



Mobile IoT Marketing Update

11 January 2018

Andrew Parker, Marketing Director IoT, GSMA
Eric Yu, Marketing Manager IoT, GSMA

GSMA Antitrust Policy

- Anti-trust law prohibits (i) agreements (written or implicit) between competitors which may negatively impact consumers or competitors and (ii) sharing of confidential information
- All GSMA participants **must** abide by the following rules:
 - ✓ **DO** clearly identify the positive purpose of each project and follow it
 - ✓ **DO** consult with legal in areas where you are unsure
 - ✗ **DON'T** enter into agreements that restrict other parties' actions or creates barriers to market entry
 - ✗ **DON'T** discuss or exchange information on pricing, business plans, or any other confidential or commercially sensitive data

Agenda

1. GSMA IoT 2018/19 Marketing Planning
2. GSMA IoT in Mobile World Congress 18
3. FY17 Events & Activities
4. Marketing Updates & Collaborative Marketing

2018/19 IoT Marketing Planning

Enabling IoT to Scale - IoT Programme Outcomes & Activities in 2018/19



COVERAGE

Help operators to build a global base of mobile IoT customers and revenue

- Scale Mobile IoT by driving global availability in 80% of the top 50 IoT countries, of standardised interoperable networks and modules / chipsets and investigate how to improve coverage and densification
- Expand demand for operator IoT services in key verticals by supporting new IoT devices and stimulating adoption by Solution Providers, DevOps and OEMs



CAPABILITY

Ensure operators have the capabilities to capture further IoT revenue

- Steer industry SIM evolution in the strategic direction that supports operators by evolving remote SIM provisioning and managing compliance
- Capture additional IoT revenue by evaluating new business cases and enablers such as analytics, edge computing and ledgers
- Enable operators to become trusted partners for IoT by developing a privacy management approach that is acceptable to regulators



CYBERSECURITY

Reinforce operator position as trusted IoT partners

- Improve IoT Security by updating & promoting the GSMA security guidelines
- Reduce impact of IoT security breaches by implementing information sharing processes to improve threat intelligence & risk mitigation
- Enable operators to become IoT Identity managers by defining architecture & relationships for user-centric and device-centric identities
- Proof of Concept (PoC) leveraging Embedded SIM for security (perhaps using iUICC)

Key Industry Messages – **Mobile IoT = Trusted IoT**

- The mobile industry is **scaling up commercial NB-IoT and LTE-M** networks in 2018 to realise the LPWA mass market IoT opportunity.
- 3GPP standard technologies NB-IoT and LTE-M are able to be **deployed quickly** by adapting existing mobile networks to **securely and sustainably** scale the market.
- Mobile IoT operators will support **roaming and interoperability** to provide high quality, cost effective global coverage for IoT solutions.
- Mobile networks using these technologies deliver **extended coverage** & support low power devices with **long battery lives**, up to 10 years, to support **mass market industrial and smart city applications**.
- Focusing on standardised Mobile IoT technologies will allow **cost effective delivery of service** and, with scale, supply mobile modules for devices for a few dollars.
- Mobile operators and their ecosystem partners are experienced, **trusted providers** of managed M2M solutions with existing mobile networks, so are best placed to extend their reach to serve the full range of IoT applications.
Mobile IoT = Trusted IoT.

Any other industry messages to include???

- *Include Mobile IoT ecosystem messages on how the industry will inspire developers and application & solutions providers*

2018/19 Mobile IoT Industry Initiatives Sponsorship Opportunities

Event	Sponsorship Details
Up-scaled Mobile IoT Summits in <ul style="list-style-type: none"> • Shanghai – 27th – 29th June 2018 • Los Angeles – 12th – 14th September 2018 • Barcelona (MWC19) – w/c 27th February 2019 	Per Summit <ul style="list-style-type: none"> • Platinum Sponsor £25,000 • Silver Sponsor £10,000 • Networking Sponsor £10,000
Mobile IoT Innovators – developer focused events around technology centres / labs <ul style="list-style-type: none"> • Europe • Asia • Americas 	Per event <ul style="list-style-type: none"> • Platinum sponsor £15,000
Industrial /key vertically focused events, e.g. Hannover Messe & Utility Week series. The exact targets to be discussed & agreed. <ul style="list-style-type: none"> • Europe x 2 • Asia • Americas 	Per event <ul style="list-style-type: none"> • Platinum sponsor £25,000
Mobile IoT Webinar Series – 4 webinars (Covering key industrial verticals and development community – exact dates to be confirmed) <ul style="list-style-type: none"> • May/June • Sept/Oct • Nov/Dec • Feb/Mar 	<ul style="list-style-type: none"> • Series sponsor all 4 webinars £25,000 • Specific webinar sponsor £5,000

Shortlisted IoT Events for 2018 – For Your Information

February	March	April	May	June
MWC18 (26 Feb – 1 Mar)	2nd IoT India Expo (7-9 Mar) IoT Strategies (14-15 Mar) Smart IoT London 2018 (21-22 Mar)	The Smart Manufacturing Forum 2018 (17-18 Apr) IoT Tech Expo Global 2018 (18-19 Apr) China Utility Week (18-19 Apr) Hannover Messe (23-27 Apr)	Internet of Things World 2018 (14-17 May) IoT Forum CE (16-17 May) SCWS (21-23 May) LPWA World 2018 (22 May) Announcing Connectivity Expo (21-24 May) VR World (22-23 May) International Drone Expo (23-25 May) Mobile 360 Series – Privacy & Security (30-31 May)	Internet of Things Convention (6 Jun) Internet of Things Europe (12-14 Jun) Asian Utility Week 2018 (18-19 Jun) Autonomous Machines World (25-26 Jun) MWC Shanghai 2018 (27-29 Jun) IoT Tech Expo Europe 2018 (27-28 Jun)
July/August	September	October	November	December
	MWC Americas 2018 (12-14 Sep) LPWAN World Forum (19-20 Sep) Industry of Things World (23-25 Sep)	IoT Solutions World Congress 2018 (3-5 Oct)		

Detailed list of events: <http://j.mp/2CTdQ2A>

Please nominate any relevant industry events and share with Eric (eyu@gsma.com).



Creating a
**Better
Future**

#MWC18

Mobile World Congress 18

26 Feb – 1 Mar 2018
Barcelona, Spain

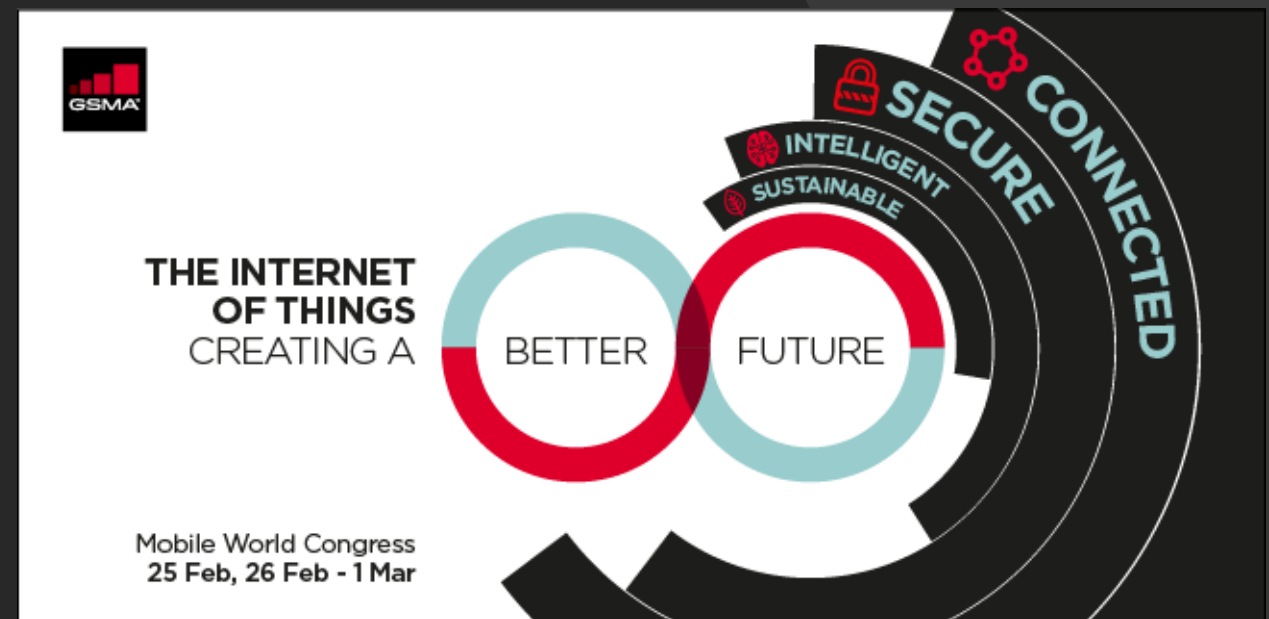
Event Theme: The Internet of Things – Creating a Better Future

Mobile technology has a significant impact on the lives of more than 5 billion people around the world, and the GSMA is dedicated to connecting everyone and everything to a better future.

