



### **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

## **IoT Marketing Group**











































































































## **Agenda**













# APAC 5G Industry Community – an ecosystem empower collaboration for joint success

5G Readiness accelerating Industries on Digital Transformation

## 5G commercialisation: global overview

## Intelligence







### **Background - APAC 5G Industry Community**

- GSMA forecasts 5G will contribute \$2.2 trillion to the global economy by 2034. Key
  industries such as manufacturing, healthcare, transportation, utilities and public sector
  benefitting from the new technology for digital transformation, Industry 4.0 and enterprise 4.0.
- In the recent held <u>APAC 5G Industry forum</u>, there are 900+ registration, 600+ attendee from 35+ countries covering government & agencies, analysts, consulting & industry association, mobile operators, enterprises, and solution providers. More than 80% attendances agree to form and participate the APAC 5G Industry community as a cooperation platform to support 5G industry innovation, application and business opportunities
- The GSMA launches the APAC 5G Industry community at the Community Summit
  which brings together enterprises, operators and ecosystem players to identify industries'
  challenges and opportunities, advance 5G and IoT to solve industry enterprise
  transformation.





### **APAC 5G Industry Community**

#### Accelerating the 5G & IoT adoption in industries and enterprises

**OUR VISION:** Strengthen operator and industry partnerships to accelerate the 5G & cellular IoT

**INTEREST INDUSTRY GROUP (2021-2022):** Welcome companies, govt/agencies and industry organizations with interest or passionate on 5G to join as community member







#### **INDUSTRY LEADERSHIP:**

#### **Contributor members**































#### **Press Release**

ASEAN government/agencies, mobile operators, technology provider and industry enterprises as contributor members to support the community member

- Formation of the industry interest group 1)
   Manufacturing 2) Logistics, port & transportation, 3)
   Healthcare
- Learning and understanding of 5G capability
- Collection of industry requirements, explore scenarios and applicable 5G use cases
- Support proof of concept and commercial use
- Networking, ecosystem development and partnership
- Promotion of the innovation, best practices and references
- Ceremony Spotlight <u>https://www.youtube.com/watch?v=Wv-IKdQ0ghQ</u>

## GSMA Announces the Formation of a New Asia Pacific 5G Industry Community

Thursday 21 October, 2021



Launched at Mobile 360 Asia Pacific, the APAC 5G Industry Community is a forum for people to learn and advocate 5G benefits to industries and enterprises

21 October 2021, Singapore: GSMA today announced at Mobile 360 Asia Pacific the formation of the Asia Pacific (APAC) 5G Industry Community; a new ecosystem established for those seeking opportunities to deliver Industry 4.0 and digital transformation from 5G networks, edge-cloud services, enterprise IoT and AI. The Community has been designed for stakeholders across the value chain including government and agencies, industry associations, mobile network providers, enterprises and industry players, solution providers, analysts, and consultants.





## **Industry Interest Group – Community member interest**

To educate, support and advance APAC adoption of 5G and IoT by setup 3 Industry Interest Group and facilitate collaboration

- Manufacturing
- Logistics, Port & Transportation
- Healthcare

Enterprises
business user in
various
industries

**Mobile Operators** 

**5G Ecosystem** 

- Learn, understand and explore how 5G and IoT create business values towards digital transformation
- Target 5G investments correctly
- Gain Return on Investment
- Build appropriately skilled workforce
- Drive real-world adoption of 5G in various industries
- Build trust in 5G
- Communicate clear 5G benefits
- Knowledge and networks for better decision making
- Drive creation of new ecosystems
- Define roles and resources for 5G adoption
- Build solution for digital transformation use cases
- Provide scale across markets





## Industries interest on 5G with digital transformation



#### Manufacturing

- Focus operator-managed networks (private, public or hybrid model)
- Component production, assembly and quality control
- Machine provisioning, production efficiency, machine maintenance and product quality



#### Logistics, Port & Transportation

- Supply chain, logistics and warehouses
- Maritimes port, airport
- Intelligent Transportation system, connected vehicles/drone and autonomous driving



