



Capacity
Building

Training Course Catalogue 2015/16



The GSMA unites nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and Internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences.



The mobile industry is constantly innovating and adapting to a variety of pressures. These include a huge increase in demand for mobile data, shifting business conditions due to the emergence of over-the-top players and the growing importance of mobile as an enabler for connected living as well as digital and financial inclusion.

Policymakers and regulators play a key role in shaping the way the industry responds to these issues, so it is vital they keep pace with the latest developments in technology and the business environment, and also understand the implications of different policy and regulatory approaches.

As the global association of mobile network operators, the GSMA closely tracks changes in these areas and the effects they have worldwide. Using this knowledge, we have created a range of high-quality, short training courses that offer unique insights into the latest industry, policy and regulatory thinking.

Delivered in partnership with established training institutions, all our courses are taught by expert trainers, offered at low or no cost and suitable for professionals at all stages of their career.

Developed by experts, the GSMA's training courses rely heavily on real-world examples to highlight regulatory best practice. As a result, they provide students with practical information and key insights into the most pressing issues faced by regulatory authorities worldwide as they consider how best to facilitate the delivery of mobile services to consumers.

Course Name	Length (Days)	Page
● Mobile Regulation for Socio-Economic Development	3	6
● Advanced Spectrum Management for Mobile Telecommunications	2	8
● Children and Mobile Technology	2	10
● Mobile Money for Financial Inclusion	1	12
● Principles of Mobile Privacy	1	14
● Radio Signals and Health	1	16
● Competition in Mobile Telecommunications	1	18
● Weighing the Benefits of Universal Service Funds	1/2	20
● Mobile Sector Taxation	1/2	22
● Internet of Things	2	24
● Principles of Internet Governance	2	26

Mobile Regulation for Socio-Economic Development

3
DAY COURSE



The potential of mobile technologies to enhance people's lives and generate economic value is unprecedented. Governments in every country have a responsibility to create the conditions that maximise the benefits for society.

This intensive three-day course highlights the contribution that the mobile industry and mobile technologies make to the economy, and the wide range of mobile services that, particularly in developing countries, can transform people's lives. Participants will learn about regulatory best practices for the mobile sector, as well as practical steps that can accelerate the delivery and uptake of mobile-driven education, healthcare and financial services to all citizens.

COURSE OBJECTIVES

- Understand the economic contribution of the mobile sector and the effects of government intervention
- Learn how mobile technologies contribute to social welfare through health, education, financial inclusion and e-government
- Learn how government can best support universal access to mobile

COURSE LEADER

RONDA ZELEZNY-GREEN

SENIOR DIGITAL LEARNING AND
CONTENT DEVELOPMENT MANAGER



Ronda manages the eLearning platform for the GSMA's Capacity Building programme. She has 10 years' experience of teaching, having delivered classes across four continents.

She has also worked as a mobile telecommunications analyst, with expertise in Africa and policy, and most recently she worked with GSMA members to develop, implement and evaluate commercial mobile learning propositions. She holds MAs in Applied Linguistics and Practising Sustainable Development with an ICT specialism.

Day 1

Mobile as a Driver of Economic Growth

- Mobile impact on economy and employment
- Overview of research on the impact of mobile
- Case studies in mobile powered development

Enhancing Affordability through Best Practice Taxation

- Taxes on mobile consumers
- Fees and levies on operators
- Other telecoms-specific taxes

Regulatory Models for Widening Broadband Access

- Universal service fund advantages and limitations
- Wholesale access networks and network sharing
- Public-private partnerships

Day 2

Mobile Broadband Network Regulation

- Traffic management in mobile networks
- Mobile back haul connectivity

Financial Inclusion

- Benefits of mobile money services
- Safeguarding customer funds
- Financial compliance

Mobile-Assisted Learning

- The role of mobile in learning
- Why mLearning policies matter
- mLearning initiatives

Day 3

Health Service Delivery

- The role of mobile in health service delivery
- The regulatory implications of mHealth
- Bridging regulatory gaps

Connecting the Unconnected

- Rural communities
- Gender inclusion
- Disaster recovery
- mGovernment

Advanced Spectrum Management for Mobile Telecommunications

2
DAY COURSE



This course considers the history and technical evolution of mobile telecommunications before moving on to cover the core functions of the spectrum manager. Participants will learn about how spectrum is used, the characteristics of spectrum bands and the progression of mobile technologies.