The Internet of Things plays a vital role in creating this better future. From extreme wildlife tracking to protect species both below water and on land, to air and water quality monitoring for a cleaner environment, to smart traffic and crowd management for safer and more efficient cities, use cases for IoT solutions are near endless and the industries set to benefit from the IoT almost countless.

With 30 billion connected devices by 2026, the Internet of Things will be essential in protecting the environment, building smarter and sustainable cities, and improving quality life for billions of citizens.

Bringing to the table not only the infrastructure, but also decades of experience in providing trusted, secure and reliable connectivity, mobile operators are uniquely positioned as a key component of the IoT and are invaluable strategic partners for cities, governments and companies which are looking to make their contribution to a better future.



<https://www.gsma.com/IoTMWC18>

	25 Feb (Sun)	26 Feb (Mon)	27 Feb (Tue)	28 Feb (Wed)	1 Mar (Thu)
		Mobile World Congress 2018 IoT in GSMA Innovation City - Hall 4 (26-28 Feb 08:00-19:00; 1 Mar 08:00-16:00)			
AM		Drones Journey – Hall 3 3D30 (10:00)	IoT Seminar: Generating Value through IoT and Big Data – Seminar Theatre 1, CC1.5 (09:00 - 11:00)	Drones Journey – Hall 3 3D30 (10:00)	NB-IoT Forum Meeting – Hall 3, 3.14C (09:00 – 12:30)
			LTE-M Task Force Meeting – Hall 3, 3.14C (09:00 – 12:30)		IDE Drone Summit - Hall 8.0 NEXTech Theatre C (09:40 – 14:00)
			Drones Journey – Hall 3 3D30 (10:00)		
PM	6th Mobile IoT Summit – Hotel NH Collection Barcelona Tower [formerly known as Hesperia Tower Hotel] (13:00 - 18:30)	PSG Meeting – Seminar Theatre 1, CC1.4 (13:00 – 15:30)	IoT Security Meeting – Hall 3, 3.14C (13:30 – 16:00)	IoT Seminar IoT Security and Drones - Creating a Connected and Secure Future – Seminar Theatre 1, CC1.5 (12:00 – 14:00)	
				Mobile IoT Innovators Workshop – GSMA Seminar Theatre 1, CC1.3 (15:00 – 17:00)	
				Mobile IoT Innovators Networking Reception – GSMA Seminar Theatre 1, CC1 Networking Area (17:00-18:30)	



IoT Meeting Room Location

Lower Level

Upper Level

Day	AM	PM
Tue, 27 Feb	LTE-M Task Force	IoT Security
Wed, 1 Mar	NB-IoT Forum	

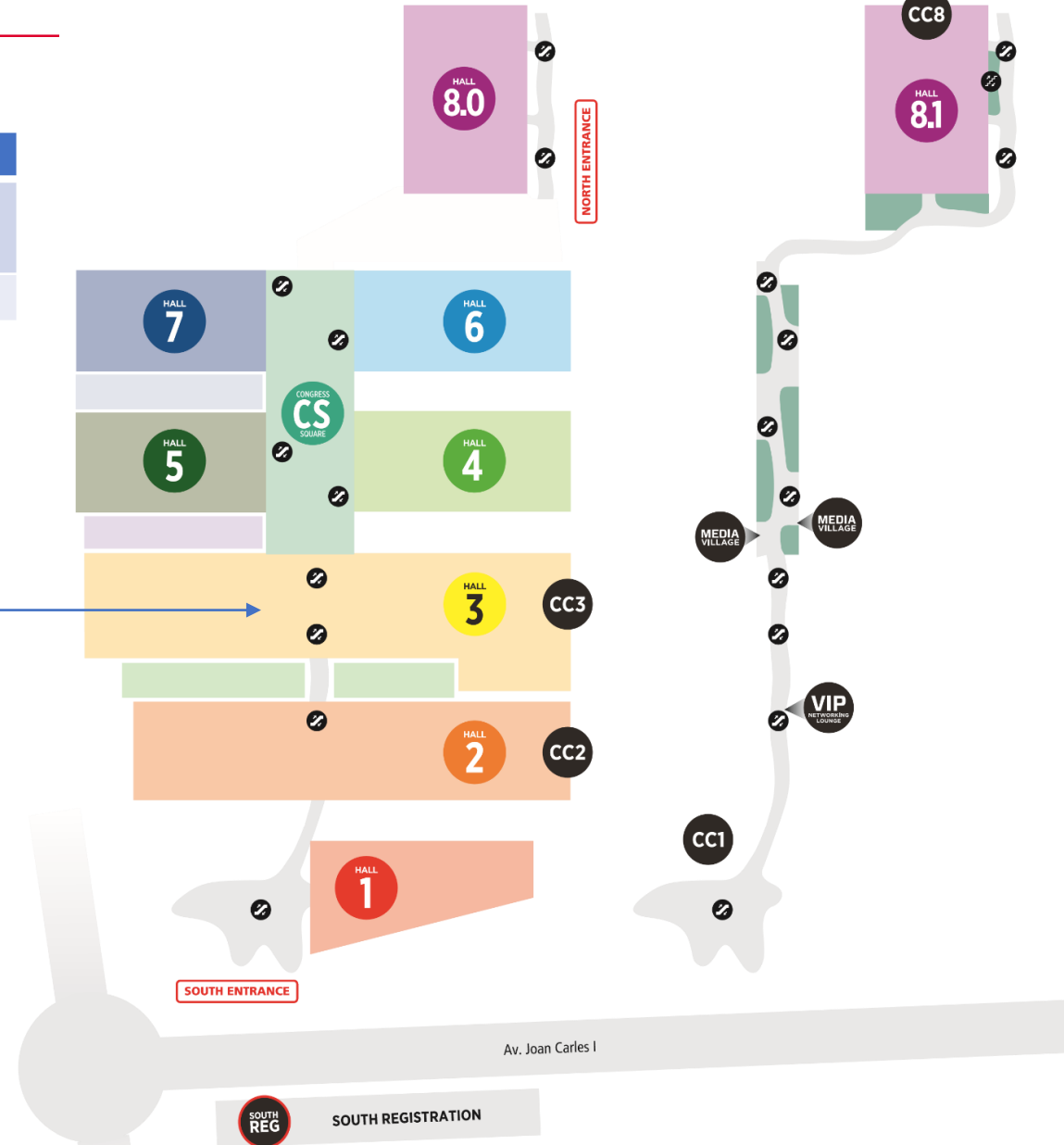
Meeting Room 3.14C

The GSMA IoT Meeting Rooms are located in Hall 3 – CC3.

Please enter via Hall 2. There is an area which has signs to VIP pick up located near the escalators. Go through these glass doors.

Turn left take the stairway or lift up to CC3– at the top of the stairway /outside the lift there is a small reception desk.

There will be a hostess here who will escort you to meeting room 3.14C



The 6th Mobile IoT Summit

Theme: Scaling Global Deployment



Date & Time: Sunday, 25 February 13:00 – 17:30 (17:30 – 18:30 Networking Reception)

Venue: [Hotel NH Collection Barcelona Tower](#) (formerly known as Hesperia Tower Hotel)
[about 10 minutes from Barcelona Airport / 20 minutes from city centre]

Sponsors: Huawei, Sequans Communications, Deutsche Telekom & NOKIA

- 500-seat auditorium
- 7 demonstrations + Mobile IoT Innovators Showcase (details [here](#))
- **ACTION:** Please invite your contacts - <https://www.gsma.com/iot/event/6th-gsma-global-mobile-iot-summit/> (You may use this [email invitation](#))



