



# **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
  - X DON'T enter into agreements that restrict other parties' actions or creates barriers to market entry
  - X DON'T discuss or exchange information on pricing, business plans, or any other confidential or commercially sensitive data



### **Mobile IoT Marketing Group**





















































# **Agenda**

- 1. CES19
- 2. MWC19 8<sup>th</sup> Mobile IoT Summit, Innovation City & 4YFN Showcase
- 3. Post-event Update: MWC Los Angeles, IoT Solutions World Congress
- 4. Mobile IoT Commercial Launches Update
- 5. Intelligent Connectivity: Website Launch & Report
- 6. IoT Collaborative Project
- 7. GSMA IoT Resources Update
- 8. AOB







# Planned GSMA IoT Activities

- Tuesday, 8 Jan Friday, 11 Jan, CES Exhibition:
  - GSMA IoT stand (IoT Vendor space, Smart Cities area)
  - Promote Mobile IoT, Mobile IoT Innovators, GSMA IoT Security Guidelines
- Wednesday, 9 Jan, Luxor Hotel & Casino:
  - Mobile IoT Breakfast Briefing (Registration)
  - Mobile IoT Initiative meeting for LTE-M Task Force and NB-IoT Forum
  - Mobile IoT Developer Workshop
  - Mobile IoT Innovators Networking Reception



25-28 February 2019



### Planned Activities at MWC19

		Mon, 25 Feb	Tue, 26 Feb	Wed, 27 Feb	Thu, 28 Feb		
	Sun, 24 Feb	Intelligent Connectivity GSMA Innovation City - Hall 4, Fira Gran Via Mobile IoT Innovators Showcase at 4YFN – Fira de Barcelona Montjuic Venue					
AM			GSMA IoT Seminars (scheduling tbc)				
PM	8th Mobile IoT Summit – Hotel NH Collection Barcelona Tower [formerly known as Hesperia Tower Hotel]		GSMA IoT Seminars (scheduling tbc)				

#### To be confirmed:

- Mobile IoT Initiative Meeting
- **Security Meeting**
- **Drones Meeting**



# 8th Mobile IoT Summit

GOING GLOBAL

Hotel NH Collection Barcelona Tower | Sunday, 24 February 2019

The Mobile IoT Summit this year will focus on:

- Cost effective delivery of service worldwide
- Extended coverage, with a focus on supporting the mass consumer market
- The long term outlook for LTE-M and NB-IoT in relation to 5G





# Recap: 6th Mobile IoT Summit @ MWC18

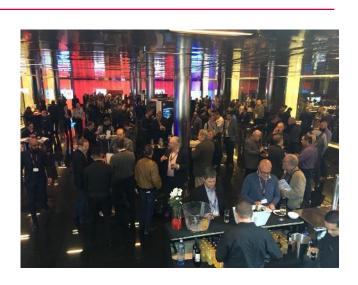
#### Theme: Scaling Global Deployment

- Date: Sunday, 25 February 2018 (MWC18 Day 0)
- Venue: Hotel NH Collection Barcelona Tower
- Proudly sponsored by Huawei, Sequans, Deutsche Telekom & Nokia
- Record high registration (650) and attendance (467)
- 7 demo partners (<u>details</u>): Arm & Vodafone, Deutsche Telekom, Huawei, Sequans, Sercomm, Sierra Wireless & u-blox
- On-demand video presentation: <a href="https://www.gsma.com/iot/event/6th-gsma-global-mobile-iot-summit/">https://www.gsma.com/iot/event/6th-gsma-global-mobile-iot-summit/</a>







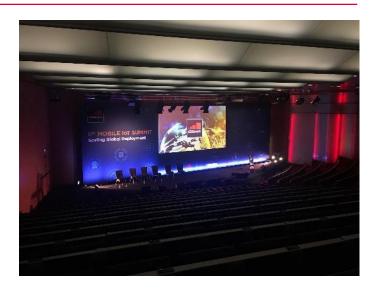
















### The 8th Mobile IoT Summit

- Date: Sunday, 24 February 2019 (MWC19 Day 0)
- Venue: Hotel NH Collection Barcelona Tower
- Similar format as last year: half-day conference in the 500-seat auditorium with 8 Mobile IoT demonstrations. Criteria:
  - Vertical related solutions (e.g. industrial, smart city, agricultural, etc.)
  - Live network connected if possible. IoT team can help connect your partners with local operators
- Sponsorship opportunities:
  - Silver Sponsors
  - Networking Sponsors
  - Please contact Eric Yu (<u>eyu@gsma.com</u>) or Fay Jenkins (<u>fjenkins@gsma.com</u>) for sponsorship details









