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Collaborative regulation

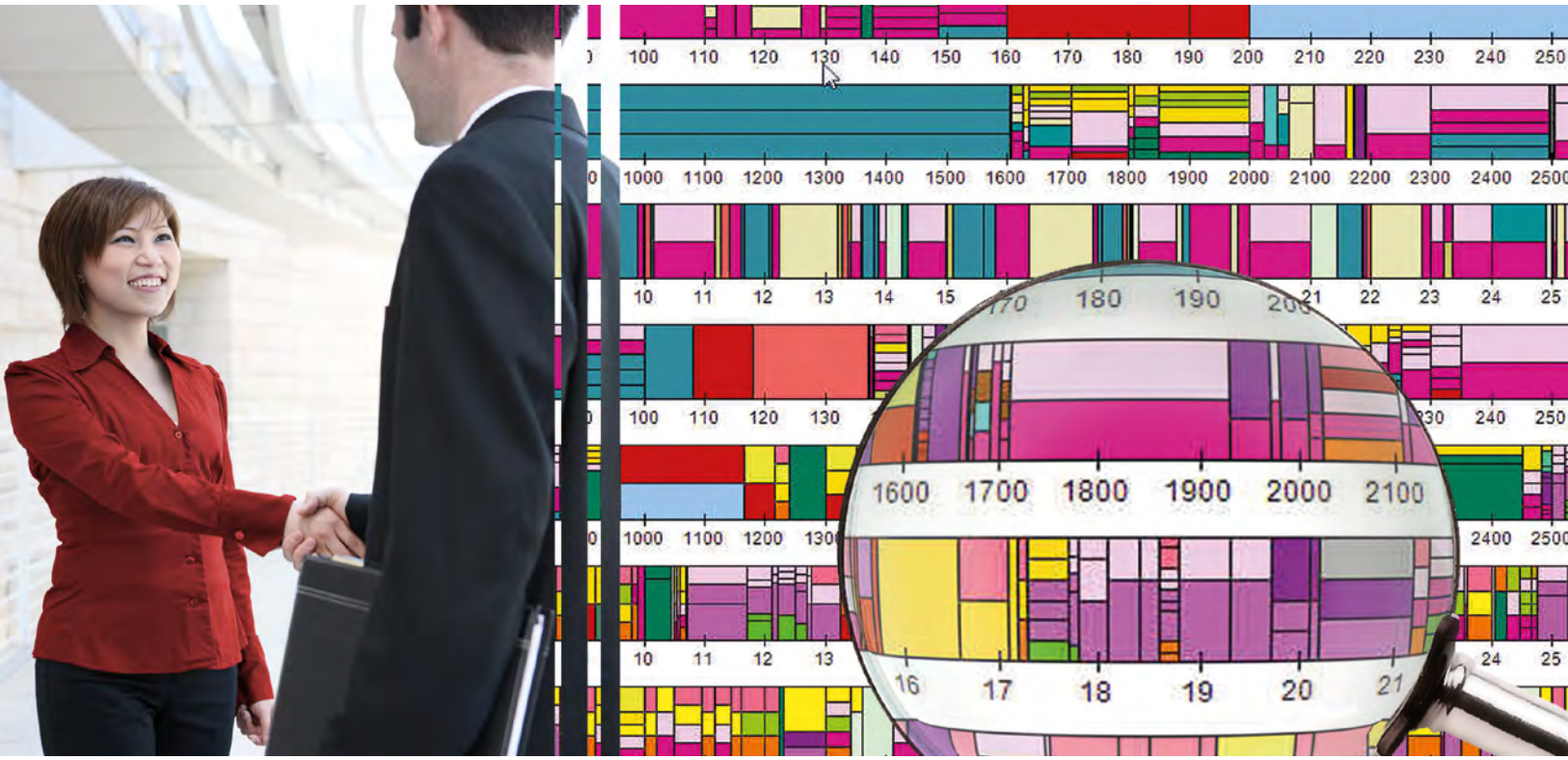
Joining forces to boost ICTs for development

Special Edition

Global Symposium for Regulators

Sharm el-Sheikh, Egypt

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Why collaborative regulation is critical

Houlin Zhao, ITU Secretary-General

Information and communication technologies (ICTs) form the backbone of today's digital economy. But creating the conditions for the new economy to flourish worldwide will require unprecedented collaboration across sectors. Getting the regulatory environment right is vital.

That's why collaborative regulation was the theme of this year's Global Symposium for Regulators (GSR-16). And that's why regulators, policymakers, industry leaders, and other key ICT stakeholders came to the beautiful city of Sharm el-Sheikh, Egypt, to exchange views and identify best practices. Participants also proposed innovative solutions, took advantage of excellent networking opportunities and enjoyed the hospitality provided under the auspices of President Abdel Fatah el-Sisi.

This year's GSR was of particular importance, because it was the first Symposium since the United Nations General Assembly adopted the historic Sustainable Development Goals (SDGs) last autumn. The ICT sector will be absolutely crucial to achieving the SDGs. But success will also require greater collaboration between the ICT and financial sectors — not only to further the use of ICTs to perform financial operations, but also to engage the financial sector in the next steps for infrastructure development.

Key financial stakeholders joined GSR-16 this year as part of the Symposium's first-ever pre-conference forum on Digital Financial Inclusion. They also participated fully throughout GSR-16, lending valuable perspectives on how to join forces with the ICT regulators and other stakeholders to create a digital financial services (DFS) ecosystem capable of boosting economies and helping to lift people out of poverty.

In this special edition of ITU News Magazine you will see how the structured dialogue launched on the shores of the Sinai Peninsula connects to ITU's ongoing initiatives to boost collaborative regulation, throughout the coming year, until next year's GSR from 11 to 14 July in the Bahamas. Enjoy!

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Special Edition | Global Symposium for Regulators







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Egypt welcomes the world's ICT leaders to GSR-16













Message from the Director

I would like to applaud the Government of Egypt and the National Telecommunication Regulatory Authority (NTRA) for their outstanding hospitality at this year's edition of the Global Symposium for Regulators (GSR).