Mobile IoT Solutions Showcase

Company	Demo Title	Technology	Brief Description
Arm & Vodafone	Arm Cordio-N NarrowBand IP and Vodafone – End-to-end, over-the-air NB-IoT connectivity	NB-IoT	Arm and Vodafone are working together to enable NB-IoT deployment at scale. The demo showcases the Arm Cordio-N NarrowBand IP connecting and registering to the Vodafone network using a live Vodafone SIM.
Deutsche Telekom	NB-IoT Smart Metering	NB-IoT	DT presents a the the smart sub metering with the customer ISTA. Intelligent and scalable heating systems are one area of application of NB-IoT. Using NB-IoT sensors makes it easier to flexibly react on varying external influences (user scenarios, weather conditions etc.). In addition, the networking of heating components allows for the recording of heating data in shorter intervals.
Huawei	NB-IoT @ Everything and Everywhere	NB-IoT	NB-IoT is widely used in many vertical industries, Huawei will select 3 use cases for demo, including: shared bicycle(fo), connected cow(AOTOSO), smart white goods(Haier/Midea). and inspire MNOs how to introduce these use cases in their network.
Sequans Communications	monarch: LTE Cat M1/NB1 Platform	LTE-M & NB-IoT	Monarch is a single-chip LTE Cat M1/NB1 solution designed specifically for narrowband IoT applications, including sensors, wearables, and other low data, low power M2M and IoT devices. Monarch is ideal for adding Cat M1 and/or NB1 LTE connectivity to narrowband, low data rate M2M and IoT devices, including utility meters, industrial sensors, health and fitness bands, asset trackers, and numerous additional devices for smart home, smart city, and wearable applications.
Sercomm	Sercomm Mobile IoT – Reinventing the Future: Home Safety Products (Smoke Detector, Flood Detector), Trackers (People/Pet Tracker and Asset Tracker) and IoT Buttons	LTE-M	Display (static) demo of the mobile IoT product line: Modules, Devices, and Small Cell Relays * Modules: LTE-M and NB-IoT ** Devices: Home Safety Products (Smoke detector and Flood detector), Trackers (People/Pet tracker and asset tracker), and IoT Button *** Small Cell Relay
Sierra Wireless	Smart safety shoe connects workers and organisations for additional protection	LTE-M & NB-IoT	The smart safety shoe enables interactive haptic and audio communications to keep workers connected in isolated, noisy or even dangerous environments. This unique LPWA-based technology brings additional protection to the workers by allowing them to send/receive real-time and contextualized alerts in deep indoor locations with extended battery lifetime. In addition, a fully integrated GIS mobile phone app connects workers and organizations. https://intellinium.io/
u-blox	inteliLIGHT® smart street lighting control by Flashnet, using u-blox LTE Cat M1/NB-IoT module technology	LTE-M & NB-IoT	Smart Street Lighting solution with intelligent control. Compatible with a range of communications technologies, including LPWA solutions. Street lamps incorporate Flashnet's inteliLIGHT® NB-IoT compatible controllers with u-blox SARA-R412R LTE CatM1, NB-IoT, 2G Multimode modules. The controllers integrate with a control and monitoring unit and communicates over NB-IoT or over LTE Cat M1 networks to the inteliLIGHT® StreetLight Control application. Provides autonomous operation for street lighting installations and to carry out three phase measurements and analysis of electrical parameters in street lighting grids.
Mobile IoT Innovators	Mobile IoT Development Kit & Module Showcase	LTE-M & NB-IoT	

IoT Seminars

Date: Tuesday, 27 February 2018

Time: 09:00 – 11:00

Venue: GSMA Seminar Theatre 1, CC1.5

Detailed agenda:

<https://www.gsma.com/iot/event/generating-value-through-iot-and-big-data/>

Date: Wednesday, 28 February 2018

Time: 12:00 – 14:00

Venue: GSMA Seminar Theatre 1, CC1.5

Detailed agenda:

<https://www.gsma.com/iot/event/iot-security-and-drones-creating-a-connected-and-secure-future/>



Mobile IoT Innovators Workshop & Networking Reception

Date: Wednesday, 28 February 2018

Time: 15:00 – 17:00

Venue: GSMA Seminar Theatre 1, CC1.3

Number of Attendees: 40

Details: <https://www.gsma.com/iot/event/mobile-iot-innovators-developer-workshop-2>

Date: Wednesday, 28 February 2018

Time: 17:00 – 18:30

Venue: GSMA Seminar Theatre 1, CC1 Networking Area

Expected Number of Attendees: 100

Details: <https://www.gsma.com/iot/event/mobile-iot-innovators-networking-reception-2/>



IoT Guide to MWC18

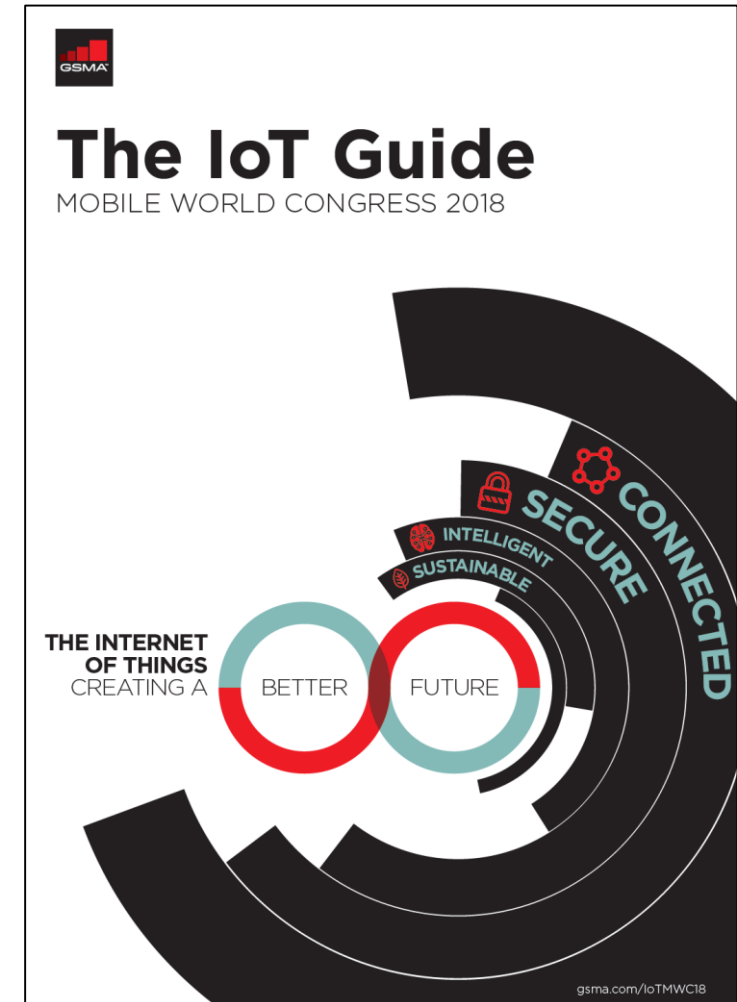
This IoT Guide is aimed to assist attendees in understanding and locating the IoT demos at MWC18. Download here:

<https://www.gsma.com/iot/iot-guide-mwc18/>

ACTION1: Please submit your demo details to Eric Yu (eyu@gsma.com) by **5pm GMT** on **23 Jan 2018 (Tue)** to include into the final version of IoT Guide and planning for IoT Journeys.

Stand Number	Demo Name	Technology	Brief Description (max 50 words)

ACTION2: Please share your social contacts with Eric for collaborative social.



IoT in GSMA Innovation City (Hall 4 Stand 4A15)

Theme: Creating a Connected, Secure, Intelligent, Sustainable Future

Details: [here](#)

Keeping Track of the World	Mobile IoT Innovators Showcase - The IoT Punch Boxer	The Air We Breathe	Securing the IoT with the SIM		Smart Stadium
AT&T Korea Telecom Samsung	BeWhere	China Mobile FarEasTone	Able Device JT	Amazon Web Services Ikerlan Telefonica	FC Barcelona Mobile World Capital
<p>This demonstration on a live Mobile IoT network emphasises the commercial availability, scalability and near endless opportunities of Mobile IoT technologies to create a better future for everyone.</p>	<p>An accelerometer inside the IoT Punch Bag measures the power of your stroke, and transmits the real-time results using a live NB-IoT network. The accelerometer is used to measure impact and prevent goods from being damaged.</p>	<p>This demo highlights how mobile operators are working with cities and using IoT Big Data analytics to improve the health prospects and quality of life for citizens.</p>	<p>SIMbae enables any standard SIM to host and execute IoT diagnosing and applications. This creates a very secure basis for a standards based IoT device architecture that immediately works with the infrastructure of all MNOs globally.</p>	<p>Telefonica is demonstrating how cellular enabled energy meters connected to Amazon Web Services can securely receive digital certificates “over the air” using the energy meters’ SIM cards.</p>	<p>Camp Nou receives more than 1.2 million visitors per year. With such significant numbers visiting the stadium, safety and efficiency are fundamental elements that FC Barcelona are continuously seeking to improve. Optimising transportation options and improving visitor experience are other key considerations. This demonstration explores how FC Barcelona are building new solutions using IoT Big Data and Mobile IoT technologies.</p>

INNOVATION CITY 2018



GSMA welcomes you to experience the latest developments in mobile at Innovation City 2018...

as one of the most visited exhibition spaces across all of the Mobile World Congress events welcoming over 70,000 unique visitors globally each year, Innovation City presents a spectacular array of innovative, cutting edge products and services that demonstrate how mobile is creating a better future. **Join us in Hall 4.**

mobileworldcongress.com/exhibition/gsma-innovation-city

#GSMAInnovationCity



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 a 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.

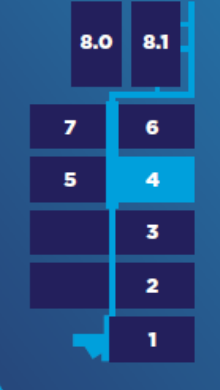
GSMA Membership

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.

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



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 #Case-ForChange 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.

