 25 February 2018
12:00-17:00**

NH Constanza Hotel, Barcelona, Spain

The Future Networks Programme will be hosting the tenth GSMA RCS A2P Future Messaging Lab in Barcelona with 3Cinteractive on Sunday 25 February 2018 at 12:00-17:00.

The A2P Future Messaging Lab will convene the leading stakeholders in the RCS A2P messaging industry; discussing the first commercial live brand campaigns, and the strategy for RCS in 2018, that will enable the momentum of last year to continue.

This event does not require you to register for an MWC event pass.

www.youtube.com/watch?v=MzBVLvTNZF8

DIGITAL TRANSFORMATION 2.0 FOR THE CONSUMER

RCS

Tuesday, 27 February 2018
11:00-12:00

Hall 4 Auditorium 3

Digital transformation in retail has changed the very nature of this industry. It is no longer just about transactions, but about conversations with consumers. This session looks at how we can build a single point of engagement with consumers which is relevant, reactive and reliable.



| Time | Format | Speaker/Company |
|--------------------|-----------------|---|
| 11:00-11:05 | Welcome address | Rimma Perelmuter, CEO, Mobile Ecosystem Forum |
| 11:05-12:00 | Panel | Anil Sabharwal, VP, Product Management, Google |
| | | Ann Cook, Director of Interactive & Managing Director of ITL, ITV |
| | | Yves Maitre, Executive EVP for Connected Objects and Partnerships, Orange |
| | | Mike Brouwers, Regional Marketing Director Europe, Subway |
| | | Stefano Parisse, Group Director of Products and Services, Vodafone |
| | | Marco Trecroce, SVP & CIO, Four Seasons Hotel |

MESSAGING AS A PLATFORM: THE FUTURE OF BRAND COMMUNICATIONS



Tuesday 27 February 2018
14:00-16:00

Room CC1.5 & CC1.1
(Seminar Theatre 1 & 2),
South Entrance (Level 1),
Fira, Barcelona

| Time | Speaker/Company | Presentation | Description |
|-------------|---|---|--|
| 14:00-14:05 | David O'Byrne, IP Communications Project Director, GSMA | RCS: Maximising Brand Communications | Welcome and Introduction |
| 14:05-14:20 | Dr. Petja Heimbach, Vice President Communication Products, Deutsche Telekom | | |
| 14:20-14:30 | Oscar Gallego, Global Head of Smart Communications and Security, Vodafone | | |
| 14:30-14:40 | Brand 1 (to be revealed) | | Session will include live demo |
| 14:40-14:50 | Amir Sarhangi, Head of Project Management - RCS, Google | | |
| 14:50-15:00 | Brand 2 (to be revealed) | | Session will include live demo |
| 15:00-15:10 | Brand 3 (to be revealed) | | Session will include live demo |
| 15:10-15:20 | Brand 4 (to be revealed) | | Session will include live demo |
| 15:20-15:30 | Sean Yoo, Director of Product Innovation - RCS Program Manager, Samsung | Samsung RCS/MaaP: Enabler for most powerful messaging communication | <ul style="list-style-type: none"> • The potential of native messaging app on devices today • How Samsung MaaP enables brands to reach their customers in the most effective way • A win-win model for the industry |
| 15:30-15:40 | Brand 5 (to be revealed) | (Presented by Samsung) | Session will include live demo |
| 15:40-16:00 | Moderator: David O'Byrne, IP Communications Project Director, GSMA | Industry Panel | |

RCS INFORMATION SESSIONS



RCS Operator Information Sessions

Monday, 26 February 2018
14:00-15:00

Wednesday, 28 February 2018
9:00-10:00

Outside Halls, CC3 (Level 1)
Room 3.12, FIRA, Barcelona

These sessions are an opportunity for operators interested in learning more about RCS to hear from those already active in the ecosystem. RCS leaders from mobile operators will provide information about their RCS experiences and answer questions on paths to launch, driving adoption, A2P/Business Messaging and other elements of the service.

Operators will have an opportunity to engage with:

- Operators who have successfully launched and scaled RCS
- Aggregators using RCS platforms and working with brands to scale MaaP
- The GSMA RCS team who can talk to you about RCS momentum and technical steps to launch

RCS INFORMATION SESSION: MEET THE VENDORS

RCS

RCS Vendor Networking
Information Session

**Wednesday, 28 February 2018
10:30-11:30**

**Outside Halls, CC3 (Level 1)
Room 3.12, FIRA, Barcelona**

This session will provide an opportunity for operators to interact with vendors of both hosted and on-premise solutions for RCS. Attendees will have the chance to pose questions and establish contacts with RCS Leads from Google, Interop Technologies, Mavenir, Samsung, SummitTech, Syniverse and WIT, who will be presenting their offerings and current progress on RCS and Messaging as a Platform.

