

Annual Report 2024



GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach.

Connectivity for Good engages members, governments and civil society, to advance positive policy and spectrum outcomes, facilitate digital innovation to reduce inequalities in our world, and tackle todays' biggest societal challenges such as digital inclusion, climate change and sustainability.

Industry Services and Solutions underpins the technology and interoperability that make mobile work. Via our projects, working groups and promotional activities we facilitate the industry's focus on areas such as 5G, Mobile IoT, fraud and security. And our technical services offer tools, data and resources to enable even more efficient and robust mobile experiences for users.

Outreach provides the world's largest platform for convening and informing the mobile ecosystem at MWC Barcelona, Shanghai, Las Vegas, Africa and the M360 series, and through Mobile World Live and GSMA Intelligence with breaking news, insights and expert analysis.

For more information, please visit the GSMA corporate website at <u>www.gsma.com</u>.

Contents

Represent Looking ahead	72 86
Represent	/2
	^
Unify	58
Promote	44
Serve	30
2024 Reality - Tech advances and growing geopolitical tensions	28
Delivering positive impact	26
Operational review	22
Our people	18
Governance	8
Strategy	6
	4
	Strategy Governance Our people Operational review Delivering positive impact 2024 Reality - Tech advances and growing geopolitical tensions Serve Promote Unify





Chairman's Foreword

In March of 2025, I was privileged to take on the role of Chairman of the GSMA Board. I am truly excited at the prospect of working with the Board and the GSMA team to advance our industry priorities.

As I look back at 2024, I believe we have made progress together across the mobile industry.

The GSMA Open Gateway is a terrific example of the power of collaboration and innovation. Now covering 75% of mobile connections, this initiative is a foundation for unlocking the full potential of mobile networks. 2024 also saw the launch of GSMA Fusion, to create demand by enabling enterprise sectors to make a public commitment for connectivity requirements across multiple markets. As we continue to advance, I look forward to realising the full power of Open Gateway monetisation across markets, driving meaningful impact for the industry across the world.

With AI at the forefront of global business projections, the GSMA led the way with several initiatives to bridge the AI adoption gap, clarify AI's potential and provide a roadmap to measurable impact. Of note are the AI Use Case Library from the GSMA Foundry, and the GSMA Responsible AI Maturity Roadmap, providing a structured framework to operators to evaluate and enhance their responsible AI practices.

The rise of AI once again highlighted the urgency of closing the mobile investment gap to drive global digital transformation. The GSMA maintained its engagement with governments and policymakers, successfully bringing the investment gap to the forefront of digital policy discussions in countries worldwide.

It was also encouraging to see growing momentum in our efforts to close the usage gap. The Handset Affordability Coalition was launched to address one of the key barriers to mobile internet usage. By year-end, 23 organisations had joined the coalition which aims to drive innovative solutions to boost handset affordability for some of the world's most under-served populations.

The 2024 Annual Report highlights all of these achievements and much more of the GSMA's work throughout the year. A special word of thanks for much of this must go to José María Álvarez-Pallete and Mats Granryd for their leadership of the GSMA over the years. In my new role, I look forward to building on this momentum as we accelerate our efforts towards a more vibrant, connected and inclusive future for all.

Gopal Vittal

GSMA Chair and Vice Chairman and Managing Director, Bharti Airtel Group

Director General's Foreword

While I only started my role at the GSMA in April 2025, it is a great honour to present to you the 2024 GSMA Annual Report. As I step into this new chapter, I am reminded by this report how vital the GSMA is as a champion and enabler for the mobile industry. In a world facing ongoing challenges, our sector continues to be a driving force for innovation and a cornerstone of the global digital economy.

With growth a top priority for our members, in 2024 we focused on deepening collaboration across the mobile ecosystem. Momentum continued to build within the GSMA's 5G Futures Community, which grew by 32% to reach 1,900 active members. Our sincere thanks to the over 6,000 members of our global technology working groups who attended over 1,250 meetings – your commitment and expertise have been instrumental to support the development of new standards and services, build consensus and align the industry behind best practices.

GSMA Open Gateway also made significant strides – with operators representing three quarters of global mobile connections now signed on. Progress was seen across all regions – with commercial API launches in Latin America, new signings in the Middle East, the development of the Asia Pacific Fintech Forum to scale Open Gateway fintech APIs, the signing of 6 new channel partners in Greater China, and the first cross-carrier, interoperable API successfully tested in North America.

Our global advocacy efforts continued throughout the year with 22 positive policy results achieved across 19 markets - addressing everything from taxation to spectrum and the investment gap.

We also remained focused on uniting the industry around shared priorities – including spectrum, sustainability, and closing the usage gap. In 2024, our MWC and M360 events convened over 150,000 participants from across the mobile ecosystem, governments, and international organisations, helping to build momentum on these fronts to advance the broader goals of our industry.

This Annual Report clearly demonstrates the breadth and depth of the GSMA's impact in 2024, and reaffirms our ambition and energy for 2025. As always, none of this would be possible without teamwork and partnership. Thank you to the GSMA team, our members, and partners for your contribution. And a special note of appreciation to Mats Granryd for his leadership throughout the years.

I look forward to building on the impressive work highlighted in this report and working with the Board and the GSMA team to further accelerate our impact for the mobile ecosystem and beyond.

Vivek Badrinath

Director General, GSMA



Chapter 1

Strategy

Vision, Mission and Strategy

Today's societal, economic, and environmental challenges are more complex than ever, and the mobile industry's ongoing investment and innovation are crucial for affordable, accessible, and sustainable solutions across all geographies.

The GSMA's vision is to unlock the full power of connectivity so that people, industry and society thrive.

The GSMA's mission is to be recognised as THE global industry association for the advancement of mobile technology by representing, promoting, serving and unifying mobile operators, the broader mobile ecosystem and industries around the world who are pursuing digital transformation to deliver real impact for business and society.

The GSMA's strategy is to:

 represent our members to governments, regulators, international institutions and development organisations.

- promote the industry through reports, thought leadership, events, media and marketing channels.
- serve the industry through GSMA services, training, news, data insights and research to inform, improve and support our members.
- unify through collaboration which drives innovation, global interoperability and business opportunities.

The GSMA operates across three vertical pillars – Connectivity for Good, Industry Services and Solutions, and Outreach - all underpinned by Organisational Health activities across the organisation. Collectively these activities drive KPIs across areas of engagement, impact and financial performance.

Financial Strategy

The GSMA Group is overall not-for-profit and utilises contributions from events, services and membership fees to drive industry impact.

In 2024, with reserves above pre-pandemic levels. the GSMA continued to deliver on its financial strategy. As a non-profit association, the GSMA uniquely generates a broad portfolio of funding sources which scale member benefit. In 2024, for every £1 of operator membership fees, the GSMA generated more than £8 of additional funding from other sources. These funds are invested into key industry topics on behalf of its members to maximise industry impact. The Audit & Risk Committee oversees a broad programme of work to strengthen the GSMA's resiliency and safeguard members' interests. Recent initiatives include rebuilding reserves to record levels, implementing a comprehensive legal entity reorganisation, ringfencing client funds, and changing the financial year from April-March to January-December to align MWC Barcelona with the start of the financial year.

As the GSMA looks forward to 2025, these measures ensure that the organisation has a stable foundation for future growth and impact.



Member Benefit Safeguard Member Interests Maximise Industry Impact

GSMA 6/92 **GSMA** 7/92

Chapter 2

Governance











GSMA

8/92

GSMA Board 2023-2024

The GSMA Board is comprised of Group CEOs, CEOs and C-level representatives from the world's leading mobile operators. Collectively they set the GSMA's strategic direction, ensuring its work is fully aligned with the needs of mobile operators and their customers across the world. The Board ensures that the GSMA's resources are focused on activities where collective action can deliver significant benefits to the mobile industry's customers, beyond those that individual operators could achieve through their own pursuits. Board members serve a 2-year term. A Board election was run in the latter part of 2024 to elect a new Board for the term 2025/26.





Igal Elbaz AT&T



SAT&T







GSMA

axıata















KDDi KDDI



Young Shub Kim













Singtel

Yuen Kuan Moon



Olayan Alwetaid









TIM

verizon

Pietro Labriola



telenor



Vicki Brady

























José María Álvarez-Pallete served as Chair of the GSMA Board until February 2025.

Mats Granryd served on the GSMA Board until 31 March 2025.

On 24 March 2025, Gopal Vittal became Chair of the GSMA Board, and on 3 April, Ralph Mupita became Deputy Chair.

On 1 April 2025 Vivek Badrinath became the new GSMA Director General and took his place on the Board.

Board updates 2024:

Rima Qureshi, EVP & Chief Strategy Officer served as Verizon representative to the Board until February 2024

Joe Russo, EVP & President of Global Networks and Technology was appointed to the Board as Verizon representation in September 2024.

ANNUAL REPORT 2024

GSMA Leadership Team 2024

As a member of the Board, the Director General is responsible for the day-to-day management of the GSMA. The Director General is supported by a leadership team comprising individual officers, each responsible for specific aspects of the GSMA's work.



Mats Granryd
Director General



Lara Dewar Chief Marketing Officer



Louise Easterbrook
Chief Financial Officer



John GiustiChief Regulatory Officer



John Hoffman CEO and Director, GSMA Ltd.



Alex Sinclair
Chief Technology Officer

Note: Mats Granryd completed his tenure as Director General of the GSMA on 31 March 2025.

Vivek Badrinath became the new Director General of the GSMA on 1 April 2025.

ANNUAL REPORT 2024

CHAPTER 2 / GOVERNANCE

Committees



The Board delegates specific responsibilities to the following boards and committees:

- The Audit and Risk Committee is responsible for overseeing the GSMA's financial controls, risk management and financial performance.
- The Business Advisory Committee provides advice to the Board on specific issues relating to events and other commercial activities of the GSMA to convene or support the mobile industry.
- The Compensation Committee is responsible for determining the compensation of the Director General and the GSMA Leadership Team and the compensation policies and practices of the GSMA, reviewing and approving the annual organisational performance objectives and reviewing Leadership Team succession planning.
- The Nominations and Governance Committee
 is responsible for managing the process of
 nominating, appointing and electing members
 to the Board, its committees and its expert
 groups and for overseeing and managing the
 governance processes of the GSMA Board,
 Committees and Groups.
- The GSMA Mobile for Development Foundation Inc. Board is responsible for oversight of the GSMA Mobile for Development Foundation donor-funded programmes. A dedicated in-house compliance team provides oversight of all grant-funded programmes to ensure that the specific contractual requirements of each donor are met.

Three groups, each chaired by a member of the Board, act as advisors to the Board:

- The **Strategy Group** supports the Board by developing and proposing strategies for overall strategic focus and direction of the GSMA, the industry, and matters of strategic importance to the operator community.
- The Policy Group advises the Board on specific issues relating to public policy, regulation, spectrum management, industry reputation, advocacy and the use of mobile technology to achieve scale in delivering developmental and social goals.
- The **Technology Group** provides expert advice to the Board on matters relating to products and technology architecture evolution, including interoperability.

Membership

As of November 2024, the GSMA had 1,147 members, comprising mobile operators and ecosystem players.

Operator members	685
Non-operator members	462

Working Groups

The GSMA's global technology working groups report into the Policy Group and Technology Group. Together they comprise over 150 groups and sub-groups and in 2024 held more than 1,250 meetings with over 6,000 member participants. These groups updated or released approximately 200 essential documents, covering all aspects of system specifications, including interoperability, roaming and interconnect.

Prominent Working Groups & Task Forces	Acronym	Members November 2024*
Wholesale Agreements and Solutions Group	WAS	2,385
eSIM Group	eSIM	468
Fraud and Security Group	FASG	1,269
Networks Group	NG	630
Interoperability Data Specifications and Settlements Group	IDS	348
Terminal Steering Group	TSG	317
Internet Group	IG	190
Intellectual Property Rights Working Group	IPR	12
Automotive Identity Group	AID	58
5G Voice-over-WiFi Task Force	5GVWIFI TF	45
5G New Calling Task Force	5GNCTF	38
Authorisation Server Authentication Capabilities Group	ASACG	44
Operator Platform Group	OPG	244
Post Quantum Telco Task Force	PQTN	126
RCS Group	RCSG	230

^{*}Individual participants

GSMA 14/92 **GSMA** 15/92

Risk Management

The Risk and Compliance Committee is responsible for the provision of effective and appropriate internal governance relating to risk management and compliance. The Committee has oversight of the organisation's risk management, internal controls and related compliance activities. Comprised of the GSMA's Leadership Team, and supported by senior advisors from the finance, people and culture, information technology and legal functions, the Risk and Compliance Committee reports on its activities to the Audit and Risk Committee.

The Risk and Compliance Committee is responsible for:

- Ensuring effective operation of the risk management framework
- Reviewing the organisation's principal risks
- Reviewing the quality, adequacy and effectiveness of the internal controls and mitigation plans
- Monitoring emerging and future principal risks
- Reviewing any material risk materialisation
- Ensuring rigorous compliance with laws and regulations relating to business conduct

In January 2025, the Risk & Compliance Committee assessed the principal risks of the GSMA as follows:

Consequence Likelihood	Rare	Unlikely	Possible	Likely	Almost Certain
Catastrophic					
Major			2	1569	
Moderate			3 4 7 8		
Minor					
Insignificant					

1	Impact to funding of disruption to GSMA events
2	Compliance with antitrust law
3	Safety and security at the GSMA
4	Management of donor funds
5	Cyber threat and information security
6	Compliance with data protection regulations
7	Third party reliance
8	Regulatory changes/scrutiny impacting the GSMA's operating model
9	Impact of geopolitical developments on the GSMA

The Committee considered the likelihood of three risks as changed during the year:

- 1. 'Impact to funding of disruption to GSMA events': reduced
- 2. 'Compliance with data protection regulations': reduced
- 3. 'Impact of geopolitical developments on the GSMA': increased

Note: The risk heat map indicates the 'Net Risk' rating after taking mitigations into account. Numbers in the key are for reference only and do not imply a ranking of the risks.