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 latency; Throw yourself into Space with 5G gaming in partnership KT - experience low-latency gaming; Experience holographic brought to life - interact and communicate real-time with remote parties via 3D hologram.

Google

See the potential of RCS Business Messaging; the future of consumer communications, and learn how major brands are utilising this exciting new platform.

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.



IoT Journeys through MWC18

Details: <https://www.gsma.com/iot/iot-journeys-mwc18/>

IoT Journeys through MWC18 give attendees the opportunity to explore innovative demonstrations throughout all halls at Mobile World Congress 2018. The self-guided journeys allow delegates to see at a glance key information about each demonstration and understand the broad range of use cases of three essential areas of the Internet of Things, all of which will play a crucial role in creating a connected, secure, intelligent and sustainable future.

Mobile IoT Journey 	Drones Journey [GUIDED] 	Connected Vehicle Journey 
<p>Built for IoT applications that require long battery lives, are low cost, and often operate in remote and hard to reach locations, Mobile IoT (licensed spectrum low power wide area) technologies are set to securely and efficiently scale the Internet of Things. The Mobile IoT Journey highlights the numerous industries that will benefit from Mobile IoT connectivity, and how these technologies will accelerate the growth of the IoT around the world.</p> <p>Details: https://www.gsma.com/iot/mobile-iot-journey-mwc18/</p>	<p>Catering to numerous industries and use cases, such as traffic management, agriculture scanning, medical drone deliveries, and support for emergency services, drones are a rapidly emerging sector within the IoT. The Drones Journey explores this versatile application range and how drones can become valued additions to modern life, helping to make cities smarter and improving quality of life for citizens.</p> <p>Details: https://www.gsma.com/iot/drones-journey-mwc18/</p>	<p>The latest vehicles on the world's roads already contain very advanced information and communications technologies, including on-board computers, a wide range of sensors and, in many cases, both short-range and wide area connectivity. Advances in Cellular Vehicle-to-Everything (C-V2X) technology, 5G networks, the GSMA Embedded SIM Specification, and improved security for connected solutions will further aid and accelerate the realisation of fully autonomous vehicles, which is demonstrated in the Connected Vehicle Journey.</p> <p>Details: https://www.gsma.com/iot/connected-vehicle-journey-mwc18/</p>

FY17 Events & Activities

Mobile IoT – Up-scaled Events

Date	Event
23 Jan 2018	Webinar - Mobile IoT for Developers
25 Feb 2018	6 th Mobile IoT Summit & Networking Reception
26 Feb – 1 March 2018	IoT in GSMA Innovation City
28 Feb 2018	Mobile IoT Innovators Workshop & Networking Reception
21 March 2018	Webinar - Vertical Focused (Topic TBC potentially Asset Tracking / Industrial IoT / Agriculture)
23 – 27 April 2018	Hannover Messe



GSMA Mobile IoT in

smart city expo
WORLD CONGRESS

14-16 NOVEMBER 2017
BARCELONA
GRAN VIA VENUE



Event Details: <https://www.gsma.com/iot/event/smart-city-expo-world-congress/>

Smart City Expo World Congress

- Key focus:
 - Promote Mobile IoT solutions developed by startups
 - Drive ecosystem engagement through Mobile IoT Innovators
- Number of leads:
 - Total number of business cards collected: 210
 - Total number of audience to GSMA stand: about 1,000



GSMA IoT Team

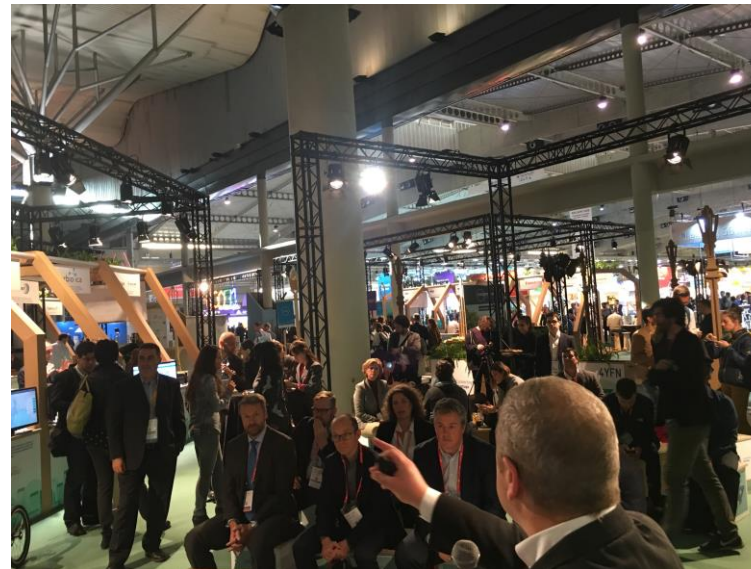
Mobile IoT Development Kits Showcase



Mobile IoT Innovators Networking Reception



Dr Shane Rooney, Executive Director, IoT, GSMA kick-started the networking reception by sharing the latest Mobile IoT technology development. You may view here his presentation deck.



Shane's speech attracted a large number of delegates who were eager to understand Mobile IoT technology.

Experts from Deutsche Telekom and TDC also joined us in this reception and exchanged ideas with attendees on Mobile IoT projects.



Paula Clemente from El Mundo and Albert Cuesta from Catalunya Radio interviewed Shane to understand how Mobile IoT technologies are applied in driving smart cities initiatives.

6 Mobile IoT Project Showcases

Telemetry Systems for Heat, Gas and Water Metering – NB-IoT – [ABARO](#)



Smart Building Infrastructure – NB-IoT – [BS2](#)



Smart Street Lighting – NB-IoT – [Flashnet](#)



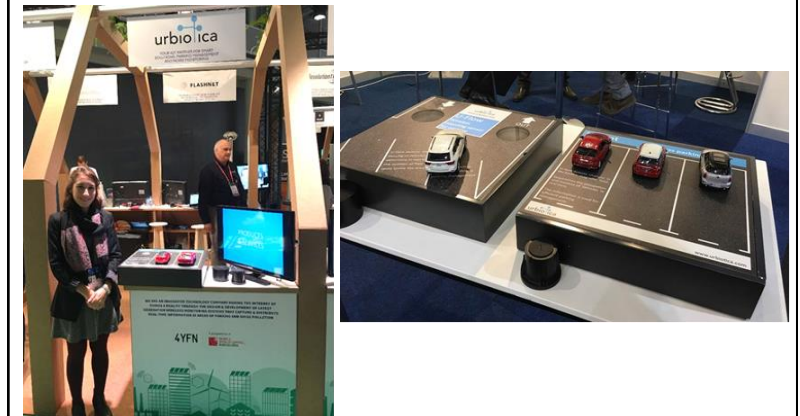
Emergency tracking device with SARA-N211 Module – NB-IoT – [Netze BW](#) / [u-blox](#)



Smart Manhole Cover – LTE-M – [Revolution11](#)
(Mobile IoT Innovators Award Winner at AT&T Hackathon, MWCA17)



Smart Parking – NB-IoT – [Urbiotica](#)





The banner features a dark blue background with a network of glowing blue nodes and lines. On the right side, there is a large, stylized white icon of a mobile phone with signal waves emanating from it. Below this icon are five circular icons: a medical symbol, a factory, a globe, a laptop, and a location pin. The text is arranged as follows:

 Mobile IoT

GSMA Mobile IoT Webinar Series

2017-2018

Platinum Sponsor


HUAWEI

Website: <https://www.gsma.com/iot/gsma-webinar-series-2017-2018/>

Mobile IoT Webinar Schedule

Webinar	Date & Time	Register	On-Demand Recording	GSMA Lead	Registration / Attended (%)
Mobile IoT (1) – Mobile IoT for Utilities	27 Sep 2017 3pm BST	Here	Here	Nicola Gordon	729 / 188 (25.79%)
Mobile IoT (2) – Mobile IoT for Smart Cities	25 Oct 2017 3pm GMT	Here	Here	Eric Yu	709 / 163 (22.99%)
Mobile IoT (3) – Moving to Global Deployment	6 Dec 2017 3pm GMT	Here	Here	Emma Kane	521 / 147 (28.21%)
Mobile IoT (4) – Building a Connected Product with Mobile IoT (LPWA) – A Guide for Developers	23 Jan 2018 3pm GMT	Here		Jacqueline Woerner	
Mobile IoT (5) – Vertical Focus (TBC)	21 Mar 2018 3pm GMT			Emma Kane	

Marketing Updates

Mobile IoT Commercial Launches

- KPI – 35 commercial launched Mobile IoT networks by April 2018
- **30** commercial launches YTD
 - Summary: <https://www.gsma.com/iot/mobile-iot-commercial-launches/>

