

GSMA IoT Marketing Group Quarterly Update

21 April 2022

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



IoT Marketing Group

GSMA INTERNET OF THINGS 3



AT&T



中国移动
China Mobile



COMPRION



Dialog



EMnify



Fibocom



Giesecke+Devrient
Creating Confidence



HUAWEI



Kigen



LINCS FIEL
IoT Connectivity Solution Provider



NOKIA



Qualcomm



SEQUANS
COMMUNICATIONS



smartfren.

SONY



T-Mobile



TELE2



Telefónica



telenor | connexion



THALES
Building a future we can all trust



TRUSTONIC



verizon



XL axiata





5G Transformation Hub

The world's most innovative 5G solutions

GSMA.com/5GHub



- Promoting the value of 5G for different industries and customers
- GSMA offers a complete 5G case study service inc. research, copy writing, design, publication, promotion and project management
- Opportunity to showcase solutions on GSMA.com digital hub and at future GSMA events



MWC™

Barcelona

26 February - 03 March 2022

CONNECTIVITY UNLEASHED

#MWC22

Upcoming Activities




GSMA IoT RESOURCES & UPDATES



5G Transformation Hub

The world's most innovative 5G solutions

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GSMA 5G Transformation Hub at MWC 22 Barcelona Highlights



GSMA Pavilion 5G Transformation Hub Display



Case Studies & MWC Barcelona Show Daily



Press release

Mobile Momentum: 5G connections to surpass 1 billion in 2022, says GSMA

Connectivity Unleashed as 5G demonstrates the fastest generational roll-out in mobile history – with innovative new use cases accelerating adoption





Transform your Business by Unlocking the Full Potential of 5G

The 5G Era is established and being rolled out across the globe. The GSMA has launched the 5G Transformation Hub, an authoritative source of information on current live 5G solutions with case studies detailing the benefits and the future positive impact of scaling up these solutions worldwide. The 5G Hub demonstrates why 5G is best placed to deliver real value for a wide range of customers and transform many industries, including manufacturing, energy, transportation, live entertainment, smart cities and construction. Many more case studies will be added during 2022 and the GSMA is asking Members to nominate innovative 5G case studies to contribute to the digital showcase.

ENERGY Wind Farms



5G enabled technology could **increase wind farm capacity by up to 70%**

INDUSTRY Construction



5G connected robots could lead to up to **40% improvement in site scanning productivity**

SPORTS 5G Stadiums



5G millimetre wave to deliver compelling services inside NFL stadiums and **transform sports for spectators**

INDUSTRY Industrial Robots



Advanced connectivity could **add hundreds of billions of dollars to economic output**

TRAVEL Subways



High-capacity 5G could **transform subway travel**

GOVERNMENT Smart Cities



5G based monitoring could help **reduce social costs of air pollution by US\$ 50 per person per year**

Latest case studies

- Commercial drones
- 5G Theatre

More case studies available →

The **GSMA 5G Transformation Hub** is showcasing on the Foundry Fire Screen on the GSMA Pavilion on Industry City in Hall 4.

Meet the GSMA Foundry Team at our networking event at 17:30-19:00 Tuesday 1st March in the Industry City Networking Lounge, also in Hall 4.

Visit us at MWC and learn more at [GSMA.com/5GHub](https://www.gsma.com/5GHub).