The course also covers the principles of spectrum planning at a national, regional and international level. A deep dive into spectrum licensing will be followed by an overview of regulatory topics that relate to spectrum, such as infrastructure sharing, and numerous illustrative case studies.

COURSE OBJECTIVES

- Understand the processes and approaches to spectrum allocation and licensing
- Learn how spectrum management is changing in an ever-evolving sector
- Apply the concepts to one's own national spectrum conditions

COURSE LEADER

DR WLADIMIR BOCQUET

HEAD OF POLICY PLANNING



Wladimir is responsible for defining and building consensus around spectrum policy positions with GSMA members, and for promoting best practice in spectrum management. Previously, he was deputy director in charge of spectrum strategy and international planning at Orange-France Telecom Group.

He has a degree in telecommunications from Telecom Bretagne (Ecole Nationale Supérieure des Télécommunications de Bretagne, France) and a doctorate from the University of Kyoto, Japan.

Day 1

Spectrum Management Overview

- Objectives for spectrum managers
- Key aspects of spectrum management

Spectrum Planning

- Spectrum management at an international, regional and national level
- National broadband plans
- International harmonisation

Spectrum Licensing for Mobile

- Spectrum assignment methods
- Licence renewal
- Spectrum auctions

Spectrum Policy Considerations

- Technology neutrality
- Re-farming spectrum
- Licence renewal
- Network and infrastructure sharing
- Spectrum monitoring

Day 2

Spectrum for Mobile Broadband

- Wireless back-haul
- Wi-Fi
- The digital dividend

Examples from around the World

- Realising the digital dividend
- Re-farming the 850MHz band for 3G and 4G
- Infrastructure sharing
- The 2.6GHz band — delivering capacity

The Benefits of Mobile Broadband

- Measuring benefits
- Impact assessments
- Socio-economic benefits

“

The experience and ideas I have gained from the course will be very helpful when it comes to solving spectrum and licensing issues in my country.

— CRASA student, February 2015

Children and Mobile Technology

2
DAY COURSE



Children and young people are among the most avid users of mobile technologies, which can have a tremendously positive impact on their lives. Like any tool, however, mobile technologies can be used to cause harm, and parents, governments and industry have a role in protecting and supporting children who are connected.

This course looks at the issue from several angles, including cultural differences regarding children’s use of mobile devices, child online protection and whether regulation is necessary.

COURSE OBJECTIVES

- Learn what is known about children’s use of mobile technologies
- Acknowledge the benefits while mitigating risks for children
- Understand the role of regulation and legislation in child online protection

COURSE LEADER

JENNY JONES

DIRECTOR OF PUBLIC POLICY



Jenny is responsible for the GSMA’s mYouth programme, which is concerned with children’s use of mobile phones, mobile learning, and the safe and responsible use of mobile devices and services.

She also leads the Mobile Alliance Against Child Sexual Abuse Content. Previously, she worked for Vodafone Group and Spectrum Strategy Consultants. She holds a BA in modern languages from the University of Oxford.

Day 1

How Does the UN Convention on the Rights of the Child Apply in Today’s Connected Society?

- The impact of ICT on children’s rights
- Striking a balance

How is Mobile Enabling Children to Access Many of Their Rights?

- Learning, information, freedom of expression — a new generation of digital citizens

What Is Child Online Protection?

- Distinguishing between the misuse of technology by adults to exploit children and the potential risks that can be avoided through safe and responsible use by children

Safe and Responsible Use of ICT by Children

- Digital safety — What are the risks?
- Promoting safe and responsible digital citizenship

Children’s Use of ICT

- What we know about children’s attitudes to ICT
- How to engage youth through ICT

Day 2

To Regulate or Not to Regulate?

- Regulatory evolution 2004–2015
- Learnings from the international community

Online Child Sexual Exploitation — Context

- Terminology, statistics and trends
- The role of the internet
- Key players and the international backdrop — political, law enforcement and industry

Combating Online Child Sexual Abuse

- The importance of clear legislation
- Enabling effective collaboration between hot-lines, law enforcement, industry and NGOs
- Technical solutions to prevent re-victimisation through online images

Overlap Between Children’s Use of Technology and Child Sexual Exploitation

- Behaviours and consequences
- The importance of education and awareness
- Reporting

Moving Forward on Child Online Protection

- Developing a high-level action plan for child online protection

Mobile Money for Financial Inclusion

1
DAY COURSE



Mobile money services are proliferating in many countries, providing ‘unbanked’ citizens with the ability to manage their money and make financial transactions efficiently and securely.

