Final Report

ITU-D
Study Group 1

Question 6/1

Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks

6th Study Period
2014-2017

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Question 6/1: Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks

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Preface

ITU Telecommunication Development Sector (ITU-D) study groups provide a neutral contribution-driven platform where experts from governments, industry and academia gather to produce practical tools, useful guidelines and resources to address development issues. Through the work of the ITU-D study groups, ITU-D members study and analyse specific task-oriented telecommunication/ICT questions with an aim to accelerate progress on national development priorities.

Study groups provide an opportunity for all ITU-D members to share experiences, present ideas, exchange views and achieve consensus on appropriate strategies to address telecommunication/ICT priorities. ITU-D study groups are responsible for developing reports, guidelines and recommendations based on inputs or contributions received from the membership. Information, which is gathered through surveys, contributions and case studies, is made available for easy access by the membership using content-management and web-publication tools. Their work is linked to the various ITU-D programmes and initiatives to create synergies that benefit the membership in terms of resources and expertise. Collaboration with other groups and organizations conducting work on related topics is essential.

The topics for study by the ITU-D study groups are decided every four years at the World Telecommunication Development Conferences (WTDCs), which establish work programmes and guidelines for defining telecommunication/ICT development questions and priorities for the next four years.

The scope of work for **ITU-D Study Group 1** is to study "**Enabling environment for the development of telecommunications/ICTs**", and of **ITU-D Study Group 2** to study **"ICT applications, cybersecurity, emergency telecommunications and climate-change adaptation"**.

During the 2014-2017 study period **ITU-D Study Group 1** was led by the Chairman, Roxanne McElvane Webber (United States of America), and Vice-Chairmen representing the six regions: Regina Fleur Assoumou-Bessou (Côte d'Ivoire), Peter Ngwan Mbengie (Cameroon), Claymir Carozza Rodriguez (Venezuela), Victor Martinez (Paraguay), Wesam Al-Ramadeen (Jordan), Ahmed Abdel Aziz Gad (Egypt), Yasuhiko Kawasumi (Japan), Nguyen Quy Quyen (Viet Nam), Vadym Kaptur (Ukraine), Almaz Tilenbaev (Kyrgyz Republic), and Blanca Gonzalez (Spain).

Final report

This final report in response to **Question 6/1: "Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks"** has been developed under the leadership of its two Co-Rapporteurs: Jinqiao Chen (People's Republic of China) and Romain Abilé Houéhou (African ICT Consumers Network / Réseau des Consommateurs Africains des TIC (RéCATIC), Benin); and nine appointed Vice-Rapporteurs: Majid Khalid Al Balushi (Oman Telecommunications Regulatory Authority (TRA), Oman), Edva Altemar (Haiti), Romain Ciza Mweze (D.R. of the Congo), Yawo Sitsofé Mawuéna Gamo (Togo), Stanislas Kanvoli Kakou Bidge (Côte d'Ivoire), Carl Adams Kopati Gbadi (Agence de Régulation des Télécommunications, Central African Republic), Cristiana Camarate Leão Quinalia (Brazil), Suzy Owona Noah (Cameroon) and Mr Ahmadou Traoré (Mali). They have also been assisted by ITU-D focal points and the ITU-D Study Groups Secretariat.

ISBN

978-92-61-22751-7 (Paper version)

978-92-61-22761-6 (Electronic version)

978-92-61-22771-5 (EPUB version)

978-92-61-22781-4 (Mobi version)

This report has been prepared by many experts from different administrations and companies. The mention of specific companies or products does not imply any endorsement or recommendation by ITU.

Please consider the environment before printing this report.

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Executive Summary

i. Introduction

The fast-changing pace of technology has sparked a revolution which has not spared the telecommunication sector, where momentous change has led to a highly diversified range of technologies and services for today's consumers.[1]

It is clear that the Internet and digital technologies are transforming our world, offering a wealth of opportunity for business and consumers, even allowing recipients of services offer and produce while also being consumers (sometimes known as "prosumers"). Such developments have affected the need for information and bandwidth and have provided consumers with more power to leverage the strength of their growing demand and use of information and communication technologies (ICTs) on markets. However, if barriers to the use and uptake of telecommunications/ICTs continue to exist, citizens can miss out on goods and services, Internet companies and start-ups may have their horizons limited, and businesses and governments will not be able to fully benefit from or be able to exploit digital tools for their citizens.