The high number of participants, more than 500 from nearly 70 countries, confirms that GSR continues to be the world's global ICT regulatory event, attracting experts from all corners of the world. GSR offers a neutral platform to share ideas and best practices and bring meaningful reforms to stimulate investments.

I would like to echo the words of the Secretary-General and stress that now more than ever, we all need to come together for an inclusive dialogue and develop innovative solutions to leverage new opportunities.

Today, no one and no sector can imagine life without information and communication technologies (ICTs). Policymakers, regulators, the private sector and all stakeholders need to establish an inclusive dialogue to foster an enabling regulatory environment across all sectors in order to tap into the unlimited potential unleashed by ICTs to achieve sustainable development for all.

ICTs are increasingly recognized as an essential pillar of many areas of life in the converged ecosystem. Moving from vertical to collaborative policy and regulation is crucial in today's world.

We will remember GSR-16 as an important step in that direction. We joined forces across sectors to launch a structured discussion on collaborative regulation that will enable us — together — to leverage ICTs to achieve the Sustainable Development Goals and improve people's lives.



Brahima Sanou

Director
ITU Telecommunication Development Bureau (BDT)



New ways for leaders to share best practices

This year, more than 500 leaders from some 70 countries gathered from 11 to 14 May in Sharm el-Sheikh, Egypt, to attend this year's annual Global Symposium for Regulators (GSR-16).

Participants of GSR — the world's largest specialized gathering of information and communication technology (ICT) regulators and policy specialists — discussed a wide range of issues, including: artificial intelligence; the 'Internet of Things'; new digital platforms; privacy, trust and cybersecurity; and digital entrepreneurship.

The GSR is a unique forum to foster common regulatory measures that help boost ICT growth to improve lives. As such, GSR-16 took on added importance this year due to the critical role ICTs will play in achieving the United Nations' historic new Sustainable Development Goals (SDGs).

"This edition of GSR was very successful," said ITU Secretary-General Houlin Zhao. "I am very pleased that in today's smart and connected world, where ICT lies at the heart of economic and social development, we all agree that greater collaboration is a must. Setting the right conditions for innovation and for new business models to flourish while safeguarding consumers' rights remains critical, and it calls for greater cross-sectoral collaborative regulation."



> ***"We need to share this responsibility to develop our economies."***
>
> *Yasser ElKady, Chairman of GSR-16 and Minister of Communications and Information Technology of Egypt*

'Sharm el-Sheikh marks the beginning'

GSR-16 attendees agreed that the issues facing them in a world of dizzying ICT convergence are so important — and yet so complex — that they require unprecedented collaboration.

"We need to share this responsibility to develop our economies," said Chairman of GSR-16 Yasser ElKady, the Minister of Communications and Information Technology and Chairman of the Board of the National Telecommunications Regulatory Authority (NTRA) of host nation, Egypt.

"Sharm el-Sheikh marks the beginning of the structured discussion on collaborative regulation," said ITU Development Bureau Director Brahima Sanou. "Collaborative regulation will help us to achieve the [United Nations'] Sustainable Development Goals and reach the most vulnerable strata of society."

New focus on digital finance

GSR-16 featured a new focus on digital financial services, given the rapid growth of the industry and its direct potential to improve lives.

Financial players such as the Alliance for Financial Inclusion and executives from the central banks of several nations featured prominently in forum sessions and discussions with top ICT leaders, reflecting the ongoing convergence of two of the most heavily regulated industries.

Several speakers and presenters noted the need for financial and ICT regulators to work together to provide holistic solutions that take the entire value chain into account.

"The regulation is not only from the telecom side," said Amr Badawi, a Board Member of the National Telecommunications Regulatory Authority of Egypt. "Financial regulation has to be in place and collaboration between the two regulators has to exist in order to achieve digital financial inclusion."

That's why the entire first day of GSR-16 was devoted to the Symposium's first-ever **Global Dialogue on Digital Financial Inclusion**, a thematic pre-conference supported by the Bill & Melinda Gates Foundation and in collaboration with other partners.

The Dialogue saw a detailed discussion of what regulation is needed to support the new digital transactions models, payment platforms, and innovative technologies — as well as what roles key stakeholders should play to address the technical, business, and regulatory gaps emerging.

Forum for regulatory and industry discussion

More than ever before, this year's GSR highlighted the importance of regulatory collaboration to remove the barriers that hinder ICT growth and the economic progress it brings. As such, GSR's core Global Regulators-Industry Dialog (GRID) sessions focused squarely on topics such as: how to pave the road towards adoption of IoT; how to include the unbanked and unconnected in today's smart society; what regulators can do to facilitate entrepreneurship in a digital economy; and how to maintain trust by secure e-commerce, financial transactions, digital identities.

The Regulatory Association (RA) meeting held at GSR-16 provided a vital, neutral platform to discuss cooperation between regulatory associations across different regions. This RA meeting focused significant attention on defining strategic guidelines and recommendations that can create an enabling environment for the international mobile roaming market.

GSR-16 also featured a lively debate at the Private Sector Chief Regulatory Officers' (CRO) Meeting. It was the sixth CRO meeting, and the participants from a range of sectors did not waste the opportunity to put forward suggestions for how to collaborate to bring a uniform private-sector voice when proposing regulatory reforms to policymakers.

"What do we do about 'next generation' regulation? What are the quick wins? What do we do with regulators that are willing to work with us tomorrow?" asked CRO Chairman Bocar Ba in a call to action to fellow colleagues attending the meeting. "We want to show that the private sector can join hands with the public sector to harmonize. We have the opportunity. We have a forum."

In addition, this year's GSR programme featured two parallel tracks on the final day: a Regulators' track, open only to regulators and policymakers, and an Industry track, open to private sector members. Participants in the industry track discussed the need to convey to governments how slow and patchy regulatory policies inhibit growth and how harmonized and predictable policies boost the uptake of ICTs — and economies. They also discussed how **ITU's Regulatory Tracker** is a tool that can aid collaborative regulation.