25-28 FEB | Hall 4 | Fira Gran Via





















# IoT in the GSMA Innovation City (MWC18)







FC Barcelona Smart Stadium Demo









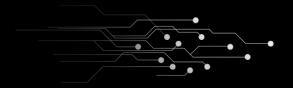












# Call for Demo Proposals in the GSMA Innovation City

- Themed around Intelligent Connectivity and categorised into, but not limited to, Artificial Intelligence, Digital Trust, Digital Wellness/Healthcare, Smart Platform, Industry 4.0, Connectivity, etc.
- Immersive, innovative, highly visible and photogenic demonstration with great media values
- Preferably on live network including, but not limited to, 5G connectivity and Mobile IoT (LTE-M & NB-IoT) connectivity
- Full support with on-site experts from your organisation

This is an excellent co-marketing opportunity which brings visitors from Innovation City to partners' stands.

A series of internal discussions will be conducted by the Innovation City committee for assessing and qualifying the demonstration based on the theme of the GSMA Innovation City





# 4YFN Showcase

25 – 28 Feb | Fira de Barcelona | Montjuic

# **GSMA MOBILE IOT** INNOVATORS

Mobile IoT = Trusted IoT

















# **Call for Demo Proposals**

- We are keen to work with innovative Mobile IoT developers and startups
- Proposals can be any demonstrations on <u>LIVE</u> Mobile IoT networks (LTE-M or NB-IoT) including but not limited to asset tracking, industrial sensor, smart factory/construction, smart city, smart agriculture, wearables, etc.
- Other activities being considered: Mobile IoT Workshop, Technical Consultation, etc.











# **Post-Event Update**















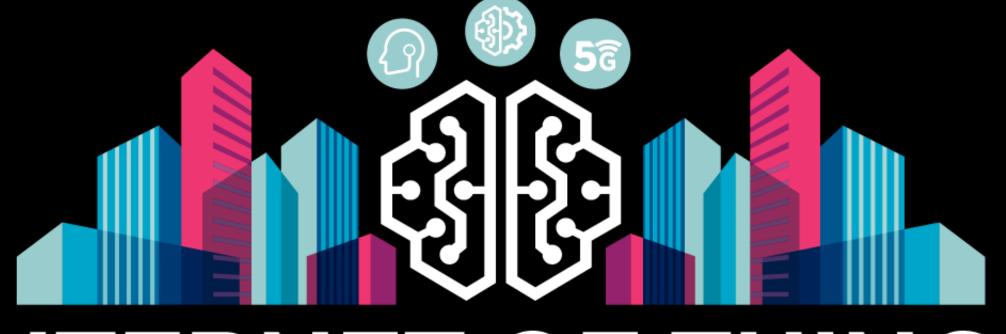
# loT Conference Wed, 12 Sep | 13:00 - 17:00