Terms and details required for new case study proposals aszomora@gsma.com



28 February – 03 March 2022

CONNECTIVITY UNLEASHED

#MWC22

MWC BARCELONA 2022 IN NUMBERS



IN PERSON ATTENDEES FROM

183

COUNTRIES
& TERRITORIES

352



CONTENT DELIVERED
1,000+ SPEAKERS
ACROSS THE ENTIRE EVENT

6

THEMES

5G CONNECT,
ADVANCING AI,
CLOUDNET,
FINTECH,
INTERNET OF
EVERYTHING
& TECH HORIZON

1,600

+

INTERNATIONAL
JOURNALISTS

652,000

UNIQUE VIEWS TO

[MWCBARCELONA.COM](https://www.mwcbarcelona.com)

OVER THE EVENT CAMPAIGN

OVER

61,000

TOTAL
ATTENDEES



TO MWC AND 4YFN 2022

ONLINE IMPRESSIONS
ACROSS THE SOCIAL
CAMPAIGN AND EVENT

103,000,000

74,000

LINKEDIN
CONNECTIONS

CREATED VIA
MY MWC

6.71M

ONLINE IMPRESSIONS

ACROSS THE 2022
CAMPAIGN & EVENT

€24

BN

OF FUNDS REPRESENTED THROUGH
THE INVESTORS PROGRAMME





The Success of GSMA Technology & Foundry

10

9

Summits

19

Events

Including roundtables & 4FYN sessions

107

Industry
Speakers

1,000+

Record Attendance

56

Expert
Interviews

6

GSMA Technology &
Foundry Demos

mmWave

5G

FinTech

Manufacturing

Open RAN

Aviation

Mobile IoT

Tower & Fibre

Smart Mobility

Security

Identity

VoIP

eSIM

Topics

~£1M

Generated/Assisted
Sponsorship
excluding GSMA Foundry

GSMA Foundry Networking Reception
Over 200 partners attended





Summary Statistics

- Number of unique attendees: 287
- 24 expert speakers from 19 organisations
- 9 presentations and 3 panels



Themes

Growth and Development of
Massive IoT in the 5G Era

Critical IoT with Big Data
& Edge

Business Landscape of eSIM



On-demand recording: <https://www.gsma.com/iot/resources/mwc22-5g-iot-summit/>

Pictures from Part 1 (Massive IoT): <https://photos.app.goo.gl/Y66Nnmay7PjPSXiV6>

Pictures from Part 2 (Critical IoT & eSIM): <https://photos.app.goo.gl/fXrtTw2JHGDTEXna8>

eSIM Summit



MWC™
Barcelona

eSIM

eSIM Summit at MWC22

eSIM Adoption and
Global Market Trends

Theatre 3 - Hall 7
Wednesday 2 March 2022
10.30-12:30 (GMT+1)

KORE. **THALES** **TRUPHONE**
Building a future we can all trust

Number of Attendees: 168

Sessions

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

eSIM

eSIM

eSIM

eSIM

eSIM

eSIM



<https://www.gsma.com/iot/resources/esim-summit-mwc22/>

INDUSTRY CITY

Over 1,400 unique attendees (from scanned data)

Manufacturing Summit – Industry City Stage



5G IoT for Manufacturing at MWC Barcelona 2022

Manufacturing Summit

Industry City Stage,
Hall 4, Fira Gran Via
28 February 2022

Knowledge Partner **accenture**



Number of Attendees: 320

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/resources/mwc22-manufacturing-summit/>



Smart Mobility Summit – Industry City Stage



Smart Mobility at MWC Barcelona 2022

Smart Mobility Summit

Industry City Stage,
Hall 4, Fira Gran Via
28 February 2022

Knowledge Partner **accenture**



Number of Attendees: 246

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/resources/on-demand-smart-mobility-summit-at-mwc-barcelona-2022/>