Outputs and products

GSR-16 discussion papers formed the basis for certain segments of the forum sessions. The authors of papers on topics such as 'Fifth Generation Regulation,' maintaining trust, and how emerging technologies and the app economy are impacting regulation presented their findings during the relevant sessions. (Read the discussion papers **here.**)

During the closing ceremony, Amr Badawi, Board Member of the NTRA, briefed the audience on the outcomes of the **Global Dialogue on Digital Financial Inclusion**, held on 11 May. He also presented the **GSR-16 Best Practice Guidelines on Collaborative Regulation for Digital Financial Inclusion**.

> ***"We have to harness the disruptive technologies to ensure that every single citizen on this earth is included."***
>
> *Kathleen Riviere-Smith, Chief Executive Officer, Utilities Regulation and Competition Authority of the Bahamas*



Outputs from GSR-16 will be incorporated into the 17th edition of ITU's annual flagship regulators report. See the recently published **Trends in Telecommunication Reform 2016** (16th edition).

Moving forward

No matter how detailed the discussions got, the framework of GSR-16 and the comments of leaders in attendance always kept people focused on ITU's central mission of connecting the world to improve lives.

Kathleen Riviere-Smith, Chief Executive Officer of the Utilities Regulation and Competition Authority of the Bahamas — the host country for next year's GSR from 11 to 14 July, 2017 — captured the spirit well: "We have to harness the disruptive technologies to ensure that every single citizen on this earth is included," she said. "We don't want to look backwards, we want to move forward."

Video insights

Several public- and private-sector leaders stepped into our GSR-16 video studio to give further insight on how to move forward with collaborative regulation in an era of great change. Below is a small sample:

"You have to be dynamic in the regulatory model that you adapt. You should listen to the business perspective of how you will … include more people in the digital and mobile financial services."



l Ansari Almashakbeh
Vice Chairman, Telecommunications Regulatory Commission, Jordan

"Trust is a very important pillar in any information society, especially when you talk about smart services and smart applications."



Sherif Hashem
Vice President of Cybersecurity for Egypt's NTRA

"We are going to witness the fourth industrial revolution. We need to address it in a right way that will foster growth for the private sector."



Bocar Ba
Chairman, CRO at the Global Symposium for Regulators 2016

"We need a '5G' regulatory model. We need an approach that makes it flexible and reduces risk and encourages companies to try things."



Peter Pitsch
Associate General Counsel, Intel Corporation



View the GSR-16 Highlights Video to get a flavour of the dynamic nature of this year's Symposium in Sharm el-Sheikh, Egypt.

Go to the GSR-16 YouTube playlist to view all videos from the Symposium.


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Adjusting to the new regulatory landscape

Today's pace of technological change is demanding a very different regulatory approach for governments seeking to unlock the enormous opportunities that information and communication technologies (ICTs) offer to accelerate socio-economic development.

"Today we live in a society of smarter machines, robots, smarter automobiles, drones, smart cities — and this is dominating the global economy and global society," says Kemal Huseinovic, Chief of the Department of Infrastructure, Enabling Environment and E-Applications at ITU's Telecommunication Development Sector. "Regulators around the world have become more conscious of the changing ecosystem."

What are the features of this changing ecosystem? And what regulatory approaches will be most effective to boost inclusive and sustainable ICT growth? Government ministers, top regulatory authorities and leading technology companies tackled those critical issues head on as they met from 11 to 14 May in Sharm el-Sheikh, Egypt, to attend ITU's Global Symposium for Regulators (GSR-16).

"When it comes to IoT and smart cities, we need to think about regulation in a really collective, comprehensive way," said Sherif Hashem, Vice-President of Cybersecurity for Egypt's National Telecommunications Regulatory Agency (NTRA).

Indeed, all in attendance noted the pressing need to work together in an era of great convergence and change.



> ***When it comes to IoT and smart cities, we need to think about regulation in a really collective, comprehensive way.***
>
> *Sherif Hashem, Vice-President of Cybersecurity for Egypt's National Telecommunications Regulatory Agency*

"We have to move from vertical regulation to collaborative regulation," said Brahima Sanou, the Director of ITU's Telecommunication Development Bureau (BDT), during opening remarks that set the tone for the Symposium.

A new, complex landscape

"ICT is now at the core of all economic activity," said Scott Minehane, Principal at Windsor Place Consulting and co-author of the GSR-16 discussion paper, **The Race for Scale: Market Power, Regulation and the App Economy**. "All of the things that are disruptive today will become the norm tomorrow."

GSR-16 participants discussed how to deal with a range of disruptive ICT trends — from the rise of popular "Over the Top" (OTT) players such as Netflix, Skype, and WhatsApp to issues surrounding new 5G and IoT technologies to local content requirements.

"Innovation is coming from ICT companies. … Telecom operators are behind. Regulators are way behind," says Bocar Ba, Chief Executive Officer of the SAMENA Telecommunications Council and Chair of ITU's Chief Regulatory Officer's Meeting. "The KPIs [key performance indicators] we used to have yesterday won't work. They are irrelevant."

So how do regulators adjust to the changing realities?

"It's going to be difficult for us to figure out which technologies are going to be important and how they're all going to fit together," said Peter Pitsch, Global Executive Director, Intel Corporation. "The answer is that regulators need to come up with the best possible discovery process. By that I mean putting in place a regime that develops good information and incentives to act on that information, from the bottom up. There's going to be lots of investment and risk taking, and frankly, a lot of experimenting. One practical idea is to come up with long, flexible licenses. … At the end of the day, getting this good discovery process is all about discovering what works for consumers."

Light-touch, flexible regulation

This sentiment was widely shared during GSR-16. Serving ICT consumers better means more connected citizens, more jobs, and better economic growth. So how can regulators help? Go slowly, tread lightly, and stay flexible, said many in attendance.

"Technology will always advance faster than regulation. Regulators very often jump the gun," said Shiv Bakhshi, Vice-President of Industry Relations for Ericsson. "Let technologies take some shape before you regulate. Heavy-handed regulation is never a very good idea. Light-touch regulation is always preferred."

Mr Minehane echoed the importance of flexibility, suggesting that regulators should ease regulation so that traditional telcos have more flexibility to compete in the app economy. He also said that new entrants should be granted temporary licenses so that regulators could assess and make needed changes for longer-term licenses.