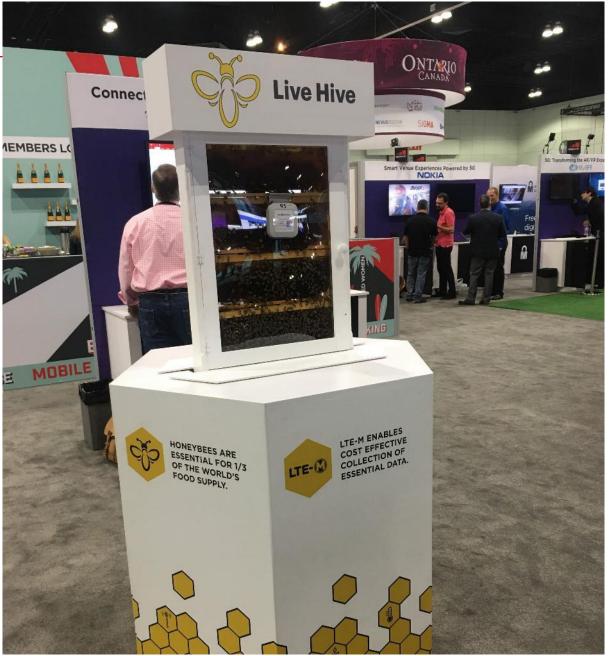
# INTERNET OF THINGS

AT THE **GSMA INNOVATION CITY** 

**SEPT 12-14** | South Hall | Los Angeles Convention Center















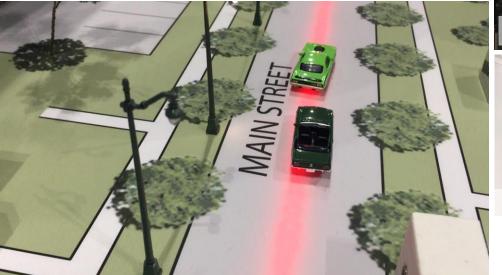


G+D Smart Video Cam Demo









# What did our partners say?

"GSMA Team - I'd like to take a moment to echo Ven's note.

An unequivocal success, the GSMA support and entrepreneurial, can do attitude was fundamental to pulling this off. Thank you." David A. Houghton, GM - Asset Tracking Solutions, NimbeLink

"Thank you for your leadership of this event. Excellent experience for us!" Barbara White, Director, AT&T IoT Solutions

"Thanks again for the opportunity to showcase our product.

I learned a lot last week!" Matt Drake, Regional Sales Manager, NetraDyne

"Thank you for sharing the photos. What a successful event!"

Jaclyn Ng, Product Marketing Manager, Sierra Wireless

"Great photos! It was a pleasure and fun to plan and work on the city light demo."

Jyrki Penttinen, Program Manager, G+D Mobile Security

"I would like to congratulate You and You're team on a very well organized and executed Innovation City Program. There was consistent traffic and a genuine wow factor around the bee display." **Ven Dixit**, Marketing Manager, NimbeLink