Aviation Summit – Industry City Stage



Discovering Commercial Opportunities in Advanced Air Mobility

Aviation Summit

Industry City Stage,
Hall 4, Fira Gran Via
3 March 2022



Number of Attendees: 64

Topics

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



<https://www.gsma.com/iot/resources/aviation-summit-mwc-barcelona-2022/>

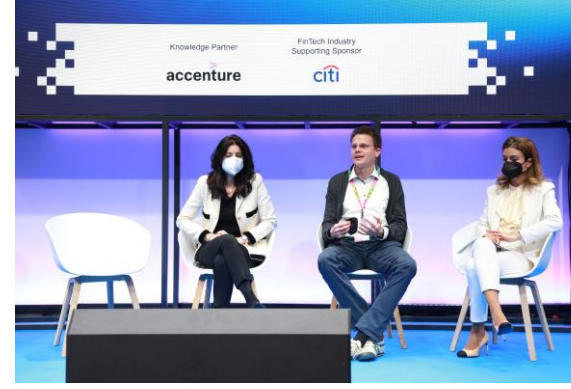
FinTech Summit – Industry City Stage



Number of Attendees: **484**

Sessions

1. Digital Assets Landscape
2. The rise of scam attacks
3. Web3.0 - The Metaverse
4. FinTech Disruption
5. Transformation of Payments



[Watch](#) the FinTech Summit sessions

[Join](#) the FinTech Forum

[Follow](#) us on LinkedIn

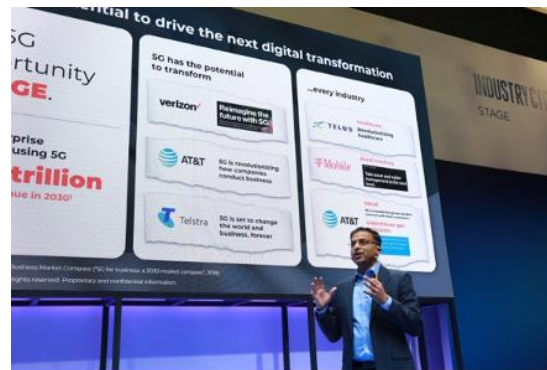
Security Summit – Industry City Stage



Number of Attendees: **332**

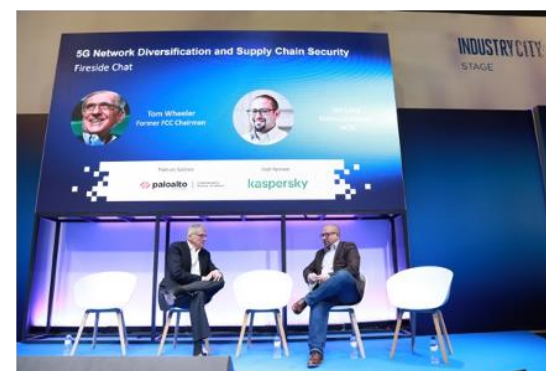
Sessions

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)



[Watch](#) the Security Summit sessions

[Join](#) the T-ISAC Summit – 19 May 2022



[Watch](#) the Identity and Data session

[Download](#) the 2022 Security Landscape Report



5G mmWave Summit



Topics

- 5G mmWave progress to date and global outlook
- The economics of 5G mmWave
- Key applications and real-life use cases
- Challenges, priorities and next steps



[Watch the mmWave Summit](#)

[MWC22 Partner Interviews](#)

[Watch the Open RAN Summit](#)

GSMA Foundry at MWC Barcelona 2022

28 February – 3 March 2022



GSMA Foundry Networking Reception and Awards



The GSMA Foundry Forge – Industry City, Hall 4:

Autonomous Drone Flight with AI 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 Transformation 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 end-to-end solution to improve critical, 24/7 services
- [Telco Edge Cloud \(TEC\) Pre-Commercial Trials](#) – innovative 5G edge solutions

Technology Demo

KPN's Autonomous Mobile Robot (AMR)



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, Agointelli. 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](#)



Upcoming Activities



MWC Shanghai 2022 *Postponed*

20 April 2022, Shanghai: The GSMA would like to express its regret at the postponement of MWC Shanghai 2022, originally scheduled for 29 June – 1 July 2022. Global circumstances remain dynamic, and with the evolving pandemic and measures in Shanghai, our industry stakeholders and partners cannot continue confidently in their preparation for the event.

This decision is disappointing to all of us, but we continue to work with health and government authorities on the delivery of the next safe and successful MWC Shanghai.