ANNUAL REPORT 2024 CHAPTER 3 / OUR PEOPLE

Chapter 3

Our people: Diversity, Equity and Inclusion

Our people: Diversity, Equity and Inclusion

As a global organisation representing an industry that covers 96% of the world's population, it is the GSMA's imperative to build a team that is truly diverse and inclusive. The GSMA unites a global ecosystem and leads by example, working with the wider industry to make commitments and strive for best practice in diversity, equity and inclusion across the world.

Diversity, Equity and Inclusion (DEI) is an essential part of the GSMA's culture, and the organisation strives to produce tangible results that bring about long-term sustainable change through a DEI agenda with three core principles:

- Transparency: Open reporting of diversity data and progress internally and externally
- Inclusive Culture: Creating an environment of psychological safety through investment in the DEI agenda and education

 Accountability: Removing bias and empowering GSMA leaders to drive the DEI agenda

The GSMA's annual Diversity Report is guided by these core principles to track the organisation's progress toward its diversity, equity, and inclusion goals



GSMA 18/92

Ensuring we deliver on our actions

The Steering Committee provides direction in developing the DEI strategy and promotes the DEI agenda within the organisation.



Louise Easterbrook Chief Financial Officer UK



John Giusti Chief Regulatory Officer



Lizzie Chilton People and Culture Director UK

The DEI Team ensures that the GSMA has appropriate tools, resources and support to develop and deliver the DEI strategy and goals to promote a diverse and inclusive working environment.



Fiona Onochie Head of Talent and DEI UK

Nadia Mastantuono DEI and Wellbeing Partner

UK

OneGSMA Co-chairs.

OneGSMA is an employee-led forum that empowers staff to actively contribute to the delivery of our DEI strategy and goals. By identifying opportunities for improvement and championing peopledriven initiatives, OneGSMA plays a vital role in shaping a truly inclusive culture.



Ankur Vashishtha Workplace Services Manager

INDIA



Carol Gitobu M4D Senior Market Engagement Manager KENYA

Our Inclusion Champions are passionate about DEI and actively promote all aspects of DEI within their department and the wider business. Their allyship and support in delivering OneGSMA inclusive culture educational initiatives and activities is critical. All GSMA employees are responsible for building an environment where colleagues feel comfortable to be themselves.



Alex Arcia Finance and Compliance Analyst, Atlanta



Annabelle Yeoh Senior Project Manager, Events, Hong Kong



Belen Espada Vioque Workplace Services Coordinator, Barcelona



Bhavisha Shah People Planning and Project Lead, London



Elaine Lee Head of Corporate Support, Shanghai



Florencia Bianco, Senior Manager, Buenos Aires



Gehena Singh New Delhi



Henry Bowes Manager M4D, London



Jay Jackson Atlanta



Jemima Higginbottom Social Media Community Manager, London



Kayleigh Ramsay Membership Manager London



Larissa Gontijo Jales Policy and Regulatory Manager Brazil



Lavinia Zecca People Communications Lead London



Lois Owusu-Asabere Talent Administrator London



Luiz Felippe Zoghbi Director Spectrum Policy London



Operations Analyst Atlanta



Rishi Chauhan Research Analyst New Delhi



Yashika Shankar Research Analyst New Delhi

Chapter 4

Operational review



GSMA 22/92

Global Impact 2024

SERVE

Survey of operator member CEOs

Net Promoter Score of

Mobile for Development

40 million more people reached, to a new total of

260 million 299

Foundry projects delivered



industry services launched

> **Equipment Marketplace Device Compatibility** and Call Check



PROMOTE

in person attendees at MWC and M360 events



2,600+ international journalists at MWC Barcelona

Mobile World Live



professionals

Fraud and Security Group

participants and **30** new / updated threat assessments **GSMA Intelligence**

reports from



UNIFY

5G Futures Community

grew 320/ to 1,900 active members

operators committed to cutting emissions over next decade, to a new total of 70 operators with nearly 50% of global mobile connections

GSMA Open Gateway

now covers 75% of global mobile connections with MoUs signed by **67 mobile operators** and 27 channel partners



meetings and 200 essential **documents** updated / released by **Technology Working Groups**

REPRESENT

positive policy results across



policymakers and regulators trained in 98 countries



Ministerial Programme at MWC Barcelona

- delegations from **140 countries** and 44 intergovernmental organisations

The Mobile Economy report series





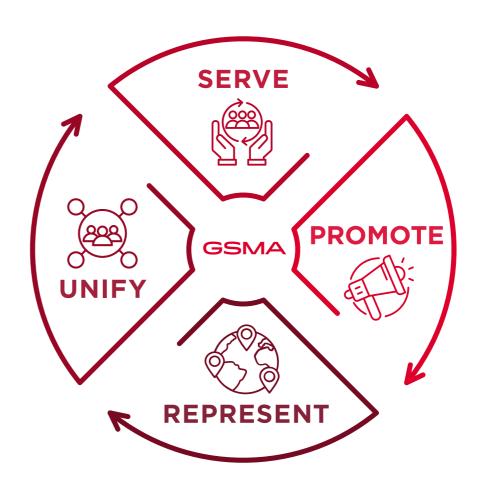
Delivering positive impact

The GSMA's vision is to unlock the full power of connectivity so that people, industry and society thrive. Investment and innovation by the mobile industry are crucial to develop affordable, accessible and sustainable solutions to the world's most pressing societal, economic and environmental challenges.

The GSMA's mission is to be recognised as THE global industry association for the advancement of mobile technology by serving, promoting, unifying and representing mobile operators, the broader mobile ecosystem and industries around the world who are pursuing digital transformation, to deliver real impact for business and society.

Annually, the GSMA sets engagement, impact and financial key performance indicators (KPIs) and this report demonstrates how the GSMA specifically delivers on the imperative for Impact.

In 2024, following the successful completion of its financial recovery plan, in response to the challenges raised by the Covid-19 pandemic, the GSMA was able to invest significantly to rebuild the organisation and its activities. That well-placed investment, along with a robust and flexible organisational structure, leaves the GSMA well placed to continue to serve, promote, unify and represent the global mobile industry and amplify its impact going forward.



GSMA 26/92 **GSMA** 27/92

2024 Reality

Tech advances and growing geopolitical tensions

In 2024, the wars in Ukraine, the Middle East and Africa all continued unabated, causing further disruption to energy and food supplies. Although inflation fell in most markets, interest rates remained high, compounding the effect of geopolitical instability on investment. Once again, many cities, towns and rural communities were subject to extreme weather events in 2024, underlining the urgent need to address harmful changes to the climate.

In an increasingly unpredictable socio-economic and geopolitical landscape, policymakers and business leaders are recognising the urgent need to harness AI and other advanced digital technologies to enhance responsiveness and adaptability. Mobile connectivity and services remain central to this effort, enabling real-time access to critical information and capturing vital real-world data from people and devices alike. Against this backdrop, the role of the GSMA in promoting technological interoperability becomes even more essential, ensuring that global digital ecosystems remain resilient, inclusive, and capable of supporting innovation amid rising global tensions.

Serve

Prioritising members' needs, attracting new audiences, and offering platform services, training and partnerships to ensure that the mobile industry remains resilient and able to diversify and grow.

Meeting members' needs

The 2024 annual survey of operator member CEOs saw a record response rate, with 36% of CEOs participating. The responses generated a "great" Net Promoter Score (NPS) of 59, an increase of 14 points since 2023. This positive result reflects a dedicated team effort, and the GSMA will continue to work hard to enhance engagement and maximise the value of membership.

Key Category Results Dashboard

Annual CEO Survey (& Board/All-Member)

Strategy

No change 2023: 91% 2022: 89% 2021: 92%

91%

Board: 100% All-Member: 89%

Strategy and remit aligned to the needs of my business

Governance

▼-5% 2023: 89% 2022: 81% 2021: 89%

84%

Board: 94% All-Member: 75%

Governed in an open and transparent manner

Technology

▼-4% 2023: 86% 2022: 81% 2021: 86%

82%

Board: 100% All-Member: 89%

The most significant technology topics

Advocacy

▲1% 2023: 86% 2023: 82%

2022: 82% 2021: 84%

87%

Board: 94% All-Member: 72%

Effectively advocates for industry positions

Public Policy

▲1% 2023: 88% 2022: 82% 2021: 86%

89%

Board: 100% All-Member: 79%

Effectively addresses the most relevant policy and regulatory topics

Outreach

▼-1% 2023: 89% 2022: 85% 2021: 92%

88%

Board: 100% All-Member: 79%

The GSMA's world-class inperson events are important to my business

Impact

▲1% 2023: 92% 2022: 92% 2021: 95%

93%

Board: 94% All-Member: 89%

 \bigcirc

Plays an impactful role in the development of the mobile communications industry

Membership

▲8% 2023: 83% 2022: 78% 2021: 81%

91%

Board: 94% All-Member: 89%

Membership delivers measurable, tangible value for my business

In April, the Member Gateway and Roaming Gateway platforms were launched, and their capabilities were enhanced throughout the year, including a certificate database that facilitates uniform and automated exchange of cryptographic key material between GSMA members, enabling 5G standalone (5G SA) roaming and other potential use cases.

A significant change in Membership strategy in 2024 was the expansion into new industry verticals, which are becoming increasingly dependent on mobile connectivity and services, particularly 5G. In these adjacent sectors, the GSMA is highlighting its expertise and membership value, and building brand awareness.



30 / 92



Nurturing mobile innovation

In the fast-paced world of mobile technology, innovation is key to staying ahead of the curve.

Positioned as the "Home of Mobile Innovation", the GSMA Foundry is the go-to place for cross-industry collaboration. Mobile operators and innovators that join the Foundry benefit from increased brand exposure and invaluable industry contacts who can help them address priority challenges, ultimately benefiting the entire mobile ecosystem and society.

Projects

The GSMA Foundry focuses on projects which solve industry-level challenges – prioritising speed and agility, turning ideas into impactful solutions in months, not years. More than 70 projects have been delivered since the Foundry launched in 2021, including more than 18 in 2024.

2024 highlights

- China Mobile, Huawei and AIS collaborated to employ an intelligent packet core to better monetise user experience of 5G networks.
- BeWhere Smart Logistics designed integrated 5G and satellite solutions for global asset tracking to ensure the safe and timely delivery of freight across supply chains.
- China Telecom and China Unicom extended their innovative partnership to co-govern their shared infrastructure to encompass their 4G networks and their 5G networks.

Partnerships

Partnerships are the driving force behind the GSMA Foundry. In 2024, the GSMA Foundry and IBM worked together to support the adoption of generative AI in the telecom industry. The partnership resulted in the GenAI Accelerator Pack, providing GSMA members with free access to IBM's watsonx.ai platform to test, develop and build generative AI systems, driving productivity gains and boosting revenue growth.

The Foundry's partnership with the European Space Agency (ESA) established a non-terrestrial networks (NTN) community with 40 members. It launched challenges and funding opportunities valued at more than £10 million, broadening access to ESA 5G/6G NTN Labs, rolling out education programmes and more. The ESA made its NTN test network available to Foundry participants to enable the real-world testing of their innovations.

"ESA is proud to partner with the GSMA on a variety of impactful initiatives in our commitment to advance connectivity solutions, through the integration of satellite and terrestrial networks. One of ESA's aims is to connect everyone, everywhere and at any time, and this powerful collaboration with GSMA is a significant step in advancing the mobile and satellite





In 2024, the GSMA Foundry and the GTI 5G-A×AI Development Programme launched a challenge to promote the development of converged solutions utilising 5G Advanced and Al, supporting industry innovation.

At MWC Barcelona, the annual Foundry Excellence Awards recognised successful projects from AWS, China Mobile, China Telecom, China Unicom, Huawei, Liberty Global, Unmanned Life, World Mobile and ZTE. At MWC Las Vegas, the Foundry promoted four demos including a 5G sensor experience from BeWhere and watsonx.ai demos from IBM.

"The project with VEON and Beeline Kazakhstan is the first on our exciting journey with the BSC. We now call on industry to join us and work together to reduce the disparity in developing and applying AI technologies across different languages. This disparity exacerbates the Al language gap, and the challenges that come with it, including siloed innovation and widening the digital divide."

Alex Sinclair, Chief Technology Officer,

GSMA Al is transforming the world as we know GSMA 34/92

"Artificial Intelligence is the next game changer in the history of technology, and it is in our hands to design and develop it in a way that promotes inclusion for all. Enabling low-resource languages to be a part of the world of AI empowers hundreds of millions of people around the globe by addressing the current shortcomings of the AI landscape. We are delighted to be the first operator group to partner with **Barcelona Supercomputing** Center and the GSMA to explore opportunities to raise to this challenge."

Kaan Terzioglu, Group CEO, Veon



Reducing digital divides

The GSMA helps drive innovation in digital technology to reduce inequalities, particularly in low- and middle-income countries (LMICs). Singularly positioned at the intersection of the mobile ecosystem and the development sector. the GSMA is stimulating digital innovation to deliver both sustainable business and large-scale socio-economic impact for the underserved.

Governments and institutions provide donor funding to the GSMA Mobile for Development Foundation, which runs thematic programmes that research impact opportunities, engage on-the-ground in target countries, and provide advocacy expertise to partners. Donor funding is also used to provide direct funding to subgrantees through the GSMA Innovation Fund.













GSMA 35 / 92 **ANNUAL REPORT 2024** CHAPTER 4 / OPERATIONAL OVERVIEW

Digital inclusion

By placing everyday services within easy reach of individuals, their families and communities, the mobile internet delivers information and opens up new opportunities. While substantial progress has been achieved in increasing internet adoption and usage, there is a growing digital divide between and within countries. As 96% of the world's population is already covered by a mobile broadband network, addressing the usage gap the 39% of the global population with coverage, but not using the internet - is the main challenge.

The GSMA helps the mobile industry address the usage gap by conducting research and analysis, engaging with governments, intergovernmental organisations and partners, and advocating across multiple channels. The GSMA's State of Mobile Internet Connectivity 2024 report attracted nearly 1,000 page views in its first week after publication in October, reinforcing its value. The report received tier one media coverage through CNBC Africa, and in the first four days after publication, generated more than 1,400 articles in the media.