#### Healthcare

- Hospital and rural medical center
- Ground and air ambulance
- General Practitioner and Clinic





### Manufacturing – On demand content











## Logistics, Port & Transportation - On demand content







#### **Healthcare - On demand content**









#### IoT activities - On demand content

- Innovator pitching e.g. China, Taiwan, ASEAN to MNOs and ecosystem (online)
- IoT Tours for regional networking, ecosystem engagement and development such as business matching and partner meeting in Shenzhen, Hong Kong, <u>Taipei</u>, Shanghai, Kula Lumpur, Bangkok, etc
- APAC IoT Summit e.g.
  - @Bangkok Transforming into Digital Societies with IoT, AI, Blockchain
  - <u>@Kula Lumpur Partnership is key to success</u> with MNOs, MCMC, IoT Association from Indonesia, Malaysia, Singapore, Thailand,
  - Thrive Online What 5G IoT means for smart cities and enterprises with Petronas (Oil&Gas), Sreeyasewu (Poultry), etc.
  - <u>Thrive online How 5G IoT is transforming manufacturing</u> with Siemens, Orisol, etc
  - @M360 APAC 'Digital Enterprises' IoT Session
- Connected APAC IoT exhibition and feature demo from APAC innovators e.g. <u>IMEUS</u>, <u>Momoku</u>, <u>Igloohome</u>, <u>Garuda Robotics</u>, <u>DycodeX</u>, <u>Daviteq</u>, <u>Cre8IoT</u>, <u>ACIS</u>, <u>ASTRI</u>, <u>SingTel</u>.... in M360 APAC, MWC Barcelona, MWC Shanghai
- IoT Challenge (online and offline) e.g. Maxis IoT 5G challenge with industry leader from Gamuda Land, Petronas, Proton, etc.
- IoT Case Studies e.g. <u>Leading the World of Innovation in Asia-Pacific in 10 countries</u>, <u>How Asia Pacific Intelligently Connects to IoT</u>, <u>Transformation IoT solution with cases in APAC</u>
- Feature Interview e.g. <u>SingTel</u>, <u>Mobitel</u>, <u>Jazz</u>, <u>Grameenphone</u>, <u>Telstra</u>
- <u>IoT Innovation lab</u>: Australia, Bangladesh, Japan, Indonesia, Malaysia, Singapore, Sri Lanka, etc
- <u>loT directory</u> e.g. APAC Innovators circulate to MNOs and ecosystem partner

#### Ecosystem partner activities e.g.

- AllThingsConnected Webinar: "5G, Network & IoT Cybersecurity" with SKT, Viettel, Subex,
- IDB & ITRI Webinar: World Telecom Smart City Conference. Host session with MNOs and innovators members
- <u>BridgeAlliance Webinar</u>: Navigating APAC's Fragmented IoT Landscape
- MyloTA Webinar: IoT, empowering Applications Against Covid-19





## **Industry Interest Group activity**

Industry Interest group	Date	Content
Manufacturing	2 Dec 2021	Virtual Workshop with Q&A - Advancing Smart factory in the 5G era
Logistic, Port & Transportation	13 Jan 2022	Virtual Workshop with Q&A - 5G transforming Airport and Aviation workshop
Healthcare	17 Feb 2022	Virtual Workshop with Q&A - Deep dive 5G enable Connected healthcare
MWC Barcelona	28 Feb – 3 Mar 2022	Physical conference and on-demand content. Case studies, Speaking and show case opportunities
Manufacturing	Mar 2022	
Logistic, Port & Transportation	Apr 2022	
Healthcare	May 2022	
MWC Shanghai	29 June – 1 July 2022	5G tour. Physical conference and on-demand content. Case studies, Speaking and show case opportunities
Manufacturing	July 2022	
Mobile360 APAC @Singapore	2-4 Aug 2022	5G tour. Physical conference and on-demand content. Case studies, Speaking and show case opportunities
Logistic, Port & Transportation	Sep 2022	
Healthcare	Oct 2022	