While the business model has been proven through hundreds of self-sustaining services, many countries have only a nascent mobile money sector. Meanwhile, in mature markets the mobile money platform is now used to offer a broader range of financial and mobile-for-development services. This course provides an in-depth look at mobile money services — how they work, the stakeholders involved and the regulatory enablers, as well as critical issues such as cross-network interoperability.

COURSE OBJECTIVES

- Understand the value of mobile money services to individuals and society
- Learn what mobile operators must do to launch a mobile money service
- Learn about the regulatory framework that is required, as well as the legal boundaries



Course Outline

Introduction to Mobile Money

- Who are the unbanked?
- The cost of cash
- Mobile money impact around the globe
- How mobile money services work

The Regulatory Environment

- A primer on financial-sector terminology
- Regulatory principles for financial services and key areas for mobile money
- The role of the telecoms regulator

Business Models for Mobile Money Services

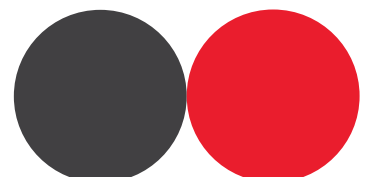
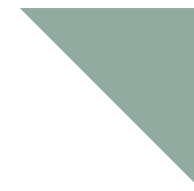
- The case for non-bank financial providers
- Unique advantages of mobile network operators
- Differences among mobile money services

Consumer Protection — Safeguarding Customer Funds

- Customer due diligence
- Mobile money agent due diligence

Technical Considerations for Mobile Operators

- Unstructured Supplementary Service Data (USSD) channel sharing
- Application Program Interfaces (APIs)
- Interoperability



Principles of Mobile Privacy

1
DAY COURSE



The growth of the mobile internet and converged services is creating new challenges related to the use and protection of people’s personal information, as data flows between multiple parties, in real time, across geographic borders.

This course investigates the current state of mobile privacy, highlights research on consumer attitudes towards their privacy and examines current and emerging regulations around the world. The course also reviews the GSMA’s universal mobile privacy principles, Privacy Design Guidelines for app developers and industry initiatives that give consumers more control over how their information is used.

COURSE OBJECTIVES

- Understand the facets of mobile privacy, data protection and consumer trust
- Consider the role of mobile operators, internet content providers and consumers in respecting and protecting the privacy of consumers
- Consider how regulation can be applied effectively to protect consumer privacy in a converged world

COURSE LEADER

PAT WALSH

DIRECTOR OF PRIVACY, PUBLIC POLICY



Pat works with GSMA members and other key stakeholders to explore ways to shape the way privacy is advanced, managed and protected across the mobile ecosystem.

He has more than 16 years of experience in data privacy and regulatory policy in the fixed, mobile and internet sectors, and regularly acts as an industry representative on various regulatory and international public interest groups.

Course Outline

Privacy and Data Protection — History

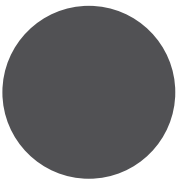
- Defining privacy and data protection
- The economic value of privacy
- How policymakers and industry can work together to increase trust
- Research into consumer attitudes and perceptions

Privacy and Data Protection — Government Intervention vs Self-Regulation

- Regulatory developments
- The role of the industry: mobile privacy principles, guidelines and codes of conduct
- Compliance in a globalised app development ecosystem
- Importance of transparency, choice and control, security and accountability

Data Security

- Introduction to security
- SIM-based vs non-SIM-based security
- Mobile identity services and authentication
- Current challenges for policymakers



Radio Signals and Health

1
DAY COURSE



The effect of radio transmissions on health has been studied extensively, leading to international standards for network antennas and exposure limits for workers and the public.

Despite the ever-growing body of scientific knowledge, many people continue to be concerned about electromagnetic fields (EMFs) and their impact on health. This course looks at the state of the science, standards for mobile technologies, regulatory compliance and public awareness and education.