Driven by technology innovation, industry development and market competition, telecommunication users today enjoy greater business opportunities but are also faced with a constant change in the range, type and impact of consumer rights. As ICTs are recognized as the foundation for economic and social development, the ecosystem has expanded, and now includes ICT/telecommunication operators and service providers, as well as partners from others sectors, including health, education, transport, finance, etc. Regulators across the sectors must create the enabling environment for the new converged digital economy, and consumers increasingly need to understand how they can benefit from the opportunities the converged digital economy presents.

ITU's Telecommunication Development Sector (ITU-D) continues to recognize the importance of consumer protection, in particular in regards to the need to exchange information on institutions, policy and regulation and best practices to guide national regulatory agencies and telecommunication consumers around the world.

In 2014, the World Telecommunication Development Conference (WTDC) defined study Question 6/1 that deals with consumer information, protection and rights and is based on previous progress in study groups and the advice coming from the Telecommunication Development Advisory Group (TDAG) during the study period 2014-2017.

ii. Previous work

In the final report of Question 18-2/1 for the study period 2010-2014,[2] it was concluded that consumer protection regulations in a converging environment must be based on the eight United Nations Guidelines for consumer protection:

1) The right to satisfaction of basic needs;

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[1] Natural persons and corporate entities acquiring or using, for strictly non-professional purposes, products and services available on the market. Citizens were first officially recognized as consumers on 15 March 1962, when President John F. Kennedy, in a speech to the United States Congress on the adoption of the Consumer Bill of Rights, stated: "Consumers [...] are the largest economic group in the economy, affecting and affected by almost every public and private economic decision. [...] But they are [...] often not heard". Consumers are therefore powerful economic agents who shape product markets and thus human and economic development.

[2] Question 18-2/1 report for the study period 2010-2014 "Enforcing national policies and regulations on consumer protection notably in a converging environment", available at: https://www.itu.int/pub/D-STG-SG01.18.2-2014.

2) The right to product guarantee;

3) The right to be informed;

4) The right to choose;

5) The right to be heard;

6) The right to a remedy;

7) The right to education;

8) The right to a healthy environment.[3]

National policies and regulations on consumer protection in the age of convergence are still at various stages of development in most ITU Member States. Broadband infrastructure and the new services they foster have evolved tremendously in most developing countries. However, national laws and regulations to protect consumers of ICT/telecommunication services generally remain incomplete and patchy.

The Question 18-2/1 report defined four guidelines on regulatory provisions and obligations for consumer protection:

1) Revision of ICT/telecommunication texts to adapt them to the converging environment, indicating rights of appeal to ensure consumer protection in the new environment;

2) Development of texts on the rights and obligations of consumers in a converging environment;

3) Aid in the form of subsidies paid to consumer-protection associations to finance their activities, subject to clearly defined regulatory conditions and arrangements;

4) Definition of a permanent framework for dialogue, on one hand between the consumer associations and the ICT/telecommunication regulatory authority and on the other between the consumer associations and ICT service providers/operators.

The Report also requested coordination between entities involved in consumer protection, and suggested two options:

1) Creation of coordination between consumer associations in the ICT/telecommunication sector;

2) Strengthening of cooperation between sector regulators to improve consumer protection.

Use of technology, international cooperation and sharing of experience, education, information and capacity building for consumer associations were also included in this report. Lastly, some best practices and guidelines on convergence were defined to protect consumers in a converging environment.

iii. Expected outputs

The definition of Question 6/1 provides that consumer information and consumer rights have become a priority and that the topic should be made the subject of a separate study. The study carried out over the last study cycle built on findings previously made on basic issues of consumer protection, in particular in the convergent environment, as well as on enforcement, including appropriate national legislation, practices, procedures and sanctions.

The questions for study in the 2014-2017 period are as follows:

1) Organizational methods and strategies developed by public consumer-protection agencies with regard to legislation/regulations and regulatory activities;

[3] UN Resolution 39/248 of 16 April 1985.

2) Mechanisms/means put in place by regulators, operators/service providers and consumer-protection agencies to inform consumers, in particular the different subject areas covered;

3) The role of international, regional and national organizations for the protection of telecommunication/ICT consumers' rights;

4) Any economic and financial measures adopted by national authorities in the interests of consumers of telecommunication/ICT services, in particular specific categories of users (persons with disabilities, women and children);

5) Challenges in relation to the provision of new convergent services relating to consumer protection, as well as the policies, regulations and rules established by National Regulatory Agencies (NRAs) to protect consumers against possible abuses by operators/providers of these convergent services.