FUTURE NETWORKS SEMINAR: 5G FOR INDUSTRY-SPECIFIC SERVICES



5G For Industry-Specific Services

Monday, 26 February 2018

13:30-15:30

Room CC1.5 & CC1.1 (Seminar Theatre 1 & 2),
South Entrance (Level 1), Fira, Barcelona

| Time | Speaker/Company | Presentation | Description |
|-------------|--|---|--|
| 13:30-13:35 | Henry Calvert, Senior Director, GSMA | GSMA Welcome and Introduction | |
| 13:35-13:45 | Anil Rao, Principal Analyst, Analysys Mason | Network Slicing – The Future of Connectivity: Changing Operator Economics of Connectivity and Enabling Innovation across Industries | <ul style="list-style-type: none"> Connectivity and services will be transformed in three phases: capacity based, service based, application based Network slicing will change the economics of the connectivity business but also open the door to new service innovations across industries The proliferating demand for fine-grained, service-specific network slices will lead to a more complex, multi-layered slicing value chain |
| 13:45-14:05 | Dr. Ryokichi Onishi, Group Leader, Network Group & Kiichi Iwasaki, Project Manager, Toyota | Automotive Edge Computing: Use Case and Requirement | <ul style="list-style-type: none"> Vision: Connected intelligence for mobility evolution Issue: System capacity for automotive big data Solution: Edge computing and community based approach |
| 14:05-14:20 | Dr. Andreas Müller, Senior Expert and Project Manager, Bosch | Network Slicing for Industry 4.0 – Expectations and Opportunities | <ul style="list-style-type: none"> The role of 5G for Industry 4.0 How network slicing may help Major challenges and expectations |
| 14:20-14:35 | Allan Cai, Senior Production Design Expert of AliTelecom, Alibaba | 5G and New Retail | <ul style="list-style-type: none"> Alibaba's best practice on integrating Communication Technology into the Internet, serving the largest e-commerce platform in the world New Retail and future direction How 5G can help |
| 14:35-14:50 | Matt Stagg, Head of Mobile Video, EE | How 5G will revolutionise the Broadcast, Media and Entertainment industry | <ul style="list-style-type: none"> Developing the BME vertical within the 5G ecosystem How 5G opens up opportunities for outside broadcast, remote production and mass content upload Aligning the BME industry to capitalise on the 'Glass to Glass' opportunities of 5G |
| 14:50-15:05 | Mike Wright, Group Managing Director, Networks, Telstra | 5G: Towards a Brave New Future | <ul style="list-style-type: none"> Telstra is leading 5G trials from our 5G Innovation Centre We are exploring new horizons for industries, and how they can transform with the benefits of new technologies Beyond the evolution from 4G which 5G offers, explore the use cases of how this technology can be a revolution |
| 15:05-15:30 | Anil Rao, Principal Analyst, Analysys Mason | Conclusion and Wrap-up | |

FUTURE NETWORKS LTE-BROADCAST ROUNDTABLE

Private Event by Invitation Only

Tuesday, 27 February 2018
08:00-10:00

CC3 Room: 3.14A

This Roundtable will gather a broad range of senior participants from across the ecosystem to discuss the future of eMBMs and what collective actions are needed to see this technology implemented throughout 2018. We will have representation from content providers, device, chipset and equipment vendors and key LTE-Broadcast Operators.

Some topics to be discussed include:

- Addressing technical issues in networks and devices
- Promotion of innovative business models
- How the industry can overcome potential regulatory barriers

FUTURE NETWORKS VIRTUALISATION ROUNDTABLE

Private Event by Invitation Only

Tuesday, 27 February 2018
10:30-12:00

CC3 Room: 3.14A

The Virtualisation Roundtable will explore the theme of collaborative action with the aim to widen the mobile virtual infrastructure ecosystem. We will explore the theme of collaborative action with the aim to widen the mobile virtual infrastructure ecosystem.