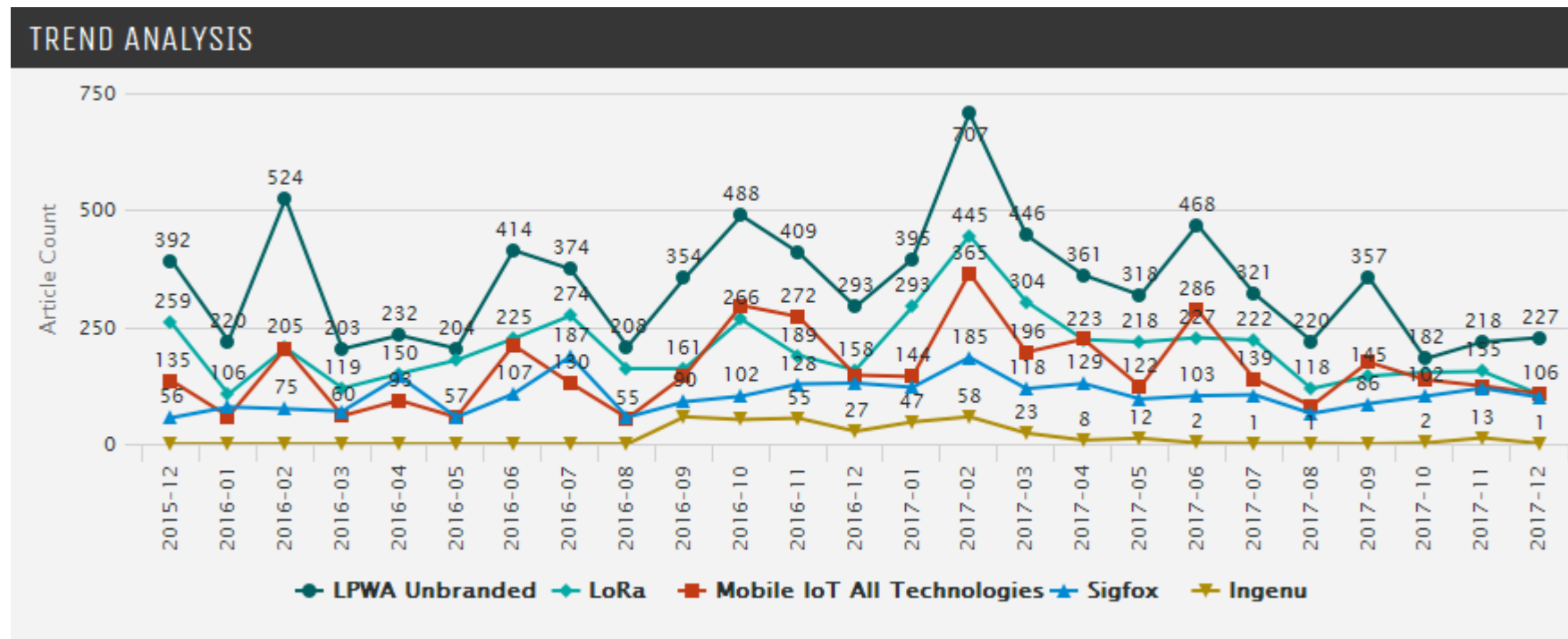
Operator	Location	Technology
3	Hong Kong	NB-IoT
AT&T	North America	LTE-M
AT&T	Mexico	LTE-M
China Mobile	China	NB-IoT
China Mobile	Hong Kong	NB-IoT
China Telecom	China	NB-IoT
China Unicom	China	NB-IoT
Deutsche Telekom	Austria	NB-IoT
Deutsche Telekom	Germany	NB-IoT
Deutsche Telekom	The Netherlands	NB-IoT

Operator	Location	Technology
Dialog Ataxia	Sri Lanka	NB-IoT
Etisalat	UAE	NB-IoT
Etisalat	UAE	LTE-M
KT	South Korea	NB-IoT
LGU+	South Korea	NB-IoT
M1	Singapore	NB-IoT
Telia	Norway	NB-IoT
Telecom Italia	Italy	NB-IoT
Telstra	Australia	LTE-M
Turkcell	Turkey	NB-IoT
Turkcell	Turkey	LTE-M

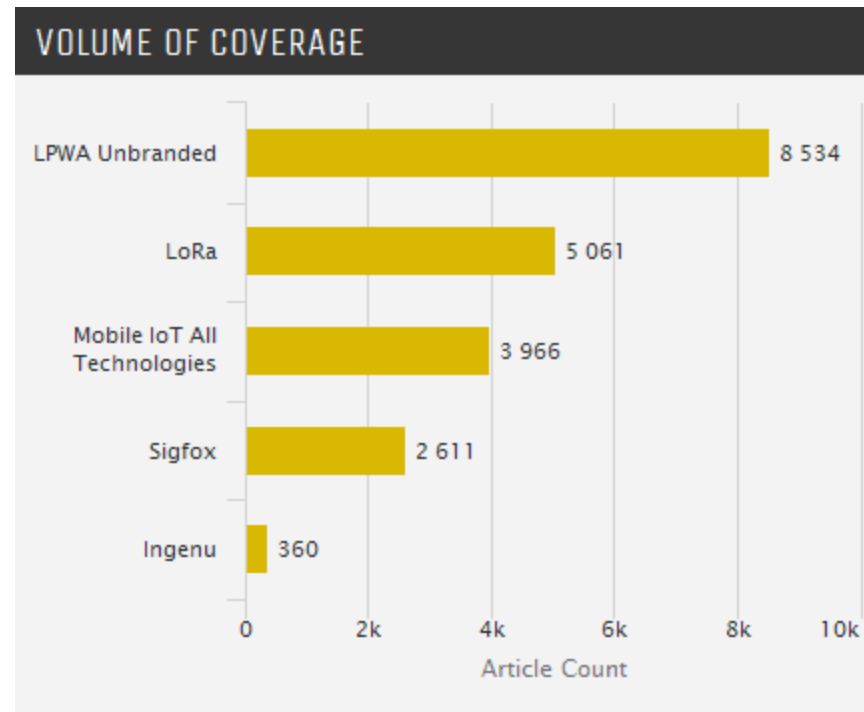
Operator	Location	Technology
Velcom	Belarus	NB-IoT
Verizon	North America	LTE-M
Vodafone	Australia	NB-IoT
Vodafone	Czech Republic	NB-IoT
Vodafone	Ireland	NB-IoT
Vodafone	Italy	NB-IoT
Vodafone	Turkey	NB-IoT
Vodafone	Spain	NB-IoT
Vodafone	The Netherlands	NB-IoT

Licensed technologies outpacing unlicensed in the worlds media

16,227 articles on LPWA analysed by Commetric (from Dec 2015 to Dec 2017)