> ***"All agencies need to be aligned and say: 'Yes, we're going to do this'."***
>
> ***Harinderpal Singh Grewal, Cluster Director of the InfoComm Development Authority of Singapore***



"Adopting more flexible policies and frameworks … remains today more critical than ever," said Jose Toscano, Director-General and Chief Executive Officer for the International Telecommunications Satellite Organization (ITSO), as he moderated an industry leaders debate on new regulatory KPIs for the sector.

"Regulation cannot be static, it has to be dynamic," said Amr Badawi, a board member of Egypt's NTRA as he opened a lively forum session on how to regulate in the Internet of Things (IoT) era. "ICT has a big role in smart cities. If we have wrong regulations or over-regulations, we can ruin growth."

"[Regulation] has to be something different than it was 10 years ago," said Giacomo Mazzone, Head of Institutional Relations for the European Broadcasting Union (EBU). "Separated regulatory bodies cannot work anymore. We need to go beyond the traditional boundaries. We need to stick to some basic principles that could apply across borders."

'Fifth-generation regulation'

"We stand at the gates of fifth-generation regulation," said Sofie Maddens, Head of the Regulatory and Market Environment Division of BDT. "There really is the realization that there is a need for collaborative regulation. It's about having a holistic view. It's about having that inclusive dialogue across the sectors."

'Fifth-generation regulation' includes common principles such as innovation, efficiency and collaboration to overcome today's common barriers such as interoperability, quality of service (QoS), sharing of data and security. "Collaborative regulation means to share guiding principles and best practices and define mechanisms for cooperation," said Ms Maddens, highlighting that GSR-16 was a good place to start to do exactly that.

One example of success for collaborative regulation comes from the city-state of Singapore, a recognized leader in ICT strategy and implementation. Singapore's vision to become a smart city leader in the IoT era has already required unprecedented coordination — and unity of purpose.

"Singapore's vision has the backing of the whole government," said Harinderpal Singh Grewal, Cluster Director (Resource & Interconnection Management) of the InfoComm Development Authority of Singapore (IDA). "All agencies need to be aligned and say: 'Yes, we're going to do this.' … If you want the data to be interoperable and shared between many different sectors, you have to get together to decide how these standards can be put in place."

The good news is that regulators are starting to collaborate more across sectors — and not just in Singapore. "Regulators around the world are aware that they need to adopt to the changing environment," says ITU's Huseinovic. "They are increasingly interacting with other sectors."

But what is the best way to share best practices so that regulators can learn from each other on how to implement 'fifth-generation,' collaborative regulation?

"ITU can address the best practices for different countries," said Al-Ansari Almashakbeh, Vice-Chairman and Board Member of the Telecommunications Regulatory Commission of Jordan as many in attendance nodded in agreement. "I believe that ITU can play an important role in collecting the data and [conducting] case studies."



'Digital financial inclusion' gathers steam

As information and communication technologies (ICTs) become more engrained in the daily social and economic fabric of our lives, digital financial services (DFS) are rapidly becoming a key part of the ICT ecosystem.

The enormous business potential of DFS is surpassed only by its potential to improve lives, especially for the world's estimated 2 billion "unbanked" adults who have no access to basic financial services. But the push for governments and private companies to meet the growing demand for DFS is bringing with it a host of complex regulatory issues as two of the most heavily regulated sectors converge.

Now more than ever, tight collaboration between the financial and ICT sectors is critical. That's why this year's Global Symposium for Regulators (GSR-16) featured its first-ever thematic pre-conference for the Global Dialogue on Digital Financial Inclusion on 11 May with the support of the Bill & Melinda Gates Foundation and in collaboration with other partners.

The purpose of the Global Dialogue is to bring telecoms/ICTs and financial regulators — and other relevant stakeholders — from around the world to discuss synergies and regulatory overlap, strengthen cross-sectoral collaboration, and identify new regulatory approaches for digital financial inclusion. The issues discussed in the pre-conference were also discussed throughout the rest of GSR-16 and will continue in the months and years to come.



> ***"The mobile revolution can become a great enabler for digital financial inclusion."***
>
> *Ram Sewak Sharma, Chairman of India's Telecom Regulatory Authority*

"The matrix of issues and problems to be solved is very complex," said Sacha Polverini, Senior Programme Officer at the Bill and Melinda Gates Foundation's Financial Services for the Poor (FSP) programme and Chairman of ITU–T's Focus Group on Digital Financial Services. "The regulatory environment needs to be enabling, not one that creates bottlenecks."

Big opportunities, big challenges

Throughout GSR-16, the conference hall in Sharm el-Sheikh crackled with possibility as distinguished leaders rattled off statistics attesting to the transformational power of digital financial services.

"The mobile revolution can become a great enabler for digital financial inclusion," said Ram Sewak Sharma, Chairman of India's Telecom Regulatory Authority.

Providing mobile banking solutions for the unbanked is "not just a force for good, it's good for business," said Khalid Elgibali, MasterCard's President for the Middle East and North Africa as he explained MasterCard's push to give access to 500 million people previously excluded from financial services by 2020.

Harnessing the opportunities for digital financial inclusion, however, will require unprecedented coordination between private- and public-sector players across the converging ICT and financial ecosystems, GSR participants agreed.

"The real challenge for any development of mobile services in a developing country is how to make the link between the users and the value chain," said Ahmed A. Faragallah, Head of Payment Systems Department, Central Bank of Egypt. "You need to develop a whole ecosystem," including financial and ICT stakeholders, that can adjust together to meet evolving consumer needs.

Different players can bring different necessary strengths to the equation. For example, Mr Faragallah mentioned that using mobile data from big mobile network operators could be very helpful to serve customer segments with tailored digital financial products. He referenced Google and Samsung, saying: "Why are they launching payment services? Because they understand their customers very well."

Bringing all the various player together, however, is an enormous task.

"We talk about how [technical] systems talk to each other, but there is a more crucial type of [human] interoperability: between the sectors; between the key regulators or the key policymakers within this discussion — IT regulators, telecom regulators, financial regulators," said Tunmbi Idowu, Head of Compliance and Risk Control for Ericsson. "At the moment we all work in silos, but when you have a regulatory framework that is built on dialogue, it allows for confidence and partnership."