COURSE OBJECTIVES

- Understand public concerns and the accumulated knowledge about the health effects of EMFs
- Learn about internationally accepted safety requirements for radio transmissions
- Learn how to respond to public safety concerns and increase awareness of the science

COURSE LEADER

DR JACK ROWLEY

SENIOR DIRECTOR OF RESEARCH AND SUSTAINABILITY



Jack runs the Health Programme within the GSMA's Public Policy department. He has more than 20 years of experience in the telecommunications industry and is the author of over 100 publications on mobile communications safety.

He holds an Electronics Engineering Degree with first class honours from the University of Limerick (Ireland) and a PhD from the RMIT University (Australia). Jack is also a member of the Bioelectromagnetics Society and a senior member of the IEEE.

Course Outline

Radio Signals — Sources and Health Research

- What are electromagnetic fields?
- Why are people concerned about possible health risks?
- What do we know from existing research?
- Reliable sources of information

Human Exposure Limits for Radio Signals

- International exposure limits for workers and the public
- Assessment of compliance for devices and network antennas
- Choosing measurement equipment
- Reporting results and public communication

Application of EMF Risk Communication Techniques

- Drivers of risk perception
- The issue life-cycle
- Ten principles for risk communication

Developing Radio Frequency Safety Policies

- Harmonisation with international requirements
- Policy for mobile devices
- Policy for antenna sites: RF compliance, citing and approvals

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The course was very detailed and drew on lots of examples from around the world. It has equipped me with a lot of knowledge I didn't previously have.

— CRC student, December 2014

Competition in Mobile Telecommunications

1
DAY COURSE



Competition in mobile telecommunications is multifaceted and dynamic. While regulatory authorities have the ability to determine the market structure, they must also be alert to business practices and rapid technological changes that impact infrastructure competition and the related downstream and upstream markets.

This course provides a foundation for understanding the rules of competition and the regulatory powers that can be applied to offenders.

COURSE OBJECTIVES

- Understand the rationale for competition law and its principles, anti-competitive agreements, abuse of dominance and merger control
- Look at the types of intervention available to competition authorities and why they might arise
- Review general horizontal regulation versus sector-specific rules
- Compare the relative advantages of ex-ante and ex-post regulation



Course Outline

The Principles of Competition in Mobile Telecommunications

- Rationale for competition law
- The nature of mobile sector competition
- Mobile network operators and spectrum licensing

Types of Anti-Competitive Practices

- Concepts and definitions
- Lessening of free competition
- Anti-competitive agreements
- Abuse of dominance

Types of Regulatory Intervention

- The role of the telecoms regulator
- The role of the competition regulator
- Ex-ante vs ex-post regulation



Weighing the Benefits of Universal Service Funds

1/2
DAY COURSE



Governments in many countries impose a levy on the mobile sector to fund network deployment in areas where the market conditions do not support commercial investment. While the ultimate objective of universal service is laudable, the results of this approach have been mixed.

This course looks at the record of universal service funds (USFs) in achieving their objectives and considers alternative approaches to connecting the unconnected.

COURSE OBJECTIVES

- Understand the challenges involved in connecting the rest of society
- Learn how countries around the world have used their USFs, and the outcomes for citizens
- Consider alternatives to USFs that could be more effective



Course Outline

The Challenge of Universal Access

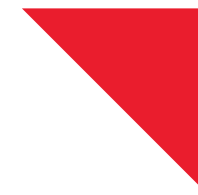
- Rural connectivity — why mobile?
- Delivering access plus affordability to consumers

Strategies for Connecting the Unconnected

- Service obligations in spectrum licensing
- Infrastructure sharing
- Public-private partnerships
- Single wholesale networks

Universal Service Funds

- How funds are raised, managed and distributed
- Global USF data
- USF effectiveness — the good and the bad
- How to phase out USFs and accelerate network deployment



Mobile Sector Taxation

1/2
DAY COURSE



In many countries, in a variety of ways, governments impose substantial taxes on the mobile industry — above and beyond standard corporate tax. Sector-specific taxation is never without consequences; for mobile operators, special taxes affect consumer prices as well as operators’ ability to build and upgrade their networks.

This course takes a critical look at mobile industry taxation, the outcomes thereof, and how telecoms regulators can affect the level of sector-specific taxation.

