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14

3-5 JUNE  
The Gulf Hotel Bahrain  
Manama, Bahrain

# CAPITALIZING ON THE POTENTIAL OF THE DIGITAL WORLD

CHAIRMAN'S  
REPORT

# GSR14 CHAIRMAN'S REPORT



His Royal Highness Prince Khalifa  
bin Salman Al-Khalifa,  
Prime Minister of Bahrain,  
GSR14 Patron



Dr Hamadoun I. Touré,  
Secretary-General,  
ITU



Dr Mohammed Ahmed Alamer,  
Chairman, Telecommunications  
Regulatory Authority,  
Bahrain and GSR14 Chairman



Mr Brahim Sanou,  
Director, Telecommunication  
Development Bureau (BDT),  
ITU

The 14th Global Symposium for Regulators (GSR14), organized by ITU's Telecommunication Development Bureau and hosted by the Government of Bahrain under the patronage of His Royal Highness Prince Khalifa bin Salman Al-Khalifa, Prime Minister of Bahrain, was held in Manama, Bahrain, from 3 to 5 June 2014. The first two days were dedicated to the Global Regulators-Industry Dialogue (GRID) with the private sector, while the third day was for regulators alone.

The Global Symposium for Regulators (GSR) is the largest annual gathering of the global regulatory community concerned with information and communication technologies (ICTs). GRID sessions of the symposium foster a productive dialogue between regulators and the industry on topical policy and regulatory matters.

More than 700 leading specialists from 113 countries worldwide registered to attend the event, which also attracted around 80 high-level participants, including government ministers, heads of regulatory agencies and industry chief executives.



# OPENING CEREMONY

## SPEAKERS

H.E. Sheikh Fawaz Bin Mohamed Bin Khalifa Al Khalifa,  
Minister of State for Communications, Bahrain

Dr Hamadoun I. Touré, Secretary-General, ITU

Mr Brahima Sanou,  
Director, Telecommunication Development Bureau (BDT), ITU

Dr Mohammed Ahmed Alamer, Chairman,  
Telecommunications Regulatory Authority (TRA), Bahrain,  
and GSR14 Chairman

Opening GSR14 and welcoming participants, H.E. Sheikh Fawaz Bin Mohamed Bin Khalifa Al Khalifa, Minister of State for Communications, Bahrain, stressed the vital importance of ICTs in today's globalized world. He reiterated the commitment of the Government of Bahrain to further leverage the opportunities created by ICTs. The ICT sector contributes over half a billion dinars (USD 1.24 billion) directly to Bahrain's national economy, generating 4 per cent of total gross domestic product (GDP). To further enhance the ICT sector globally, GSR serves as a forum to discuss new regulatory approaches, enhance existing ones, and help implement them.

In his keynote address, Dr Hamadoun I. Touré, ITU Secretary-General, noted that in today's digital world, ICT regulators are increasingly taking on tasks beyond their traditional roles, and working to foster the development of services to deliver sustainable and inclusive social and economic development. ITU, through the work carried out by its three Sectors – Radiocommunication, Telecommunication Standardization and Telecommunication Development – is committed to assisting Member States, particularly in identifying the best strategies for success, taking into account their national circumstances and requirements.

Mr Brahima Sanou, Director of the ITU Telecommunication Development Bureau, reflected on the progress made since the creation of the Global Symposium for Regulators 15 years ago. At that time, mobile penetration worldwide was just 12 per cent,

and mobile broadband was not even available. Statistics relating to today's digital world speak for themselves. According to ICT data newly released by ITU, the number of mobile subscriptions will amount to the equivalent of 96 per cent of the world population by the end of 2014, showing a ten-fold increase over the past 15 years. Behind the statistics lie real human stories of people who nowadays are able to use mobile devices as their daily tools of communication, data transfer and much more, Mr Sanou told participants.

In introducing the overarching theme of GSR14, "Capitalizing on the potential of the digital world", Mr Sanou pointed out that consumers today increasingly have to deal with new challenges arising from innovative technologies, devices, online services and applications. In a globalized, interconnected and increasingly complex environment, consumer education and empowerment are critical to enabling users to benefit fully from the potential of the digital world.

Dr Mohammed Ahmed Alamer, Chairman of the Telecommunications Regulatory Authority of Bahrain and GSR14 Chairman, said that regulators had the important task of examining ways of ensuring that the full array of benefits of the digital world is brought to all citizens in an informed, responsible and safe manner. He stressed that this can be achieved only through effective and smart regulation targeted at empowering consumers, redefining responsibilities, and creating the conditions for data-driven economies to flourish.



# OPENING DEBATE

REDEFINING RESPONSIBILITIES IN A DATA-DRIVEN DIGITAL WORLD

## MODERATOR

Mr Brahim Sanou, Director of BDT

## PANELISTS

Ms Magdalena Gaj, President, Office of Electronic Communications (UKE), Poland and GSR13 Chairperson

Dr Mohammed Ahmed Alamer, Chairman, Telecommunications Regulatory Authority, Bahrain and GSR14 Chairman

Mr Lin Mombo, President of the Regulatory Board, Autorité de Régulation des Communications Electroniques et des Postes (ARCEP), Gabon and GSR15 Chairman

Ms Gabrielle Gauthey, President, Global Government Sector, Alcatel-Lucent

Mr Bocar Ba, Chief Executive Officer, Samena Telecommunications Council

Presentation: The digital revolution: are we ready?

Mr Mario Maniewicz, Chief, Infrastructure, Enabling Environment and E-applications Department, ITU/BDT

In opening the debate, Mr Sanou stressed the importance of addressing the new issues raised by the evolution of the ICT sector. The digital world is exciting, but also challenging, in terms of its synergies and competition, innovation and disruption, and new values. This is a world where stakeholders need to be willing and able to act together and build new relationships based on trust among all parties. Without trust, the tremendous opportunities of the digital world cannot be fully exploited.

As a backdrop to the debate, ITU gave a presentation on "The digital revolution: are we ready?" The presentation focused on the digital revolution sweeping the ICT sector. It highlighted the move to a hyper-connected world, where trillions of information bits are infusing the digital highways and where the attention is all about consumer value. This is good news for those who are connected; however, half of the world population still has to be brought online. To do so, light touch regulation needs to be complemented by both strong enforcement powers and sound co-regulatory alternatives. The timing of a regulatory intervention may prove critical to the success of its outcome. To craft the digital future, stakeholders need to start by asking themselves what their respective roles and responsibilities are.

Regulators in the panel stressed the importance of industry players, regulators and the various government bodies in collaborating to implement national broadband plans. Developing a national strategy at governmental level was recognized as key. The need to extend collaboration to scientists and academia was also highlighted. It is vital for regulators to be perceived by investors as exercising their power autonomously and independently of political influence. Establishing a predictable regulatory environment can prove very helpful.

All panellists recognized that investment in infrastructure is needed and called for cooperation, public-private partnerships (PPPs) and innovative sharing models, including the sharing of spectrum and infrastructure. Industry participants stressed that passive and active sharing should be fostered, as should smart competition in services provided over the shared networks. More spectrum is required, as spectrum is the lifeblood of the digital economy. The importance of working together to attract long-term investors was recognized and participants suggested inviting investors and banking institutions to future Global Symposium for Regulators events.

Industry participants noted that governments and regulators are aware of consumers' huge appetite for broadband. While broadband is now sometimes considered to be a commodity, it is not always viewed as such by the other sectors. Participants recognized that regulators are working hard to keep up to speed with the fast-changing technologies. The challenge is, however, to upgrade ICT regulations and address the need for convergence of regulations between different sectors and across borders. Also, cloud computing and machine-to-machine (M2M) communications raise a host of new legal issues as data streams flow through multiple jurisdictions, while regulators can only regulate players in their own jurisdiction. Therefore, as regulation evolves, the challenge of horizontal regulations will have to be addressed through collaboration.

