EXECUTIVE SUMMARY

Over past decades the world has witnessed a digital revolution that is ushering in huge change. The rate of that change continues to accelerate challenging our governments and institutions to keep pace. The ICT regulatory landscape too is evolving and at an ever-increasing pace. This report measures and monitors changes taking place in the telecommunication/ICT market itself as well as in the regulatory environment. It identifies and analyses seven market trends and seven regulatory trends and takes an informed view on future regulatory direction. The report builds on extensive data captured in the ICT Regulatory Tracker.

Of the many findings featured in this report, one stands out as particularly significant. It is this: the move towards a more open, collaborative regulatory approach, together with the role played by the ICT regulator in orchestrating this, will be critically important in delivering on the rich promise of the digital economy – to the benefit not only of consumers and businesses but to the 3.9 billion people who remain unconnected to the Internet.
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<td>ICTs move centre-stage as the digital economy gains momentum.</td>
<td>Mobile – the engine for expanded local access to the Internet.</td>
<td>ICTs are less visible but more prevalent.</td>
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<td>With the rise of the Internet and mobile communications, ICTs increasingly power the global economy, rendering some markets obsolete and enabling the emergence of others. New efficiencies and opportunities trigger important developments in industry and science – hardly any area of economy and society is untouched. And yet, the global picture remains mixed: while mobile has grown hugely, large populations still have no access to the Internet. This looks set to change as a growing swathe of urban young in developing countries make new demands for future connectivity.</td>
<td>By 2017, three-quarters of all global Internet use will be via mobile and much of that growth will come in low and middle-income countries. Significant gaps in penetration remain with more than half the world’s population yet to be connected to mobile broadband. Mobile virtual network operators have taken up this challenge, successfully targeting under-served market niches and optimizing network coverage to grow subscriber bases. While fixed connectivity leverages ICT for increased productivity, outreach and efficiency, mobile is set to transform economic sectors across the board.</td>
<td>As ICT moves into each area of our daily lives, cloud computing is the catalyst and enabler of important technological advances. The cloud transforms people’s data into an increasingly valuable by-product: today’s data trails produced by users using multiple ICTs are massive and growing, generating ‘big data’. A new culture of ‘dealing in data’ is beginning to take root.</td>
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ICTs are enabling and disrupting industries.

ICT focus has shifted towards building platforms which integrate technologies, networks and devices powering new capabilities and services. 5G mobile broadband is being conceptually enhanced and is now poised to take the integration of communication protocols, devices and applications to the next level. Close-to universal coverage of ICT networks, especially mobile, paves the way for the connecting together of machines and objects, a major trend over the coming years.

The app economy.

The app economy is transforming economic and social activities and opening up channels of innovation, productivity and communication. Technology design deployed by disruptive app companies reduces transaction costs while allowing for increasing economies of scale. The outlook for both network operators and over-the-top providers is bright as they benefit from a virtuous cycle: as the ICT sector outgrows all others, innovation continues to power ahead creating yet more opportunity.

Market concentration and consolidation.

The past decade has seen ICT in constant flux – new players, services and delivery platforms have stretched boundaries and changed market dynamics. Led by innovation, digitization and automation, new competitors have gate-crashed markets around the world. In 2016, high-profile mergers and acquisitions swept the ICT landscape, featuring a wide range of market players and deals, from fibre to cloud to artificial intelligence. In some cases, players from the extended ICT sector are opting for strategic partnerships or ‘coopetition’.

Cyber threats have grown in scope and scale.

Massive digitization in consumer and corporate life has brought increased risk. The level of threat has grown as the tools in the hands of criminals and terrorists have become more sophisticated. Though cyber readiness has become paramount for building secure ICT networks and services, not all countries are prepared.
1 Collaboration – fast-tracking the promise of the digital economy.

With the growing economic confidence of ICTs and related markets has come a new regulatory assertiveness embodied in the G5 collaborative regulation approach. Increasingly, ICT regulators are teaming with regulators from other sectors to address multi-sector issues. Equipped with this collaborative, problem-solving attitude, regulators are better harnessing and maintaining buoyant growth. Key questions for today’s regulators include: how to collaborate and with whom? What are we regulating and how?

2 Regulatory landscape continuing to see rapid and fundamental change.

The ICT sector cannot remain narrowly focused on its own players and issues – simply because convergence has blurred boundaries and complicated the rules of the game. The pace of regulation in the ICT sector is faster than in most other industries today, with transformation happening all the time.

3 More regulation being adopted; many countries expand scope of regulatory policies.

From 2007 to 2015, ICT regulation is characterized both by the volume of change and the increasing pace at which it is adopted. No fewer than 52 regulators are now in the G4 category. Fifty-five per cent of countries have moved one generation up the ICT ladder of regulation while 15 per cent have leaped generations in only nine years. In contrast, one-quarter of countries have seen no regulatory movement since 2007.
4 Regulation as an equalizer.
Regulation ensures that all market players – from start-ups to national incumbents to multinational corporations – benefit from a level playing field. Competition is essential today in spurring innovation, diversifying services on offer and improving consumer experience in ICT markets. The regulation of that competition continues to trigger a massive opening up of ICT markets, from basic telephony services to mobile broadband.

5 Focus moves to monitoring and enforcement.
The scope of monitoring and enforcement continues to widen. In 2015-16, challenging issues – including taxation of players without national physical points of presence and the poor quality of information being shared over social media – have sparked passionate global debate. These issues underline the need for more effective monitoring and enforcement of regulation.

6 One model does not fit all – convergence and divergence in complex, fast-moving landscape.
A single ICT regulatory model that fits all does not exist. Points of convergence are emerging however, driven by factors such as efficiency, extended access to networks, affordability and quality of service. New issues are constantly emerging, posing challenges for regulators. Some challenges require collective action from the international community while others will disrupt the market order.

7 Regulators are standing up to challenges, reinventing the rules.
Expectations of ICT regulation have grown. No fewer than 43 countries now conduct a Regulatory Impact Assessment before regulatory decisions are made. Incentive regulation is sometimes included to encourage investment, especially in infrastructure. Ex ante Regulatory Impact Assessment and evidence-based decision-making have become mainstream.
The data behind the Outlook 2017 was captured through the **ICT REGULATORY TRACKER,** an evidence-based tool which covers 186 countries and economies over the period 2007 – 2015.

Leveraging a large amount of historic regulatory data, the tool is devised to help decision-makers and regulators more fully understand the ever-changing terrain of ICT regulation.