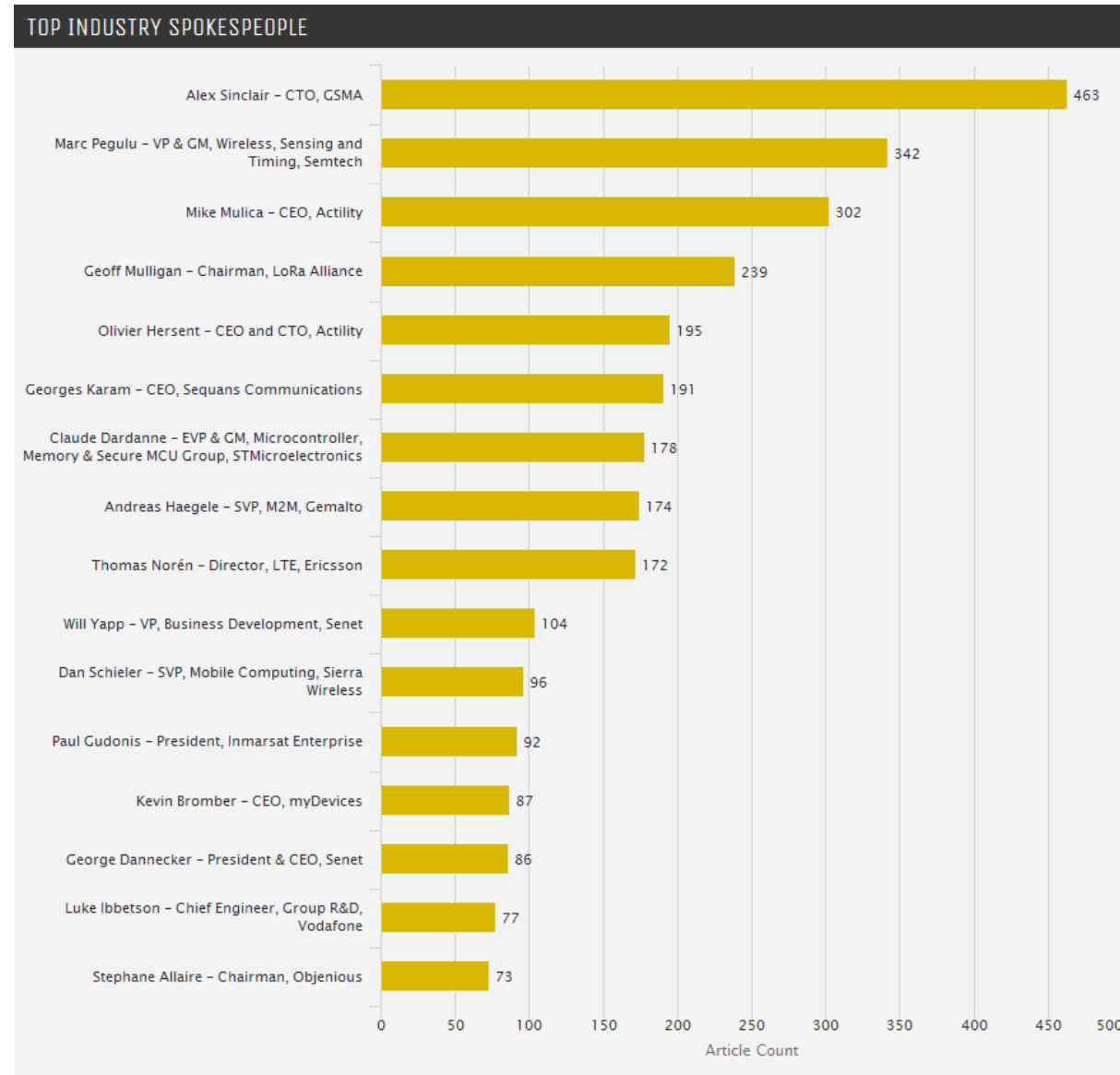


Volume of Coverage by LPWA Technologies



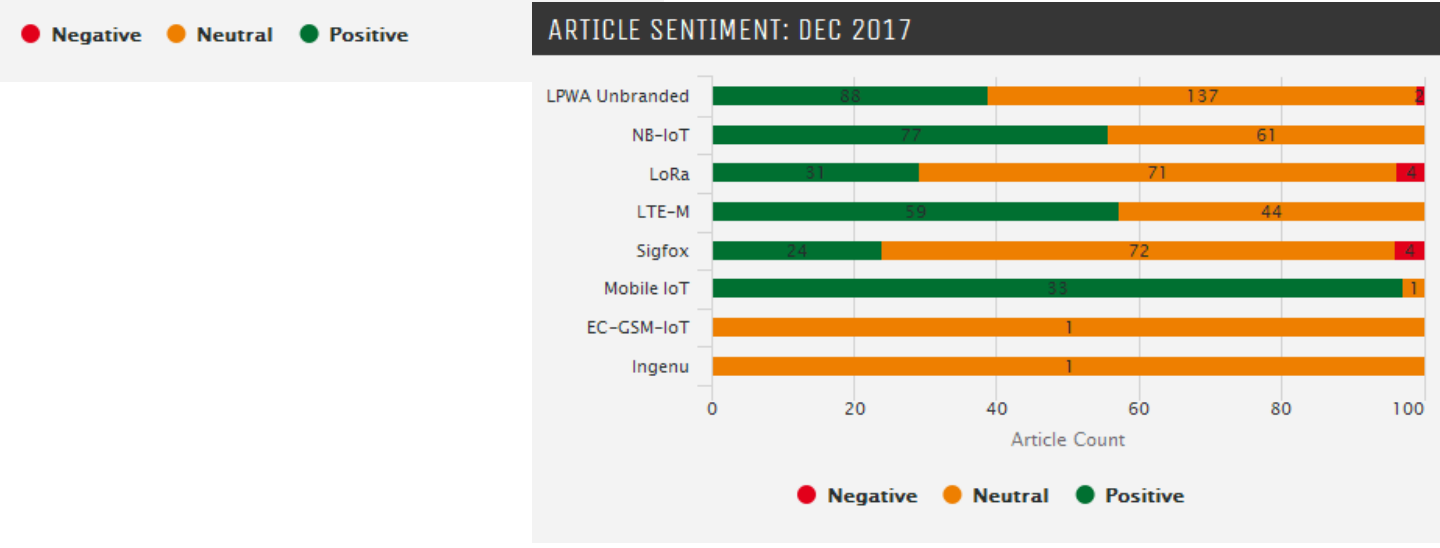
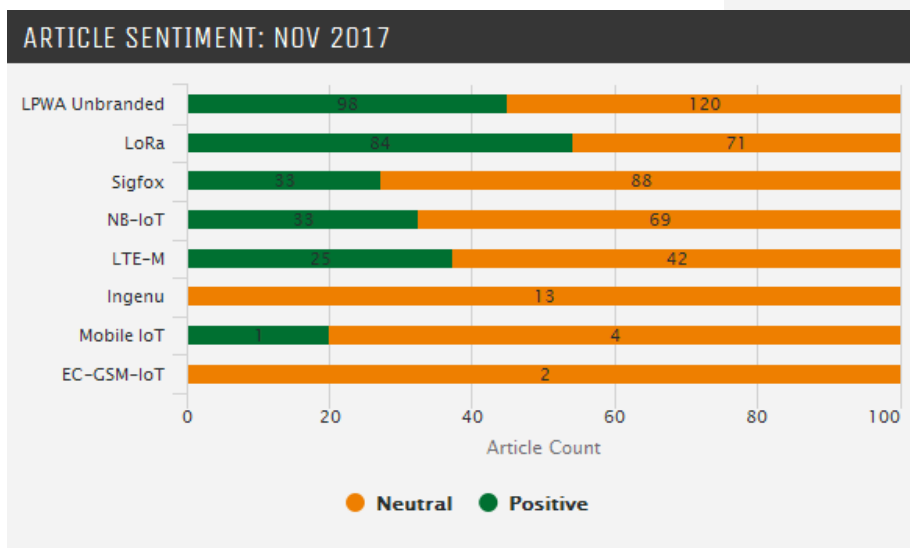
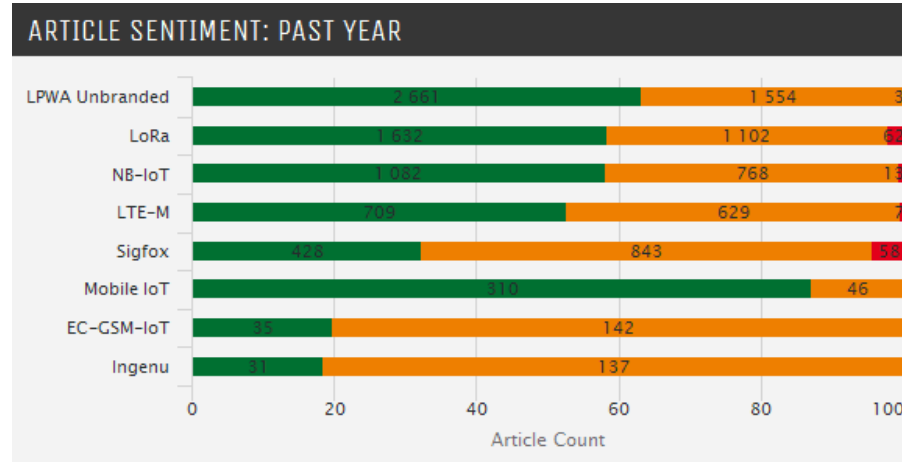
Source: Commetric – December 2017

Top Industry Spokespeople

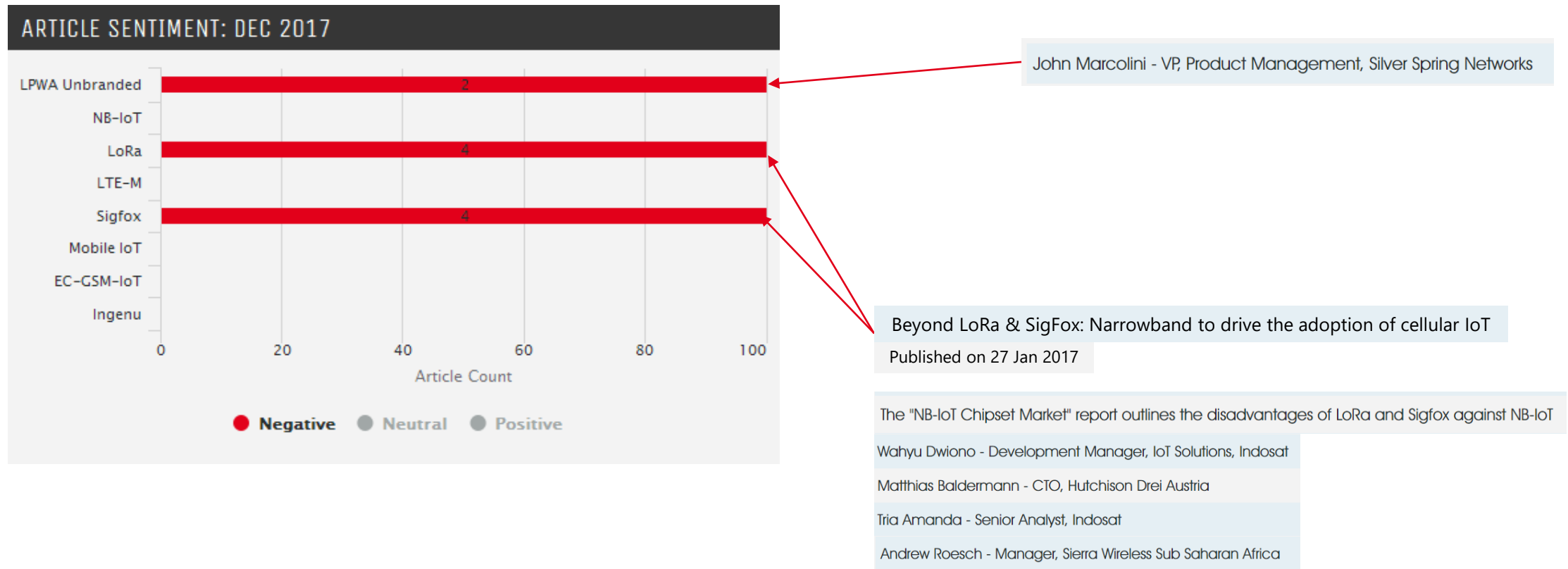


Source: Commetric – December 2017

Mobile IoT Sentiment Analysis (2017 vs Nov 17 vs Dec 17)