## Welcome join the community with benefits - no membership fee

- Receive regular newsletter with latest 5G Industry development and insights
- Access to the Industry Interest Group activities
- Raise interest and support request to the contributor members
- Speaking and show case chances in GSMA 5G activities including webinar, conference and 5G tour, etc
- Business matching opportunities for innovators, SI, enterprises and mobile operators
- Potentially contribute to 5G industry report and case study
- Application the Global Mobile Award (GLOMO) and Asia Mobile Award (AMO)



Register here to join the community







28 February - 03 March 2022

## CONTECTIVITY UNLEASHIED



## For MWC Barcelona 2022, we will unleash connectivity so we can collectively:

- Reconnect to accelerate 5G transformation
- Reimagine investment to harness digital technologies
- Reinvent vertical industries to create greater innovation

## Key Technology Sessions & Activities Full Schedule: https://www.mwcbarcelona.com/agenda

	Mon 2	28 Feb	Tue 1 Mar		Wed 2 Mar		Thu 3 Mar
			GSMA F	Foundry & Forg	ge (Hall 4)		
08:00 - 08:30					-		
08:30 - 09:00							
09:00 - 09:30							
09:30 - 10:00							
10:00 - 10:30					mm\\\ava Cummit		
10:30 - 11:00			Security Summit 10:30-15:15		mmWave Summit 9:30-12:00	eSIM Seminar 10:30-12:00	
11:00 - 11:30		Disrupted by FinTech					Aviation Summit
11:30 - 12:00				FinTech Summit 10:30-16:15			10:30-12:30
12:00 - 12:30	Managera atomina a Comanait						
12:30 - 13:00	Manufacturing Summit 11:00-14:30						
13:00 - 13:30	11.00-14.50	Security Roundtable					
13:30 - 14:00							
14:00 - 14:30							
14:30 - 15:00							
15:00 - 15:30					OpenBAN		
15:30 - 16:00		Smart Mobility Summit 14:45-18:00			OpenRAN Summit 14:30-17:00		
16:00 - 16:30							
16:30 - 17:00						5G IoT Summit 15:00-19:00	
17:00 - 17:30			GSMA Foundry Networking Reception 17:30 – 19:00				
17:30 - 18:00							
18:00 - 18:30							
18:30 - 19:00							



Technology
MWC
Barcelona
Exhibition
Hall 4



- Telco Edge Cloud Latest industry trials
- Always On Network Service improving critical communications
- 5G Autonomous Drones video as a sensor & warehouse management
- GSMA 5G Business Accelerator Hub showcasing the most innovative 5G solutions
- Killer Robot the weed terminator smart agriculture in the Netherlands

## NDSTRYETT

**OPEN THEATRE - KEY VERTICAL SUMMITS** 





## **GSMA Foundry Networking Reception**



17:30 – 19:00 | Tuesday 1 March | Industry City Networking Lounge, Hall 4

Join us for drinks and learn more about the latest GSMA Foundry projects

Register here

#### The GSMA Foundry Forge – Industry City, Hall 4:

## **Autonomous Drone Flight with Al Analytics**





This demo features a vertical drone flight which includes autonomous take-off & landing, and multiple object or person recognitions using AI, whilst live streaming the result to a screen over a 5G network.

## **GSMA 5G Business Accelerator Hub**

Launched at MWC
Barcelona, this is a new 5G
innovation portal
showcasing many of the
world's finest 5G solutions
sharing best practice around
the globe.

#### **GSMA Foundry Fire Screen**

Attendees can learn about a vast array of successful GSMA Foundry projects delivered by global MNOs and industry partners.