Consumer education was identified as a vital element of modern regulatory frameworks, alongside principles of transparency, security, privacy and data protection, to capitalize on the benefits of the digital world. In conclusion, Mr Sanou underlined that more needs to be done to realize a fully digital world, and action is urgently required.



# SESSION 1

CHANGING ICT CONSUMER BEHAVIORS:  
CONSUMER EMPOWERMENT AND PROTECTION  
IN THE DIGITAL AGE

## MODERATOR

Ms Jessica Rosenworcel, Commissioner, Federal Communications  
Commission (FCC), United States

## PANELISTS

Mr Ron Box, Regulator, Telecommunications and Radiocommunications  
Regulator (TRR), Vanuatu

Mr Kijoo Lee, Commissioner, Korea Communications Commission (KCC),  
Republic of Korea

Mr Romain Abilé Houehou, Coordinator, Réseau des Consommateurs  
Africains des TIC (RéCATIC)

Mr Dominique Würges, Director, Institutional relationships, Orange

Mr Simon Milner, Policy Director, Facebook

Presentation: Consumer protection in the online world  
Ms Michèle Ledger, Head of Practice, Cullen International




Rapid technological innovation brings new challenges in an increasingly liberalized marketplace. Consumers are confronted with new issues brought about by the wider availability of ICTs in terms of greater choice of devices, online services and applications. Identifying pro-active policy and regulatory measures, in addition to co-regulatory and self-regulatory solutions and initiatives geared towards educating and empowering consumers, is essential to protect the rights of all users in an open, transparent and inclusive digital world.

The GSR14 Discussion Paper on "Consumer protection in the online world" takes stock of current regulatory issues and practices and suggests ways of improving consumer protection and experience. Contrary to the telecommunications, energy, postal, financial and audiovisual sectors, many operators in the online ecosystem are unregulated. No single regulator or authority in a country is responsible for supervising and enforcing a set of binding rules on these operators. Over-the-top (OTT) players need to respect the laws of the country in which they operate, but they are not supervised to the same extent as telecommunication operators or financial institutions. The paper identifies burning cross-cutting regulatory questions that should be addressed as a matter of priority to ensure that digital consumers are fully empowered, some of which may require changes to the legislative framework.

From the perspective of regulators, on the one hand, the pace of growth and innovation in online services and applications raises major challenges as new regulations need time to be conceived and implemented. On the other, legacy policy and regulations could create additional barriers to new challengers in online markets and thus result in missed opportunities

for price reduction and service diversification. Sound, swift and flexible regulations are needed to ensure that consumers online are protected, while incentives for service and content providers are created. In this regard, several key areas need to be addressed – and universal access to online services and information remains a major focus for regulators in developed and developing countries alike. Consumer education, along with consumer protection and redress, requires greater involvement from regulators, although not necessarily more, or heavier, regulation. Cybersecurity, child online protection and privacy all remain high on the list of priorities for regulators at the national level, as well as for international and regional bodies active in this field.

Service and content providers remain confident that the advantages and benefits of the online world outweigh the potential risks. In their efforts to mitigate negative effects, their emphasis is on protecting people, building trust and growing empathy. Having universal rules to govern online interactions is not always realistic because of the diversity and divergence of standards and norms – be they legal, cultural or social. However co- and self-regulation and consumer empowerment could allow for a healthy and respectful virtual space. As consumers are the main drivers of the digital transformation, educating and empowering them is essential to improve the online world. Consumers can make or break businesses online – through their new powers to search, compare, rank, recommend or even negotiate preferential conditions. Consumers have powerful channels to make their voices heard, but regulators also play a role in securing safe harbours and the rule of law for consumers.



From the viewpoint of some consumer associations, it is important to recognize the scale of consumer protection as an issue in the online ecosystem. Virtually everyone connected to an Internet-enabled ICT device is a consumer of one or of many online services, and needs guarantees for a safe, secure and efficient online experience. Before the dawn of online services, in 1985, the United Nations General Assembly adopted a set of eight guidelines for consumer protection. These guidelines included the right of “access of consumers to adequate information to enable them to make informed choices according to individual wishes and needs”. The Internet brings a whole new dimension to this right. According to some, these guidelines could be transposed into national legislation and effective mechanisms for their enforcement put in place. Without concrete enforcement options, entitlement or rights make little sense, be they online or in the physical world.

In order to apply consumer protection to the online world, regulators need to think out-of-the box and cross silos. Various options are on-hand, ranging from appointing a representative of a consumer association in the ICT regulatory authority to considering regulatory decisions from a consumer perspective before they are adopted; to co-regulatory models involving several regulators at the national level, from purely formal to practical arrangements to informal. It would make sense to envisage a global consumer protection authority as an ultimate referee, to bring together consumer interests and ensure the online world does not become a no man’s land.

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“Consumers today increasingly have to deal with new issues brought about by new technologies, new devices, new online services and applications which affect consumers’ behaviors. In a globalized, interconnected and increasingly complex environment, consumer education and empowerment are critical for users to fully benefit from the potential of the digital world.”

Mr Brahima Sanou

*Director,*

*Telecommunication Development Bureau (BDT), ITU*

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# SESSION 2

## WHY COMPETITION MATTERS

### MODERATOR

Mr Philippe Metzger, Director General, Office Fédéral de la Communication (OFCOM), Switzerland

### PANELISTS

Eng Mohammad Al Taani, Chairman of the Board/Chief Executive Officer, Telecommunications Regulatory Commission (TRC), Jordan

Mr João Batista de Rezende, President, Agência Nacional de Telecomunicações (ANATEL), Brazil

Mr Jean-François Bureau, Director, Institutional and International Affairs, Eutelsat

Presentation: Why competition matters  
Ms Janet Hernandez, President, TMG Inc.



Competition improves consumer choice, delivers lower prices, enhances quality of service, and drives innovation, resulting in new business models, new players and new services. The Discussion Paper on “Why Competition Matters and How to Foster It in the Dynamic ICT Sector” outlines the rapidly changing competitive landscape and highlights potential regulatory responses, ranging from licensing reforms, access obligations, and network and spectrum sharing, to protecting consumer choice and promoting interoperability.

Regulators face a vertically integrating, consolidating, converging and expanding market. For example, Microsoft — having acquired Skype and Nokia — offers not only software, but also devices and services. Skype today delivers 39 per cent of all international calls, challenging the voice revenues of traditional telecommunication operators.

Local or regional players are expanding internationally. Bharti of India, for instance, now operates in Africa, while Viettel of Viet Nam has expanded into Africa and the Americas. In the video services market, Netflix — three years ago, a purely domestic company in the United States — today operates in more than 40 countries and 25 per cent of its streaming customers reside overseas. In terms of vertical integration, competition concerns are being expressed — for example, in relation to the Comcast and Time Warner merger announced in February 2014, which is currently under review by government authorities in the United States.

Some countries are pressing ahead with unbundling and other ex ante obligations as part of their regulatory strategies to promote competition and facilitate the entry of new players into ICT markets. For example, Brazil’s

regulatory authority, ANATEL, has set up a national wholesale trading system for telecommunication equipment from towers and switching centres to interconnection points — and ANATEL has made it mandatory for operators with significant market power to be part of this system. During 10 months of operation, this platform has yielded almost 8000 infrastructure sharing contracts between operators.

Regulators generally see passive infrastructure sharing — towers and masts, for example — as acceptable. However, they often worry about collusion in regard to sharing active infrastructure, such as switching and billing. Recently, however, some regulators are taking the view that the benefits of faster mobile network deployment and lower costs outweigh the risk of anti-competitive behaviour.