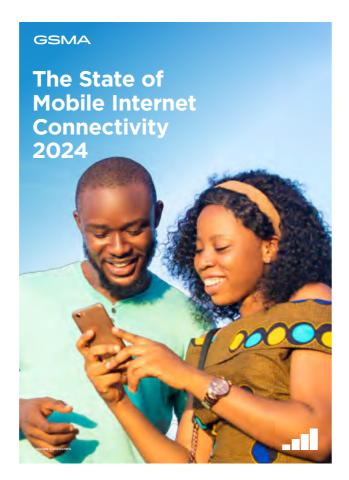
In July, the GSMA launched the global Handset Affordability Coalition, comprising operators, vendors, device ecosystem players and financial institutions. By year end, 23 organisations had joined the coalition, which has four areas of focus:

- Research and analysis to understand smartphone affordability issues
- Marketing and profiling to highlight successful initiatives
- Strategic partnerships to foster collaboration
- Access to financing to connect members with funding sources

The coalition received endorsements from Guangzhe Chen, Vice President for Infrastructure at the World Bank, and Doreen Bogdan-Martin, Secretary-General of the ITU.

The GSMA's efforts led the World Bank Group (World Bank and IFC) to identify affordable devices as a key programmatic activity as part of its Global Challenge Programme adopted in 2024. Facilitated by the GSMA, the World Bank ran extensive consultations with mobile operators to identify the key barriers and opportunities in promoting smartphone ownership and improving affordability. This process led to the creation of a suite of financial instruments that the World Bank Group plans to deploy to support device financing schemes and lower smartphone prices across LMICs.

Also in July, the GSMA published the 2024 Mobile Connectivity Index (MCI), which measures



the performance of 173 countries against the key enablers of mobile internet adoption infrastructure, affordability, consumer readiness, and content and services - which are integral to the industry's commitment to drive mobile internet connectivity and accelerate digital inclusion. More than 130 policymakers received training through MCI Workshops in Malawi and Nigeria. As a result, the GSMA and the government of Malawi began work to implement a digital skills campaign in partnership with the country's universal service fund. In Zambia, the GSMA worked with the regulator, ZICTA, on a digital skills campaign as part of the implementation of Zambia's Digital Transformation Strategy.

The GSMA's Mobile Internet Skills Training Toolkit (MISTT) has now been used to train more than 70 million people across more than 40 countries in the basic digital skills needed to use the mobile internet, including a further 12 million people between July 2023 and June 2024. A new MISTT website was launched in 2024 to improve accessibility and ease of use, featuring a multi-page layout with enhanced navigation and bulk download options, making it easier for users to find content.

The GSMA helped the African Telecommunications Union (ATU) to develop the ATU-R Recommendations on the Promotion of Rural ICT connectivity in Africa, which was adopted in 2024. The document includes recommendations to help close the coverage gap and increase digital skills.

The gender gap

The GSMA continues to measure the persistent mobile gender gap - women in LMICs are 8% less likely to own a phone than men, and 15% less likely than men to use the mobile internet.

Through the GSMA Connected Women Commitment initiative, over 50 mobile operators across LMICs have made formal commitments to reduce the gender gap in the customer base of their mobile internet and/or mobile money services. Since 2016, these operators have collectively reached over 70 million additional women with these services, with 5 million additional women reached in 2024 alone. Between July 2023 and June 2024, five new commitments and eight recommitments were made.

In 2024, the GSMA supported key government initiatives to close the mobile gender gap. Partnering with the Pakistan Telecommunication Authority and UNESCO, the GSMA helped develop Pakistan's Digital Gender Inclusion Strategy, launched at MWC Barcelona. The GSMA contributed by sharing gender-disaggregated data, best practices and direct policy feedback, and convened mobile operators to participate in consultations. The resulting strategy prioritises affordability, digital literacy, safety and addressing gender norms that impact women's mobile access. Additionally, the GSMA's Bridging the Mobile Gender Gap course convened more than 35 policymakers and regulators in Pakistan and Indonesia.

In 2023, the GSMA Foundation was selected as part of a consortium to manage the Women in the Digital Economy Fund (WiDEF), a five-year US\$60 million joint initiative between USAID and the Bill & Melinda Gates Foundation to accelerate progress on closing the gender digital divide, with support from other partners.

As part of the project, in July 2024 the GSMA Foundation opened applications from large private sector entities seeking technical support to scale proven solutions to significantly close the gender digital divide. In September, it announced a partnership with the Reliance Foundation to provide up to US\$10 million through funding rounds for innovative initiatives to bridge the gender digital divide focused on India. This led to the launch in October of the first WiDEF India grant funding round.

Following the review by the US Government of all foreign aid programmes, the GSMA Foundation's WiDEF grant agreement was terminated in



February 2025. The GSMA is currently exploring opportunities to resume part of the planned activities with other partners and remains committed to supporting efforts to help reduce the digital gender gap through its existing Connected Women initiatives.

In May, the GSMA released the annual Mobile Gender Gap Report 2024 which showed that the gender gap in mobile internet adoption across LMICs narrowed for the first time since 2020. The report explores the key barriers to equal mobile ownership and mobile internet use in LMICs and highlights the socio-economic benefits of addressing these barriers for the mobile industry, the economy and society, and for women themselves.

Key messages from the report were shared on various high-level platforms, such as Women 20 (W20), The Commonwealth Women's Forum, the United Nations General Assembly, and the ITU's Digital Skills Forum, and were cited by Women's World Banking and USAID among others.

The report received tier one and trade media coverage, achieving a 22% increase in media coverage compared with the 2023 edition, which reinforced its ongoing relevance and impact. The report, and the key findings in French and Spanish, generated 1,600 downloads and 4,000 page views in the first five months.

GSMA GSMA 36/92 37 / 92 ANNUAL REPORT 2024
CHAPTER 4 / OPERATIONAL OVERVIEW

Humanitarian preparedness, response and recovery

From conflict-induced displacement to the increasing frequency and severity of disasters, global humanitarian needs continue to rise. More than 400 million people now need humanitarian assistance, up from 360 million in 2023. Connectivity and digital technologies are vital for people in crisis, providing access to lifesaving information and humanitarian assistance and the ability to connect with loved ones.

In 2022, UN Secretary-General António Guterres launched the Early Warnings for All (EW4All) Initiative, which aims to ensure that everyone in the world is protected by an early warning system (EWS). Having catalysed the role of the mobile industry in EWS for several years, the GSMA immediately took a leadership role in the EW4All initiative, focused on "warning dissemination and communication", and is represented on the High-Level Advisory Panel by the GSMA Director General. Leadership includes:

- Providing technical assistance to mobile operators, humanitarian partners and government stakeholders
- Convening the mobile industry and building multi-sectoral partnerships to develop and implement EWS
- Publishing research on mobile-enabled EWS, including <u>cell broadcast</u> and <u>inclusive risk</u> communications
- Investing in innovative digital solutions for EWS through the GSMA Innovation Fund

At COP28 in late 2023, the GSMA launched an Industry Pledge with the International Telecommunication Union (ITU) to highlight the leading role of the mobile industry in EWS and the life-saving power of mobile connectivity and services in the face of increasing disasters. In 2024, momentum around the pledge increased, with a growing number of signatories, fuelled by a brief to the GSMA Board in Seoul in October.



The GSMA's work in collaboration with UNHCR (the UN Refugee Agency), the ITU and the Government of Luxembourg continues via the Connectivity for Refugees Initiative. In 2024, the GSMA mapped out the connectivity needs and usage of forcibly displaced people, gathered data on the mobile coverage gap and continued to implement solutions with stakeholders. The initiative is working towards connecting 20 million forcibly displaced people and their hosts by 2030.

This work and the broader humanitarian activities are governed by the principles of the GSMA's <u>Humanitarian Connectivity Charter</u>, which aims to enhance coordination of the industry before, during and after an emergency.

The GSMA has to date provided more than 12.5 million people with improved access to and use of life-enhancing mobile services during humanitarian preparedness, response and recovery, which includes 1.2 million people added in 2024.

"The GSMA Mobile for Humanitarian Innovation programme has been a critical founding partner with UNHCR and ITU of the Connectivity for Refugees initiative. We in UNHCR are thrilled how the GSMA is bringing its unique networks and expertise from the mobile industry to further the initiative's aims of connecting 20 million refugees by 2030."

Hovig Etyemezian, Head of Innovation Service, UNHCR

Financial inclusion

Mobile money is a major catalyst of financial inclusion, contributing to 15 of the 17 United Nations Sustainable Development Goals (SDGs) and connecting millions of people to formal financial services. It is especially impactful in offering underrepresented groups, such as women, rural communities and forcibly displaced persons, access to life-changing financial products.

The GSMA continues to support the growth and diversification of the mobile money industry through its research, partnerships to address key barriers to access and usage, and advocacy and regulatory work to drive enabling policies for the industry.

In April, the GSMA published the 12th edition of the <u>State of the Industry Report on Mobile Money</u>, which is the only source of supply-side data for the industry. The report shows how the industry is driving financial inclusion for billions of people and opening opportunities for entrepreneurs and small businesses. The latest report found that there are now more than 1.75 billion registered mobile money accounts processing US\$1.4 trillion a year. International money transfers (IMT) and merchant payments were among the fastest-growing use cases in 2023, showing the impact mobile money is having on driving down transaction costs of critical remittances and supporting small business growth.

In other research, the GSMA reported the total gross domestic product (GDP) between 2013 and 2022 of countries with a mobile money service was US\$600 billion higher than it would have been without mobile money. This is the equivalent of mobile money increasing GDP by around 1.5% over the same period.

To address key barriers and persistent financial exclusion, the GSMA and VISA launched a five-year initiative to advance digital financial inclusion for 20 million individuals and micro businesses. As a lack of financial literacy is a key barrier to adopting and using digital financial services, the GSMA, in partnership with mobile money providers, will develop and localise relevant educational content.

The GSMA's strong engagement with policymakers, central bank regulators and international organisations successfully influenced positive policy change this year, including:

 The removal of proposed price caps by the Bank of Tanzania, giving mobile operators the flexibility of market-led pricing, leading to revenue assurance and providing a much-needed best practice example for other regulators.



The issue of a new Foreign Exchange Directive by the National Bank of Ethiopia in July, introducing flexibilities for both inward and outward remittances. As a result, GSMA members can now offer these services, creating new revenue streams and improving supply chain and other operational efficiencies.

IMT are an important use case for GSMA members who seek to diversify revenue streams for their mobile money businesses. Given that there is inadequate data to support and substantiate IMT policy reforms, the GSMA conducted an IMT cost corridor survey. covering 178 unique corridors from 30 sending countries. The survey discovered a positive trend - a 19-basis-point drop in the cost of sending US\$200, from 3.73% in 2022 to 3.54% in 2024 - providing crucial support for advocating for mobile money-enabled international transfers. While mobile money is the most affordable IMT method, it accounts for only 4% of global remittances, pointing to a significant opportunity if stakeholders collaborate effectively.

GSMA 38/92 GSMA 39/92

Attracting early-stage investment

In low- and middle-income countries (LMICs), the GSMA aims to attract large-scale investment for digital solutions that can positively impact the lives of underserved populations and bolster innovation and commercial viability for mobile operators.

Governments and institutions provide donor funding to the GSMA Mobile for Development Foundation to research impact opportunities, engage on-the-ground in target countries, and provide advocacy expertise to partners. Donor funding is also used to provide direct funding to innovative local entrepreneurs, who are, by nature, early-stage higher-risk investments.

In 2024, the GSMA Innovation Fund was funded by the UK Foreign, Commonwealth and Development Office (FCDO) and the Swedish International Development Cooperation Agency (Sida). Through grant funding and tailored venture building support, it enables innovators in LMICs to scale and amplify their social and environmental impact.

Between 2017 and 2024, the GSMA Innovation Fund invested in 167 organisations in LMICs that went on to raise over £673 million in additional funding from private investors, equivalent to 24 times the investment made by the Fund's donors up to October 2024.

In 2024, the Fund focused on mobile internet adoption and digital inclusion, assistive tech solutions targeting persons with disabilities, digital urban services providing access to energy,

water, sanitation, plastic recycling and waste management, climate resilience and adaptation. and humanitarian innovation.

In February, the GSMA Innovation Fund for Climate Resilience and Adaptation 2.0 selected 12 grantees to help accelerate the testing, adoption and scalability of digital innovations that enable the world's most vulnerable populations to adapt to, anticipate and absorb the negative impacts of climate change, or strengthen biodiversity.

At the end of 2023, GSMA Innovation Fund start-up Aguarech raised US\$1.7 million in equity led by Aqua-Spark, a Netherlands-based global aguaculture investment fund, with additional capital from Acumen, Katapult and Mercy Corps Ventures. This funding was used to hire talent, acquire more fish feed and set up infrastructure to support more vertical integration of their technology. In July 2024, Aguarech raised a further US\$350,000 from Village Capital's Reducing Inequalities Investment Facility, backed by FMO's MASSIF Fund.

Also in July, GSMA Innovation Fund start-up ATEC raised £3 million in equity from Schneider Electric Energy and the Spark+ Africa Fund to expand its partnerships with last-mile distributors and carbon buyers, as well as continuing its research and development. ATEC's eCook stove leverages SIM technology to accurately track usage on each device and process this into 100% data-verified carbon credits through its proprietary digital monitoring, reporting and verification platform.

Between 2017 and 2024, the GSMA Innovation Fund invested in £673m+ organisations in LMICs that went on to raise over 24 times the investment made by the Fund's donors up to October 2024

Grantee spotlight - Koolboks

Koolboks produces off-grid, solar-powered refrigeration in Nigeria, where up to 40% of all food produced is wasted, largely due to a lack of cold storage. Even with access to the electricity grid, power is unreliable and back-up diesel generators are common. These generators are expensive for customers and harmful to the environment.

Koolboks received a GSMA grant in March 2022 to launch and scale its solution targeting fish traders, most of whom are women. With the introduction of Internet of Things connectivity, Koolboks can monitor their refrigeration systems remotely and offer "cooling-as-a-service."

Since partnering with the GSMA, Koolboks freezers have attracted 140 users in Lagos and other peri-urban areas, 76% of which were women. Nearly 90% of Koolboks customers said the freezers have improved their quality of life. and 85% reported an increase in income and a reduction of waste.