Implementation: 'not for the faint-hearted'

"[Digital financial inclusion] has to be a team play — an overall public private partnership play — and that's the only way it will succeed," said Mr Elgibali of MasterCard. "This is not for the faint-hearted. In the short- and medium-term, it may not be very profitable. If you adopt a long-term enough view of the future, understanding the benefits that could come, it is definitely the right thing to do."

Indeed, one needs a long-term, holistic view in order to justify the investment needed to provide digital financial services — especially in some of the smaller developing-country economies where the need for digital financial inclusion is most acute.



Thierry Millet — the Senior Vice President for Orange Money, Mobile Payments and Contactless, at the French telco giant Orange — knows this as well as anyone. Since launching mobile payment services in Cote d'Ivoire in 2008, Orange is now in 14 countries with 25 times the number of transactions four years ago. Usage per customer has nearly doubled as well. "There is lots of traction for these new services. Mass market demand … is strong," says Millet. However, he says, total transaction value per person is below 300 euros per month and it takes 3–4 years to get to a critical mass of production for the rollout of mobile payment services in a new market. "We say that whoever works on these initiatives is working for the benefit of his successors," says Mr Millet. "Most of the activity is long-term investment."

That's why Mr Millet stresses the need for a coordinated, collaborative regulatory approach. "This industry is still quite young," he says. "It's very important to have a collaborative approach, because it really helps innovation." He mentioned financial regulators making room for non-financial players and interoperability with banks as being key elements for success. But most of all, private sector players need a regulatory environment they can count on over time. "We need a long-term and secure regulatory framework to justify investment," says Millet.

How finance and ICT can work together

"Financial regulators are known for a very measured and cautious approach to change. In the developing world, this reputation is being turned upside down," said Alfred Hannig, Executive Director, Alliance for Financial Inclusion during the Opening Ceremony on Day 1 of GSR-16. He gave examples in East Africa, including how the Central Bank of Tanzania made a specific declaration in 2011 for financial inclusion. Since then, he said, Tanzania provided more than 50% of its adult citizens access to banking a year ahead of schedule and had to move the goal to 70% which they have surpassed, making the country "really a global leader" in digital Financial inclusion.

Mr Hannig gave other examples of countries across the world that have shown strong growth in digital financial services. He said that there was a common feature to the success stories: "They have all shown these strong collaborations among financial regulators and telecommunication regulators."

GSR-16 host country Egypt is following that example. "The Central Bank of Egypt has put financial inclusion at the top of its agenda" said Eng Ayman Hussein, Assistant Sub Governor, Information Technology and Payment Systems, Central Bank of Egypt. Mr Hussein mentioned that Egypt has developed an e-banking framework with priorities driven by market demand and that they are studying the most efficient model to achieve interoperability among different mobile payment providers. CBE is in "continuous communication" with the private sector about how best to provide user friendly tools for mobile banking, he said.

Bangladesh has also put digital financial inclusion near the top of its agenda. "We started our journey in the mobile financial sector in 2011," said Shahjahan Mahmood, Chairman, Bangladesh Regulatory Telecommunication Commission, pointing out that there are now 75 million mobile transactions per day with only 40% of the market served by mobile financial services. "We're hoping that probably within a year or two, we'll surpass any country in the world in terms of providing mobile financial services. The success of the sector lies in the philosophy of the government, which has taken a very ambitious programme called Digital Bangladesh. By 2021, we hope to connect every citizen by data and voice. Mobile financial services is top priority of this."

What's next?

"We are at the end of the first phase and beginning of a second phase [of digital financial inclusion]," said Carol Benson, Managing Partner of Glenbrook Partners and a Vice Chairperson of the ITU Focus Group on Digital Financial Services. "Great progress has been made looking back over the past 10 years in a number of different countries. There's a growing sophistication in understanding what works and what doesn't work."

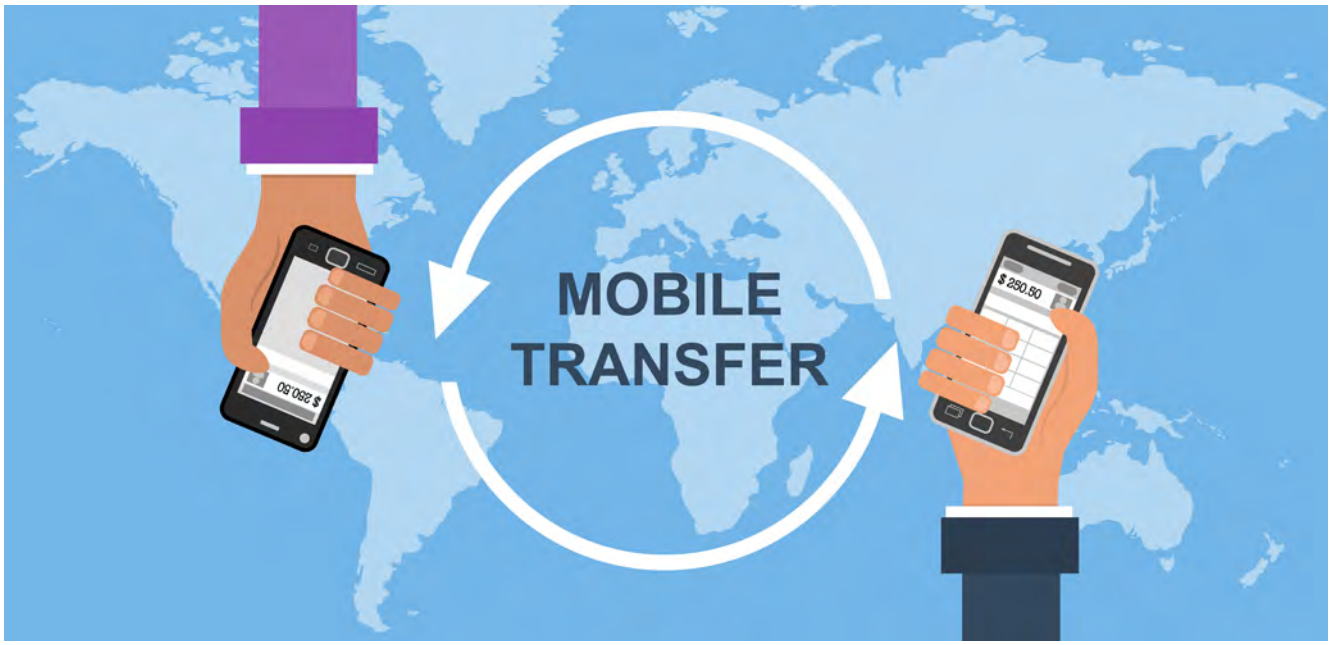
So what's next? Ms Benson listed two main goals in the next 10 years: 1) Apply the lessons already learned to countries where mobile money hasn't yet succeeded, 2) Reach "digital liquidity" whereby users are content to leave funds in electronic forms. "Even where mobile money is thriving, money is not staying in a digital wallet," explains Ms Benson. "It's stuck in a cycle of 'cash in' and 'cash out' with all of the complexities that entails."