Certain countries are rolling out wholesale open access networks to promote retail competition. Generally, these fibre-based broadband networks are either partially or wholly State-owned. Initially adopted in Australia, this wholesale open access model has been embraced in Brazil, Oman and South Africa. An open access model for mobile services is also being examined in some other countries, with Mexico looking to create an independent operator that would use the 700 MHz band to provide wholesale broadband services in the country and Kenya planning to roll out a wireless broadband network through a public-private partnership (PPP).

Net neutrality is another challenge to regulators. Consumers should know what quality of service to expect, but regulators are concerned that Internet service providers (ISPs) could use the traffic management exception to block or discriminate against particular



types of traffic in order to protect their own revenues and services. As a result, a number of countries — including Brazil, Canada and Chile — have introduced legislation. Meanwhile, in the European Union (EU), the European Parliament in April 2014 voted to require broadband providers (both fixed line and mobile) to treat all Internet traffic equally. A favorable vote by the Council of Ministers in October 2014 would turn this into EU-wide law.

Data plans — where consumers get free content (e.g. from Facebook or Wikipedia) through their mobile devices — pose a conundrum for regulators. From a consumer's standpoint, data plans might be a good thing, but from a competition standpoint, they might violate net neutrality.

A dynamic competitive environment is unfolding, and the increasingly international scope of players and plethora of new providers offering OTT services require regulators to continually find ways to adapt their regulations to ensure fair competition, drive investment and innovation, and protect consumers.







## SESSION 3

### BIG DATA - AN OPPORTUNITY OR A THREAT?

#### MODERATOR

Mr Mohamed Al Ghanim, Director General, Telecommunications Regulatory Authority (TRA), United Arab Emirates, GSR07 Chair

#### PANELISTS

Dr Vijayalakshmy K. Gupta, Member, Telecom Regulatory Authority of India (TRAI)

Mr Zhigang Ma, Deputy Chief Engineer, Institute of Economy and Policy Research, Ministry of Industry and Information Technology (MIIT), China

Dr Mustafa Aykut, Coordinator, International Affairs and Policy Coordinator, Türk Telekom

Mr Khaled Koubaa, Head of Policy, Google

Mr Peter Pitsch, Executive Director, Intel

Presentation: Big data

Mr Andy Haire, Chairman, AJH Communications, Ilc

Big Data offers a new perspective on reality, and is affecting and shaping potentially all sectors of the global economy, especially those that play a role in the capturing or relaying of data and information. However, Big Data's impact is likely to be broader than the economy; it affects how societies make sense of the world, and decide important policy challenges and innovation.

The GSR Discussion Paper "Big Data - Opportunity or Threat?" has four aims: to provide some boundaries to the subject; to explain the opportunities and contributions that Big Data offers to society and individuals; to signal and reflect on some of the inherent risks of this powerful new tool; and finally, to identify regulatory and policy considerations that should be accounted for when crafting future policy. The paper helps establish some policy options that can encourage the further use and benefits derived from Big Data and emphasizes the importance of setting the proper frameworks to prevent societal or individual abuses.

It is only normal that industry players are excited about the great opportunities offered by Big Data, or "data-driven innovation", in particular with regards to developing new products and services and generating new revenue streams. Multiple new business models leverage the customer relationships and can even turn these into a stand-alone profitable portfolio: usage patterns and preferences associated with the basic user profile (e.g., age, status, education) and behavior (e.g., location, movement) can prove a gold mine for a wide range of service providers. Some of these can act as full-fledged data providers; others can act as data analysts and creating by-products; while others can break into multiple levels of the distribution chain for Big Data products. With the complexity and variety of likely scenarios, industry codes of conduct can help ensure data does not go far beyond users' control. Transparency and traceability of industry practices are fundamental

for building consumer confidence and creating an environment based on trust.

For regulators, Big Data may represent more of a challenge than an opportunity, at least for the time being. The exponential volumes of data generated by the population raise regulatory concerns, notably with regards to consumer awareness and consent for the potential uses of their data, as well as the accuracy and security of data. The Big Data revolution can be compared to the first industrial revolution, and may likewise prove a game-changer for the economy and society as a whole -- allowing, for instance, medical research or production processes to be brought to the next level. The dark side of Big Data, however, requires active mitigation, while clear rules need to be set and enforced for the collection, analysis and use of data. Among other effects, Big Data integration into service providers' business models could impact on competition and market dominance. Conventional regulation alone, however, has little chance to provide a plausible solution to the issues at stake. Co-regulation and self-regulation have to be developed as new regulatory interfaces to ensure issues are resolved timely and without excessive regulatory intervention.

For governments in general, it is important to understand the flow of data and information and build capacity to manage these in the best interest of both businesses and individual citizens. Governments have a unique role in framing the processes of data production and certification. Big Data also represents an unlimited resource for governments and can be used to enhance both good governance and governance processes based on tangible evidence. Forensic uses of Big Data (notably in predicting crimes and applying predictive punishments) have to be carefully assessed and used with great caution. The guidance of international bodies might be sought to establish best practices for regulation in the area of Big Data.

# SESSION 4

## IS IT TIME TO RETHINK SPECTRUM LICENSING?

### MODERATOR

Mr Jacques Stern, Board Member, Autorité de Régulation des Communications Electroniques et des Postes (ARCEP), France

### PANELISTS

Mr François Rancy, Director, Radiocommunication Bureau (BR), ITU

Mr Piro Xhixho, Chairman, Electronic and Postal Communications Authority, Albania

Mr Hideo Fuseda, Director of Mobile Communications, Ministry of Internal Affairs and Communications, Japan

Mr Luigi Gambardella, Vice President and Head of Relations with international organizations, Telecom Italia

Dr Robert Pepper, Vice-President, Cisco Systems, Inc.

Presentation: New Frontiers in Spectrum Licensing

Mr John Alden, Vice President, Freedom Technologies

At the heart of the spectrum debate this year lay countries' efforts to balance licensed spectrum obligations and costs with those of licence-exempt operators, as well as to ensure a level playing field among licensed and licence-exempt operators providing mobile services. Spectrum managers in countries around the world have been facing strong pressure to free up access to more spectrum for broadband wireless services. While the radio-frequency spectrum is a highly valuable resource, and as the volume of exchange in data and information continues to grow, the management of the available spectrum can be, and should be, improved to allow for the adoption of new technologies.

The GSR14 Discussion Paper "New frontiers in spectrum licensing" examines new approaches to spectrum licensing, notably through sharing. Mobile broadband is growing rapidly around the world. The forthcoming World Radiocommunication Conference in 2015 (WRC-15) will consider new bands for International Mobile Telecommunications (IMT). A new paradigm in spectrum management has gained momentum, considering spectrum access as dynamic, rather than static. A dynamic environment is one in which devices and networks adapt flexibly to constraints in spectrum access with agility and mobility, in much the same way as passengers negotiate a crowded train station or vehicles form lanes on a highway. In exploring where to find new spectrum, the paper provides an overview of traditional models of spectrum licensing (including administrative licensing, the flexible rights-of-use models and the licence-exempt spectrum models) and the benefits associated with these. Previously identifiable models of spectrum distribution are now evolving into hybrid models that respond

to the economic needs of ICT operators, equipment manufacturers and users. At the same time, these hybrid models often retain the administrative and public policy handholds that regulators and government users need to fulfil their missions. Meanwhile, new ways of expanding spectrum access are being enabled by developing technologies or licensing approaches intended to ensure coexistence with incumbent spectrum users.

With the growing demand for data, faster and more varied services and the greater availability of applications of all sorts, regulators need to reconsider their priorities and look for new tools. Existing spectrum policies had been developed based on the needs of voice services. While regulatory approaches for voice services had worked well in the past, the move from voice to data calls for new solutions. For mobile broadband, long-term evolution (LTE) and LTE-Advanced, new spectrum is needed and a major consideration is how to allocate such spectrum in a technology-neutral way to allow operators to leverage their scarce resources. Data-centric spectrum policies are needed in the new mobile broadband world.