- •Always on Network Service (AONS) —an endto-end solution to improve critical, 24/7 services
- •<u>Telco Edge Cloud (TEC) Pre-Commercial</u> <u>Trials</u> – innovative 5G edge solutions

## Technology Demo KPN's Autonomous Mobile Robot (AMR)



This PoC demonstrates a solution to eliminate potato plants from a sugar beet crop. (Potato plants left in the field from a previous year cause disease to the current beet crop)

The project, adopted from the previous proof-of-concept for eliminating sugar beet crop from potato plants, deploys a Robotti robot, a diesel-hydraulics autonomous tool carrier from Danish development company, Agrointelli. The robot is fitted with cameras for capturing images of object on the ground and another manufacturing tools.

The image data captured by the camera is sent real-time from the robot to an edge computing server via the 5G connections. Within the edge server, the data is processed through a machine learning algorithm using a complete classification model. In this model, the machine is "trained" to recognise different objects.

KPN is the Joint Chair of **GSMA 5G IoT for Manufacturing Forum** 



## Industry City Stage – MWC22 | Hall 4

	Day 1 Mon 28 Feb	Day 2 Tue 1 Mar	Day 3 Wed 2 Mar	Day 4 Thu 3 Mar	
A N 4	Manufacturing Summit 1  Kickstarting 5G for Manufacturing  Security Revo  Security Summ  5G Security Revo  Security Summ  5G Network Diversificatio  Chain Securit	Security Summit 1 5G Security Revolution	FinTech Summit 1 Digital Assets	Aviation Summit	
AM		Security Summit 2 5G Network Diversification and Supply Chain Security	FinTech Summit 2 The Rise of Scam Attacks	Discovering Commercial Opportunities in Advanced Air Mobility	
PM	Manufacturing Summit 2 Private & Dedicated Networks for Industry 4.0	Security Summit 3 Reviewing the 2022 Mobile Security	FinTech Summit 3 The Power of FinTech Disruption		
	Manufacturing Summit 3 Advanced Analytics and Robotics	Landscape	FinTech Summit 4		
	Smart Mobility Summit 1 Future Mobility – A Safer, Greener and More Efficient Tomorrow	Security Summit 4	Web 3.0 – The Metaverse		
	Smart Mobility Summit 2 Driving the Smart Mobility Revolution	Monetising Identity Innovations	FinTech Summit 5	Knowledge Partner	
	Smart Mobility 3 The Data Opportunity: Making Mobility Smart		Transformation of Payments	accenture	



#### Details:

https://www.gsma.com/iot/iot-events/ https://www.gsma.com/identity/identity-events

## Manufacturing Summit – Industry City Stage



### **Sessions**

- Advanced Analytics and Robotics for 5G IoT in Manufacturing
- Private & Dedicated Networks in Industry 4.0
- Kickstarting 5G for Manufacturing

https://www.gsma.com/iot/gsma\_events/mwc22-manufacturing-summit/



## **Smart Mobility Summit – Industry City Stage**



### **Sessions**

- Future Mobility A Safer,
   Greener and More Efficient
   Tomorrow
- Driving the Smart Mobility Revolution
- The Data Opportunity: Making Mobility Smart

https://www.gsma.com/iot/gsma\_events/smart-mobility-summit-at-mwc-barcelona-2022/



## Aviation Summit – Industry City Stage



## **Topics**

- Challenges faced in new business development
- Advice for cross-industry collaboration
- GSMA Foundry project success

https://www.gsma.com/iot/gsma\_events/advanced-air-mobility-at-mwc-barcelona-2022/



## FinTech Summit – Industry City Stage



**Time:** 10:15 – 16:15

#### **Sessions and Speakers**

- Digital Assests Landscape | DT, Celo Labs & Citi
- 2. The rise of scam attacks | ANT Group, Telefonica & iconectiv
- 3. Web3.0 The Metaverse | Accenture& partners
- 4. FinTech Disruption | Safaricom, Veon& Yabx
- 5. Transformation of Payments | Huawei, Vodafone

#### **Sponsors**

FinTech Supporting Partner - Citi

https://www.gsma.com/identity/gsma\_events/fintech-summit-the-token-economy-at-mwc22