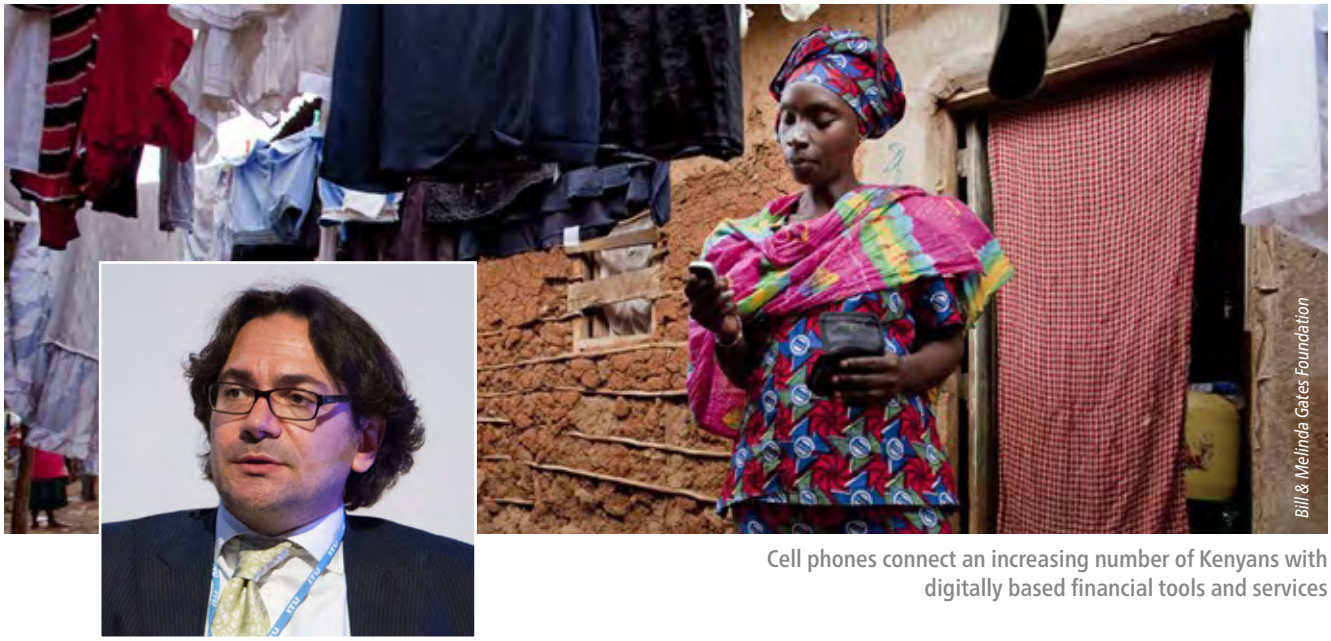
These are worthy goals, considering that 94% of mobile money is still taking the form of person-to-person transfers, according to Rory MacMillan, Founding Partner at the Macmillan Keck law firm and author of the discussion paper presented at the pre-conference, entitled **Digital Financial Services: Regulating for Financial Inclusion**. "We are at the very beginning of actual use of the mobile infrastructure for lending, for access to finance, which can be much more transformative even than the remittance services."

"We still have a long, long way to go," says MacMillan, but collaborative regulation puts us on the right track. "The regulatory environment is absolutely crucial. Empirical studies show that if the regulatory environment is designed in a certain way then the growth and services are likely to be far, far higher than if it is not."

Yet there is strong consensus that there is no regulatory "silver bullet" — each country will have to find its own path. Still, there were calls for international guidance.

"There has to be some form of international guidance on [advancing financial inclusion]," says Idowu of Ericsson. "How do we set the targets? How do we know when we get there? There is a lot of work going on within the ITU. What groups are doing is fantastic, and I think if this gains traction it's going to be a huge step forward."





Cell phones connect an increasing number of Kenyans with digitally based financial tools and services

Digital Financial Services and the need for global dialogue

By Sacha Polverini

Chairman of the ITU Focus Group on Digital Financial Services and Senior Programme Officer of the Bill & Melinda Gates Foundation's Financial Services for the Poor (FSP) programme

The world is a growing and dynamic place. Despite the obvious challenges, it is generally becoming a richer and more prosperous place to live in with more people being lifted out of poverty than ever before. For people in low- and middle-income countries, digital financial services (DFS) can be a pathway to move and remain out of poverty. The commercial benefits are increasingly documented with studies showing that the costs of payment transactions can be reduced up to 90% if they are performed through digital channels. Digital technology can address one of the main obstacles that have been keeping these services out of reach for so many: the fact that they are too expensive for people whose transactions are worth a fraction of a dollar.

However, despite the growing penetration of mobile devices (including smartphones) and continuous technological innovation, an estimated 2 billion people worldwide still remain unbanked. While everyone has a frequent need to transact to buy products and services, the ability to access or utilize formal financial services, particularly in developing countries, is undermined by numerous legal, cultural, commercial and financial issues, not to mention in many cases the lack of reliable national ID schemes which makes it extremely difficult for poor people to even open a basic account. There is therefore much more that both the public and the private sectors can do together to exploit the potential DFS can offer to bring the most vulnerable segments of the world's population into formal financial services.