Some topics that will be covered include:

- The Role of Standards
- Business Modelling
- Licensing
- How the industry manages cooperation with key vendors

FUTURE NETWORKS THINK TANK: NETWORK ECONOMICS AND INNOVATION

Private Event by Invitation Only

Wednesday, 28 February 2018
13:00-15:00

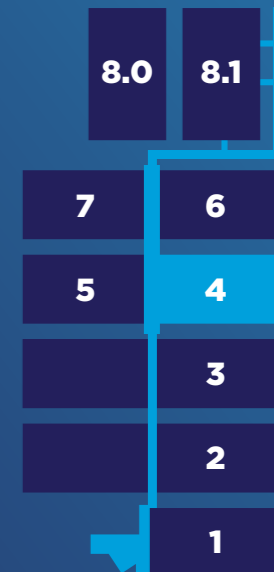
CC3 Lvl 1 – CC3 Room: 3.12

The objective of the Think Tank is to bring together senior stakeholders from the industry to engage with networks-focused companies in the Silicon Valley area who are shaping the market with innovative and/or disruptive solutions.



THE GSMA PRESENTS
INNOVATION CITY 2018

HALL 4: STANDS 4A30, 4A5 & 4A15



Huawei

Huawei Wireless X Labs will present innovative use cases based on future wireless network such as wireless CloudVR, connected fly taxi and robot pen maker.

Sierra Wireless

Sierra Wireless is empowering customers to reimagine their future in the connected world, demonstrations include worker safety, smart agriculture, aviation and industrial.

GSMA IoT

The IoT punch boxer: Hit the IoT Punch Bag to find out how strong you really are and discover the impact of Mobile IoT! Keeping track of the world: The world's first Mobile IoT consumer tracking service showing live LTE-M and NB-IoT networks in multiple countries.

GSMA Membership

Meet the GSMA Membership team and find out how you can maximize the potential of your business and engage across the mobile ecosystem.

GSMA Future Networks

Experience face and biometric recognition and see how they are delivering the office of the future with Alibaba and China Unicom.

GSMA Intelligence

Discover how your organisation can make more informed decisions by utilising the industry data, insights and reports published by the GSMA.

GSMA Mobile for Development

Discover how mobile services are impacting lives in humanitarian contexts, with cutting-edge hardware demonstrations and 360-degree interactive content.

GSMA #BetterFuture

Learn how mobile has an impact on all 17 SDGs. Experience the #CaseForChange journey in immersive 360 video and discover how Big Data is creating a #BetterFuture for all.

GSMA Mobile Connect

Experience how patients can purchase medicines from a dispensing machine with Mobile Connect and their phones. Learn how businesses can use Mobile Connect to run customer attribute checks or how citizens can use it to verify their identity cross-border.

GSMA Future Networks & Mobile Connect

See how future network services and Mobile Connect will revolutionize critical mobile communications for public services with EE, Expway and G-UAV, allowing them to respond to incidents with capabilities such as real time video broadcast to multiple devices as well as enabling secure access to patient health records in partnership with San Diego Health Connect and OpenCDE.

Turkcell Lifecell Ventures

Lifecell Ventures and Turkcell will present the innovative vision, platforms and services that enabled Turkcell's transformation into the world's leading digital operator and one of the fastest growing companies of the industry.

Conference

Entrance



Cisco IoT

Cisco IoT is a global IoT platform leader focused on helping companies accelerate their IoT success by launching, managing and monetizing IoT services that enhance customer experiences and drive revenue.

GSMA Future Networks

5G football competition in partnership with 5GUK - experience the power of 5G's low-latency; Throw yourself into space with 5G gaming in partnership with KT. Experience holoportation brought to life - interact and communicate real-time with remote parties via 3D hologram.

GSMA Future Networks, Operators and Google

Join us to experience the future of operator messaging. See how major brands are using RCS business messaging to deliver rich and interactive experiences to their customers.

KT Corporation

KT introduced 5G, the next-generation network, to the world at PyeongChang 2018 and leads the 4th industrial revolution with its innovative network & services.

FUTURE NETWORKS INNOVATION CITY DEMOS

RCS Business Messaging Demonstrations

At MWC Barcelona 2017, 'The Future of Operator Messaging' was launched with demonstrations from leading brands highlighting the exciting potential of RCS Business Messaging. This year, the first campaigns are live in market! Google will showcase their RCS platform and their work with Sprint, 3Cinteractive, OpenMarket and Mobivity, revealing how major brands are utilising this exciting new platform for consumer

communications. Vodafone will also be unveiling their new RCS platform and their work with major brands and aggregators.