GSMA INTERNET OF THINGS PROGRAMME



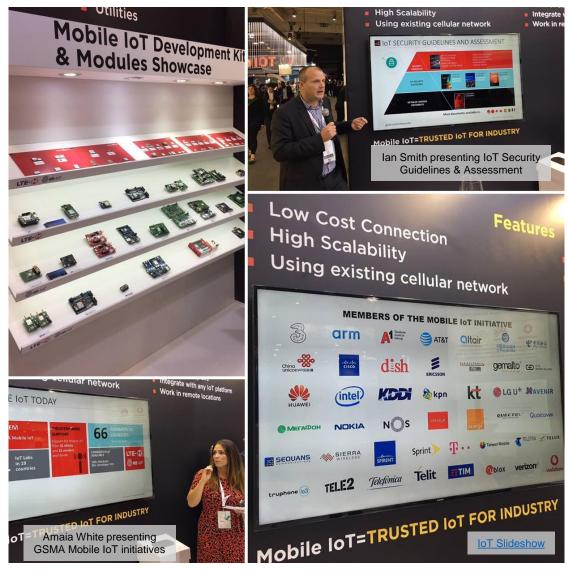


Demo Title	Brief Description	Operator Partner	Vendor/Customer Partner	Technology
Sweepy Home Help	Sweepy Home Help is not just a connected hub for your smart home, it is also an autonomous vacuum – and should make life at home a whole lot easier and smarter. But Sweepy was launched to market too early and without the necessary security measures, making life at home rather alarming. Visit us to see Sweepy in action and discover its hidden vulnerabilities.	N/A	GSMA IoT Security	IoT Security
Connectivity and Ultra Edge Computing for Mobile, Energy-critical Construction Machines	'Connected Customer Service' enables our customers to reduce annual servizitation cost / tool by up to 30%. ToolSense is the winner of ORF Futurezone Award "Best IoT Startup 2017", part of Deutsche Telekom's "hub:raum NB-IoT Warp Program", part of SAP's "Startup Focus Program" and part of University of Applied Sciences Technikum Vienna's "Student Startup Incubator Program".	<b>T</b> ··	<b>ToolSense</b>	NB-IoT
Automated Pest Monitoring and Forecasting Platform	Combining IoT and Artificial Intelligence for automated predictive service related to crop protection decisions will enable minimum maintenance fully automated insect traps to collect pest related data and send it to the cloud via Mobile IoT, 3G or 4G networks. It can use AI to identify targeted pests from the pictures and machine learning based adaptable models to predict future development of pest population.	hub:raum tech incubator of T…	* trapview	LTE-W
Intelligent Agriculture: Integrated Crop Management & Weather Monitoring	With our weather stations, we are able to monitor different parameters (rain, wind, radiation, Temperature, Humidity) which, together with other key solid parameters give us the information on what's the crop need (agriculture). This is linked to our smart controllers which wireless activates/deactivates valves according to the field needs	Telefonica	METOS <sup>®</sup> IBERIA	<b>® NB</b> -loT
NB-IoT Smart Lock for Industrial	NB-IoT is the preferred connectivity for smart locks for its standardised network security, low power consumption with enhanced battery life of around 2.5 years on AA batteries, high coupling, low cost terminal, plug and play interface and high reliability.	vodafone	HUAWEI TO TOCONSULTING	NB-IOT











**МЕГАФОН** 

SEQUANS SIERRA

TELE2 Telefonica Telit

LG U+ MAVENIR



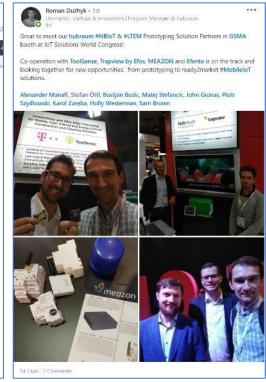




# **Highlights**



Das Wiener IoT-Startup ToolSense wurde von der GSMA, der weltweiten Vereinigung der Mobilfunkanbieter, eingeladen am diesjährigen IoT Solutions World Congress in Barcelona seine Vernetzungstechnologie für Bau- und Reinigungsmaschinen zu präsentieren. Der dreitägige Kongress, der noch bis morgen Donnerstag in Barcelona stattfinden wird, ist ein international führender Branchenevent zum Thema Digitalisierung der Industrie.





Director, Technology Partnership Development at Sierra Wireless

Nicolas Damour • 1st







**IoT Solutions** 









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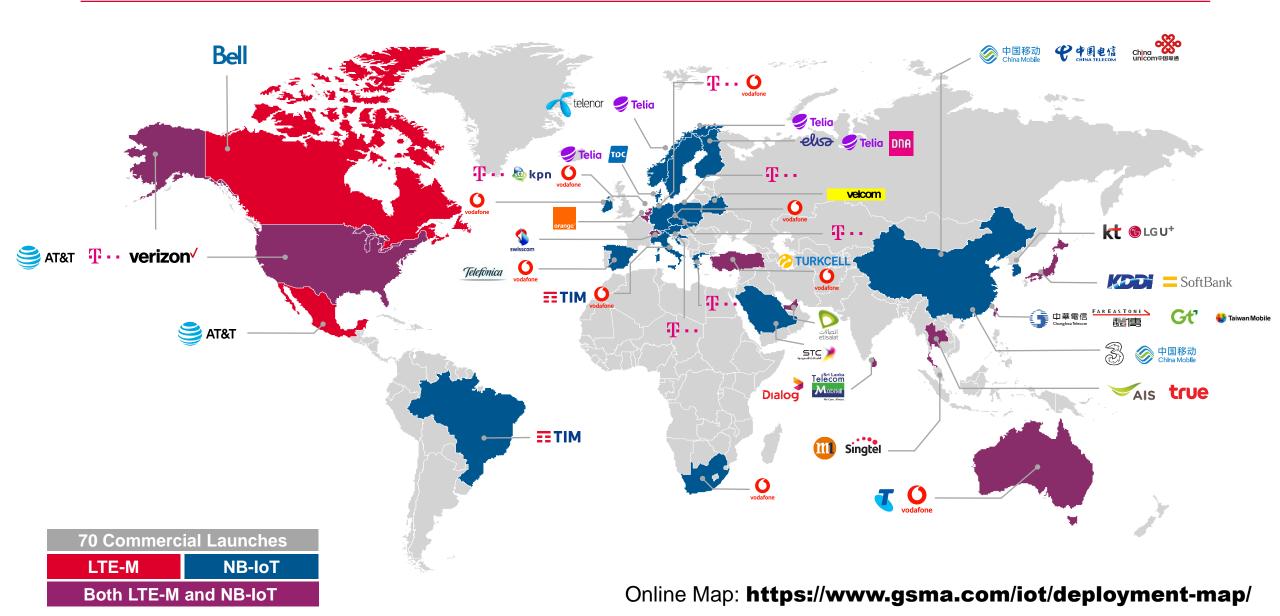