## Security Summit – Industry City Stage



**Time:** 10:15 – 15:15

#### **Sessions**

- 1. 5G Security Revolution
- 2. 5G Network Diversification and Supply Chain Security
- 3. Reviewing the 2022 Security Landscape (Launch of new GSMA report)
- 4. Monetising Identity Innovations (Identity & Data)

#### **Sponsors**

Platinum Sponsor - **Palo Alto Networks**Security Supporting Sponsor - **Kaspersky** 

https://www.mwcbarcelona.com/agenda/session/security-summit-5g-security-revolution



### eSIM Seminar - CC3 Room 3.12



eSIM Seminar at MWC22

## eSIM Adoption and Global Market Trends

Wednesday, 2 March 2022 at 10.30am (GMT+1)



Date: Wednesday 2 March 2022

Time: 10:30 – 12:00\*

Venue: Fira de Barcelona CC3 3.12 Room

#### 2 Sessions:

- 1. eSIM involving in Massive IoT
- 2. The eSIM Revolution

#### **Sponsors**

Platinum Sponsor - KORE Wireless

Gold Sponsor - Truphone

\*to be extended to 12.30 in case Thales confirm sponsorship (deadline for confirmation Friday 4th February)

https://www.gsma.com/esim/gsma\_events/mwc22-barcelona-esim-seminar/



## 5G IoT Summit – Theatre 3, Hall 7



Date: Wednesday 2 March 2022

Time: 15:00 – 19:00

Venue: Theatre 3, Hall 7, Fira Gran Via

#### 3 Sessions:

- The Growth and Development of Massive IoT in the 5G Era: Mega Trends, Successes & Opportunities
- 2. Critical IoT with Big Data & Edge
- 3. Next Generation of IoT Enabled by **eSIM**: the Business Landscape

https://www.gsma.com/iot/gsma\_events/mwc22-iot-summit/



## Open RAN – The Next Step

Date: Wednesday 2 March 2022

**Time:** 12:30 – 13:30

Venue: Stage B, Hall 5, Fira Gran Via

Open RAN is a hot topic in mobile telecom! Many different claims have been made as to the potential of Open RAN to improve competition, network flexibility and cost for the mobile operators.

Multiple vendors integration in network operation, performance on virtualization, security challenges in open interfaces and etc, will need to be solved before the arrival of the prime time for Open RAN.



Sponsored by kyndryl.

Confirmed speakers include: BT Group, Mavenir, Parallel Wireless, Red Hat, Telus and Turk Telekom.

<u>Click here</u> for the full agenda and speaker list.



## 2022 GLOMO Awards Shortlist now Live!



We're delighted to announce that the shortlist for the Global Mobile (GLOMO) Awards, the industry's most prestigious accolade, is now live and ready to view!

#### **Check out the full 2022 GLOMO Shortlist**

In a year when staying connected proved to be more important than ever, we received an incredible number of entries showcasing amazing innovation, redefining what it means to be connected. We applaud all the shortlisted companies representing the most innovative and brilliant in our sector.







Smart manufacturing IoT connections will reach 1.5 billion by 2025. 5G IoT has the potential to play a significant role in the future of manufacturing, accounting for 17% licensed IoT connections (GSMA Intelligence).

What does it take to make a factory smart? In this webinar, organisations will share experiences of deploying and operating 5G enabled IoT solutions in the manufacturing environment. We will hear about the approaches taken, the challenges, and the skills and partnerships required to deliver success.

**ON-DEMAND PLAYBACK** 





Fawad Noory Senior Director, Private Network, CEaaS, KORE Wireless



Stephane Gervais Executive VP Strategic Innovation, LACROIX Group



Jo Gilbert Technical Director & Manufacturing Lead, GSMA



© GSMA 2020







How 5G
and IoT tech
will transform
healthcare

Date:

Time:

Venue:

Thursday 17 Feb 2022

15:00 - 17:00 GMT+8

Online

Registration link:

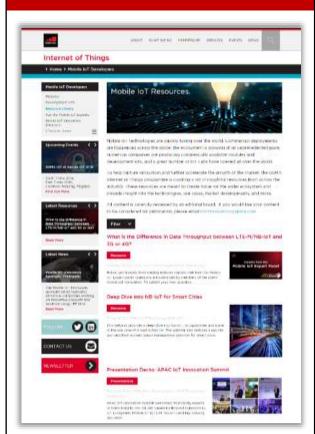
https://bit.ly/ap5gic-health



Title	Technology Area	Asset Type	Link
On-Demand IoT WebTalk: Getting to Smart: Deploying and Operating 5G IoT for Industry 4.0 (Jan 22)	Manufacturing	Video	<u>Here</u>
IoT and enterprise markets: five trends to watch 2022 – GSMA Intelligence (Jan 22)	IoT General	Spotlight Article	<u>Here</u>
Industry pathways to net zero – Decarbonisation in manufacturing – GSMA Intelligence (Jan 22)	Manufacturing	Report	<u>Here</u>
LATAM UAV market an opportunity to improve quality of life, industry experts say (Dec 21)	Advanced Air Mobility	Blog	<u>Here</u>
IoT market update: assessing disruption and opportunities, forecasting connections to 2030 – GSMA Intelligence (Dec 21)	IoT General	Report	<u>Here</u>
5G and network transformation: five trends to watch in 2022 – GSMA Intelligence (Nov 21)	IoT General	Report	<u>Here</u>
Mobile 360 APAC On-Demand: 5G Industry Community Summit (Oct 21)	IoT General	Video	<u>Here</u>
Mobile 360 APAC On-Demand: 'Digital Enterprises' IoT Session (Oct 21)	IoT General	Video	<u>Here</u>
Mobile 360 APAC On-Demand: The Connected Skies – Where are the Commercial Opportunities? (Oct 21)	Advanced Air Mobility	Video	<u>Here</u>
On-Demand IoT WebTalk: Enabling 5G Autonomous Robots in the Factory (Sep 21)	Manufacturing	Video	<u>Here</u>
Enterprise Opportunity 2021 – GSMA Intelligence (Sep 21)	IoT General	Report	<u>Here</u>
Saying goodbye to legacy networks, but what's next for IoT? – GSMA Intelligence (Sep 21)	Mobile IoT	Spotlight Article	<u>Here</u>

### **Industry Resource Libraries**

#### **Mobile IoT**



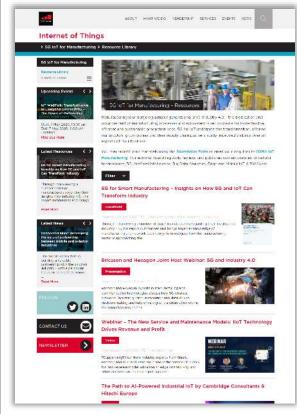




https://www.gsma.com/iot/mobile-iot-resources/

**Submit Your Contents** 

#### **5G IoT for Manufacturing**



















**Submit Your Contents** 

#### **Automotive & Mobility**







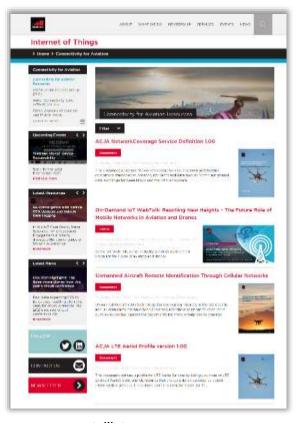




https://www.gsma.com/iot/automotive-mobility-resources/

**Submit Your Contents** 

#### **Connectivity for Aviation**











https://www.gsma.com/iot/connectivity-for-aviation-resources/

**Submit Your Contents** 

#### **GSMA IoT**

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

#### **GSMA** Twitter

https://twitter.com/GSMA

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

http://gsma.at/iot

#### **GSMA IoT YouTube Playlist**

https://gsma.at/iotplaylist

#### **GSMA IoT Newsletter**

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

#### **IoT Marketing Group Meeting Archive**

https://www.gsma.com/iot/iot-marketing-group/meetings/