When looking at the main trends in spectrum requirements, spectrum sharing continues to gain momentum. To balance the needs of different kinds of service providers, regulators need to consider different approaches. Some new technologies can also help regulators experiment with sharing techniques. In order to speed up the deployment of mobile networks and ensure that both rural and urban areas are served, the benefits of connectivity can also be gained by sharing passive infrastructure. Sharing the passive elements can reduce cost and time to market. It will be interesting to watch and see whether these new sharing experiments really turn out to be new frontiers in licensing.



The need for a long-term vision and certainty in the marketplace for spectrum is essential to attract investment. Licences are needed to solve issues related to interference, as radio waves do not stop at walls and borders. In this regard, the licensing framework can be considered a mechanism and instrument for achieving the best use of spectrum for each country. Coverage and other obligations can be part of the licence. So-called "unlicensed spectrum" is a viable option for developing some kinds of services, although no spectrum is effectively unlicensed, as blanket licences may be necessary for the commercial provision of all services. Unlicensed spectrum provides interesting alternatives, especially in the higher frequencies. The shared use of licensed and unlicensed spectrum methods are being explored, noting that it is difficult to find clear frequency bands. Some observers expect that the interest in the unlicensed use of spectrum will grow, as licensed spectrum bands become congested. Levels of security and quality of service need to be maintained for all services, including for unlicensed spectrum services.

While spectrum licensing is a rather technical topic, it is also important from the social, economic and political viewpoints, and to society as a whole. Consumers and their needs are central to regulations and policies. The demand for new, more bandwidth-intensive services (such as video), and the quality of service imperatives

are forcing operators to look for more spectrum and increased flexibility. Convergence is further demanding that broadcasters and telcos communicate and work together, although in the past, they have competed for the same content and audience. The dynamics of this new environment is thus very different from the situation ten or twenty years ago, when most of the existing policies and regulations were developed. Spectrum policies need to be modernized to create targeted incentives and secure sufficient infrastructure investment. In this regard, it is best practice that licence fees reflect the value of spectrum, and that auctions are not used as cash cows.

Panellists were unanimous in their agreement that more spectrum is needed, for licensed and licence-exempt spectrum use. Developing countries and emerging economies will even be more in need of spectrum going forward, and one way to free up spectrum is to accelerate the transition from analogue to digital broadcasting. When addressing spectrum challenges, the new paradigms must be identified for handling spectrum. Regulators should be innovative and allow for new methods and mechanisms to be considered and tested. In doing so, however, regulators should be responsive and forward-looking, while ensuring that extensive testing and analysis are undertaken before adopting any new mechanisms.

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**"GSR is a landmark event in the calendar of everyone working in the ICT and telecoms regulatory industry.**

**The importance of GSR14 is evidenced by the hundreds of delegates that have registered for the next three days of lectures, workshops, seminars and networking opportunities."**

**Dr Mohammed Ahmed Alamer**

*Chairman, Telecommunications Regulatory Authority,  
Bahrain and GSR14 Chairman*

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# NETWORK DEBATE

MEETING THE DEMAND FOR CAPACITY,  
ARE WE GETTING THERE?

## MODERATOR

Mr Kamal Shehadi, Chief Regulatory Officer, Etisalat and GSR09 Chair

## PANELISTS

Prof. João Confraria, Member of the Board, Autoridade Nacional de Comunicações (ANACOM), Portugal

Mr Gonzalo Ruiz Días, president, organismo Supervisor de Inversión Privada en Telecomunicaciones (OSIPEL), Peru

Mr Paarock VanPercy, National Communications Authority (NCA), Ghana

Mr Deepak Mathur, Senior Vice President APMA, SES

Mr Pablo Pfost, Head Group Regulatory Affairs, Telefonica

Is the current deployment of high-speed broadband networks sufficient to meet demand? What technologies are out there? And which regulatory, policy and commercial approaches have been adopted? Speakers provided diverse examples of different approaches, including mobile, fibre-to-the home (FTTH), submarine cables and satellites.

In Europe, Portugal is a leader in next-generation access (NGA) and long-term evolution (LTE) coverage. Today, 80 per cent of households are covered by either an optical-fibre or cable network and 90 per cent of the population has access to an LTE network.

One key step was when the national regulatory authority decided to impose mandatory access to Portugal Telecom's ducts and poles by 2006. Portugal Telecom was subjected to this type of regulation, because by then, it held a concession for public service and had significant market power in terms of infrastructure. A law was also passed in 2009 imposing symmetric access to every duct in the country. This means that electronic communications operators willing to build NGA networks are entitled to have access to ducts owned by other electronic communications operators, as well as by municipalities, highway operators, railway operators, water and waste companies, and so on. A government programme was introduced to subsidize the construction of FTTH networks in rural and poor areas, requiring subsidized companies to allow access to service providers or operators intending to use fibre.

Moving to Africa, in Ghana in the mid-1990s, telephone penetration was just 0.3 per cent. In 2000, the Government took direct measures to introduce access infrastructure. At that time, there were four mobile licensed operators holding licences that had to be renewed annually. In 2004, the Government started to award 15-year licences, with the option to renew for another ten years. Almost immediately, investment and roll-out grew, and by 2006 the penetration rate had grown to about 26 per cent, reaching 73 per cent by 2010 and 110 per cent today — while mobile broadband penetration has today reached 54 per cent.

Before 2000, the primary mode of Internet access was satellite (described as expensive, unreliable and slow). And only 1.5 per cent of the population used the Internet then. The Government then privatized submarine fibre-optic cable landings and that brought capacity to the country. The first submarine cable landed in 2000, but prices remained high. Nearly ten years later, the second submarine fibre-optic cable landed and almost immediately, prices for telecom services almost halved. Since then, competition has continued to push prices down and bandwidth has continued to increase.

Before submarine cables landed on its shores, Africa traditionally relied on satellite to provide point-to-point links for Internet and voice. However, the satellite industry argued that this usage misses out on satellite's strength in mass broadcasting and content delivery. For example, a single C-band satellite can cover all of Africa or all of Asia. A single transponder can carry 30 channels of standard-definition television or 8 channels of high-definition (HD) television and reach every single consumer across Africa or Asia, at a negligible cost per household. In relation to broadband and the Internet, there is considerable innovation going on in the satellite world. One satellite company (O3b Networks) is using high-throughput spot beams to provide fibre-like speeds, fibre-like latency at fibre-like prices anywhere in the world.

Turning to the Americas, in 1994, Peru began to foster private investment in the telecommunication sector. From a single concession held by the State monopoly, the country progressed to over 600 concession contracts, this being the State's main tool for promoting investment in this market. There are now 30 million mobile lines in Peru. However, this growth has not been even, with the major part of growth in connectivity concentrated in coastal areas and cities. One of the challenges facing both State and industry is to extend the service to the remotest parts of the country, including its rural, mountainous and jungle areas.

Since 2013, Peru has been working on a fibre-optic backbone network project that will enable it to counter the problem of infrastructure

scarcity in its interior provinces. The Government is seeking to facilitate access to infrastructure and fixed broadband in the remotest areas through a PPP project. The State is thus playing an important role, with the regulator being responsible for guaranteeing neutrality in terms of access to this transport network, which will be under the control of a private operator.

From a network operator's viewpoint, each country should generate the necessary resources and investment for the development of broadband and ultra-broadband networks, both fixed and mobile. In general, such investment has to come essentially from the private sector, with some exceptions (as seen, for example, in the case of Peru). When deciding on the appropriate regulatory framework to put in place, policy-makers and regulators are urged not to view telecommunication companies as utilities. Given the very short technological cycles in which these companies operate, they should not be dealt with in the same way as companies in other sectors such as gas or electricity. Regulatory frameworks must not impede innovation or prevent the exploration of new business models — nor must the rules on open Internet that are currently the subject of such debate be allowed to prevent citizens from experiencing new things.