In 2024, Koolboks partnered with WidEnergy Africa, a GSMA Innovation Fund alumni, with the goal to sell at least 500 units of their solarpowered refrigerators in Zambia in the next 3 years.





Grantee spotlight - ReCircle

ReCircle's digital platform aggregates the collection and processing of dry waste in India, which can be sold as plastic credits (transferable certificates representing the amount of plastic waste managed) to businesses.

In many countries, companies producing plastic waste do not have a proper channel to recover that waste to meet their sustainability commitments and comply with local guidelines. Low-value, non-recyclable plastics, such as food packets and wrappers, are usually dumped in landfills.

In March 2022, the GSMA supported ReCircle to digitise the dry waste supply chain from collection to processing, to enable transparency and drive operational efficiencies in waste management. The ReCircle platform brings together individuals, household-level waste collectors, large-scale waste aggregators, recyclers and processors.

Since partnering with the GSMA, ReCircle has diverted over 100,000 metric tons of waste from landfills, and now works across 270 cities and towns.

Following the closure of the GSMA grant, 80% of the partners surveyed reported an improvement in their quality of life after working with ReCircle. In recognition of their contribution to the waste management sector, co-founders Rahul Nainani and Gurashish Singh Sahni were both named in Fortune India's 40 under 40 list for 2024.

GSMA GSMA 40/92 41/92 **ANNUAL REPORT 2024** CHAPTER 4 / OPERATIONAL OVERVIEW

Providing interoperable services

GSMA Industry Services address challenges for organisations across the connectivity ecosystem and industries that rely on connected technology, such as manufacturing or fintech. These challenges are often identified by GSMA Working Groups.

Device services are based on the accurate and comprehensive mobile device data collated by the GSMA and includes type allocation codes (TACs) for all connected industries. These services provide essential insights to improve business performance and the customer experience, as well as to protect the wider ecosystem.

Network services drive the reliability, quality and sustainability of global networks for the 5G era

and beyond, by enabling better collaboration between businesses in the ecosystem, to facilitate improved 4G and 5G services - along with call and SMS fraud prevention.

Assurance services provide a process of assessing security requirements, which are defined by industry standards. This enhances resilience in networks and devices as security controls, as suppliers are assessed and a baseline of security requirements are met.

In 2024, the GSMA launched GSMA Equipment Marketplace, GSMA Device Compatibility and GSMA Call Check to help customers achieve business sustainability and strengthen fraud prevention.













Training the industry

GSMA Advance, launched in 2024, accredits and trains professionals in the mobile ecosystem. Informed by feedback from GSMA members, the courses are designed to develop knowledge and skills in areas most pertinent to mobile operators today, including spectrum management, roaming and mobile privacy, climate change and responsible AI adoption. The GSMA partners with organisations in the wider mobile ecosystem to understand their skills and knowledge gaps, and together create learning pathways that suit the needs of their workforce - whether self-paced online training or bespoke in-person workshops.

GSMA Advance launched the GSMA's first professional accreditation Best Practice in Public

Policy and Regulatory Impact, a six-week course using a hybrid blend of self-paced online learning. live expert seminars and assessments. A second accreditation Foundation in Mobile & Telecom ran over five weeks in November and December and was designed to develop the knowledge of professionals new to the industry and support the GSMA's mission to unify the connectivity ecosystem.

In 2024, participants from 45 companies, including MTN, Azercell, VEON, Ooredoo and SaskTel, enrolled in GSMA Advance training. GSMA Advance held in-person training on Roaming in Amsterdam, AI for Executives in Mexico and Responsible AI in Benin, as well as online training on VoLTE.

GSMA GSMA 42/92 43 / 92

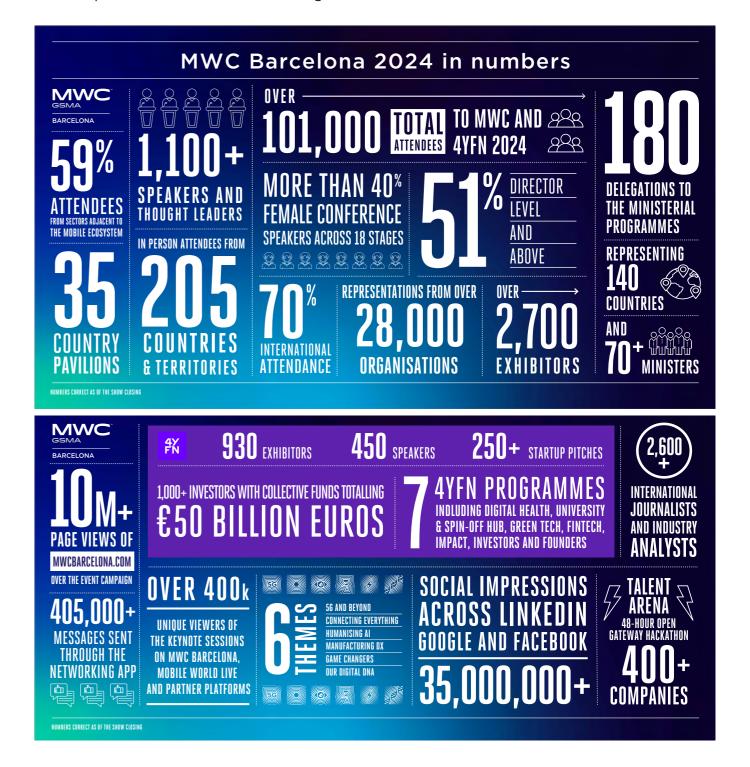
Promote

Convening the global ecosystem, publishing industry intelligence, and speaking to the right media channels to ensure that the mobile industry is trusted when and where it matters.

Convening our global community

The convening power of the GSMA is central to its full value to members and its impact on society. GSMA events bring together key players from the private and public sectors, as well as partners from across other industries and regions, to progress the mobile industry and society as a whole.

MWC Barcelona 2024 attracted more than 101,000 attendees from 205 countries and territories. It provided a very strong reminder of what is possible when people convene face to face – progressing relationships, sales, policies, international cooperation, social issues and much more. In 2024, the percentage of female speakers and non-mobile industry speakers continued to rise. Female speakers have risen from an average of 24% in 2021 to 40% in 2024.



GSMA 44/92 **GSMA** 45/92

ANNUAL REPORT 2024 CHAPTER 4 / OPERATIONAL OVERVIEW

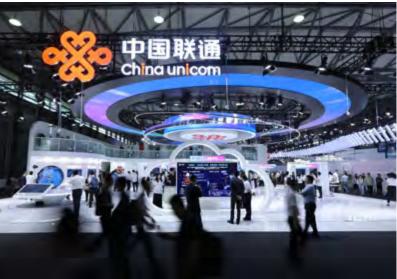
2024 marked the 10th anniversary of 4YFN, the startup event at MWC Barcelona, which brings together entrepreneurs, investors, and companies to launch new ventures.





https://www.youtube.com/watch?v=kjjH9cp-3lc









ANNUAL REPORT 2024

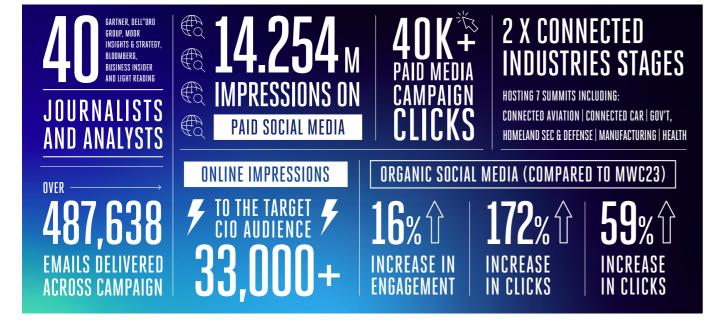
CHAPTER 4 / OPERATIONAL OVERVIEW











The GSMA's regional M360 series is designed to reach all GSMA members and address their specific needs. In May, M360 Eurasia welcomed over 700 attendees, from 237 organisations and 49 countries and territories to Baku, Azerbaijan, including speakers from Azercell, Veon, Google, the World Bank and the ITU.





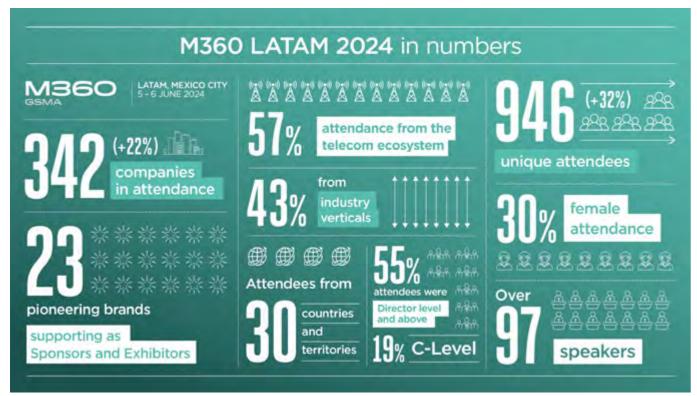








M360 LATAM hosted over 900 attendees in México City in June, providing a conference platform to cultivate public and private co-operation in mobile and adjacent industry verticals, to discuss their challenges and successes, as well as network with peers.





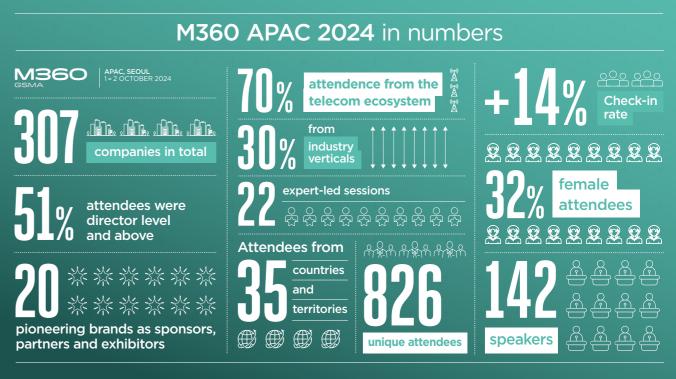


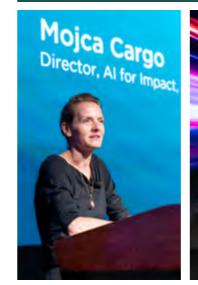






More than 820 people attended M360 APAC in Seoul, South Korea in October. Leaders from the private and public sector met to discuss how to realise the full potential of the digital economy, through a united vision for APAC.





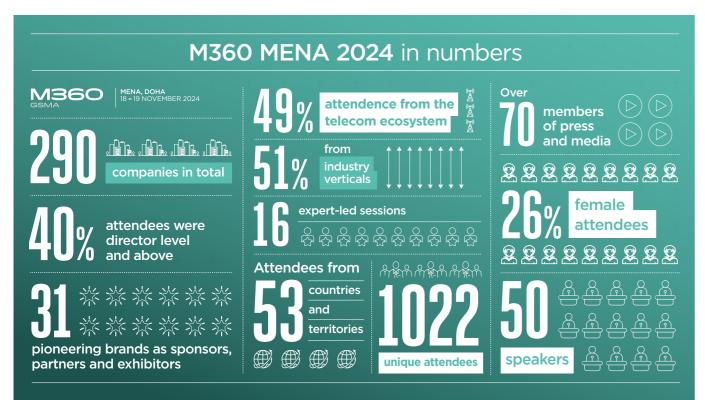








In November, M360 MENA was hosted for the first time in Doha, Qatar, where leaders from the private and public sectors discussed how to continue driving partnerships for digital-first societies. The event convened over 1,000 delegates from more than 50 countries, representing 290 companies.











Building trust through cybersecurity

The GSMA is enhancing trust and securing the mobile ecosystem by ensuring that cybersecurity has a strong and growing presence within the industry. The GSMA's <u>Annual Security Landscape Report</u> provides an overview of established and emerging threats to services and technologies that affect mobile operators and their customers.

In 2024, more than 50 mobile operator chief information security officers (CISOs) attended the GSMA's global CISO roundtable and regional meeting series. Security also became increasingly prominent across GSMA events, which are now regular platforms for showcasing cybersecurity's important role in industry. At MWC Barcelona, the GSMA debuted an extended Security Summit to complement the C-level security conference.

In September, the GSMA T-ISAC (Telecommunication Information Sharing and Analysis Centre) held its first Summit in London. With a 24% increase in members and a 23% increase in intelligence sharing, T-ISAC continues to help the mobile industry defend against real-time threats.

Collaboration between GSMA members via the Fraud and Security Group, with participation of more than 1,200 mobile fraud and security specialists, resulted in 30 new or updated threat assessments, solution specifications and/or best practice publications in 2024. This included updated 5G security and IoT guidelines, and a new declaration process for the Global Title Leasing Code of Conduct.

The GSMA's Post Quantum Task Force, initiated in 2023, continued to unite the wider mobile tech ecosystem in preparation for a safe transition to the quantum era. The GSMA Coordinated Vulnerability Disclosure programme continued to attract researchers seeking to resolve security issues before they could be explored by attackers to impact the industry.

The increased number of security activities in 2024 was indicative of the demand from mobile operators, vendors and other relevant audiences with an interest in cybersecurity. The GSMA continues to help the industry enhance ecosystem end-user defences against fraud and security threats.



Forecasting the future

























In 2024, **GSMA Intelligence** solidified its role as the telecom industry's definitive source of insight, informing transformation across the mobile ecosystem and supporting GSMA work, including Open Gateway, AI, enterprise digitisation and non-terrestrial network (NTN) initiatives.

The new AI State of the Market series, backed by industry-wide surveys, offered a critical look at AI's expanding role in telecoms, setting a benchmark for future-AI driven strategies. Meanwhile, the New Open Gateway State of the Market series, generated from industry tracking and developer-focused surveys showcasing latest developments, global coverage and use cases, helped to quantify the global impact of the initiative.

To support the GSMA's drive into vertical membership, GSMA Intelligence conducted the expansive *Enterprise Survey* covering 4,200

companies across 10 sectors—producing a firstof-its-kind dashboard and report on enterprise needs in various sectors, including manufacturing, automotive and fintech.