MWC Shanghai has grown to a three-day event, attracting senior executives and companies from a wide range of vertical industry sectors to the region. “Convening the industry benefits the entire ecosystem. This coming together spurs innovation and dialogue that truly unlocks the power of connectivity so that people, industry, and society thrive,” said John Hoffman, CEO GSMA Ltd.

Mr Hoffman continued, “As we learn to live in this new world, we will crack the code on how to bring people together so we can get on with the work we love. We always knew that bringing the MWC series of events back would require responsible leadership and continued judgement in respect of local and global circumstances.”

We remain committed to communicating as early as possible, respecting the investments that partners and exhibitors make to participate in an MWC. The GSMA remains grateful for the support of its board, members, customers and its hosting country and city.

Full statement: <https://www.mwcshanghai.com/about/press-releases/gsma-statement-on-mwc-shanghai-2022>



ASEAN is the fastest growing internet market in the world. ASEAN digital economy is expected to add over \$1 trillion to regional GDP in next 10 years. Countries and MNOs in Indonesia, Malaysia, Philippines, Singapore, Thailand have begun their 5G Journey. ASEAN has made bold steps towards a Digital ASEAN with the ASEAN Digital Masterplan. 5G promises to unlock an unprecedented wealth of potential use cases and incremental value in ASEAN, however decisive policy and regulatory decisions will be necessary to motivate industries using new technologies, solve spectrum, cross border business and cybersecurity concerns.

Connected Manufacturing

Manufacturing is one of the key industries contributing to huge economy benefits with 3.4 times growth in Smart manufacturing IoT connection, reaching 1.5 billion globally by 2025 – the fastest growth rate of all the enterprise IoT verticals.

The pandemic has exacerbated existing challenges and pain points for manufacturers, highlighting the need to for automation, robots, remote control, improvement in supply-chain resilience and boost in production speed and flexibility.

Advanced Mobility & Transportation

DHL forecast IoT to open up a \$1.9 trillion opportunity in logistics. 5G is one of the key enablers to facilitate data-driven analytics, decision making with big data and artificial intelligence.

5G accelerates the advance mobility & transportation in logistics, port, warehouse automation with advance robotics and unmanned vehicles.

Digital Healthcare

The global healthcare sector is served by a vast and complex supply chain. Healthcare services are heavily regulated, operating close alignment with regulatory bodies, governments and environmental organizations

The Covid-19 pandemic impacted the existing healthcare system and resources. There are also challenges in the burden of care work for aging populations.

Technology enabled Digital Transformation, which is anticipated to grow significantly in the coming years. Frost & Sullivan forecasts the growth from \$147 billion in 2019 to \$235 billion in 2023.

Sponsorship opportunities: 1 x Headline Sponsor, 6 x Supporting Sponsors (max 2 per vertical)

Contacts: Andrew Parker (aparker@gsma.com) or Eric Yu (eyu@gsma.com)



MWCTM
Las Vegas

IN PARTNERSHIP WITH



September 28 – 30, 2022

CONNECTIVITY UNLEASHED

<https://www.mwclasvegas.com/>



GSMA IoT RESOURCES & UPDATES



We are delighted to have agreed this collaboration with 5G-ACIA which will further the engagement between mobile network operators, manufacturers, and the wider ecosystem. This collaboration will help to advance 5G in manufacturing and industrial automation and redefine the benefits of partnering with mobile operators for 5G IoT manufacturing applications deployment. Our overall goal is to bring together trusted, strategic partners for better production quality, flexibility, efficiency, and sustainability. Enabling our members to work closely with the members of 5G-ACIA will support significant progress.