By the end of the study period, the following outputs are expected:

– A report to Member States and Sector Members, consumer-protection organizations, operators and service providers, setting out guidelines and best practices that will need to be produced to help these actors to find the tools needed for a better culture of consumer protection as regards information, awareness-raising, inclusion of consumers' fundamental rights in laws and national, regional or international regulatory texts, and consumer protection in the provision of all telecommunication/ICT services.

– Organization of regional seminars on consumer protection: consumer information, protection and rights, laws, economic and financial bases, consumer networks.

iv. Study period 2014-2017 contributions and outputs

Contributions and sources of input:

In addition to contributions received during the study period, and building on outputs from previous study periods, several reports and initiatives have been consulted for the present Question 6/1 report:

– **ITU**: ITU has received responses to its regulatory questionnaire from 2015. A number of questions relate to consumer protection, and these have been included in the present report.

– **Body of European Regulators for Electronic Communications (BEREC)**: In order to provide BEREC and National Regulatory Agencies (NRAs) with an understanding of market dynamics relating to Net Neutrality (NN), in particular from the end-user perspective, BEREC commissioned a consumer research study to gain an understanding of how consumers value NN and desk research to gather information already in the public domain on Internet usage by consumers.[4]

– **United Nations Guidelines on Consumer Protection (UNGCP)**: Better protection for people buying things online in both developed and developing countries will be among the outcomes of revisions to United Nations Guidelines agreed at a major UNCTAD conference in Geneva in July 2015. A proposal submitted to the United Nations General Assembly contains a request that UNCTAD establish an Intergovernmental Group of Experts on consumer protection law and policy; monitor the implementation of the guidelines; serve as forum for exchange of best practices; and provide technical cooperation and capacity building to developing countries and economies in transition. Last updated in 1999, the UNGCP needed updating in a world of e-commerce and online shopping, and in other areas such as financial services, energy, public

[4] http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/5024-berec-report-on-how-consumers-value-net-neutrality-in-an-evolving-internet-marketplace-a-report-into-ecosystem-dynamics-and-demand-side-forces.

utilities, and tourism. The Guidelines included the important principles of parity of treatment between online and offline consumers, and protection of consumer privacy.[5]

– The **Telecom Regulatory Authority of India (TRAI)** issued new regulations requiring operators to inform customers about their data usage and obliging telecommunication companies to acquire the explicit consent of users before activating data services. The TRAI noted that it had received numerous complaints from customers on the lack of transparency regarding their data use, resulting in customers exceeding their limit (where applicable) and incurring additional charges and fees. Further, the TRAI reported that it had received complaints over the activation of internet services on mobiles without the consent of the subscriber, again leading to additional data usage and charges.[6]

– As part of the study period work, a number of regional seminars were also held and input from other seminars were also sought to enrich the report:

  • A regional training program was held jointly by ITU and TRAI in India in 2016 on the topic of consumer protection. Presentations and the report are available on the website.[7]

  • A regional workshop was organized jointly by ITU and Ministry of Industry and Information Technology (MIIT) in November 2016 in Chongqing, People's Republic of China on the topic of consumer protection. Presentations and the report are available on the website.[8]

  • A regional workshop was held in Cotonou, Benin in March 2017 on possible solutions to address existing as well as emerging challenges amongst telecommunication, broadcasting and converged ICT regulators in the area of consumers' rights and protection in the digital age. The event was organized by ITU in collaboration with the Ministere de l'Economie Numérique et de la Communication, Republic of Benin. Presentations and the report are available on the website.[9]

Outputs:

This report has carefully studied developments in a fast changing world, particularly in the field of the telecommunications sector. It covers many topics such as the situation and progress of telecommunications consumers, challenges in the field of telecommunication consumer protection, the institutional framework of telecommunication consumer's rights, economical aspects of consumer's rights protection and finally provides an overview of global trends of communication consumption. It tries to sum up ongoing experiences from ITU Member States, includes reports from international organizations and national regulator's laws and regulations. Based on such facts, it provides readers with some useful guidelines both for market players and for policy makers and regulators.

The most important principles are listed below (without being exhaustive):

– Need for fair and equitable treatment;

– Need for disclosure and transparency;

– Need for consumer education and awareness-raising;

– Ensure protection of privacy;

– Define mechanisms for consumer complaints and disputes;

– Build consumer trust in converged services;

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5 http://www.consumersinternational.org/news-and-media/news/2015/07/ungcp-revision_july2015/ and http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1034&Sitemap_x0020_Taxonomy=UNCTAD Home;#2039;#7th UN Review Conference;#1475;#Competition Law and Policy.