# GSMA"

#### **MOBILE IOT GLOBAL COVERAGE**



# MOBILE IOT GLOBAL COVERAGE

• Full details: <a href="https://www.gsma.com/iot/mobile-iot-commercial-launches/">https://www.gsma.com/iot/mobile-iot-commercial-launches/</a>

TOTAL	
Total KPI Markets Launched	32
Total Operators Launched	39
Total Markets Launched	35
Total Number of Launches	70

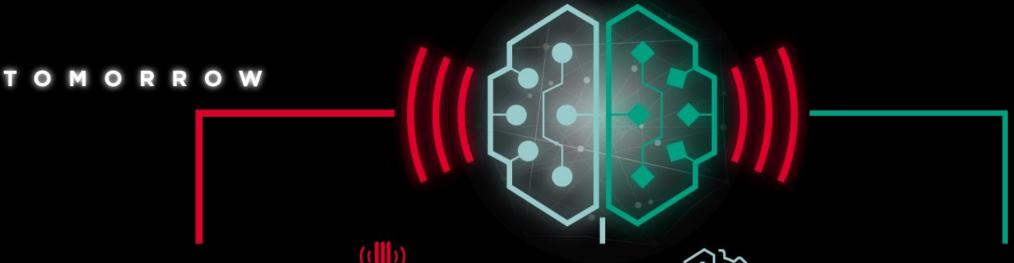
NB-IoT	
Total NB-IoT Launches	53
Total NB-IoT Markets	33
LTE-M	
LTE-M Total LTE-M Launches	17



#### INTELLIGENT CONNECTIVITY

The Fusion of 5G, Al and IoT

INTELLIGENTLY CONNECTING EVERYONE AND EVERYTHING TO A BETTER FUTURE



5G ERA: INTEROPERABLE NETWORKS

56 / 46 / 36 / MOBILE IOT / WIFI / FIXED BROADBAND / SATELLITE

ARTIFICIAL INTELLIGENCE COMPUTER IQ: 10,000+



INTERNET OF THINGS
25 BILLION CONNECTED DEVICES



Flexible, reliable, high-speed, low latency, high capacity networks

Smarter platforms for enhanced decision making & automation

Everything will be securely connected enabling rich new products & services



HUMAN GENIUS IQ: 140+ (

9 BILLION CONNECTED DEVICES

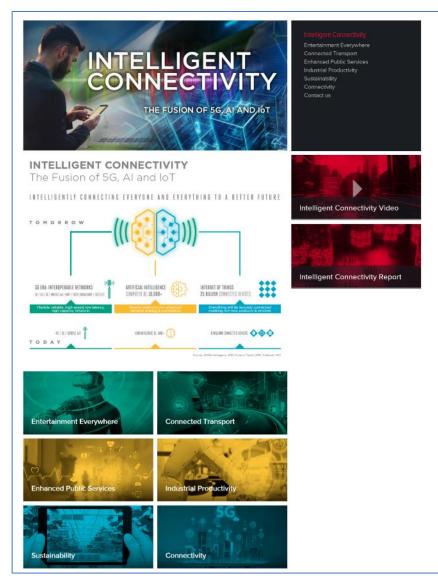


TODAY

# Intelligent Connectivity Website

- Newly launched Intelligent Connectivity website which illustrates in details the six key areas:
  - Entertainment Everywhere
  - Connected Transport
  - Enhanced Public Services
  - Industrial Productivity
  - Sustainability
  - Connectivity
- Intelligent Connectivity Infographic
- Intelligent Connectivity Video