GSMA Intelligence also developed a *Mobile Energy Efficiency Benchmarking* tool based on real-world data inputs from operators on a fully anonymised basis to quantify network energy consumption and efficiency levels, and fuel sources.

GSMA Intelligence published over 200 reports in 2024, covering core themes such as 5G, generative AI, eSIM, and spectrum management, while maintaining and strengthening a vast data repository. It also initiated a knowledge management process aimed at consolidating insights across the GSMA, empowering the organisation to lead with confidence and clarity.

Mobile World Live (MWL), the GSMA's media operation, continued to play an influential role by bringing daily breaking news, expert analysis and intelligence to industry professionals. In-house editorial and production specialists worked directly with brand partners to produce bespoke strategic content and deliver it to a global audience via online and media channels.

MWL's flagship daily newsletter continued to serve a global community of over 188,000 mobile, tech and telecommunications professionals, curating engaging editorial content for its audience. As the lead media partner for the GSMA, MWL provided comprehensive coverage of GSMA events. At MWC Barcelona, MWL TV livestreamed keynotes, CxO interviews, show floor features and the GLOMO Awards, making all content available on-demand immediately on MobileWorldLive.com. There were more than 25,200 live views of the 80+ hours of live broadcast. MWL also streamed the Mobile 360 event series to attract a wider audience, and live streamed the keynote presentations from MWC Las Vegas, supplemented by analysis review programmes and onsite interviews.







GSMA 54/92 **GSMA** 55/92

Amplifying thought leadership

In 2024, the GSMA's communications strategy aimed to deliver impact across all ongoing work, with a specific focus on three priorities: promoting GSMA Open Gateway, addressing the usage gap and the fair share campaign. Refined messaging, appropriate spokespeople and the leveraging of events all established the GSMA as a thought leader in the industry and beyond.

The objective was to ensure clarity and consistency in all external communications, while enhancing an understanding of the GSMA's unique role among current and new audiences.

Communications initiatives showcased the expansion of MWCs and the M360 series into adjacent sectors, positioning them as essential for industry professionals. The GSMA welcomed more than 2,600 international journalists to MWC Barcelona, generating over 149,400 media articles throughout the event. Notably, more

than 28,200 of these articles made prominent references to the GSMA and the three priorities, and GSMA spokespeople gave 106 interviews to leading global media outlets.

GSMA Open Gateway attracted more than 18,000 media mentions across 105 countries, up from around 9,000 mentions in 2023. With operators and enterprises signing up to GSMA Open Gateway throughout 2024, the opportunities with this initiative continue to expand.

The GSMA remains committed to delivering quality and relevance in its external communications, by diversifying its PR content beyond press releases, focusing on the most impactful news, and exploring other channels, such as external speaker platforms, blogs, influencer collaborations, open letters, media roundtables and in-person interviews.

































ANNUAL REPORT 2024

Chapter 4.5

Unify

Facilitating innovation, enabling standards, and discovering common viewpoints to ensure global interoperability, shared positions and monetisation opportunities for network assets.

Extending 5G

To enhance enterprise connectivity and enable society to thrive, the GSMA is working to unlock the full potential of 5G standalone (SA) networks and 5G-Advanced technologies. By uniting the industry around this goal, the GSMA is fostering collaboration and accelerating the adoption of next-gen connectivity to create new opportunities for enterprises and consumers alike.

The GSMA 5G Futures Community brings together global ecosystem players to explore 5G benefits, best practices, and solutions for key challenges facing operators and enterprises. Through extensive quarterly outreach and events, members stay updated on 5G innovation, connect with experts and access in-depth insights into the latest 5G advancements. In 2024, the GSMA 5G Futures Community grew by 32% to 1,900 active members.

Although the 5G landscape is evolving rapidly, adoption of 5G SA networks has been slow as many operators adopt a "wait and see" approach, opting to continue scaling 4G LTE over 5G. Almost 20% of global networks operate on 5G SA, but GSMA Intelligence expects the transition to accelerate over the next two years, with 88 operators planning to deploy 5G SA during this period.

However, the B2B segment, which is projected to contribute US\$1 trillion in operator revenue opportunities by 2030 for services beyond core telecoms, has yet to achieve the necessary scale in most markets.

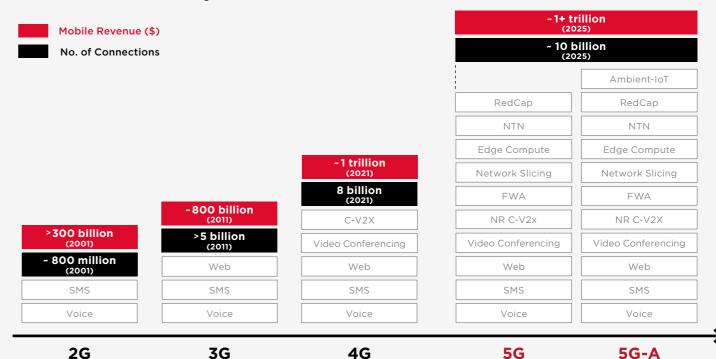
CHAPTER 4 / OPERATIONAL OVERVIEW

The GSMA continued to address the global 5G investment gap by collaborating with mobile operators, equipment vendors, and enterprise verticals to overcome challenges around 5G SA deployment, 5G-Advanced technology adoption and interoperability across diverse networks.

5G-Advanced is the next step in development of cellular technologies and the GSMA launched the <u>5G-Advanced</u>: <u>Shaping the Future of Operator Services paper</u> at MWC Barcelona. The paper was downloaded more than 1,000 times by telcos and broader ecosystem players by year end. Additionally, the GSMA initiated the <u>TechFive[G] interview series</u>, where market leaders discuss the opportunities and use cases of 5G-Advanced technologies, sharing insights on how to overcome barriers to adoption.

5G-Advanced is the next step in the development of cellular technologies*

*Not an exhaustive list of technologies



Source: GSMA Intelligence

GSMA 58/92 **GSMA** 59/92

Monetising 5G through APIs: Open Gateway

Network APIs are one of the leading 5G monetisation opportunities for mobile operators. The GSMA Open Gateway initiative is enabling operators to monetise network assets through a standards-based, interoperable API system and universal federation.

GSMA Open Gateway aggregates API capabilities that are of value to banking and e-commerce to support authentication and anti-fraud solutions. By leveraging 5G SA capabilities, including increased uplink reliability, network slicing and enhanced interoperability, operators can now offer a new suite of flexible, guaranteed services for enterprises, collaborating closely with tech firms and developer communities to drive industry-wide innovation.

In support of GSMA Open Gateway, 67 mobile operators and 27 channel partners have signed Memoranda of Understanding (MoU). Together they represent 278 mobile networks, covering

three-quarters of global mobile connections. That represents a marked increase on the 228 networks representing over 64% of mobile connections globally supporting the initiative at MWC Barcelona 2024.

GSMA Open Gateway was launched at MWC Barcelona 2023, with the support of 21 mobile operator groups. The GSMA Open Gateway framework covers the overall architecture and principles of exposing network capabilities and identity context, via open interoperable APIs creating programmable connectivity. The GSMA collaborates with the CAMARA open-source project for developers to access enhanced network capabilities, driven by the Linux Foundation in collaboration with the TM Forum in the development of interoperable APIs. Working in CAMARA and the TM Forum, simple and clear APIs between telcos and enterprise developers can be delivered quickly, using developer-friendly tools and software code.

67



MoU signatories (network operators only)

75%



mobile connections (globally)

278



networks as part of 65 operator groups participating

37



CAMARA APIs published to date

85



APIs certified by the GSMA and 131 in pipeline 52



commercial launches (globally)

27



channel partners

6



commercial digital case studies published 18,540



media mentions of GSMA Open Gateway



Outreach to developers ramped up throughout 2024, with Open Gateway evangelists presenting at key events, such as Kubecon, API Days, Openatom and DSP Leaders World. The inaugural GSMA Open Gateway Developer Conference, DevCon, sponsored by Nokia, 5GFF and Telefónica, was held at MWC Las Vegas, along with the Open Gateway Challenge – an awards programme to recognise developers who utilise public CAMARA APIs to create commercial cloud-based services.

In addition, the GSMA launched the Open Gateway Community, which provides a knowledge sharing space for operator and developer communities to meet and present use cases, proofs of concepts and best practices. By the end of 2024, more than 350 people had engaged with the Community.

With commercial launches in Argentina and Chile in 2024, Open Gateway is now in widespread use across **Latin America** reaching more than 90% of the connections in the region. Every country in the region has at least one operator supporting the Open Gateway initiative, while Mexico, Colombia, Ecuador, Peru, Chile and Argentina already have a clear roadmap of APIs for their markets.

In the **Middle East**, new Open Gateway signatories included Ooredoo Group and Batelco, in addition to du, e&, Omantel, STC and Zain. The GSMA facilitated collaboration between e& and du for deployment of Open Gateway in the UAE.

In **Asia Pacific**, the GSMA launched the APAC Fintech Forum, to bring together mobile operators from Indonesia, Singapore, Malaysia, Thailand and Philippines to build a fintech sector community to advance traction and scaling of Open Gateway fintech APIs.

In **Greater China**, nine out of 11 operator groups in the region have signed up to Open Gateway. They account for more than 98% of the connections in Greater China, while six more leading companies signed as channel partners. In 2024, Chinese operators submitted 40% of APIs that have been accepted by CAMARA.

The GSMA-China Telecom Open Gateway Open Lab, which offers developers support, hosted a hackathon at MWC Shanghai, while the GSMA-China Unicom Innovation Incubator provides resources and funding for Open Gateway projects. The GSMA-China Mobile Joint Innovation Hub also advanced Open Gateway, as well as other advanced technologies, such as AI, 5G-Advanced and 6G.

The Open Gateway initiative also gained traction in **North America**. In the US, AT&T, T-Mobile and Verizon conducted independent tests of the first cross-carrier, interoperable API. In Canada, the GSMA strengthened partnerships with Canadian operators around Open Gateway, and built connections with Canadian universities to support new research and development projects focused on 5G API applications.

In 2024, the GSMA launched GSMA Fusion, a new approach to create demand for Open Gateway. Its aim is to enable enterprise sectors to make a public commitment for connectivity requirements across multiple markets, in the short-term utilising Open Gateway capabilities, and in the future, to support the technological development of capabilities required to make enterprise deployments a success.

Addressing global challenges

Enhancing the daily lives of more than 5.6 billion people around the world, mobile connectivity is at the heart of global socio-economic progress. By developing industry-wide positions, the GSMA is helping to realise the potential of mobile connectivity to address the world's biggest challenges.

Climate

The climate crisis remains one of the world's most pressing challenges. In March, the GSMA released its fourth annual report <u>Mobile Net Zero: State of the Industry on Climate Action 2024</u>, highlighting how the mobile industry is progressing against its ambition to be net zero by 2050. Seventy operators, representing nearly half of global mobile connections, have committed to rapidly cutting their emissions over the next decade. That represents an increase of eight operators in 2024.

The GSMA continues to encourage companies across the industry to disclose climate impacts and set targets in line with the net zero ambition. A main driver of this is the GSMA Climate Action Task Force, which consists of 75 mobile network operators covering 80% of global mobile connections, following the addition of 10 operators in 2024.

In 2024, the GSMA conducted research in 26 markets on consumer attitudes and behaviours around mobile device circularity (environmental impact, longevity, reuse, repair and recycling) to support industry transformation and the business case for greater circularity. This research was well received by members and will form the basis of work on circularity in 2025.

Access to renewable energy sources continues to be an issue for many operator members. To help address this, the GSMA facilitated dialogue between operators in Africa, the World Bank and third parties to identify collaboration opportunities to improve access to renewables and stimulate a combined green digital transformation.

As outlined in the section on Attracting early-stage investment, the first phase of the GSMA Innovation Fund for Climate Resilience and Adaptation Cohort completed its final disbursements in 2024.

GSMA Innovation Fund for Climate Resilience and Adaptation grantees

GeoKrishi:

https://www.gsma.com/ solutions-and-impact/ connectivity-for-good/mobilefor-development/gsma_ resources/gsma-innovationfund-start-ups-geokrishi/



Komunidad:

https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/gsma_resources/gsma-innovation-fund-start-ups-komunidad/



BKK:

https://www.gsma.com/ solutions-and-impact/ connectivity-for-good/mobilefor-development/gsma_ resources/gsma-innovationfund-start-ups-bkk/



Hello Tractor:

https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/gsma_resources/gsma-innovation-fund-start-ups-hello-tractor/



J-Palm:

https://www.gsma.com/ solutions-and-impact/ connectivity-for-good/mobilefor-development/gsma_ resources/j-palm/



CoAmana:

https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/gsmaresources/gsma-innovation-fund-start-ups-coamana/









In March, the GSMA published <u>The Nature Tech</u> <u>Nexus: Bridging Biodiversity and Business</u>, exploring key barriers and drivers of action for the mobile sector. It features case studies of mobile operator initiatives across the Global South, demonstrating the sector's potential to transform business operations to be nature positive. This includes scaling existing biodiversity solutions and acting as a launching customer or investor in nature tech.

Since publication, the research insights have been shared at key events, including the Tech4Nature Summit 2024 in Shenzhen, China, co-hosted by IUCN and Huawei, as well as COP16 in Cali, Colombia. The research has since sparked collaborative engagements with the nature tech ecosystem to explore opportunities for scaling critical innovations.

The GSMA also published <u>Making Circularity</u> <u>Work</u>, taking stock of how and where digital innovation supports circular economy models in waste management, and including insights from the GSMA Innovation Fund for Digital Urban Services, which completed in 2024.

Environmental, social and governance

In 2024, 25 mobile operators submitted data to GSMA Intelligence as part of the <u>ESG Metrics</u> <u>for Mobile</u> benchmarking process. Ten of these operators also publicly reported against the metrics.

In June, the GSMA published <u>ESG Metrics for Mobile Insights</u>, which provides analysis of the previous year's ESG data received from early adopters. This report provides operators with insights on key areas, progress, gaps and opportunities to move the needle on key ESG indicators.