6 http://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Pages/Events/2016/Mar-ITU-TRAI/home.aspx.

7 Idem.

8 http://www.itu.int/en/ITU-D/Study-Groups/2014-2018/Pages/meetings/china-nov16.aspx.

9 http://www.itu.int/en/ITU-D/Regulatory-Market/Pages/Events2016/Benin/Home.aspx.

- Improve the laws and regulations adapted to digital convergent world;
- Foster smart regulation by altering traditional functions such as market entry and interconnection;
- Establish co-regulation mechanisms among government bodies, market industries and consumer entities.

1 CHAPTER 1 – Telecommunication consumer and their rights: situation and progress

1.1 A brief history: from user to consumer

Over the past 150 years, the definition of telecommunication consumers has evolved to include telephone users, mobile phone users and Internet users, with boundaries between "traditional" telecommunications users and Internet users becoming increasingly blurred. Today, the definition includes users of infrastructure, terminal equipment, and network resources, as well as users of business services and content services. Telecommunication consumers today include all users of consumer products in traditional telecom networks and services as well as the Internet.

Changes facing users and consumers include:

1) Products and services keep on expanding;
2) Uses and applications keep on changing;
3) Users are changing from people to everything;
4) Behavior has changed from individual use to shared use;
5) More coordination is taking place between investors, operators, service providers and consumers as well as between regulators across the sectors.

– Equipment manufacturers, operators, service providers as well as regulators and policy makers are adapting to these changes, through innovative products, services, content, policy and regulation, to meet the changing needs of consumers.

1.2 New trends in consumer rights protection

Today, the behavior of ICT consumers is changing. Consumers actively use ICT products and services for transactions, sharing, and service provision, changing their relationship with equipment manufacturers, operators, content providers, industry associations, government departments and other institutions. The characteristics and trends of consumer rights and their protection have changed, including:

– **The diversity of telecom consumers.** ICT innovation is expanding the boundaries of the information and communication industry, with actors in the telecommunication sector evolving from individual people to organizations, from people to machines, from individual devices to the internet of everything.

– **The richness of content consumption.** Thanks to the rapid development of network technology, computing technology and digital technology, telecommunication users can enjoy more than terminals, information transmission and audio content. Today, they have access to hardware, software, digital content and services, which can be delivered online or offline, from the real world to virtual reality.

– **The globalization of consumption.** The accelerating convergence between telecommunication networks and the Internet has led to globalization and collaboration among different regions or inside multinational companies, while at the same time affecting labor markets and opportunities. It is taking place everywhere, no matter whether it is hardware production, sales and maintenance services, or digital content transmission and sharing, or digital service delivery. International data roaming and cross-border E-commerce are both typical examples of the issues raised by globalization.

– **Heterogeneity of business model.** The same products and services can be subject to different market policies depending on behavior habits or sales purpose. It can be free of charge or paid by time or by capacity. Charges can be paid by consumers or by content providers.

- **Price differentiations.** Various products and services differ in terms of resource requirements and cost structure. Without taking into consideration monetary or exchange rate factors, the price of similar products and services can differ among countries, and price differences between different products and services will be even greater. Even the price of generally available services with common global technical standards, such as mobile voice and data services will often be among countries.
- **The variability of Quality of Service (QoS).** Although technology generally determines the upper limits of QoS of ICT products and services, market competition rules can also affect the results. National technology standards and policy and regulation often determine the minimum standards, but the openness of the market at home and abroad can also affect QoS. Market conditions as well as regulation may also create the need for clearer consumer information.
- **Responsibility and burden of proof.** Due to the large number of information and communication operators and service providers, diversified services, and complex supply chain of goods and services, it is often difficult for individual consumers to define the exact amount of damages when services are not provided satisfactorily. It often entails bilateral burden of proof, especially in the case of online transactions.
- **The complexity of security.** Security problems may be linked to user's terminals or connections, as well as to services or content offered by equipment manufacturers, network operators, content providers or service providers. Many problems are beyond the control of a single country. Policy makers and regulators around the world are increasingly addressing the security of personal data and network data. Collaboration is needed to address the increasing complexity of network and information security.