COURSE OBJECTIVES

- Learn about the principles of taxation
- Understand the ways additional taxes are applied to the mobile industry
- Learn how supplemental mobile sector taxation impacts consumers and society
- Consider how over-taxation of the sector can be rolled back, to everyone’s benefit



Course Outline

The Costs and Benefits of Taxation

- Principles of taxation
- Global tax burden on the mobile sector
- Short-term government revenue, but at what cost?

Socio-Economic Contributions Made by the Mobile Sector

- Economic value, employment and government revenues generated by the sector
- Social benefits of mobile technology — internet access, health, education, financial services
- The implications of additional, sector specific taxation

Trends in Mobile Sector Taxation

- Mobile sector taxation around the world
- Surtaxes on international incoming traffic (SIIT)
- The impact of over-taxation — measurable evidence

Transitioning to a More Effective System of Taxation

- Can telecoms regulators influence the finance ministry?
- Communicating the rationale for change



Internet of Things

2
DAY COURSE



The Internet of Things (IoT) holds tremendous promise for citizens, consumers, businesses and governments. Referring to machines, devices and appliances of all kinds that are connected to the internet through multiple networks, IoT has the means to shrink healthcare costs, reduce carbon emissions, increase access to education, improve transportation safety and much more.

This course provides a high-level overview of IoT concepts from a mobile perspective, outlines the role IoT can play in enhancing the quality of life of citizens and explains the key differences between traditional telecoms services and the IoT world. It also discusses the implications that IoT has for policymakers and regulators.

COURSE OBJECTIVES

- Understand the benefits IoT can bring to citizens, consumers and businesses
- Learn about the key difference between IoT and traditional telecoms services
- Discover the regulatory implications of IoT

Day 1

What is IoT?

- A definition of IoT and associated concepts
- Outline of the key differences between IoT and traditional voice and messaging services

A High Level Technology Overview of Mobile-Enabled IoT

- The basic concepts of IoT, including transport technologies, sensor networks and IoT specific communication standards
- The potential risks that IoT devices pose to mobile networks

Day 2

Operational and Deployment Models

- The need for global scale and the role of embedded SIMs and remote provisioning solutions
- The role of SIM alliances and other operational models in promoting the use of IoT

Case Studies

- Real-life IoT case studies from the automotive, healthcare, education and smart city sectors

Policy and Regulatory Implications

- The key concepts and issues that policymakers and regulators need to be aware of when looking into IoT



Principles of Internet Governance

2
DAY COURSE



Internet governance is the development of shared principles, norms, rules, decision-making procedures and programmes that shape the evolution and use of the Internet. The policies and processes involved in internet governance have taken centre stage over the last several years and are of concern to all stakeholders engaged in internet issues. This course will provide an overview of internet governance through its history, institutions, processes and people.

The course will discuss and analyse the actual or potential consequences of different policy approaches, including the multi-stakeholder model, which have been either adopted or proposed for internet governance at the national, regional and global level.

COURSE OBJECTIVES

- Understand the history, institutions and people involved in internet governance
- Learn about the policies and processes involved in internet governance and how they are approached by different stakeholders
- Apply the concepts to local, regional, national and international internet issues

COURSE LEADER

DOMINIQUE LAZANSKI

PUBLIC POLICY DIRECTOR



Dominique works on cyber security policy and internet governance for the GSMA and also leads the GSMA's Internet Governance Task Force. Previously, she worked for Yahoo!, eBay and Apple in the US, and more recently for the Taxpayers' Alliance in the UK.

She holds a BA from Cornell University, an MSc in Information Systems Management from the London School of Economics and a second master's degree from the University of Bath.