At the macro level there is an urgent need to develop mechanisms to operationalize best practices and policy recommendations to allow regulators, operators and providers in the telecom and financial services sectors supporting the DFS industry to grow organically and reach a larger number of low-income people in a sustainable way. The ITU, through the ITU–T Focus Group on DFS and the Global Dialogue, is facilitating a discussion between the telecoms and financial services regulators and operators. There is a strong need for framed collaboration between the two in addition to a clear understanding of the laws and responsibilities.

What works?

On the regulatory side, having the right rules in place is key to attract medium and long-term investments, provide legal certainty, avoid arbitrage and allow service providers to scale their business without compromising the security, stability and integrity of the financial system. The telecommunications industry has not been slow to act. However, in many countries new players find it difficult to navigate an environment which is heavily regulated and where for many years only traditional financial players could operate. Commercially, there needs to be fair competition to guarantee an open, level playing field for the different stakeholders involved in the process.

A better understanding of how the telecommunications and financial services regulators can work better together in a fast evolving marketplace is important if any system is to be successful. Examples of effective inter-authority cooperation comes, for instance, from East Africa (i.e. Tanzania, Kenya and Uganda) where regulators have been working hand-in-hand to address issues such as consumer protection, interoperability, security of the network where competences are somehow shared or overlapping. With mobile numbers suddenly becoming bank accounts, customers are increasingly confused about roles and responsibilities if services are disrupted or where to direct their complaints in case of litigation.

Samples of success

There are numerous examples of success stories we can draw upon. In 2013, the Mexican government managed, for instance, to save an estimated USD 1.27 billion per year, or 3.3 per cent of its total expenditure, on wages, pensions and social transfers. How? By digitizing and centralizing its payments to all government workers.

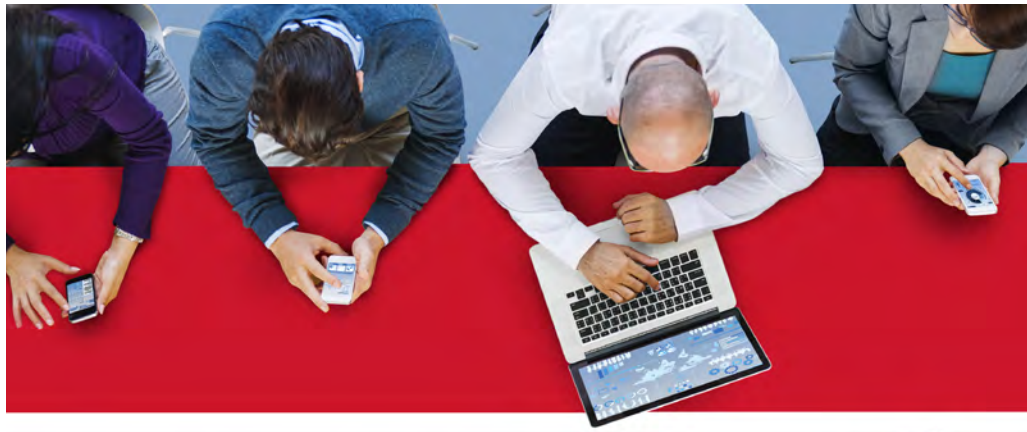
Another example is represented by M-KOPA which has provided solar electricity to more than 330 000 homes in three African countries. Each solar home system can be repaid in small daily instalments via cell phone. Innovations like these that elegantly solve urgent problems will make financial services attractive enough that people are willing to assume the risk of leaving the cash-based economy they know and trust.

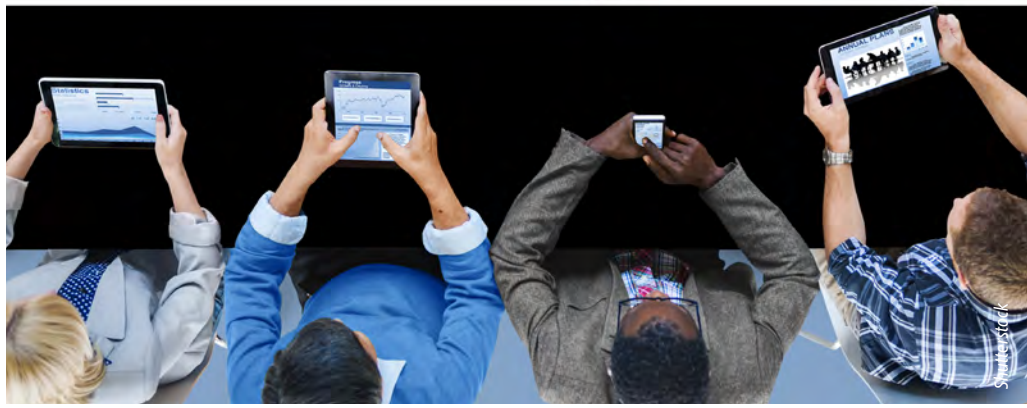
Digital credit — small loans that can be accessed instantly over mobile devices — are increasingly offered in low-income countries, particularly in sub-Saharan Africa. One of the first to reach scale in a short period of time is M-Shwari, a savings and loan product launched in Kenya in 2012, and now exported into neighbouring countries. The product is being used by millions of people, a large percentage of whom are below the poverty line, and thus unserved by credit providers, also because of a lack of credit history. By using alternative data — airtime, credit top up, number of P2P transfers etc. it is now possible to develop alternative scoring systems that have showed a high level of predictability.

The above examples show how technology is stimulating new applications and innovating business models even though scalability and profitability remain major challenges.