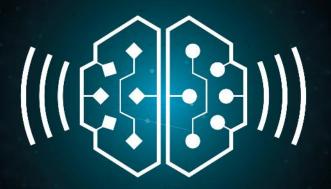


https://www.gsma.com/IC/



# INTELLIGENT CONNECTIVITY

HOW THE COMBINATION OF 5G, AI AND IOT IS SET TO CHANGE THE AMERICAS



- 'Intelligent connectivity' is to describe the powerful combination of flexible, high-speed 5G networks, the Internet of Things (IoT) and artificial intelligence (AI).
- Underpinned by ubiquitous, hyper connectivity, intelligent connectivity marks the beginning of a new era defined by highly contextualised and personalised experiences, delivered as and when you want them. It will have a significant and positive impact on individuals, industries, society and the economy, transforming how we live and work.



https://www.gsma.com/IC/report/



# **IoT Collaborative Project**

Mobile IoT Asia Pacific Regional Report
Industry Insights Executive Interview for Intelligent Connectivity



# Mobile IoT Asia Pacific Regional Report

#### **Objectives**

- Deliver Mobile IoT messages in Asia Pacific region for accelerating Mobile IoT network launches and solutions adoption
- Generate customer demands through storytelling and media engagement in strategic countries, i.e. the countries
  which have yet launched Mobile IoT networks, namely <u>India</u>, <u>Indonesia</u>, <u>Malaysia</u>, <u>New Zealand</u> and <u>Philippines</u>
  listed on the list of top 50 IoT markets

#### **Deliverable**

- Produce one document with new, rare and innovative Mobile IoT customer stories in Asia Pacific (South-East Asia)
  region
- Accelerate Mobile IoT networks launch in at least 3 of the 5 IoT markets
- Promote through GSMA press release, GSMA social channels and newsletters

**Delivery Time**: MWC19

**Request**: please let Eric know if you come across any good, rare and innovative Mobile IoT customer stories





### **Industry Insights for Intelligent Connectivity**

#### **Objectives**

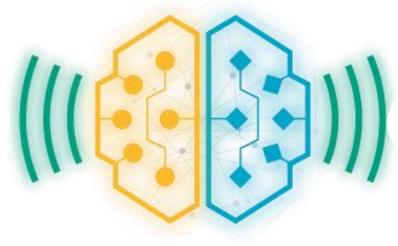
- Collect market intelligence by interviewing senior key stakeholders from operators and ecosystem players and sharing their views and insights on Intelligent Connectivity
- Create stronger awareness towards Intelligent Connectivity

#### **Deliverable**

 Executive Interviews and/or Video Interviews posted on Intelligent Connectivity website (<a href="https://www.gsma.com/IC">https://www.gsma.com/IC</a>) under the new session "Industry Insights"

**Delivery Time**: on-going

**Request**: please let Eric know if you are interested in this opportunity, i.e. nominate your senior key stakeholders for interviews and promote Intelligent Connectivity





# **New GSMA IoT Resources**





Topic	Date	Register / View On-Demand
How does Mobile IoT fit into 5G future?	Monday, 11 June 2018	<u>Here</u>
Industry 4.0 – Optimising Industrial IoT with Mobile IoT	Wednesday, 24 October 2018	<u>Here</u>
Cellular – The Missing Link for <b>Drones</b> ?	Wednesday, 7 November, 2018	<u>Here</u>
What Next For <b>Mobile Operators</b> in the IoT?	Wednesday, 12 December 2018	<u>Here</u>
SIMply <b>Secure</b> – Leveraging the SIM to Create a Trusted IoT	Wednesday, 23 January 2019	<u>Here</u>



### **Industrial IoT Feasibility Study**

This study highlights the suitability of Mobile IoT technologies for use in the Industrial IoT space, including:

- case studies of how Mobile IoT technologies are being used by industry today
- highlighting the benefits of leveraging this versatile and low cost connectivity for industrial applications







### **Industrial IoT Case Study**

This case study illustrates how Ericsson is utilising Mobile IoT and other cellular networks to support a wide range of different manufacturing use cases, making it possible to optimise manufacturing processes via a single communication system.



https://www.gsma.com/iot/ericsson-smart-industrial-factory/



### **Agricultural IoT Case Study**

This case study illustrates how Chunghwa Telecom and Nietzsche Enterprise (NHR) develops the Connected Greenhouse project with the use of NB-IoT in Taiwan.