Visit Innovation City to experience the first ever commercially launched RCS campaigns from major retailers, a television company, a bank, a hotel chain, a taxi company and more!

5G Demonstrations

| Demonstration | Partners | Description |
|--|--|--|
| Public Services - Mobile in Critical Communications | EE, Expway & G-UAV | See how mobile will revolutionise critical mobile communications for emergency services with EE, Expway and G-UAV, allowing them to respond to incidents with capabilities such as real time video broadcast to multiple devices. |
| The Office of the Future | China Unicom & Alibaba | Experience face and biometric recognition and see how they are delivering the 'Office of the Future' with Alibaba and China Unicom. |
| 5G Powering Remote Experiences: Demo 1 | 5GUK (University of Surrey, Kings College London, University of Bristol) | Compete to be No. 1 on the leader board in our 5G football competition in partnership with 5GUK. Score a goal and experience the power of 5G low latency through remote robotic technologies and be in with the chance of winning a top prize. |
| 5G Powering Remote Experiences: Demo 2 | Korea Telecom | Throw yourself into Space with 5G gaming in partnership KT. You'll experience the power of the mobile network making truly immersive low-latency VR gaming a reality. |
| 5G Powering Remote Experiences: Demo 3 | 5GIC & DoubleMe | Experience holoportation brought to life; Interact and communicate real-time with remote parties via 3D hologram. |

RCS DEMONSTRATIONS FROM OUR PARTNERS (IN HALLS 1, 2, 5 & 6)

There are also plenty of other opportunities outside of Innovation City to see exciting demos showcasing the potential of RCS Business Messaging. Visit our partners' stands listed below, experience their RCS solutions and make some important vendor contacts.

| Vendor | Location | Description |
|-----------------------------|------------------------|--|
| Ericsson | Stand 2O60 (Hall 2) | Ericsson will demonstrate the new RCS messaging interface that supports interaction with chatbots. Visitors will be able to explore how to benefit from new B2C business opportunities using IP messaging and chatbots. |
| Interop Technologies | Stand 1C21 (Hall 1) | Interop Technologies' hosted RCS solution is one of the first in the world with GSMA accreditation in Framework, Enriched Calling and Messaging. Stop by their stand to learn more about securing your future! |
| Mavenir | Stand 6D40 (Hall 4) | Mavenir is demonstrating how the richness of RCS can be leveraged to enhance customer engagement through the use of chatbots. |
| SummitTech | Stand 5H31 (Hall 5) | SummitTech will be showing live demos of innovative RCS solutions for MaaP, Chatbots & Plugins, AI, VoWiFi, IMS Connected Car, GSMA Enriched Calling, RCS Connected Living, RCS mHealth, Virtual Reality (VR) Calling, IMS Drones, Robots and RCS cryptocurrencies. Visit their stand to experience the full potential of RCS. |
| WIT | Stand E11 (Hall 6) | WIT will be demonstrating their out-of-the-box RCS MaaP solution, including P2P messaging, multi-device, voice and video; A2P rich messaging campaigns; and bots for multi-channel conversational transactions. |
| ZTE | Stand E16 (Hall 6) | ZTE will demonstrate their MaaP based service (using food ordering and hotel room reservation use cases), Multi-Number Enriched Calling/IVVR and Phone-STB video call. |

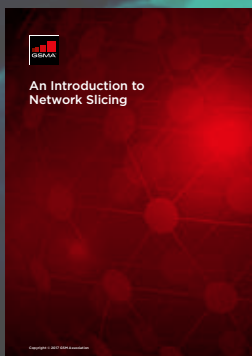
INTERESTING READS



RCS Research Study



5G Era



Introduction to Network Slicing

KEY PROGRAMME CONTACTS



Henry Calvert
Head of Future Networks



Jill Cooper
Programme Marketing Director



Erdem Ersoz
Project Manager in RCS/MaaP projects



David Hutton
Head of Networks



Rosie Leary
Marketing Manager



Jamie Lee
Programme Manager



Catherine Maguire
RCS/MaaP Operator Engagement Manager



Andrew Milne
Marketing Manager (5G)



Oonagh Molloy
Future Networks Programme Director



David O'Byrne
IP Communications Project Director



Kelvin Qin
Senior Project Manager



Paul Schonewald
Marketing Manager



Tom Van Pelt
IMS Technical Director



Michele Zarri
Technical Director, Networks



Faisal Zia
Project Manager, Future Networks