These insightful examples and comments from panelists were followed by an intense debate on why some countries are returning to the monopoly model of providing a single wholesale network that existed 15-20 years ago in the industry. Why should this experimentation with ideas that often failed the last time this industry experienced a public-sector-dominated,

public-sector-led monopoly model succeed today? Where should a monopoly stop? Should it stop at civil works, fibre or even transmission facilities?

Governments that are pushing for a single wholesale network were quoted as saying "We provide the low-cost solution. We are basically doing the right thing. We are helping the public". So what should be the role of the State in the context of network development to guarantee broadband access?

For some, the role of the State is to facilitate the provision of infrastructure wherever private investment has been unable to do so for whatever reasons. It is a role that could be referred to as subsidiary, or as supplementary, in which the aim is not to replace private investment but to complement it.

With regards to PPPs, there is considerable financial engineering behind them and it is important to analyze the business case and the different financial risks that investments entail. Liberal economists can always blame the State when things go wrong, or argue that without State involvement, things would have been better. But many countries face financing problems, and sometimes State involvement in large investment projects is necessary to reduce the risk in order to attract private investors.

Given that broadband contributes to economic development, financial partners such as the development banks could be involved in discussions at ITU level or in GSR, where they could surely contribute to ITU-brokered discussions. This is food for thought for ITU.

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**“GSR provides an unparalleled platform for sharing regulatory experiences and best practices. As the initiator and convener of this unique global dialogue that brings together heads of national telecom/ICT regulatory authorities worldwide, ITU is proud to see the many innovative contributions received year after year, which have helped move ICTs to the forefront of the policy agenda and recognize broadband as a powerful catalyst for social and economic inclusion. Efforts throughout the world to spearhead innovation and investment and protect consumer rights through the adoption of targeted ICT regulation will contribute to making the dream of a ‘digital world for all’ a reality.”**

**Dr Hamadoun I. Touré**  
*Secretary-General,  
 International Telecommunication Union*

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# SESSION 6

NEW BUSINESS MODELS DRIVEN BY DIGITAL COMMUNICATIONS AND SERVICES

## MODERATOR

Mr Mohamed Bubashait, General Director, Telecommunications Regulatory Authority (TRA), Bahrain

## PANELISTS

En Hesham El Alaily, Executive President, National Telecommunication Regulatory Authority (NTRA), Egypt

Mr Mohamed Sharil Tarmizi, Chairman, Malaysian Communications and Multimedia Commission (MCMC), Malaysia

Mr Jim Beveridge, Director, International Technology Policy, Microsoft

Ms Lauren Van Wazer, Vice President, Global Public Policy, Akamai Technologies

## NEW BUSINESS MODELS IN THE DATA-DRIVEN ECONOMY

Mr René Arnold, Head of Department Markets and Perspectives, WIK-Consult GmbH



The data-driven economy is very much a global economy. New data transport, storage and analysis procedures have enabled more businesses to utilize data in their business models. There are many factors that impact the success of those models. One of the main characteristics of this new environment is that it is consumer-centric. Regulators have to step in to balance consumer rights with business opportunities, thus enabling new digital economies to thrive.

The GSR14 Discussion Paper on “The impact of data on ICT business models” explores the trend towards data becoming a new driver of economic growth. The paper traces the evolution of business models built around data, and provides evidence for a sustained structural change leading to a data-driven economy which policy-makers and regulators need to be aware of. Three important characteristics of the data-driven economy emerge. Firstly, data’s economic influence is stretching across all sectors. Secondly, the data-driven economy is shaped by two-sided markets that look poised to create dominant positions in the market and thus should be closely monitored by policy-makers and regulators. Thirdly, it is still uncertain which players will win the most powerful position. In a nutshell, the paper suggests that regulatory interventions may have little effect if they are only applied on a national level, calling for regulatory arrangements with international reach.

One thing seems to be sure – the new data-driven economy is here to stay. But how could it grow beyond the previous brick-and-mortar economies? Many argue that data is the new gold; however, could the data-centric economy

become a new Eldorado of the digital age, for all countries at all levels of development? What makes this economic philosophy different from previous ones is sharing. The sharing economy is the future, creating new businesses without boundaries, for forward-looking multinational companies as well as for optimistic individual entrepreneurs, often with little or no initial investment required. With the sharing of networks, of capacities and of the radio-frequency spectrum – new business thinking takes new avenues unexplored by conventional economics. But getting the technology right cannot ensure a profitable business model, and multiple challenges need to be addressed. For regulators, the new business realm around data calls for new regulatory solutions. While regulation is needed more than ever, it shifts focus and needs to leverage on new norms. Extending legacy regulations to new market realities can only be counterproductive. New and differently tailored regulations for all market players may be required to overhaul legacy regulations.

However, this may be more easily said than done. Internet economies do not grow in a vacuum, they need physical infrastructure. A major concern for regulators is to spur investment and grow network capacity. With sharing becoming an essential building block in revisiting business models in the ICT sector and beyond, regulators are aware that they have to pick their interventions and apply a minimalist approach to regulating some aspects of the new digital economies, while putting in place heavy-duty enforcement mechanisms. ICT regulators increasingly need to be knowledgeable in many different areas,





from network engineering to traffic management to content, and have to learn continuously, and assume new roles and responsibilities. The fundamental question – to regulate or not to regulate? – is one that regulators have to consider literally every day. There are few straight answers – however, regulators are conscious that hammering obligations may no longer work in many areas, and incentives are the new

regulatory fixes. Regulators do not wish to be seen anymore as watchdogs or doorkeepers, but rather as partners and allies. Likewise, rather than trying to accommodate all possible scenarios of arrangements and interactions among market players, network operators or OTTs, and code those into formal law, regulations should establish an enabling framework for players to partner, share and compete.

All panellists agreed that, as data know no borders, issues relating to the data-driven economy have to be addressed globally with a view to establishing a policy and regulatory framework which is flexible and capable of meeting the requirements of new and emerging market players. Innovative and smart regulatory approaches are required, providing for equal treatment of all market players. In order to

foster sustainable growth of new services and ensure consumer interest, greater market self-regulation or light touch regulation is paramount.



# SESSION 7

REGULATORY IMPACT ASSESSMENT: SPURRING  
REGULATORY EFFICIENCY

## MODERATOR

Dr Eugene Juwah, Executive Vice Chairman and Chief Executive Officer, Nigeria Communications Commission (NCC), Nigeria

## PANELISTS

Dr Dražen Lučić, President of Council, Croatian Post and Electronic Communications Agency (HAKOM), Croatia

Eng. Godfrey Mutabazi, Executive Director, Uganda Communications Commission (UCC), Uganda

Mr Sunil Kanti Bose, Chairman, Bangladesh Telecommunication Regulatory Commission (BTRC), Bangladesh

Eng. Saddig Al Tayeb, Deputy Governor for Competition Affairs, Communications and Information Technology Commission (CITC), Saudi Arabia

Presentation: Using regulatory impact analysis to improve decision-making in the ICT sector

Prof. Andrea Renda, Senior Research Fellow, Centre for European Policy Studies (CEPS), Belgium

With globalization, technological progress and the resulting shift in business models, regulation, and ICT regulation in particular, is getting more complex. Before making decisions and adopting regulations, it makes sense to attempt to assess their impact, compare it against the set objectives and eventually revise or fine-tune those decisions.