1.3 What is the scope of consumer rights: international context

1.3.1 General context

Consumer rights mean the right to be paid in goods or receive services, including for a certain period of time after obtaining such goods and services. Compared with providers, consumers are often in a weak position in terms of safeguarding their own rights and interests, often due to a lack of access to information, knowledge and skills, as well as due to the influence of external forces and other factors. Governments and international organizations, including ITU, are taking action to provide consumers with guidelines and assistance through policies and regulation, information dissemination, education and training.

In the 1980s, Consumers International (CI), the world federation of consumer groups founded in 1960, with today over 240 Member organizations in 120 countries,[1] called for the introduction of a set of consumer responsibilities to compliment consumer rights. Consumer rights are defined around a set of eight basic principles, including: the right to satisfaction of basic needs, the right to safety, the right to be informed, the right to choose, the right to be heard, the right to redress, the right to consumer education, and the right to a healthy environment.[2] Consumer responsibilities are centered around a set of crucial principles, including***:*** critical awareness, involvement or action, social responsibility, ecological responsibility, and solidarity.[3]

The United Nations Guidelines for Consumer Protection (UNGCP) set out the main characteristics of effective consumer protection legislation, enforcement institutions and redress systems and for assisting interested Member States in formulating and enforcing domestic and regional laws, rules and regulations that are suitable to their own economic and social and environmental circumstances.

1 http://www.consumersinternational.org/who-we-are/about-us/.
2 http://www.consumersinternational.org/who-we-are/consumer-rights.
3 Idem.

The rules also provide the framework for international enforcement cooperation and knowledge exchange among Member States.[4]

1.3.2 Consumer protection in ICTs – the role of ITU-D

ITU-D continues to recognize the importance of consumer protection in the telecommunication/ICT sector, in particular in regards to the need to exchange information on institutions, policy and regulation and best practices to guide national regulatory agencies and telecommunication consumers around the world. ITU-D has addressed consumer protection in the last three study group periods,[5] through reports and publications, as well as in events and training materials.[6] Regulators at the 2014 ITU Global Symposium for Regulators (GSR) identified measures needed to protect the rights of ICT consumers without stifling innovation that will enhance consumer's experience of living in a competitive, safe and trustworthy digital environment, including by:

- Redefining consumer protection needs along the value chain, from ICT networks to apps and services.
- Identifying priorities and responsibilities of ICT stakeholders (government, industry and consumers) in a digital environment.
- Expanding the regulator's mandate and enforcement measures to ensure effective consumer protection in a converged digital environment (in particular in dealing with privacy, data protection, protection against fraud, misuse, etc.)[7]

1.4 Recent progress in various countries

A majority of countries have adopted laws and regulations, and created entities and organizations to inform and help consumers know about their rights and mechanisms to enforce the rights if they are violated. These measures are generally guided by government bodies and implemented by third parties. In many cases, it is the judicial institutions that are mandated to provide final redress to consumers. 2016 ITU data as illustrated in **Figures 1 to 8** below show that many countries have made great progress in the field of consumer protection, in which regulatory bodies have played a big role.

Figure 1: Feedback from ITU member states on consumer issues

		Number of countries/economies						
		Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas	**Total**
Is there a specific telecommunication consumer protection legislation/regulation	Yes	27	12	19	8	39	23	**128**
	No	11	5	14	0	3	9	**42**
Regulator responsible for consumer complaints	Yes	39	15	28	8	36	28	**154**
	No	1	1	2	0	6	3	**13**
Is the Regulatory Authority responsible for promoting consumer participation in its	Yes	34	12	24	5	23	21	**119**
	No	2	4	7	2	18	10	**43**
Regulator responsible for consumer education	Yes	37	11	25	7	36	25	**141**
	No	1	4	6	1	6	6	**24**
Is the Regulatory Authority responsible for representing consumers/defending their	Yes	27	13	22	7	24	22	**115**
	No	7	3	9	1	17	10	**47**
Regulator responsible for comparative tariff information	Yes	33	6	14	3	26	15	**97**
	No	4	8	13	4	15	13	**57**
		11	2	9	1	18	10	**51**
If Yes, please indicate for which services		23	5	11	2	24	15	**80**
Region size		**44**	**21**	**40**	**12**	**43**	**35**	**195**

[4] The guidelines were first adopted by the General Assembly in resolution 39/248 of 16 April 1985, later expanded by the Economic and Social Council in resolution E/1999/INF/2/Add.2 of 26 July 1999, and recently revised by the General Assembly in resolution 70/186 of 22 December 2015 (available at: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/186).