Alex Sinclair, Chief Technology Officer, GSMA

5G represents a key technology for the further evolution of the manufacturing sector and it will take Industry 4.0 to the next level, facilitating unprecedented levels of flexibility, productivity, efficiency and ease-of-use. A prerequisite for the successful adoption of 5G in the manufacturing industry is a very close collaboration between previously disjoint stakeholders and ecosystems, especially from the ICT and OT domains. 5G-ACIA as the globally leading organization for driving and shaping Industrial 5G is therefore actively reaching out and liaising with other relevant organizations around the world and the Memorandum of Understanding that we have signed with GSMA represents another major milestone in this respect. We are very happy and excited about joining forces with GSMA and to jointly pave the way for the Factory of the Future.

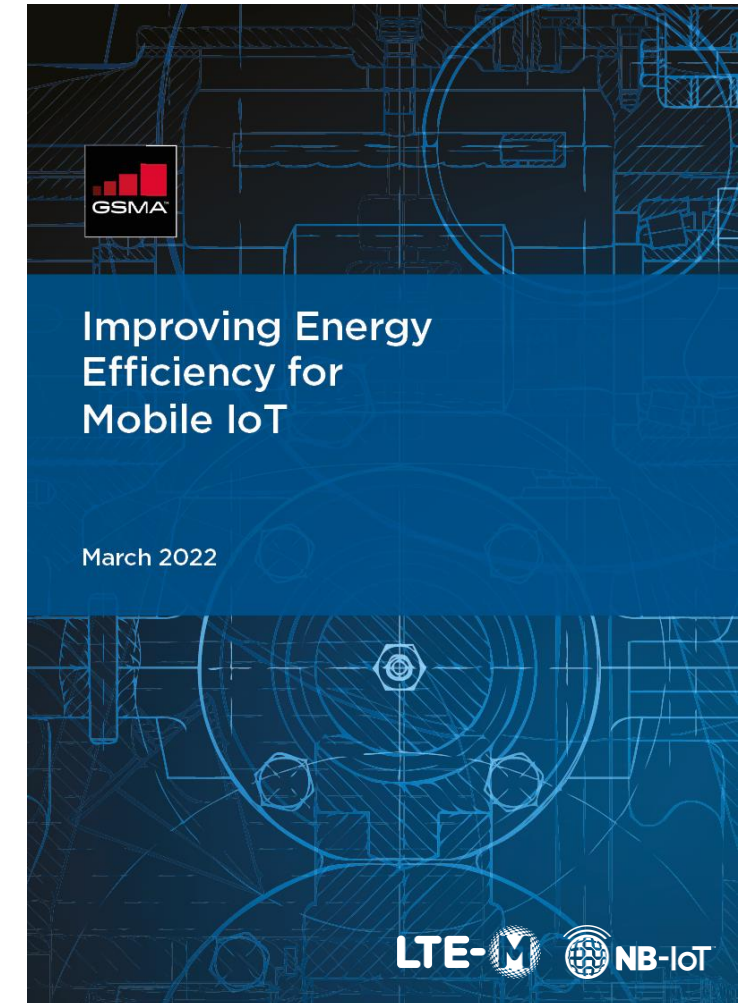
Dr. Andreas Mueller, 5G-ACIA General Chair & Head of Communication and Network Technology, Bosch

Read more: <https://www.gsma.com/iot/manufacturing/5gacia-mou/>

Launched during MWC Barcelona 2022

Contents

- Introduces energy efficiency capabilities of 5G Mobile IoT technologies
- Key energy efficiency features available for LTE-M and NB-IoT devices compared to 2G
- Power optimisation technics in R13, R14 and later in R15
- Power class specifications and energy consumption impact
- Power efficient LTE-M/NB-IoT vs ~x6 higher current at 2G
- Application protocol selection
- Preferred operation modes - PSM/eDRX vs Device Shut down
- Reference Test Setup – Conducted/Radiated in a Lab and Live NW
- Measurement procedures and Reference test results



Download the whitepaper: <https://www.gsma.com/iot/resources/energy-efficiency-mobile-iot/>