# GSMA IoT Resources (July – Oct 2018)

Title	Туре	Link
Development Guide: NB-IoT for Agriculture (Oct 2018)	Technical Document	<u>Here</u>
Leveraging the SIM to Secure IoT Services (Oct 2018)	Case Study	<u>Here</u>
Mobile IoT Just Doubled in Range – Without the Need for Hardware Upgrades (Oct 2018)	Blog	<u>Here</u>
Collaboration and Innovation to pave the way for AI in the IoT: an Interview with Sierra Wireless (Oct 2018)	Blog	<u>Here</u>
Intelligent Connectivity Top of the Agenda in Bangkok as Asia Pacific Leads the Way in IoT (Oct 2018)	Blog	<u>Here</u>
NetraDyne Discuss their Al Platform, 5G and their vision of the IoT (Oct 2018)	Blog	<u>Here</u>
Intelligent Connectivity: How the Combination of 5G, Al and IoT is Set to Change the Americas (Sep 2018)	Report	<u>Here</u>
Opportunities in the IoT: Evolving Roles for Mobile Operators (Sep 2018)	Report	<u>Here</u>
Opportunities and Use Cases for Distributed Ledger Technologies in IoT (Sep 2018)	Report	<u>Here</u>
Industrial IoT Feasibility Study: How Mobile IoT is Changing the Industrial Landscape (Sep 2018)	Report	<u>Here</u>
The Future of Farming: How Mobile IoT technologies can help agriculture feed the world (Sep 2018)	Case Study	<u>Here</u>
Mobile IoT Case Study: Ericsson Smart Industrial Factory (Sep 2018)	Case Study	<u>Here</u>
Search and Rescue Supported by Drones on a Cellular Network (Sep 2018)	Case Study	<u>Here</u>
New Connectivity, New Control (Sep 2018)	Blog	<u>Here</u>
Operators Look Beyond Connectivity in the Age of IoT (Sep 2018)	Blog	<u>Here</u>
Intelligent Connectivity: the Fusion of 5G, AI and IoT (Sep 2018)	Blog	<u>Here</u>
Development Guide: LTE-M for Consumer Devices (Aug 2018)	Technical Document	<u>Here</u>
The GSMA IoT Infographic (Aug 2018)	Brochure	<u>Here</u>
LTE-M to Provide Vital Boost to Bee Populations in Agriculture (Aug 2018)	Blog	<u>Here</u>
Mobile IoT Connects China to the Future (Jul 2018)	Blog	<u>Here</u>
New Roles in the Market for Operators as They Look Beyond Traditional Revenue Streams (Jul 2018)	Blog	<u>Here</u>

# Mobile IoT Resource Library

- We welcome third-party LTE-M and NB-IoT resources to be hosted on Mobile IoT Resources Library for IoT developers and solutions as reference materials
- Filtered by Both Technologies, LTE-M and NB-IoT
- Please submit the following materials to Eric Yu (<u>eyu@gsma.com</u>) for considerations:
  - The document in PDF format, if applicable
  - The source URL of the resources.
  - A short blurb of less than 100 words









#### **Email Eric Your Feedback**

Apart from the current activities, what else do you like GSMA to do next year and drive the IoT market further?

Next Meeting: Thursday, 31 January 2019



#### **THANK YOU!**

#### **GSMA IoT**

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

#### **GSMA IoT in MWCA18**

https://www.gsma.com/iot/event/mobile-world-congress-americas-2018/

#### **GSMA IoT on LinkedIn**

http://gsma.at/iot

#### **GSMA** Guide to IoT

https://www.gsma.com/iot/the-gsma-guide-to-the-internet-of-things/

#### **GSMA IoT Newsletter**

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