Twelve mobile operators, along with the European Financial Reporting Advisory Group (EFRAG) and the European Commission, attended a workshop on the EU's Corporate Sustainability Reporting Directive (CSRD) run by the GSMA in Brussels. This led to the inclusion of GSMA EU members as a key stakeholder group for the EFRAG CSRD review process, and the *ESG Metrics for Mobile* whitepaper is now being considered as an input document for CSRD sector-specific metrics development.

As biodiversity and nature continue to decline, the GSMA worked with more than 40 mobile operators on a nature impact assessment guidance for the mobile sector. This work has helped operators to build capacity in this important area and will provide a framework on how to report on material issues.

Digital child sexual exploitation

In February, the GSMA Mobile Alliance was relaunched as the <u>GSMA Mobile Alliance</u> to combat Digital Child Sexual Exploitation, evolving to reflect the broader scope of the group's mission in the current climate and digital ecosystem. Member commitments also expanded and evolved to address the impact areas that emerged during stakeholder consultations and member working sessions.

As part of this effort, members will continue to work to keep their own services free from child sexual abuse material and push for change. They will also support national stakeholders, including frontline workers in law enforcement and at child helplines.

GSMA 62/92 GSMA 63/92



Advancing common goals

"GSMA membership is very important for the business I am in, international roaming... for our business, it's really very important to have global principles and guidelines that you can only get through an organisation as the GSMA."

Marjolein Medendorp, International Roaming Expert, Telefónica Móviles Spain "The most important for us is that the GSMA has initiated this group of NTN - non terrestrial networks - that is the one that will drive the standardisation towards the satellite industry... having the direction connection with the MNOs helps us a lot. The way forward to signing roaming agreements with them is thanks to the GSMA standardisation framework."

Jaume Sanpera, CEO, Sateliot

5G Standalone & Network Slicing

In 2024, GSMA working groups made significant advancements to support 5G standalone (5G SA) roaming. **The Wholesale Agreements and Solutions Group** developed a new agreement template that supports 5G SA and beyond. Materials were updated to encompass network slicing, and guidelines on how to implement 5G SA roaming were refined. These updates include information on what needs to be considered from an agreement point of view, as well as security, charging and settlement processes. The GSMA also extended the GSMA Roaming Gateway to permit the exchange and validation of the digital certificates essential for operators to establish trusted connections to enable 5G SA interworking.

The **Networks Group** developed a 5G SA roaming test book, which provides industry test cases to ensure roaming services in a 5G SA scenario, and security edge protection proxy (SEPP) test cases, allowing consumers to enjoy safe and dependable roaming experiences.

The **Terminal Steering Group** focused on user equipment requirements related to network slicing and defined testing specifications that will be incorporated into the Global Certification Forum's device certification criteria. This will improve interoperability and speed up implementation.

The output and impact generated by working groups reflect the dedication and commitment of GSMA members.

5G VoWIFI

In May, the Board-initiated 5G Voice-over-WiFi (5G VoWiFI) Task Force was formed, with a mandate to build an interoperable 5G VoWiFi ecosystem and boost the adoption of 5G VoWiFi across the industry. By November, the Task Force, chaired by China Telecom, consisted of 45 members from 25 companies.

Invited representatives from the WBA (World Broadband Alliance) and WBBA (World Broadband Association) joined Task Force meetings in 2024.

GSMA 65/92

ANNUAL REPORT 2024
CHAPTER 4 / OPERATIONAL OVERVIEW

5G New Calling

The 5G New Calling Task Force was created to provide strategic guidance, address challenges and support the adoption of 5G New Calling. Chaired by China Mobile, it had 38 members from 17 companies by year end.

In collaboration with the Terminal Steering and Networks groups, which defined an IP multimedia subsystem (IMS) data channel API and a usernetwork interface (UNI) profile, members facilitated the development and release of an open-source software development kit to enable industry development and consolidation on a single defined API.

The Task Force addresses gaps in the New Calling standards and tracks related progress in standards development organisations.

Completion of IoT eSIM

The eSIM landscape has undergone significant transformation since the GSMA's initial specification was published in May 2016. There has been widespread adoption with large-scale M2M, consumer and IoT deployments leveraging eSIM technology.

In 2024, the GSMA strengthened its position as the industry's standardisation leader by introducing the eSIM Architecture Guidelines, a comprehensive resource detailing three alternative architectures, their rationales and benefits. The eSIM architecture guide generated over 9,000 impressions online, reflecting its value to the target audience. Its impact was amplified by an educational video, which accumulated more than 3,800 views, validating the content's technical depth and educational significance.

The momentum behind eSIM was evident at major industry events. Attendance at eSIM Summits at MWC Barcelona, Shanghai and Las Vegas all grew considerably, including C-level engagement. The GSMA's pioneering eSIM Products Compliance report attracted more than 320 downloads and a 34% engagement rate on LinkedIn. These metrics underscore the industry's strong interest in standardisation, certification and compliance for eSIM products.

This progression highlights how eSIM technology has evolved from a theoretical framework to a widely adopted, standardised solution for M2M, consumer and IoT connectivity, with the GSMA continuing to drive education, compliance and industry alignment.



Engaging key customers

Beyond the traditional working groups, the GSMA engages with organisations to build essential connections between the mobile industry and key customer markets. The GSMA's industry communities focus on customer vertical markets – advanced air mobility, fintech, manufacturing and telecoms – and enabling technologies – IoT, telco edge cloud, and identity and data. This focused industry engagement enables the mobile industry to better understand market requirements and inform these key sectors about the capability and value of new mobile technology. This helps scale the mobile market for the benefit of members, their customers and the world.

Mobile identity

Mobile identity APIs provide the next generation of mobile authentication, fraud detection and prevention solutions, benefitting users across the economy. Boosted by the GSMA Open Gateway initiative, mobile identity solutions grew in network coverage and market awareness in 2024. Applications multiplied to ease and secure user journeys ranging from onboarding through to transactions and lifecycle management, across financial services and fintech, e-commerce, and marketplaces. Analysts continued to recognise Number Verify, which seamlessly verifies a user's mobile number with their mobile operator, as the next generation of mobile authentication.

To support these advances, the GSMA Identity and Data Community shares knowledge and best practices across the ecosystem and engaged with more than 120 companies in 2024 during its online events.

At MWC Barcelona, the GSMA seminar Humanising digital identity: how the mobile industry boosts digital trust drew over 920 registrations.

In 2024, following community collaboration, the first version of the GSMA ASAC.01 specification <u>Seamless Authenticator subsystem enhancement for TS.43 Operator Token</u> was published. This specification enables MSISDN (mobile number) seamless authentication via Wi-Fi, which improves solutions, such as Number Verify.

In 2024, the mobile industry expanded its involvement in the European Digital Identity project to deliver secure, privacy-preserving European identity wallets. The GSMA coordinated European mobile operators' joint feedback to the European Digital Identity Wallets draft implementing acts and operators were invited to input into potential business models for the eID ecosystem.

Fintech

Uniting GSMA members, fintech partners and the broader fintech ecosystem, the Connected Fintech and Commerce Community offers a platform to share key insights, thought leadership, and address challenges within the fintech and telco sectors. In 2024, the community attracted over 450 global attendees from more than 100 organisations to its online forum meetings. These forums provide a platform for discussions and highlight successful use cases from leading experts on topics, such as fintech strategy, AI, cybersecurity, insurtech, frictionless commerce, super-apps, scams and APIs. With mobile operator fintechs, such as Jazz Cash and Zain Group, and partners, such as Boltech, FIS and Infobip, the community explores key challenges and opportunities.

In 2024, GSMA Fintech and Commerce Community projects played a significant role in fostering regional collaborations across the UK, Italy, Sweden, Rwanda, Nigeria and South Africa. Key telecom members, such as Airtel, BT, Telefónica, Telstra, Vodafone and MTN Chenosis, built APIs that banks and fintechs can use to fight fraud, in line with the GSMA Open Gateway initiative.

At MWC Barcelona, the Fintech and Commerce Community hosted a full-day Fintech Summit, featuring five fintech CEOs, which was fully subscribed. Collaborations with key stakeholders, such as trade associations UK Finance and SABRIC(SA), facilitated a better understanding of needs and the development of API solutions, such as Scam Signal in the UK, which scaled during 2024, making a material difference to the UK strategy to fight fraud.

GSMA 66/92 GSMA 67/92

ANNUAL REPORT 2024
CHAPTER 4 / OPERATIONAL OVERVIEW

Manufacturing and production

The GSMA Connected Manufacturing and Production Community saw significant growth and engagement in 2024, including a 49% increase in attendance at forum meetings and now represents 101 organisations from around the world, up from 68 in 2023.

Sharing strategic insights from leaders of mobile operators, manufacturers and the wider ecosystem, the community held four forum meetings covering private networks, network APIs, the 5G industrial device ecosystem, infactory provisioning, operational technology interoperability and AI. The community also produced papers on deterministic networks and network APIs for manufacturing. The latter was developed out of a workshop led by the Manufacturing and Production Community and the Smart Mobility community and hosted by GSMA member Airbus at the Airbus Leadership University in Toulouse. A site visit to Verizon 5G London Hub enabled members to experience the latest technologies being used by manufacturers worldwide.

The GSMA held a Manufacturing Summit at the MWC and M360 events in Barcelona, Shanghai, Las Vegas and Seoul, with expert speakers from AT&T, Ericsson, Orange, Verizon, Dassault Systèmes, John Deere and Rockwell Automation. More than 1,300 attendees participated in Manufacturing and Production Community events throughout 2024.

Smart Mobility

The GSMA's Smart Mobility Community aims to use mobile connectivity and services to improve the efficiency, safety and sustainability of transportation systems. In 2024, The Drone Interest Group and the Aerial Connectivity Joint Activity continued to lead advanced air mobility initiatives.

The number of commercial drone services using cellular connectivity increased, with the roll out of BT drone solutions and Citymesh deploying 70 5G drones across Belgium, while Swisscom launched a drone as a service solution. In Asia Pacific, all Chinese operators are providing drone services, while KDDI SmartDrone Inc. was established in Japan, and KT and SKT focused on urban air mobility in South Korea.

GSMA members contributed to the creation of the first <u>CAMARA API for people density</u>, with the first version available in 2024. The API is the result of two years of work as outlined in <u>Interface for Data Exchange between MNOs and the UAS Ecosystem</u>. It will help drone operators to better identify risks as described in JARUS SORA 2.5 guidelines, which has been adopted by EASA (European Union Aviation Safety Agency).

The International Civil Aviation Organisation invited the GSMA to present at the first edition of the Advanced Air Mobility Symposium, which also featured two exhibitors from the mobile industry: SK Telecom and e&, highlighting the growing interest in the potential of mobile networks.

More than 200 experts attended the GSMA's Aerial Cities event, including decision makers from companies in the drone and AAM (advanced air mobility) industry, mobile operators, civil aviation and government representatives.

In 2024, the GSMA's Smart Mobility website generated more than 11,300 page views, a 10% increase over the same period in 2023, while Smart Mobility sessions at the four main GSMA events featured 60 speakers and attracted over 1,800 attendees.

IoT Community

The IoT Community promotes IoT technology and capabilities and accelerates the adoption of 5G IoT solutions, including LTE-M and NB-IoT. The IoT Community is making the adoption of IoT easier for enterprises through enablers, such as provisioning, SIM, roaming and capacity management. In 2024, the IoT community continued to focus on the energy and environment sectors, while also exploring the impact of satellite-based IoT and IoT regulations.

In 2024, the GSMA IoT Community published guides on the environment sector, global IoT regulations and hybrid cellular NTN (nonterrestrial networks). These guides have become essential resources for stakeholders navigating IoT implementation in their respective industries. The community also released whitepapers on the future of 5G IoT and the impact of NTN, with an engagement rate of 56% and strong clickthrough rate of 55% on LinkedIn.

The GSMA also created a database of global reference bands making it easier for IoT customer service providers to deploy national, regional and global cellular low power wide area solutions, which now total over one billion connections since the GSMA started this campaign.

The IoT Community engaged with over 200 GSMA member companies during the year. It also held 5G IoT Summits at MWC Barcelona, MWC Shanghai and MWC Las Vegas, which saw growth in attendance and executive level participation from 2023 to 2024. The MWC Barcelona summit saw a 22% increase in attendance, attracting more than 350 participants, while the inaugural MWC Shanghai summit attracted 380 participants. The MWC Las Vegas summit saw a 92% increase in attendees to over 180, with a 25% C-level representation – more than double the figure for 2023.

At the IoT Solutions World Congress in Barcelona, the GSMA IoT Community showcased the power of collaborative innovation by bringing together five GSMA members and a customer to demonstrate cutting-edge IoT solutions. The event drew over 10,950 attendees.

"For us, Semtech, it is very important to be able not only to attend such tradeshows, but also to attend and be seen as part of the GSMA community (in this case: the GSMA IoT community). That is why, for example, in each of the posts I've made on LinkedIn, I have taken great care that the pictures feature both the Semtech branding, but also the GSMA branding. We want to solidify the message that Semtech is a leader... part of a bigger group of industry leaders in the particular field of cellular IoT."

Nicolas Damour, Senior Director for Strategic Partnership, Semtech

"Thank you for hosting Sony in **GSMA** booth at IoT Solution World Congress in Barcelona last week. **GSMA** booth was located in the most central location of the venue and the entire setup was fantastic. Having our customer Konvoy to showcase the beer keg tracker based on LTE-M & NB-IoT was a great fit and a beer tap generated additional traffic throughout the show. Such presence of GSMA at both event types - the vertically oriented as Enlit and a broader one as IoT Solutions World Congress, is highly valuable. It generates a direct link between Cellular LPWA and the IoT and helps for a wider adoption of LTE-M and NB-IoT technologies."

Igor Tovberg, Director, Product Marketing, Sony

GSMA 68/92 **GSMA** 69/92

Embracing emerging tech

Artificial Intelligence (AI)

The GSMA is committed to bridging the AI adoption gap by making AI accessible and beneficial for all, transcending boundaries of resources, expertise and geography. To that end, the GSMA is focused on removing barriers to AI adoption, fostering inclusivity, and ensuring the sustainable, responsible growth of AI across industries. To empower our members with accessible AI solutions, the GSMA is also helping mobile operators to navigate technical challenges, such as complexity, integration barriers and evolving security concerns.