Day 1

Evolution of the Internet and Internet Governing Bodies

- Network of networks (TCP/IP, A-root, TLDs, SMTP, HTML)
- Commercial stage — Multilateral (IETF, ICANN, IAB, ISOC)
- Mobile Internet makes it pervasive worldwide

Internet Architecture

- Network of networks (TCP/IP, A-root, TLDs, SMTP, HTML)
- Mobile Internet technologies and architecture

Current Issues and Developments

- Institutions and processes
- Events — WSIS and IGF

Internet Governance Issues

- Licensing rights, international exclusivity and illegal bypass, spectrum and universal service
- Domain names, routing tables and IP standards

Day 2

The Roles of Government and Other Stakeholders

- Multilateral vs multi-stakeholder governance models
- The role of governments in the multi-stakeholder model
- The role of multilateral organisations
- Proposals for change

Policy Issues Arising From Internet Governance

- Cyber security
- Intellectual property
- Freedom of expression, privacy, law enforcement
- Electronic commerce
- Jurisdiction and enforcement of national laws and regulations

Issues Specific to Developing Countries

- Achieving Internet access for as many people as possible
- Capacity building and other collaborative ways to address issues
- Funding participation in Internet governance bodies

Why Choose Training from the GSMA?



Expert Trainers

Our highly skilled trainers have unparalleled industry and academic experience



Exceptionally Positive Student Feedback

Course feedback consistently shows that our students rate our courses very highly — often showing feedback of 100% approval



In-Depth and Highly Relevant

Created by in-house experts and external specialists, our coursework is updated regularly to ensure it reflects the latest industry developments and current regulatory landscape



Unprecedented Global Expertise

Spanning more than 220 countries, the GSMA unites nearly 800 of the world's mobile operators, allowing it to draw on exceptional levels of global expertise



Established Training Programme

In 2014 alone, the GSMA delivered over 800 student days of training across countries as diverse as the US, Namibia and Mongolia



Delivered with Established Training Partners

The GSMA delivers its training courses in partnership with respected and established training partners including AFRALI, USTTI, IDB and CRASA



Taking Advantage of the Latest Market Data

Our trainers and coursework take advantage of the latest industry data supplied by GSMA Intelligence, our in-house database of mobile operator statistics, forecasts & industry reports



Helps you find solutions to key policy and regulatory challenges



Improves your understanding of the latest technologies



Allows you to discover how others tackle similar issues



Offers an opportunity to update your core skills and learn new ones



Helps you gain insights into the newest industry trends



Enables knowledge sharing and networking opportunities

Why Training Matters

How We Deliver Our Training

The GSMA recognises that organisations, departments and individuals often have different training needs, which is why we can deliver our courses in a number of ways.



Via local partners

The GSMA principally delivers its courses through partnerships with international regulatory training bodies. This provides us with the flexibility to deliver courses where they are needed the most and ensures that we can run courses at a location near you.



On-Site

If your organisation or department has a sufficiently large number of people that could benefit from our training, we can deliver our courses on-site. This allows your employees to receive their training at the same place where they practice their skills and reduces or cuts out travel and accommodation expenses for employees.



Online

By March 2016, the GSMA will launch an eLearning platform that will put students in control of their own learning. Using this platform, students will be able to study our courses from anywhere in the world, progress through the course at their own pace and schedule coursework around work and family.

Global Reach, Local Impact



The GSMA has trained students from over 65 countries around the world, passing on insights into the latest industry, policy and regulatory thinking that help local regulators and policymakers to positively shape the development of mobile services in their country. We've been able to achieve this global reach by forming close partnerships with local, respected training institutions.

Our courses are delivered in partnership with local institutions, including:



The GSMA delivers its courses principally through partnerships with international regulatory training bodies, contributing the course design, content and teaching materials. In addition to this substantive core, the GSMA can provide trainers, project management and other support as required by the training institution. Partnerships take a variety of forms, including the provision of stand-alone courses to intergovernmental or commercial institutions, training programmes for government or NGO-led centres of excellence, and master's degree-level modules for universities.

GSMA courses in telecommunications policy and regulation are informed by industry data, original market research, global experience and on-staff GSMA experts in issues spanning spectrum auctions, future spectrum requirements, mobile security, quality of service, competition and many more topics that are at the heart of mobile sector regulation. Few organisations have as clear a view of the mobile telecoms industry and regulatory landscape in virtually every country in the world.

To explore opportunities to work with the GSMA for regulatory capacity building, please contact:

Sarah Gaffney, Partnerships Manager, GSMA Capacity Building

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The GSMA's training courses offer practical information and key insights into the most pressing issues faced by regulatory authorities worldwide. Developed and taught by experts, they are suitable for professionals at all stages of their career.

For more information on how any of the courses in this catalogue can be delivered in your region, please email capacitybuilding@gsma.com or call **+44 7733 333 799**.