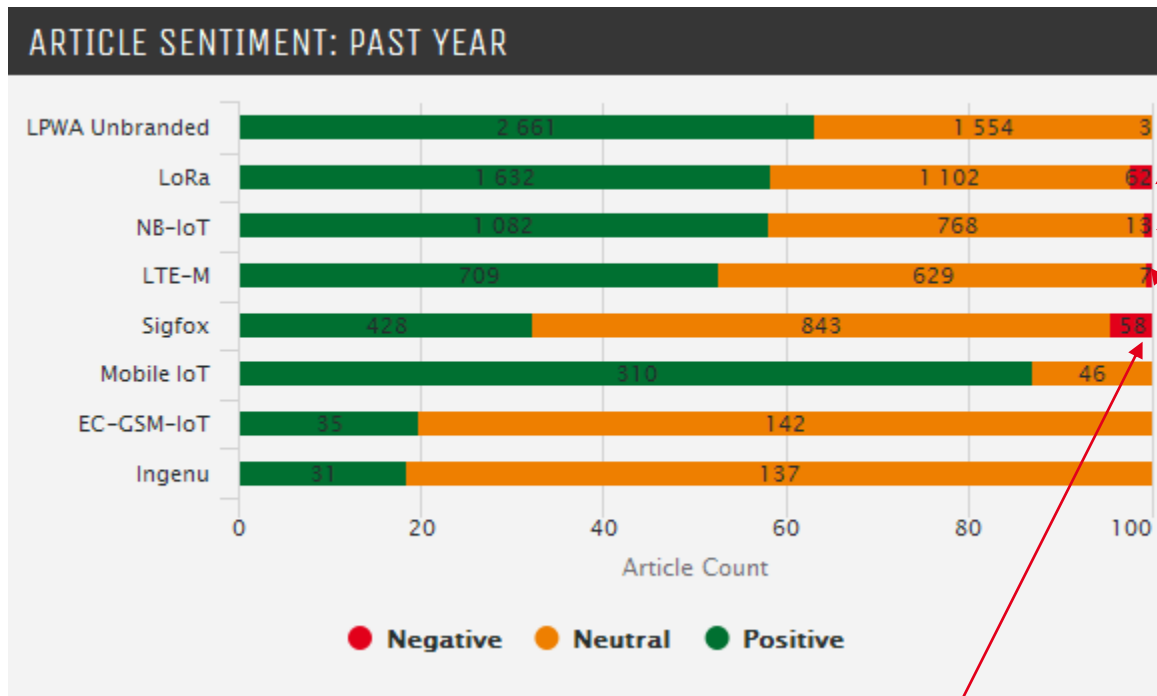


Mobile IoT Sentiment Analysis Deep Dive – Dec 17



Source: Commetric – December 2017

Mobile IoT Sentiment Analysis Deep Dive – 2017



Message (04) Last 12 Months

Technavio's report describes LoRa and Sigfox as expensive, unreliable and insecure technologies	42
The "NB-IoT Chipset Market" report outlines the disadvantages of LoRa and Sigfox against NB-IoT	9
LoRaWAN is unable to meet a key IoT network deployment requirement, unlike Weightless-P	5
LoRa does not include the security and management features of NB-IoT	3
LoRa is one of an array of LPWA technologies	3
Orange chooses LoRaWAN for its deployments across France	1
Orange has hinted that its strategy is to use LoRa as a kind of IoT stopgap until LPWA-like capabilities are introduced into cellular standards	1

Message (04) Last 12 Months

Interoperability problems between Ericsson and Huawei hinder the NB-IoT services rollout	6
NB-IoT has not been deployed yet and chipsets are still in prototype phase	4
NB-IoT to compete with LTE-M	3
Vodafone predicts that NB-IoT will crush LoRa and Sigfox	2
NB-IoT functionality is questioned	1
NB-IoT has problems with security and interoperability; Vodafone disagrees	1
NB-IoT to be discussed at LPWA World 2017	1
NB-IoT's disadvantage is that it uses mobile operators' networks and thus incurs more charges; possible signal interference is a concern	1

Message (04) Last 12 Months

Only six NB-IoT/LTE-M networks from five countries have commenced operations as of Q1 2017	5
LTE-M is costlier and more bandwidth-hungry than NB-IoT	2

Message (04) Last 12 Months

Technavio's report describes LoRa and Sigfox as expensive, unreliable and insecure technologies	44
The "NB-IoT Chipset Market" report outlines the disadvantages of LoRa and Sigfox against NB-IoT	9
Sigfox is increasingly being challenged by cellular LPWA options	1

Mobile IoT Web Content & Analytics Update



• Content

- 14 Mobile IoT news articles have been featured over the last 3 months
- New coverage on [Commercial Launches](#): China Telecom, KT, Turkcell & Velcom
- Launched [Mobile IoT Evolution Tracker](#)
- Updated Interactive '[Open Mobile IoT Labs Map](#)': 29 Open IoT Labs
- Continuous update of [Development Kits](#) and [Modules](#)



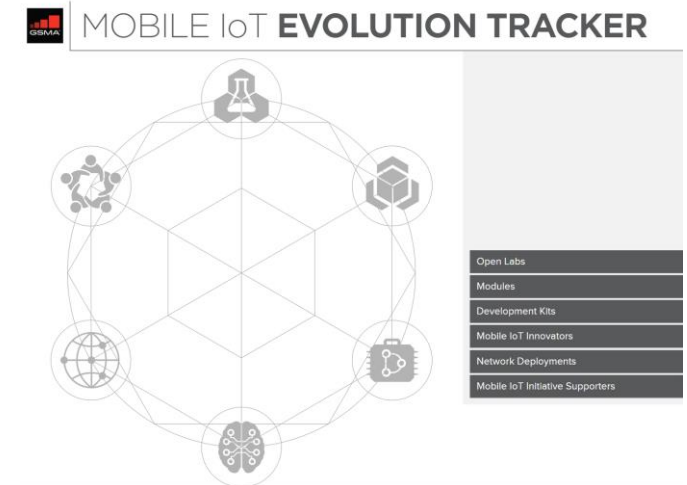
• Upcoming updates

- Update Mobile IoT Deployment Map
- Updated quarterly Mobile IoT Evolution Tracker
- Revamp Mobile IoT Innovators Directory



• Website Analytics (2017Q4: 1 Oct – 31 Dec 2017)

- **119,832** Page views
- There were traffic spikes on 27 Nov and 29 Nov to [NB-IoT Logo Download Page](#)
- Top 5 Page Views: (1) NB-IoT **8,732**; (2) IoT Landing Page **6,658**; (4) Embedded SIM **6,530**, (4) Mobile IoT Initiative **5,219**; (5) LTE-M **4,379**



2017Q3	2017Q2	2017Q1
124,610	104,941	111,284

Page Views (2017Q1-Q3)

Website Analytics YTD (1 Apr – 31 Dec 2017)

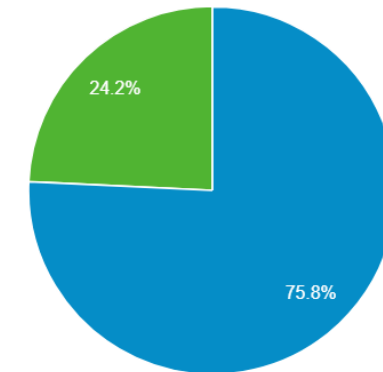
- **Summary:** with **375,580** page views YTD (229,551 from last update in October), the GSMA's IoT site has become the defacto leading resource for updates, information and guidance on the deployment of the Mobile IoT.
- Top 5 Page Views: (1) NB-IoT **24,903**; (2) IoT Landing Page **18,033**; (4) Embedded SIM **17,848**, (4) Mobile IoT Initiative **17,583**; (5) LTE-M **11,406**
- **75.8%** (103,976) new visitors