In 2024, the GSMA launched several initiatives to bridge the Al adoption gap, clarify Al's potential and provide a roadmap to measurable impact, including key work within the GSMA Foundry (see in 'Nurturing mobile innovation' in Chapter 4.3).

The GSMA also brought together mobile operators, AI technology leaders, and industry stakeholders through working groups, member forums and industry events. GSMA tools, such as AI readiness frameworks and energy-efficient AI benchmarks, empower operators to scale AI confidently and responsibly, ensuring secure and impactful AI adoption.

The results of these efforts are already evident: GSMA initiatives are helping mobile operators employ Al-driven customer engagement models they can use to deliver more personalised experiences, as well as network optimisation tools to reduce costs and enhance service quality.

At M360 MENA in November, the GSMA Foundry launched the <u>AI Use Case Library</u>, featuring more than 25 AI use cases from Ericsson, Huawei, ZTE and other companies. The library will grow to include 50 use cases from companies in the GSMA Foundry ecosystem by MWC Barcelona 2025.

Responsible Al

It is crucial that AI is designed, developed and deployed in a responsible way. To support this goal, the GSMA, together with the AI For Impact Task Force, created a comprehensive *Responsible AI Maturity Roadmap*. According to an organisation's level of maturity, the roadmap provides clear steps for implementing responsible AI. It also provides a structured framework to assist operators in evaluating and enhancing their practices.

Adopted by 22 mobile operators by year end, the roadmap is supported by a digital tool that helps identify and address any gaps in existing processes, together with clear recommendations on possible improvements.

In 2024, the GSMA provided inputs to the ASEAN Guide on AI Governance and Ethics including the GSMA governance model example, which illustrates how to escalate ethical issues in the deployment of AI. The model was included in the recommendation made by the 4th ASEAN Digital Ministers' Meeting in February 2024.

Globally, governments are monitoring the rapid deployment of generative AI and the associated large learning models. On behalf of the industry, the GSMA input into AI governance consultations run by Taiwan, Sri Lanka, UNESCO and Brazil. The GSMA advocates for practical measures, such as regulatory sandboxes, that will result in a favourable governance landscape. On behalf of members, the GSMA is monitoring AI regulatory trends (such as the EU AI Act) and regional AI governance.

The GSMA is a member and contributor to the OECD expert groups on Responsible AI, and AI and Data Governance, and, in 2024, joined the Council of Europe's Committee on AI as an observer member.

In 2024, the GSMA increased its presence at international data privacy events: the Network of African Data Protection Authorities Conference in May and the Global Privacy Assembly in October. The data privacy track was also relaunched at MWC Barcelona.



Represent

Amplifying the collective voice of members to ensure that governments, regulators and multilateral organisations everywhere understand the positions and priorities of the mobile industry.

More than 5.6 billion people rely on mobile connectivity, which contributes US\$5.7 trillion to annual global GDP. To continue investing, operating and innovating at the level that consumers, businesses and governments demand, mobile operators depend on supportive public policy.

Progress in policy and regulation is achieved by consistent long-term interaction with governments and regulatory authorities, extensive in-country experience, and deep data analytics understanding. Under the auspices of the global and regional Policy Groups, the GSMA operates through a well-informed global view, ongoing engagement with members and governments, and the agility to predict and address in-country challenges as they arise. Dependent on political and budget cycles, positive outcomes are generally the result of multi-year efforts, and much face-to-face relationship building.

In recognition of the GSMA's expertise in addressing senior stakeholders across the public and private sectors, experts from all levels and areas of the organisation are continually invited to participate at events. In 2024, Mats Granryd and the leadership team received over 100 invitations to speak, including from governments and multilateral organisations.

GSMA 72/92 **GSMA** 73/92



Working with governments

At the behest of members, the GSMA applied its regulatory and policy expertise extensively in 2024 and facilitated industry positions on the issues that most occupied national governments.

The GSMA Ministerial Programme at MWC Barcelona – the world's leading forum for policymakers and industry leaders – welcomed 184 delegations representing 140 countries and 44 intergovernmental organisations. Regional policy programmes also took place at MWC Shanghai, and at the M360 series of events in Mexico City, Seoul, Baku and Doha.

In 2024, the GSMA stepped up its advocacy, including a focused Ministerial Programme session, related to network shutdowns and the impact they have on citizens and digital economies. Prompted by the unusually high number of elections in 2024, the GSMA also distributed guidance and organised webinars for members on how to prepare for and manage service restriction orders (i.e., network shutdowns).



Asia Pacific

- In a meeting with the Prime Minister of Pakistan, the GSMA delivered key messages from the GSMA report <u>Realising Pakistan's Aspiration to</u> become a Digital Nation.
- The Minister of Communications in India appointed the GSMA to its Stakeholder Advisory Committee, which is a vehicle for sharing ideas with the government on how to improve telecommunications services and resolve policy issues.
- The GSMA contributed to expert group meetings of the UN Economic and Social Commission for Asia and the Pacific (ESCAP) on Open-RAN and artificial intelligence by providing insights into how to build sustainable, secure and open networks.
- The GSMA Governance model for the escalation of ethical issues was incorporated into the ASEAN Guide on AI Governance and Ethics, which was endorsed at the 4th ASEAN Digital Ministers' Meeting in February.
- Following the success of the *Digital Nation Summit Jakarta* in December 2023, the GSMA expanded the one-day industry conference concept to Jakarta, Islamabad, Manila and Singapore in 2024. The format proved to be a successful platform to generate significant **media**, **government and ecosystem** attention and engagement.



— In March, European mobile operators and the GSMA unveiled a <u>manifesto</u> for Europe's digital future, outlining strategic areas for action, emphasising the importance of **next-generation connectivity, digital innovation and the green transition**. The manifesto generated more than 13,000 views on X, more than 10,000 views on LinkedIn and more than 2,400 views on YouTube. It was presented at high-level events in Brussels and Strasbourg and distributed to the Belgian, French, German, Dutch and Austrian Parliaments.



 The GSMA, in partnership with Politico, hosted an event entitled After the Elections: What's Next for Europe's Digital Agenda with re-elected MEPs from the key political parties.

Latin America

 For the first time, a Head of State from Latin America participated in MWC Barcelona. Santiago Peña, President of the Republic of Paraguay, presented his vision of Paraguay as a Digital Hub in the region and how connectivity is a tool for **social inclusion**.



 In advocacy directly related to Presidential Elections in Mexico and Panama, the GSMA highlighted the opportunities to connect more people to the **benefits of mobile broadband**.





Middle East and North Africa

- Delegates from 11 African countries attended the Mobile Money Regulatory regional workshop, which the GSMA hosted in Cairo with the Egyptian telecoms regulator. The workshop started participating countries on the path towards **regulatory harmonisation**, potentially fuelling greater investment and financial inclusion.
- The GSMA facilitated the establishment of a task force between the Kuwaiti regulator (CITRA) and mobile operators in Kuwait to address industry issues related to EMF regulations, fibre and data centres.
- Data Privacy, AI and Security capacity building workshops, hosted by the GSMA in collaboration with the Jordanian Telecommunications Regulatory Commission, were attended by almost 40 participants from 15 stakeholder organisations.



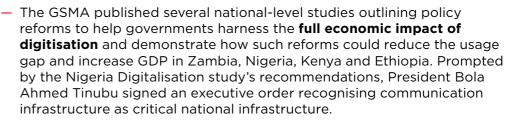
North America

The GSMA's Caribbean Coalition collaborated with governments in Trinidad, Bahamas, Saint Marteen, Aruba, and Puerto Rico to expand digital infrastructure, reduce **regulatory hurdles** and enhance connectivity in small island nations. To back up this effort, GSMA Intelligence published <u>Mobile Investment Gaps: Caribbean islands</u>.





Sub-Saharan Africa





- The GSMA developed the <u>Digital Africa Index</u>, which builds on the GSMA Mobile Connectivity Index and Mobile Money Regulatory Index, through the development of two new indices: the Digital Nations & Societies Index and the Digital Policy & Regulatory Index. The Carnegie Endowment for International Peace Africa Program has invited the GSMA to present these tools at the launch of its Africa Technology Policy Tracker.
- In the Comoros, GSMA advocacy led to a new ICT Act, which grants
 mobile operators rights to provide internet, value-added services and
 voice services with technology neutrality, enhancing service delivery and
 fostering innovation in the ICT sector.
- Seven operator groups contributed to the GSMA Intelligence Telco Energy Benchmark study, which found that operators in Africa are significantly less energy efficient than the average of their counterparts globally. After the GSMA outlined policy recommendations to help address the energy investment gap in the region, feasibility pilots commenced in Nigeria and the DRC.
- The GSMA-coordinated China-Africa Dialogue at MWC Shanghai led to the start of collaboration with the African Telecommunication Union, and Zimbabwe ICT Regulatory Authority and Ministry of ICT for a co-created tailored solution on **Digital Health and Mining**.

GSMA 76/92 **GSMA** 77/92

ANNUAL REPORT 2024
CHAPTER 4 / OPERATIONAL OVERVIEW

Capacity building

GSMA Capacity Building develops and delivers specialised free training for policymakers and regulators on the key issues shaping the future of mobile connectivity. These courses underpin the organisation's advocacy efforts, ensuring that regulatory frameworks enhance global connectivity and digital inclusion.

In 2024, more than 1,500 policymakers and regulators received online or face-to-face training. This amounts to 2,100 training days, across 17 courses, in 98 countries. A subsequent survey of participants found that the courses conducted in the first quarter of 2024 led to over 40 commitments from learners to engage in activities aimed at advancing policy in key areas, such as the mobile gender gap, spectrum management, radio signals and health, competition policy in mobile communications, radio access networks, mobile privacy and climate change.

More than 60% of surveyed participants indicated that the courses facilitated the development or enhancement of new projects and that they personally advocated for adjustments or updates to policy or regulation based on the programme's insights.

In 2024, the programme also gained Continuing Professional Development (CPD) accreditation for all its courses and developed new training materials on topics such as AI, cybersecurity, mobile money and non-terrestrial networks.

The GSMA signed agreements with the Malaysian Communications and Multimedia Commission and Multimedia University in Malaysia to extend GSMA Capacity Building Masterclasses across ASEAN countries and with the Pakistan Telecommunication Authority to relaunch the Centre of Excellence in Islamabad with training courses delivered in partnerships with the South Asian Telecommunication Regulators' Council.

"The GSMA has been a valuable partner, providing the National Communications Authority of Somalia with specialised expertise and insights on global best practices, which has strengthened our technical and regulatory capabilities. This year's training has empowered our team to innovate and excel in their roles, creating a lasting impact on Somalia's telecommunications sector. We are grateful to GSMA for this transformative partnership."

Mustafa Yasin Sheikh, Director General, National Communications Authority (NCA). Somalia

"Participating in the GSMA **Capacity Building Programme has** broadened my understanding of the diverse, evolving aspects of mobile policy and regulation. The programme's structured approach, expert-led sessions and global perspectives have enriched my technical and strategic skills, empowering me to tackle complex telecommunications challenges with greater insight. It has also connected me with an invaluable network of professionals, enhancing my ability to drive meaningful socio-economic impact in my role."

Lucy Nyakwera, Officer Spectrum Engineering & Authorization, Uganda Communications Commission (NCC)

Addressing the investment gap

In 2024, the GSMA continued to advocate for policymakers to address the investment challenges operators face to maintain and extend their networks to meet growing demand. The combined efforts of the GSMA and its members have placed this topic firmly on the digital policy agenda, with active discussions in regions and countries around the world.

Additionally, the GSMA advocated, in certain markets, for new financial mechanisms including a commercially agreed fair contribution. There has been a particular focus on Europe and Brazil where there are active policy proceedings on this theme. The GSMA also engaged members and stakeholders in other markets on building awareness of the challenges, and proposed policy changes to energise mobile network investments



Europe

In 2024, the European Commission published a White Paper on how to master Europe's digital infrastructure needs, which included a range of forward-looking options for revitalising investment in Europe's networks. Together with its European members, the GSMA developed a comprehensive response, focused on achieving a more connected and innovative Europe based on a digital single market that demands a bold new approach. Many of the response's key policy asks were echoed in two high-level European reports by Enrico Letta and Mario Draghi. A key objective - the creation of the Digital Networks Act - was also enshrined in the European Commission President's mission letters to the designated European Commissioners.

Separately, the GSMA developed an in-depth paper for the European Commission on the commercialisation of the internet. The paper provided a detailed analysis of the market dynamics and business practices around IP data transport and took into account the judgement from the Regional Court of Cologne in the Deutsche Telekom case against Meta in relation to non-payments of data transport contract.

To advance the industry's policy asks, the GSMA engaged in stakeholder outreach on this topic.



Latin America

Following GSMA engagement around MWC Barcelona 2023, Brazil, Colombia and Peru put the mobile investment gap high on their 2024 regulatory agendas. In Brazil, at least four government bodies explored ways to bridge the investment gap, focusing on aspects such as competition, equitable network access, and contributions to the universal service fund. Meanwhile, to safeguard a healthy investment environment, Colombia and Peru began to gather evidence on how digital services affect consumers and drive competition within the telecommunications sector.

After publishing a regional report on connectivity gaps, the GSMA increased awareness across the region by presenting the findings at regional forums, leveraging the insights to advocate for public policy reforms. The report also helped to maximise engagements with the Colombian government on the usage gap, prompting an upcoming public consultation on safeguarding and promoting investment.

Following advocacy by the GSMA, Argentina repealed Decree 690, which prevented mobile operators from adjusting their prices, which had been affecting investments and hampering operators' ability to bring the benefits of mobile broadband to more citizens.

GSMA 78/92 **GSMA** 79/92



Securing spectrum capacity

The GSMA's work on spectrum ensures members have access to the capacity they need to innovate and expand connectivity. Through advocacy on spectrum regulation, the GSMA aims to help deliver policies that will increase digital equality and address the usage and coverage gaps, while accelerating the mobile sector's drive towards net zero.