The GSR14 Discussion Paper "Using Regulatory Impact Analysis to Improve Decision Making in the ICT Sector" throws light on a powerful but relatively underutilized regulatory instrument, the Regulatory Impact Analysis (RIA). RIA is defined as a systematic, structured, evidence-based analysis of the prospective impacts of a proposed policy measure against possible alternatives. The adoption and implementation of RIA can promote the efficiency, transparency and accountability of government action. However, implementing RIA is also challenging, from both procedural and methodological viewpoints. This discussion paper takes stock of current RIA developments and examines potential opportunities and challenges of the implementation of RIA in the ICT sector. Several examples of application of RIA in the ICT sector are illustrated, and a check-list for regulators is developed, with the aim of providing advice to ICT regulators on how to successfully use the RIA tool in their daily regulatory decisions.

From developing countries' perspective, introducing RIA could replace the approach of cutting and pasting best practices from other jurisdictions. It could instead frame a participatory regime for making relevant regulatory decisions, leveraging the specific knowledge of stakeholders in national markets to make good law. An informed, two-way process of assessing various policy options and their likely consequences paves the way to a better understanding of market realities, the roles of the different players involved and the issues at stake. Another benefit of this approach is growing a sound long-term relationship with industry and consumers. This also helps create a new image of the regulator as a conciliator and advocate for industry and consumer rights, rather than as a policeman.

In Nigeria, policy objectives have been defined and made available to the public. Comments and input from stakeholders are fed into the regulatory process, leveraging on a wide consultation process. In the European Union, a thorough market analysis is conducted every three years. Croatia has taken this approach one step further with its project "Looking in the Future", which focuses on mapping the future effects of regulatory decisions in cooperation with academia and industry. In India, the main issue is often the enforcement of regulatory decisions. To remedy this situation and ensure transparency and accountability, draft regulations are subject to public consultations with stakeholders, through targeted events or online, before the regulatory authority's formal approval. In Saudi Arabia, the regulator takes a number of measures to ensure that stakeholders benefit from regulation. Periodic market analysis is carried out amongst individuals, and small- and medium-sized enterprises (SMEs), as well as public institutions such as hospitals and schools, to quantify the impact of regulation and suggest ways of correcting or streamlining regulations. Recommendations from these studies help shape the regulator's strategy for boosting the ICT sector and pass on the benefits of regulation to all users, businesses or individuals.

Last but not least, it is important to stress that RIA does not replace political decision-making. Where a standard cost-benefit analysis is used, regulators can still add different weights to different types of areas, according to their political or other priorities. The value of RIA is in the process of conciliation of diverging views and needs, and balancing consumer and industry interests. Multi-criteria analysis based on the specific case in point can help reduce bias and induce targeted regulatory options to remedy specific issues and improve the quality of regulation overall. One challenging aspect remains the cost of RIA. A battle of evidence improves the quality of debate on regulation, but this often comes at a cost, in terms of time, effort and resources dedicated by the regulator.





# SESSION 8

## TAKING THE REGULATORY MODEL TO THE NEXT LEVEL

### MODERATOR

Ms Kathleen Riviere-Smith, Chief Executive Officer, Utilities Regulation and Competition Authority (URCA), Bahamas

### PANELISTS

Ms Adriana Labardini, Commissioner, Instituto Federal de Telecomunicaciones (IFT), Mexico

Mr Antonio Preto, Commissioner, Autorità per le Garanzie nelle Comunicazioni (AGCOM), Italy

Mr Diego Rodríguez, Member of the Board, Comisión Nacional de los Mercados y la Competencia (CNMC), Spain

Dr Kemal Huseinovi, Director General, Communications Regulatory Agency, Bosnia and Herzegovina

Mr Thari G. Pheko, Chief Executive & Ex-Officio Board Member, Botswana Communications Regulatory Authority (BOCRA), Botswana

It is no surprise that the plain old telecom regulator may no longer be effective in the current dynamic and heterogeneous digital environment. Having separate regulators overseeing discrete areas in silos may facilitate "authorities shopping" by market players to find the best conditions. Instead, some countries may be better suited to establish a converged regulator to achieve multiple objectives and perform efficiency gains.

Italy established one of the first converged regulators in 1997. Having a converged regulator allows for addressing consolidation between media, content and service providers in a more integrated way. In this view, a converged regulator provides for regulatory transparency, certainty and greater investment, and can provide equal regulatory treatment of the different services provided over the different platforms and equal treatment of all players. Having a single entity also played a role in the successful switch-over from analog to digital broadcasting services in Italy.

In Bosnia and Herzegovina, a converged regulator was established in 2001 to oversee telecom and content regulation. Operators and new market entrants see huge benefits of having a single regulator for consumers and businesses, as they only have to deal with one entity, a one-stop-shop rather than multiple different institutions. Content regulation is becoming increasingly important. With the convergence of services and infrastructure, the future is horizontal regulation and no longer vertical regulation.

The Bahamas went through this process in 2009 and a complete restructuring of regulatory organizations took place to increase institutional capacity. A converged regulator was established by merging the public utilities and broadcasting authorities and bringing competition powers for the sector into the purview of the converged entity.

Convergence of regulators can take different forms and institutional designs. The Mexican converged regulator, IFT, was restructured and granted extended ex post competition powers in 2013, in addition to telecom and broadcasting oversight. Bringing together the regulatory powers under one single entity allows the regulator to have a holistic vision of the sector.

It provides for better competition, greater transparency, and skilled staff to build the necessary regulations and increase participation in the market. Importantly, market concentration across the different sectors requires asymmetric regulation to eliminate barriers to competition. Exclusivity measures in broadcasting, for example, may impact competition in other markets and these may be better examined by one single entity.

The converged Spanish regulator, established in 2013, integrates the activities of five previously separated regulators in charge of infrastructures, services and content. Convergence of the regulator increases coherence between sectoral activities and creates synergies. Spain's short experience is positive, although the regulator recognizes that convergence is a very complicated process.

In Botswana, the Government realized ten years ago that ICT was the engine for growth. In 2013, when the telecom and broadcasting authorities were merged to integrate postal and Internet services as well, Botswana took on the challenge of bringing ICTs to all citizens. This has not always been an easy process, because each sector is unique and needs to be carefully addressed. To staff the regulator, it is important that the right people with the right skills are available to regulate the right services at the right time.

All panelists stressed the positive aspects and benefits of convergence in: the reduction of duplication of measures, integration, greater efficiency through staff and cost savings and the ability to promoting local content. A converged regulator is likely to be more efficient to respond to the challenges of the converged ICT sector, to foster technology neutrality and equal treatment. A converged regulator should also have competition powers. Countries in the European Union have adopted convergent regulations, but convergence of the regulator is not required as each country is different. Panelists saw few disadvantages in creating a converged regulator and stressed the importance of giving the authority competition powers over the sector to provide them with both ex ante and ex post regulatory tools.



## SESSION 9

### HOW TO MONITOR BROADBAND PLAN/DIGITAL AGENDAS' IMPLEMENTATION?

#### MODERATOR AND PRESENTATION

Mr Colin Oliver, Senior ICT Expert

#### PANELISTS

Dr Milan Jankovic, Director, Republic Agency for Electronic Communications (RATEL), Serbia

Mr Feliksas Dobrovolskis, Chairman of the Board / Director General, Communications Regulatory Authority, Lithuania

Prof. John Nkoma, Director-General, Tanzania Communications Regulatory Authority (TCRA)

The GSR discussion paper on “Monitoring the implementation of the broadband plans and strategies” emphasizes the need for monitoring and feedback to be fully integrated into broadband plans. We cannot manage something effectively, if we cannot measure it. Indicators of adoption and effective use are still underdeveloped however, although efforts are being made in this regard in a number of administrations. While some areas of monitoring clearly belong to the regulator, in other areas, such as capacity-building, the regulator plays more of a supporting role. The three phases of broadband development include: deployment, adoption and integration. Each phase builds upon the previous phase, and monitoring can be included in each of the three phases. In terms of the use of measurements, there is a shift of focus from telecom indicators towards performance indicators and outcome measures. Interactive maps are also becoming increasingly available in countries, and are proving useful in monitoring the enabling environment to ensure progress with the broadband plan. Barriers to adoption and access were also elaborated on and how to overcome these.