ITU–T's DFS Focus Group

No one size suits all. Countries can learn from each other and adapt measures to a national context, but the measures can't be duplicated without being adapted to local needs. The Focus Group is providing a toolkit that can be tailored accordingly. From now to the beginning of January 2017, when our remit will conclude, we will be publishing a series of deliverables which will include reports for consideration by ITU–T study groups which could adopt recommendations that a broad range of stakeholders can utilize. The Focus Group's outputs will consist of tools, principles and guidelines aimed to: help clarify roles and responsibilities of telecom and financial services regulators in DFS; develop guidelines to achieve interoperable mobile payment solutions; review the architecture framework for DFS platforms; and provide policy guidance on how to achieve digital liquidity. In addition, the Focus Group will be reviewing the security, consumer protection and data privacy issues raised by DFS. Our objective is to help accelerate the work being done around the world by local policy and decision makers, influencers and providers of technical assistance on digital financial inclusion.





Collaborative regulation: Lessons from Egypt

By the National Telecommunication Regulatory Authority (NTRA), Egypt

Over the past two decades, information and communication technologies (ICTs) have become an increasingly dominant factor in addressing the needs, interests, knowledge, and skills of people worldwide.

Today, electronic and mobile services and applications play a vital role in several fields such as education, health, transportation, energy, agriculture, climate change, and many others. Indeed, ICTs are now central to driving sustainable and smart development.

However, technology and innovation often move faster than the key regulations that can pave the way for their successful implementation. It is, therefore, critical for regulators to collaborate with all relevant stakeholders in order to stay closer to the curve of technology and industry developments — and to turn today's challenges into potential opportunities.

A collaborative regulatory environment can enhance the role of ICTs for development and enrich the social and economic wellbeing of consumers by bringing more efficiency, better quality of service (QoS), freedom of choice, and proper exercise of consumer rights. Collaborative regulation can benefit competition and the economy as a whole. In addition, transparency and harmonized regulations between different entities within a country will sustain market growth and attract more investment.

Over the years, Egypt's National Telecom Regulatory Authority (NTRA) has learned some valuable lessons about how to lead national collaborative regulation efforts. It's been an evolution that we would like to share.

What is collaborative regulation?

Collaborative regulation includes: effective and regular coordination and interactions; sharing of knowledge, experience, and resources; exploration of synergies; identification of possible regulatory overlaps; and development of means of collaborative approaches to policy and regulations. Moreover, there is a need for enhancing collaboration between national government agencies on the one hand, and regional and global organizations on the other hand.

Back in the late 1990s, when Egypt started its liberalization and sector reform programme, the government was keen to involve all relevant public and private entities to share their views about the process of telecommunication sector reform.

In addition, the issuance of the Telecom Act No. 10 in 2003 was preceded by wide community dialogue that sought feedback from industry, consumer protection organizations, non-governmental organizations (NGOs), and academia.

The NTRA, since its establishment by Telecom Act No. 10 in 2003, has cooperated effectively not only with market players in the telecommunication sector but also with other organizations in different sectors in order to maximize benefits, and enhance the ability of dealing with new challenges in this dynamic environment.

Increased focus on market and consumers

In 2011, NTRA signed a cooperation protocol with the Egyptian Competition Authority (ECA) as a fulfillment of the intention of both parties to pay special attention to the interests of the market and the consumers. The purpose of this protocol is to facilitate the cooperation and exchange of information between both parties, mutual provision of technical support, and the unification of economic and legal analysis methods.

NTRA also cooperates with the Egyptian Consumer Protection Authority (ECPA) in handling consumer complaints and has launched an awareness campaign under the slogan "Know Your Rights" in all Egyptian governorates, which aims to raise consumer awareness of various telecom issues.

In addition, The Consumer Rights Protection Committee (CRPC) — established according to Telecom Act No. 10 in 2003 — is responsible for protecting, educating and representing telecom consumers in an ever-changing telecom market. The committee accomplishes these goals through working with the telecom business community, consumer groups and citizens to develop and implement creative solutions to solve consumer problems. Moreover, CRPC aims to activate the role of NGOs by inviting them to hold joint meetings about how they could be a nucleus of continuous efforts that would benefit telecom services consumers.

Collaboration with government and academia

In order to ensure that ICT growth is managed in the most environmentally sound manner possible, Egypt's Ministry of Communications and Information Technology (MCIT) and the Ministry of Environmental Affairs (MEA) are implementing a "Green ICT Strategy" agreed to in a memorandum of understanding between the two agencies. In addition, the NTRA signed another protocol with the MEA to set the technical and environmental terms and specifications for building mobile sites in a safer way according to international standards.

The NTRA also cooperates with domestic universities and scientific institutions to support national research activities in the area of telecommunications and other sectors, including health care, education and media. The goal is to bridge the gap between academic activities and technical developments, policy visions and market needs.

According to the implementation of the National Broadband Plan (e-Misr), NTRA collaborates with different ministries to address their needs for broadband services. As a tool for ensuring the implementation plan, joint administrative and supervision committees are formed between NTRA and ministries that monitor progress and facilitate any barriers.

Cross-sectoral collaboration

NTRA is also currently working with the Central Bank of Egypt (CBE), mobile operators, banks, and other stakeholders to assess and enhance mobile money services in Egypt; introduce new services such as international remittances; and to pave the road to digital financial inclusion for more and more Egyptians.

Currently, one of the national projects in Egypt is the new unnamed administrative capital just to the east of Cairo. The Egyptian government has already taken serious steps in the planning and implementation of the new capital city with the vision to utilize ICT to build a true Smart Sustainable City featuring collaboration among different stakeholders including real estate, ICT, energy, transport, education, health and other sectors.

Working with regional bodies

Besides all the above initiatives, NTRA cooperates effectively with other regional and international regulators and organizations. NTRA is an active member in regional networks such as the Arab Regulators Network (ARNET), the Common Market for Eastern and Southern Africa (COMESA), the European Mediterranean Regulators Group (EMERG), as well as international organizations such as the ITU. In addition, NTRA signed several bilateral agreements with corresponding regulators in other countries for sharing experiences in different regulatory aspects.

As a conclusion, collaborative regulation can result in significant benefits for competition and the economy as a whole. Therefore, governments should aim to improve coordination across regulators for the ultimate benefit of consumers and for coherent and consistent economic regulation across different sectors. Also, cross-border harmonization as well as enhanced collaboration among national government agencies, regional and global organizations is essential. It is also important that international organizations support developing countries in building institutional capacity by sharing experiences and successful case studies for potential collaboration.

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