At the end of 2023, a four-year journey concluded with the final day of the World Radiocommunication Conference 2023 (WRC-23) and another journey began – the campaign towards WRC-27. WRC-23 took decisive action to meet mobile data growth by identifying additional mid-band spectrum for mobile, including making 6 GHz spectrum the harmonised home for the expansion of mobile capacity for future networks, including 5G-Advanced.

In 2024, the GSMA's Future Spectrum Group mapped out the pathway to WRC-27 where the GSMA will help deliver new capacity for mobile evolution, including 6G, and balanced regulation for hybrid mobile and non-terrestrial networks. Industry-wide activity, involving over 60 member companies, aims to deliver the spectrum mobile needs for the 2030s.

In 2024, the GSMA stepped up efforts to make sure 6.425-7.125 GHz spectrum is made available for licensed, macro-cell mobile in the near term, and in November the Hong Kong regulator OFCA successfully concluded the world's first auction of the upper 6 GHz band.

While leading industry coordination on 6 GHz, the GSMA published a statement at MWC Shanghai, calling for commercialisation of the 6 GHz IMT Ecosystem, co-signed by 37 mobile operators and vendors. The statement encourages governments and industry to work together to support the full development of

6 GHz for mobile. The GSMA also published <u>The 6 GHz IMT Ecosystem</u> in June and <u>Mobile</u> <u>Evolution in 6 GHz</u> in September.

To support the development of non-terrestrial networks, in February the GSMA Board created the Direct-to-Device Spectrum Task Force (D2D STF). This global expert group brings together members from the satellite, mobile operator and vendor communities to develop regulatory best-practice for hybrid satellite and mobile networks, usually referred to as D2D.

The D2D STF provides guidelines to regulators as this new technology, designed to reduce the coverage gap, requires international and local regulation. It supplements the work being carried out on technical measures for international coexistence of satellite D2D services under the auspices of the International Telecommunication Union. The GSMA's Future Spectrum Group is working to find solutions for the safe coexistence of all technologies.

In 2024, the GSMA continued to guide spectrum licensing best practice around the world in areas such as set-asides, auctions, renewals, roadmaps and spectrum pricing. The GSMA published *Impact of Spectrum Set-Asides on Private and Public Mobile Networks* and used its findings to encourage best-practice policies from regulators.

The GSMA believes that balanced spectrum regulation is an important component of delivering affordable connectivity, lowering the usage gap and widening the coverage of mobile networks. Regulators are taking note, with positive results in 14 countries, including Brazil, Chad, Spain, Tunisia, USA, and Vietnam.

Asia Pacific

Vietnam revisited its new auction process with support from the GSMA on the benchmarking methodology, by providing a tailored pricing report. Compared to the initial calculations, prices have been reduced by 80%, resulting in successful assignments in 2.3 GHz and 3.5 GHz (100 MHz per operator).



 As a result of the GSMA's 6 GHz global campaign, Bangladesh, Cambodia, Indonesia, Sri Lanka and Thailand have added the upper 6 GHz to their plans or formal roadmaps for mobile use.

Greater China

 The GSMA's work to build up the 6 GHz IMT ecosystem and promote the best approach for the world's first 6 GHz auction in Hong Kong, resulted in 100 MHz each for three operators, opening a new chapter for commercialising this critical spectrum for 5G evolution.



Latin America

- The GSMA's support for local studies on altimeters, advocacy campaigns and direct engagements with both telecommunications and aviation regulatory bodies led to Brazil reversing the **power restrictions around** airports in 3.5 GHz.
- The GSMA's advocacy efforts contributed to a positive WRC-23 outcome on 6 GHz in the region, with a footnote supported by Brazil and Mexico, the two largest countries in Latin America, identifying the upper part of the band for IMT.
- In Costa Rica, the GSMA helped to persuade the government to lower the spectrum reservation fee by 39% for 2025, compared to the initial proposal, paving the way for the 5G auction.
- Following GSMA engagement with the ministry and regulator, Colombia conducted a successful 3.5 GHz auction, with **reduced prices** in exchange for investment agreements, as well as 100 MHz assigned per operator, in line with the GSMA's positions.



North America

The USA published its new National Spectrum Strategy, which includes plans to study future use of the lower part of the 3.5 GHz band (from 3.1 GHz), which the GSMA, in collaboration with members and the CTIA, has put considerable efforts into advocating for.



GSMA

80/92

GSMA

CHAPTER 4 / OPERATIONAL OVERVIEW



Europe

- The GSMA's global support for technical and policy studies on altimeters, advocacy campaigns and direct engagements led to Belgium reversing the power restrictions around airports in the 3.5 GHz band.
- Following the GSMA and members' campaign for investment-friendly spectrum decisions to close the investment gap in Europe, Germany and Spain extended spectrum licensing terms by 5 and 10 years, respectively, without demanding additional cash payments.



Middle East and North Africa

- The GSMA worked with mobile operators in Turkey and Egypt on a spectrum pricing report to assist in the process of **licensing frequencies** for 5G services and enhance the efficiency of spectrum allocation.
- The GSMA reduced obstacles towards 4G rollout in Iraq by working with mobile operators and the Communications and Media Commission of Iraq on spectrum allocation and pricing to build regulatory capacity and align plans with best practice.
- While technology neutrality and pricing advocacy continues in Egypt, an important first step has been taken. Operators were granted 5G licences to operate in any previously assigned band for part of the initial proposed price.
- The long-awaited Tunisian 700 MHz and 3.5 GHz (100 MHz per operator) assignment concluded successfully. The GSMA supported members and regulators to find the best approach to obligations and block arrangements, resulting in a streamlined proposal for a phased implementation.



Sub-Saharan Africa

- In Tanzania, long-standing GSMA advocacy led to the finalisation of the **new ICT Policy**, which includes a spectrum roadmap in line with the GSMA's recommendations, providing regulatory certainty for licensees, along with proposals for a data sharing framework, digital skills development and protection of critical digital infrastructure from increasing cyber threat.
- After several years of GSMA activities in Chad, focusing on the benefits of market-oriented technology upgrades, including a regional report, the regulator **renewed licences** in a technology neutral basis.
- The GSMA's advocacy with the South African regulator and ministry resulted in an important reversal of a mandated 2G and 3G switch off. Operators will now be able to agree on a date that suits their plans, while seeking support from the government when the right time comes.

Reforming taxation

To make mobile services more affordable for consumers and facilitate investment in networks and services by operators, the GSMA promotes best practice principles of taxation by producing analysis on mobile sector tax reforms, and highlighting the benefits of broader internet adoption, economic growth and social inclusion.

In 2024, there were important advances in several markets:

- The government of Bangladesh agreed to eliminate the practice of charging spectrum fees in US dollars rather than Bangladeshi Taka, as a result of GSMA advocacy efforts. This reform will provide significant relief to the industry.
- Following a policy recommendation by the GSMA, six of the 43 states in Nigeria have removed **right-of-way fees**. Right of way fees can significantly increase the cost of rolling out fibre networks, ranging from an additional 1% in the cheapest states to over 70% in the most expensive.



ANNUAL REPORT 2024

CHAPTER 4 / OPERATIONAL OVERVIEW

Partnering with multilateral organisations

In 2024, the GSMA boosted its engagement with leading international organisations to influence global technology governance and digital development. On behalf of the mobile industry, the GSMA prioritised engagement with the ITU, G20, OECD, World Bank and other UN agencies.

Throughout the year, the GSMA worked with national administrations and the private sector to prepare for the ITU World Telecommunication Standardisation Assembly, the highest UN policy making forum for ICT standardisation matters, which took place in New Delhi in October. The GSMA set up an ad-hoc focus group with member operators, which agreed industry positions on 18 priority resolutions dealing with critical matters for the mobile industry, including IMT networks, international mobile roaming, mobile theft and counterfeit, cybersecurity, quality of service and EMF. The GSMA team on the ground was successful in negotiating outcomes that minimised risks and are largely aligned with mobile industry positions.

G20

The GSMA engaged closely with the G20 process, hosted by the Government of Brazil in November, through groups including Business 20 (B20) and Women 20 (W20). The GSMA's participation in B20 led to the adoption of a policy paper that recognised the importance of tackling the usage gap to drive digital inclusion and highlighted the importance of creating enabling policy/regulatory and market environments for broadband investment. The GSMA also participated in a panel discussion on digital inclusion alongside the G20 Digital Economy Ministerial Meeting.

The GSMA headed the EU delegation to W20 and co-chaired the Women in STEM Working Group, which adopted a final communiqué for G20 leaders highlighting the importance of halving the digital gender gap by 2030. As a result of this advocacy, G20 Digital Ministers adopted a joint declaration containing language aligned to the GSMA's messaging on the usage gap, digital gender inclusion, digital skills and infrastructure deployment.























OECD

The partnership between the GSMA and the OECD was significantly strengthened in 2024, with collaboration taking place across several priority workstreams:

- GSMA data was employed in the OECD's
 Financing Broadband Networks of the Future
 and the final text is consistent with the GSMA's
 investment gap proposition.
- GSMA data and messages prominently featured in the OECD's Communication Networks and Environmental Sustainability and influenced approval of a revised OECD recommendation on ICTs and the Environment.
- The OECD Deputy Secretary General Ulrik Knudsen, joined the Global CEO Roundtable at MWC Barcelona 2024.
- The OECD Deputy Director for Science and Technology and Innovation acts as a judge of the GSMA Government Leadership Award.

UN agencies

The GSMA continued its engagement with the ITU/UNESCO Broadband Commission for Sustainable Development, participating in its Fall Meeting at the UN General Assembly and contributing to numerous workstreams. This led to adoption of two state of broadband reports which featured GSMA policy messages on digital inclusion and AI.

At the UN General Assembly, the GSMA and Economist Impact hosted an event entitled From Digital Divide to Digital Dividend: reviving the SDGs, attended by Sangbu Kim, the newly appointed Vice President of Digital Transformation at the World Bank, alongside Mauricio Lizcano, Colombian Minister of Information and Communications Technologies, and Patricia Obo-Nai, CEO of Telecel Ghana.

As part of its contribution to EQUALS (the Global Partnership for Gender Equality in the Digital Age), the GSMA co-published the pioneering gender transformative digital skills education framework, which was presented at a high-level event hosted on the fringes of this year's UN Commission on the Status of Women. The Her Digital Skills: Towards a Gender Transformative Approach framework makes recommendations on the design of digital skills education programmes and how different stakeholders can intervene in the wider ecosystem to bridge the gender digital divide. The GSMA developed the report in collaboration with the ITU, Ernst and Young, Women's WorldWide Web (W4), the World Bank, UNDP, UNICEF, Plan International, GiZ and the AIDS Healthcare Foundation.

The EQUALS Her Digital Skills initiative coled by the GSMA received renewed financial endorsements by Verizon and Qualcomm in 2024. To date, the initiative has directly and indirectly benefitted over 300,000 women across 50 countries. In 2024, more than 110,000 people benefitted directly or indirectly from the initiative.

As part of the UNESCO AI Ethics Global Forum, the GSMA joined seven other companies including Mastercard, Microsoft, Salesforce and Telefónica to sign a commitment to implement AI ethics in business.

GSMA 84/92 **GSMA** 85/92

Chapter 5

Looking ahead

Economically, 2025 will be characterised by geopolitical uncertainty which will continue to deter some investment, and fuel further government-led efforts to build greater digital sovereignty and resilience. For the mobile industry, these trends present both challenges and opportunities.

Against this global backdrop, the GSMA will continue to help its members unlock the full potential of this era of tech advances and increased capabilities of mobile networks and related areas.



The GSMA's ability to invest significantly in 2024 to rebuild the organisation and its activities bodes well for 2025. Its robust and flexible organisational structure prioritises resources in line with the needs of members, allowing room for agility to react to unexpected global events and market forces.

At the forefront of efforts in 2025 will be opening up new revenue opportunities for 5G and developing new revenues and cost efficiencies through the GSMA Open Gateway solution. In 2025, the growth of GSMA Fusion will be a key priority for the organisation, working with enterprises and industries to identify unmet needs and explore new functionalities that mobile networks can provide.

The GSMA will also continue to prioritise the infrastructure investment gap, while building policy, regulatory and technological expertise in AI, cybersecurity, 5G expansion and NTNs, utilising existing platforms and channels to ensure that advancements are aligned to the industry's direction and priorities.

Focus will also be placed on advancing positive policy, reducing inequalities, tackling largescale societal challenges, and strengthening industry profile on the international stage. And of course, GSMA events will continue to provide a world-class convening platform for the industry and wider ecosystem.

Contacts

Contact the GSMA

GSMA Location	Address
Atlanta	165 Ottley Drive NE, Suite 203, Atlanta, GA30324, USA
Barcelona	Avda. Reina Maria Cristina, s/n, Hall 1, 08004 Barcelona, Spain
Beijing	Level 24, Tower 3, China Central Place, 77 Jianguo Road, Chaoyang District, Beijing, China, 100025
Brussels	Boulevard du Regent, 35, 1000 Brussels, Belgium
Buenos Aires	Av. Del Libertador 6810, 15th Floor, C1429BMO, Ciudad Autónoma de Buenos Aires, Argentina
Delhi	11th Floor, Hindustan Times House, 18-20 KG Marg, Barakhamba, New Delhi, 110001, India
Hong Kong	46/F, Lee Garden One, 33 Hysan Avenue, Causeway Bay, Hong Kong
London	1 Angel Lane, London, EC4R 3AB, UK
Nairobi	Floor 2, Delta Corner Annex, Ring Road, Westlands Lane, PO Box 45651-000100, Nairobi, Kenya
Shanghai	1801, 18/F, Kerry Parkside Offices, 1155 Fangdian Road, Pudong, Shanghai, China, 201204

Auditors	Bankers	Solicitors
KPMG LLP	HSBC BANK PLC	Homburger AG
Chartered Accountants 15 Canada Square London E14 5GL	London Corporate Banking Centre Level 30, 8 Canada Square, London E14 5HQ	Prime Tower, Hardstrasse 201, 8005 Zurich, Switzerland

For all queries, please email info@gsma.com

GSMA 88/92 **GSMA** 89/92



www.gsma.com

GSMA Head Office

1 Angel Lane London EC4R 3AB United Kingdom info@gsma.com