With high-speed broadband becoming a core element of advanced services in sectors such as health and education, the savings flowing from the use of broadband-based connectivity may outweigh the costs. Within each sector, short, medium and long-term agendas need to take account of the different challenges associated with the deployment, adoption and integration stages, weighing short-term costs against long-term gains. Attention is increasingly turning to outcomes measured not only in terms of costs and savings, but also in terms of overall gains in capability, efficiency, productivity, innovation and public welfare. New measures need to be developed to monitor changes in people's behavior and increased dependence on broadband-based services.

In the discussions, the role of regulator in implementing the national broadband plan was debated. While the regulator is expected to take the lead in a number of areas related to broadband implementation, cooperation and timing of the intervention of other stakeholders is important. In some cases, using a phased approach can deliver best results, by first establishing an enabling regulatory

environment and then moving to building essential infrastructure. As infrastructure-based competition is a reality in many markets, there is a need to find the right balance between the goals of promoting competition and consumer choice on one hand, and promoting the various forms of sharing, on the other. National broadband plans need to specify practical arrangements for its implementation, from designating a lead implementing agency, through establishing clear and measurable targets and indicators, to setting practical and efficient processes for their monitoring.

Panelists and participants shared experiences with implementing their national broadband plans, the goals of the plans defining both the indicators to be surveyed and monitored, and the mechanisms and practices for doing so. In Lithuania, the regulator has been actively promoting network sharing as a means of extending connectivity while providing targeted investment incentives. In Tanzania, the regulator has adopted a holistic approach to creating market opportunities, while protecting consumers, integrating and balancing regulations in various areas such as spectrum management, sharing and tariff policies.

In debating the financing for broadband infrastructure deployment, different models were discussed for various types of projects, noting that there is no single best model. Rather, in the specific circumstances of a country in terms of level of development, market maturity and technology adoption, the best model would be the one allowing to accommodate the national priorities and the concrete objectives of the national broadband plan, while meeting the aspirations of the consumers. Some leaned more towards financing broadband implementation by the government, others towards financing by the private sector, and others towards PPPs. For financing wireless infrastructure, where there is healthy competition among the mobile providers, multiple options are available. For wireline infrastructure suggestions were made to tap into the surplus of Universal Service Funds (USFs). To the extent practical, regulators should assess the impact of broadband in terms of ICT market development and the economy as a whole, with a view to reviewing established benchmarks for broadband capacity, as demand and usage continue to develop.





# WAY FORWARD AND CLOSING

## SPEAKERS

Dr Hamadoun I. Touré, Secretary-General, ITU

Mr Brahima Sanou, Director, BDT, ITU

Dr Mohammed Ahmed Alamer, Chairman, TRA, Bahrain,  
and GSR14 Chairman

Mr Lin Mombo, President of the Regulatory Board, ARCEP,  
Gabon and GSR15 Chairman

His Excellency Dr Hamed bin Salim Al Rawahi, 2014 Chair of AREGNET,  
Executive President of TRA Oman, and Chairman of the Regulatory Associations  
meeting 2014



Sharing his thoughts on the discussions over the three days of GSR14, Mr Sanou stressed that capitalizing on the potential of the digital world can only be achieved through collaborative efforts, resulting in effective and smart regulation. Smart regulation does not have to mean more regulation — it should rather mean more focused regulation when necessary. Mr Sanou expressed his satisfaction that ITU continues to provide an important and solid platform for ICT regulators, enabling them to share and exchange ideas and solutions, and cooperate for a better world.

ITU Secretary-General, Dr Hamadoun I. Touré, traced the history of the Global Symposium for Regulators over the past 15 years, stressing with pride that the event had grown into the world's most important and influential meeting of the global ICT regulatory community. He extended sincere thanks to all regulators for their commitment to the event and recognized the willingness of the ICT industry to engage in a constructive dialogue. He singled out the truly exceptional leaders who have served as chairmen of the Global Symposium for Regulators. Without their skill, expertise and commitment, the symposium could never have grown into the outstanding event that it is today. In closing, Dr Touré extended his warmest thanks to the GSR14 Chairman, Dr Mohammed Alamer, and the host country team led by Mohammed Bubashait, who exceeded all expectations in the organization of GSR14.

His Excellency Dr Hamed bin Salim Al Rawahi, Chairman of the Regulatory Associations meeting, presented the outcome of the annual event that took place back-to-back with GSR14. He explained that the Regulatory Associations meeting allowed many associations to share successful experiences and have an open discussion on the success factors for making a difference in their countries. The main topics of debate were Internet governance, the grey market and the theft of terminals, as well as the need for regional actions in these areas in collaboration with ITU. The meeting recommended the

establishment of a working group bringing together regulatory and industry associations to work on the implementation of the recommendations of the ITU Report on Mobile Equipment Grey Market, Counterfeit and Theft, which was produced following a request by the Regulatory Associations meeting held in 2013.


Dr Alamer, GSR14 Chairman, presented the GSR14 Best Practice Guidelines on consumer protection in the digital world. The guidelines — drafted in a spirit of cooperation — were endorsed and are available online. Dr Alamer thanked the panellists and moderators who took part in the opening debate and the panel sessions, which produced such stimulating discussions and launched new avenues for future regulation. In addition, Dr Alamer emphasized the importance of building a strong, positive relationship within the global community of regulators to enable the constructive exchange of ideas and solutions on regulation. GSR14 has strengthened links among regulators and will certainly contribute to closer and more efficient collaboration in the immediate future.

Mr Lin Mombo, Chairman of the forthcoming Global Symposium for Regulators, invited all participants to attend the next symposium, which would take place in Libreville, Gabon, in 2015. He emphasized the dedication of his administration to organizing this prestigious event and its commitment to make GSR-15 another resounding success.

All participants who took the floor congratulated the Bahraini Administration, Dr Alamer and ITU on the excellent organization and highly successful meeting.

Mr Sanou thanked the Government of Bahrain and the Telecommunications Regulatory Authority team for hosting the symposium, and congratulated Dr Alamer on his remarkable leadership of the event. Mr Sanou nominated Dr Alamer Ambassador for the GSR14 Best Practice Guidelines. In his role of Ambassador, Dr Alamer will take every opportunity between now and GSR-15 to bring these guidelines to the attention of regulators, at global and regional forums.



A photograph of two men standing side-by-side. The man on the left, Mr. Brahima Sanou, is wearing a dark suit, a light blue shirt, and a patterned tie. The man on the right, Dr. Mohammed Ahmed Alamer, is wearing a white thobe and a white ghutra with a black agal. He is holding a document titled 'GSR14' which also mentions 'CONSUMER PROTECTION' and 'DIGITAL WORLD'. Both men are looking towards the camera.

“Today’s digital world touches nearly all aspects of our lives. In this globalized and interconnected landscape, we need to work together to protect the rights of the consumers, especially those of vulnerable people, by encouraging the development of modern and effective regulatory tools. I am confident that these Guidelines will help us build a safer and trustworthy digital environment for all.”

**Mr Brahima Sanou**

*Telecommunication Development Bureau (BDT),  
ITU*

“One of our major responsibilities is to examine ways of ensuring that the full array of benefits of the digital world is brought to all citizens in an informed, responsive and safe manner. This can only be achieved through effective and smart regulation targeted at empowering consumers, redefining responsibilities, and creating the conditions for a data-driven economy to flourish. The adoption of Best Practice Guidelines will assist in these processes, and ensure that we all work together to achieve our goal.”