YtY Growth:

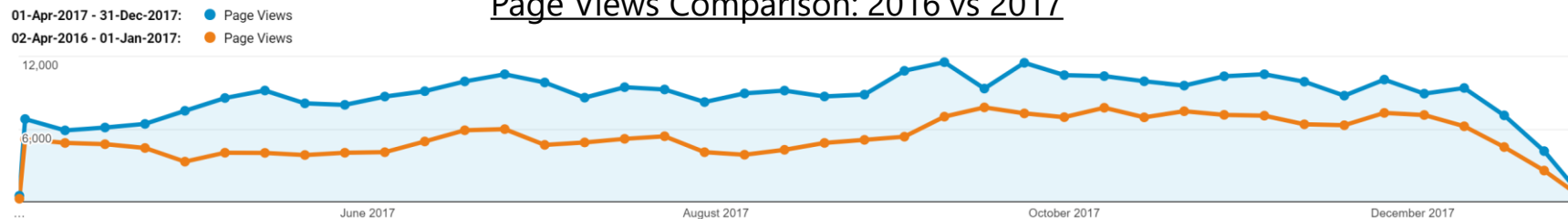
	% increment	2017	2016
Users	100.79%	120,372	59,950
New Users	106.96%	103,976	50,370
Page Views	106.63%	375,580	181,767

■ New Visitor ■ Returning Visitor

01-Apr-2017 - 31-Dec-2017



Page Views Comparison: 2016 vs 2017



GSMA IoT Marketing Resources (2017Q4)

Title	Type	Link
IoT Guide to MWC18	Brochure	Here
Cellular Vehicle-to-Everything – Enabling Intelligent Transport	Brochure	Here
Smart Concrete Paves the way to Safer and Cheaper Infrastructure	Blog Post	Here
A Breath of Fresh Air: IoT Big Data Helping to Improve London’s Air Quality	Blog Post	Here
Mobile Industry Launches Universal Hallmark for NB-IoT	Blog Post	Here
On Demand Webinar – Masterclass: Smarter Cities Powered by Mobile	Webinar	Here
NB-IoT Logo	Toolkit	Here
Connecting Cities to a Smart Future	Blog Post	Here
On-Demand Webinar: Accelerating the Commercial Drones Market using Cellular Connectivity	Webinar	Here
KT MEG: Korea’s Smart Energy System	Report	Here
Ecosystem Meets at Turning Point for Connected Vehicles	Blog Post	Here
Mobile IoT to Help Utilities Meet Phenomenal Demand for Smart Capabilities	Blog Post	Here
GSMA Mobile IoT Initiative Helping Operators Target European Connected Energy Market Worth USD\$26 Billion	Press Release	Here
Intelligent Parking to Help Pay for Smart City Development	Blog Post	Here
Addressing Air Quality with IoT & Big Data	Report	Here

Collaborative Marketing

GSMA IoT Collaborative Marketing

Please submit your marketing resources to Eric using the [submission form](#). The next cut-off date is Friday, 30 March 2018.

Example of resources collected for reference:

Title	Organisation	Content Category
Infographic: IoT Trends for 2018	Telefonica	IoT General
Smarter solutions with M1's NB-IoT network	M1	Mobile IoT
Nokia collaborates with StarHub to spearhead IoT ecosystem development in Singapore	Nokia	IoT General
MTS boosts the Russian IoT ecosystem with the launch of the Open IoT Lab	MTS	Mobile IoT
Overcoming IoT Security Challenges Using Endpoint Integrity	Sierra Wireless	IoT Security
LPWA Turns 5G Challenges into Billions of Dollars in Opportunity by 2020	Telit	Mobile IoT
AT&T is working with Amazon Web Services to develop the AT&T LTE-M button that will utilize AT&T's nationwide LTE-M cellular network	AT&T	Mobile IoT
Smart Solutions for Sustainable Cities	Deutsche Telekom	Smart Cities
10 of the most exciting technology projects in Vodafone - Day 1	Vodafone	IoT General
NB-IoT Commercial Use Case Library	Huawei	Mobile IoT
Why Industrial Manufacturing Needs IoT	Telenor	Industrial IoT
IoT Barometer 2017/18	Vodafone	IoT General
Huawei Partners with Nextek and Quectel to Drive IoT Expansion in the Middle East	Huawei	Mobile IoT
Cisco Joins GSMA Open IoT Lab Initiative	Cisco	Mobile IoT
24 hours coding for the City of the future	Deutsche Telekom	Mobile IoT

NB-IoT Logo Update

- The NB-IoT logo is finalised and available for download from GSMA website (<https://www.gsma.com/iot/nb-iot-logo-download-pack/>). Please accept the terms of use and fill in the registration form to download the logo pack.



- The blog post for NB-IoT announcement including operator quotes is live on GSMA website (<https://www.gsma.com/iot/news/mobile-industry-launches-universal-hallmark-nb-iot/>)

Statistics:

- Number of downloads: 171 (as of 8 Jan 2018)
- On LinkedIn: 73 likes and 126 shares



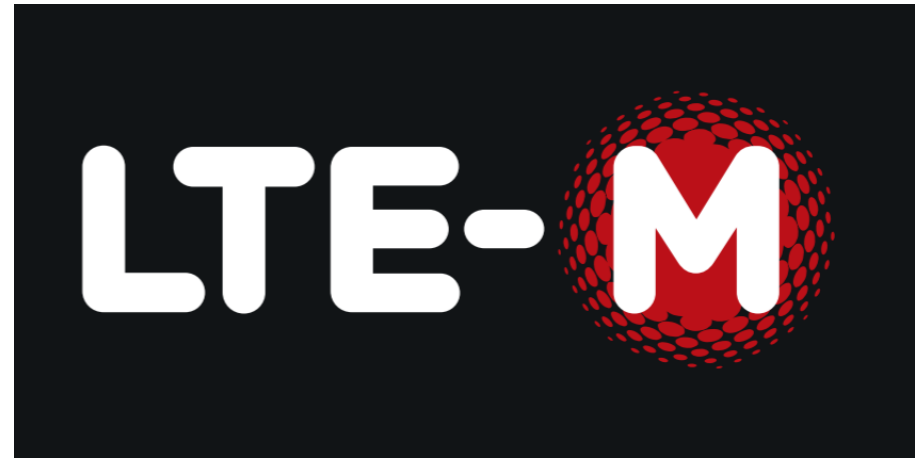
LTE-M Logo Update – Dec 2017

- In Nov 2017, 3GPP refused GSMA request to use the LTE-M extension of their registered trademark:



- Reasons included contravention of existing LTE logo terms and guidelines, potential misleading use of LTE trademark and potential interpretation as a derivative trademark of 3GPP
- Final attempt to persuade 3GPP/ETSI through direct discussions to ETSI DG on 19 Dec 2017
- Alternative finalised logo design has now been explored, developed and supported by LTE-M Task Force members with a view to creating & adopting a new distinct visual identity for LTE-M

Finalised LTE-M Logo



Update (5th Jan 2018)

3GPP has refused the use of an extension of 3GPP LTE logo. GSMA is awaiting official confirmation email from 3GPP confirming Lisbon agreement for the GSMA to develop distinct logo incorporating LTE.

New logo - All marketing copy, design, web pages and documentation will be available week commencing 22nd Jan (TBC) subject to final legal review, internal review and confirmation from 3GPP.

Next steps

- Mobile IoT Industry Messages: email Andrew (aparker@gsma.com) if there is any additional industry messages to include.
- 2018/19 Mobile IoT Industry Initiatives Sponsorship Opportunity: nominate any relevant industry events. If you are interested in sponsoring, please email Andrew or Eric (eyu@gsma.com).
- Share your MWC18 plan with Andrew or Eric for GSMA IoT Guide and/or GSMA IoT Guided Journeys. Deadline: **5pm GMT on 23 January (Tuesday)**

Stand Number	Demo Name	Technology	Brief Description (max 50 words)

- Share your social/PR contacts with Eric for collaborative social for MWC18.
- Start submitting your marketing resources to Eric for collaboration. They will be used for 2018Q2 content development. The next cut-off date is 30 March 2018 (Friday).
- Share your marketing colleagues contact details (name, job title, email) with Eric to add to this Mobile IoT Industry Initiative Group
- Quarterly conference calls to review and update progress:
 - Next call: **12th April 2018 (Thu)**
 - 12th July 2018 (Thu)
 - 11th October 2018 (Thu)

THANK YOU!

GSMA IoT

<https://www.gsma.com/iot/>

GSMA IoT in MWC18

<https://www.gsma.com/loTMWC18>

GSMA IoT on LinkedIn

<http://gsma.at/iot>

IoT Guide to MWC18

<http://gsma.at/iot>

GSMA IoT Newsletter

<https://www.gsma.com/iot/sign-up-for-newsletter/>