Objectives

- Encourage information sharing that will lead to growth of cellular based IoT
- Centralise and maintain a feeder pool of resources
- Enable new contributors the ability to join the Action groups (e.g. roaming features)
- Disseminate 5G IoT Strategy outputs
- Share marketing materials and promote collaborative opportunities (also through IoT Marketing Group)
- Identify opportunities for GSMA Foundry



Target Audience

- GSMA Members, especially those who participated in Mobile IoT Forum (previously LTE-M Task Force and NB-IoT Forum)

Launch Date:

- May 2022

Activities:

- 3 to 4 meetings in a year (first meeting in June 2022 and one of those preferably face-to-face in IoT related event, e.g. IoT Solution World Congress)

Contacts:

- Shane Rooney (sronney@gsma.com) for engagement and contents
- Eric Yu (eyu@gsma.com) for marketing



5G IoT/5G Manufacturing Expert Spotlights

30



Vincent Korstanje
CEO, Kigen

Pushing the envelope with 5G IoT with cellular growth



Carsten Ahrens
CEO, Giesecke+Devrient Mobile Security

Creating confidence for successful IoT deployments leveraging 5G



Elise Neel
Senior Vice President, New Business Incubation, Verizon

Hot Trends in 5G Manufacturing

[Click to view](#)

More to be published



Experts from

NOKIA

Qualcomm

SiGNALS
Research Group

verizon✓

ZTE

GSMA
Intelligence



Title	Technology Area	Asset Type	Link
Talk to 5G Manufacturing Experts – Elise Neel, Verizon (Apr 2022)	Manufacturing	Video	Here
Talk to 5G IoT Experts – Carsten Ahrens, Giesecke+Devrient Mobile Security (Apr 2022)	5G IoT / eSIM	Video	Here
Talk to 5G IoT Experts – Vincent Korstanje, Kigen (Apr 2022)	5G IoT / eSIM	Video	Here
APAC 5G Case Study – Secure & Responsive Connectivity for Manufacturing and Healthcare by True (Mar 2022)	Manufacturing / Healthcare	Case Study	Here
APAC 5G Case Study – 5G Brings Autonomous Robots to Life by AIS (Mar 2022)	Manufacturing	Case Study	Here
Case Studies – 5G in Verticals in China 2022 (Mar 2022)	Manufacturing / Mining	Case Study	Here
Smart Mobility Summit - MWC Barcelona 2022 (Mar 2022)	Automotive & Mobility	Video	Here
Aviation Summit – MWC Barcelona 2022 (Mar 2022)	Aviation	Video	Here
eSIM Summit – MWC Barcelona 2022 (Mar 2022)	eSIM	Video	Here
5G IoT Summit – MWC Barcelona 2022 (Mar 2022)	5G IoT / eSIM	Video	Here
APAC 5G Industry Community Workshop – Leading Indonesia and ASEAN towards Industry 4.0 (Mar 2022)	Manufacturing	Video	Here
Manufacturing Summit – MWC Barcelona 2022 (Mar 2022)	Manufacturing	Video	Here
Case Study: Rising to the Connectivity Challenge (Mar 2022)	Aviation	Case Study	Here
GSMA Whitepaper – Improving Energy Efficiency for Mobile IoT (Mar 2022)	5G IoT	Report	Here
APAC 5G Case Study – Enabling Digital Healthcare by HKT & CUHK Medical Centre (Feb 2022)	Healthcare	Case Study	Here



IoT Industry Resource Libraries

GSMA INTERNET OF THINGS 33

Mobile IoT

5G IoT for Manufacturing

Automotive & Mobility

Connectivity for Aviation



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

Submit Your Contents



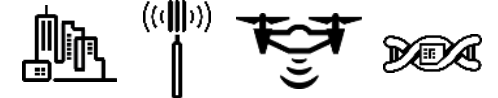
<https://www.gsma.com/iot/manufacturing/resources/>

Submit Your Contents



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

Submit Your Contents



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

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<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/>