**Dr Mohammed Ahmed Alamer**

*Chairman, Telecommunications Regulatory Authority,  
Bahrain and GSR14 Chairman*

# GSR14 BEST PRACTICE GUIDELINES ON CONSUMER PROTECTION IN A DIGITAL WORLD

The digital economy has clearly raised new exciting opportunities but also challenges for consumers that will require increased attention from a regulatory perspective. Consumers are confronted with new issues brought about by the wider availability of new Information and Communication Technologies (ICTs) in terms of greater choice of devices, online services and applications. Identifying pro-active policy and regulatory measures in addition to co-regulatory and self-regulatory solutions and initiatives geared towards educating and empowering consumers is essential to protect the rights of all users in an open, transparent and inclusive digital world.

We, the regulators participating in the 2014 Global Symposium for Regulators, recognize that the rights of all stakeholders must be balanced to ensure that both consumers and businesses benefit from digital opportunities. Therefore, we have identified and endorsed these regulatory best practice guidelines to protect consumer interests while ensuring a level-playing field for traditional and new market players by fostering a light touch regulatory approach.

**1. Charting a strategic direction:** We believe that governments must continue to play a major role in facilitating the protection of citizens at all levels through the development of a wide array of relevant legislation and government policies, such as national ICT and universal access policies, relevant consumer protection legislation, cybersecurity and cybercrime legislation, including on child online protection, quality of service and electromagnetic exposure limit regulations as well as complementary initiatives, such as the development of guidelines on prohibited acts and best practices in tackling issues as varied as hacking, transmission of personal data (between service and/or content providers), and online fraud. In addition, a series of policy measures can be prioritized to establish self-adaptive regulatory mechanisms in order to build a secure and reliable cyber space. Cross-border initiatives can be developed to further foster international

cooperation and policy implementation.

We consider that regulations should redefine legitimate consumer rights and interests, which include but are not limited to: access to publically available information and services over the Internet, quality of service, privacy, confidentiality and protection of personal data, the possibility to opt-out from features and services; the right to file a complaint; number portability; and intellectual property rights. Regulators and policy makers should strive to protect those rights universally and equally within the scope of laws and regulations. We recognize that, in enforcing and reviewing relevant legislation, regulators and policy makers must establish effective mechanisms for cooperation (such as memoranda of cooperation) with dedicated consumer protection authorities, service providers and other relevant bodies at the national, regional and international level. In doing so, clearly defining roles and responsibilities between the parties is fundamental, as well as information and resources sharing, as appropriate.

We further recognize that multinational cooperation and harmonization of regulations and initiatives are required in order to deal effectively with cross-border phenomena such as issues related to content and services provided by over-the-top players (OTTs), including consumer privacy, online fraud and cybercrime related to e-commerce and social media activities. Likewise, specialized regional entities can be empowered to deal with cross-national matters in a harmonized and focused manner.

**2. Enhancing market competitiveness:** We recognize that legal and regulatory frameworks need to be kept open, forward-looking, neutral and flexible to allow leveraging on new technologies, innovative services and new business practices, such as cloud computing, social media, mobile broadband, big data, and the Internet of Things, for users to benefit from a variety of services provided at all levels of the ICT markets.

With regards to the storage and transmission of information, regulated telecom and ICT market players and unregulated OTTs should be treated on an equal footing when it comes to the enforcement of consumer protection legal instruments.

**3. Partnering with industry:** We recognize that industry players have a vital role to play in ensuring not only transparency and accountability in their business practices, but also in willingly adopting measures geared at protecting the rights of consumers, such as protecting personal data, fighting misleading as well as unfair mass advertising, spam, the permanency of data, and child online protection.

We recommend that regulators encourage the development of Codes of Practice for service providers, including OTTs, to ensure that content, promotion and operation of services comply with all necessary consumer protection conditions.

**4. Providing a sound framework for contractual services:** We consider best practice to legally prohibit the use of general terms and conditions that provide to the customer's detriment. Furthermore, unjustified and disproportionate differences between the rights and obligations arising under the contract for ICT services should be prohibited irrespective as to whether it was concluded online or otherwise.

We further recognize the need to draw up transparent rules on the terms and conditions for concluding contracts online, the form of such contracts as well as the related procedures (e.g., user identification, order confirmation, cancellation and termination).

**5. Multiple channels for redress:** We believe that regulators' role in mediating and escalating consumer complaints for redress is essential, and sound relationship with service providers needs to be maintained to this end. Complaints

handling procedures that specifically encourage consumers to first seek redress with service providers can be successful and increase service providers' awareness of consumer needs, rights and responsibilities. We believe that consumers not only have the right to complain, but more importantly, have the right to seek a remedy whenever their rights have been infringed.

In the event of a dispute, alternative mechanisms (such as conciliation, arbitration and self-resolution) following clear and transparent procedures can be introduced for settling disputes in addition to formal adjudication and good offices, so that consumers can defend their rights rapidly and at no or minimal cost. Specialized telecommunication/ICT mediation centers might prove particularly effective with this regard.

**6. Quality of service and consumer experience:** A series of measures can be taken to ensure consumers including people with disabilities have easy and reliable access to ICT services as well as web content, such as, developing and regularly reviewing minimum quality of service standards and specifications of new technologies and services; monitoring network service providers; regularly assessing telecom/ICT services quality and publishing the results.

**7. Protecting consumer privacy and data:** We believe that establishing an integrated legal system for effectively protecting personal data and information is paramount for the digital world to thrive.

We recommend that OTTs, and social media providers in particular, engage in more transparent procedures for data processing, obtain the consent of their customers through opt-in before sharing their data and provide users with the option to clearly choose the status of their communications, between

private or public. Users should be able to make informed decisions about the degree to which their data can be accessed by others and the usage that third parties may make of it.

The online world exposes children and youth to specific risks, notably in terms of adult-only content and sexual predation. We acknowledge the importance of supplementing legal tools with a series of measures that include public advocacy, content alerts and industry self-regulation initiatives while engaging further efforts in consumer education for targeted groups, such as children, youth, parents and teachers.

We believe that establishing a Computer Emergency Response Team (CERT) can yield multiple benefits to consumers in terms of providing, inter alia, an early warning service on threats and possible cyberattacks to both the general public and government agencies.

**8. Empowering consumers:** ICT regulators should be proactive in promoting, informing, encouraging and raising awareness to stakeholders of the benefits and challenges of a connected broadband world. In doing so, it is important to recognize the need to protect and educate consumers with different access needs who may be particularly vulnerable to deceptive commercial practices or have difficulties fully understanding terms and conditions of service (e.g., the illiterate, the disabled, children and youth). In addition, a bottom-up approach targeted at citizens through the involvement of schools, community centers and NGOs, notably through social media, could greatly contribute to raising consumer awareness. Stakeholders Fora can also be created including consumer representatives, as a platform that allows for consumer participation in decision making and policy development. This will bring consumers voices to the table in a framework of ongoing dialogue.

**9. The consumer right to information:** Regulators need to ensure that all service providers make available timely and accurate information about their services and products in a clear, transparent and comparable manner that is conducive to rational decision making. Consumers should thus be able to understand the nature of the services, including prices and how they are calculated, and the quality of service provided, in addition to their own rights and responsibilities. All regulations related to consumers' right to information should be regularly and consistently updated allowing it to be practical and enforceable.

**10. Redefining the role of regulators:** We are mindful that the ICT regulator is increasingly seen as a partner to market players and an advocate for consumers' rights. Their decisions are taken based on evidence and technical expertise to foster access and use of ICTs, competitiveness of the markets, and overall social and economic development.

It is, therefore, necessary to reconsider the mandate of ICT regulators with a view to strategically strengthening their enforcement power to respond to the challenges of the dynamic digital environment.





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