[5] Question 18-2/1 report: Enforcing national policies and regulations on consumer protection notably in a converging environment, available at https://www.itu.int/pub/D-STG-SG01.18.2-2014.

[6] http://www.itu.int/en/ITU-D/Regulatory-Market/Pages/default.aspx.

[7] http://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2014/BestPractices/GSR14_BPG_en.pdf.

Figure 2: Feedback from ITU member states on consumer issues

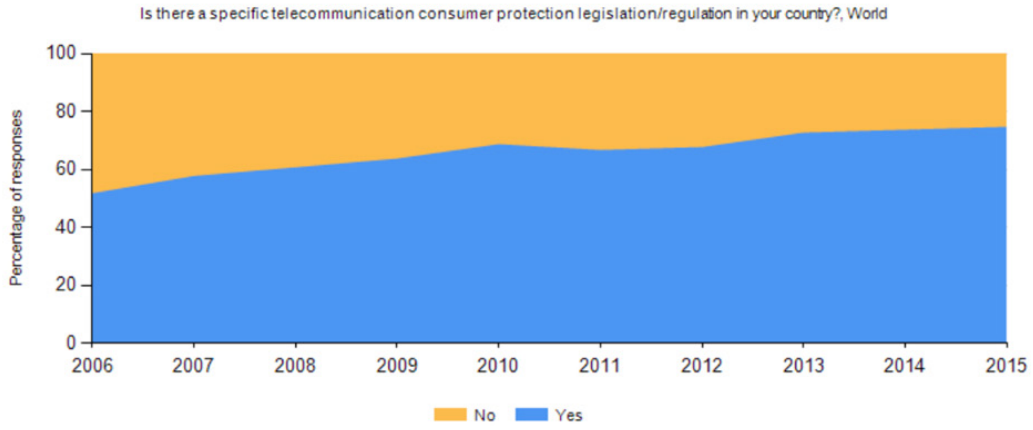
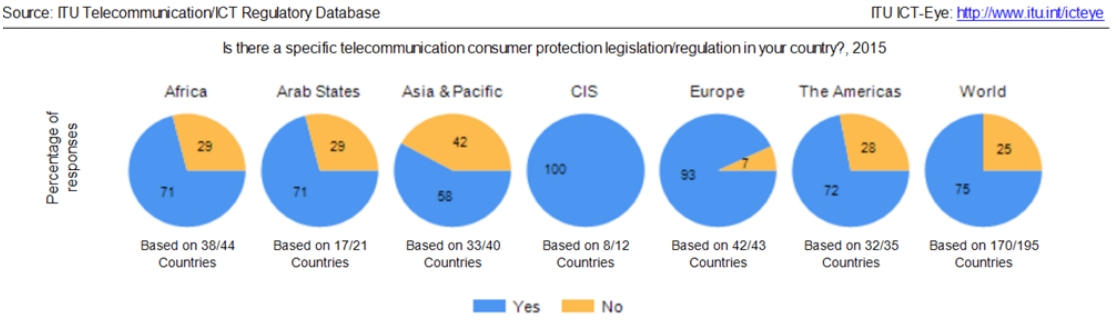
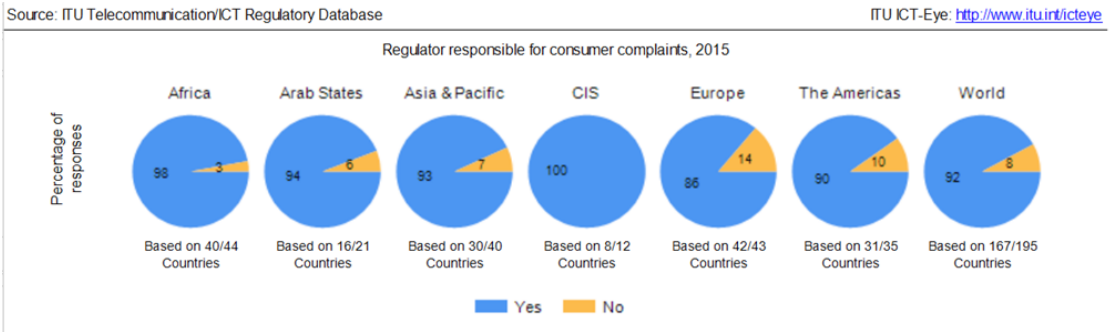


Figure 3: Feedback from ITU member states on consumer issues



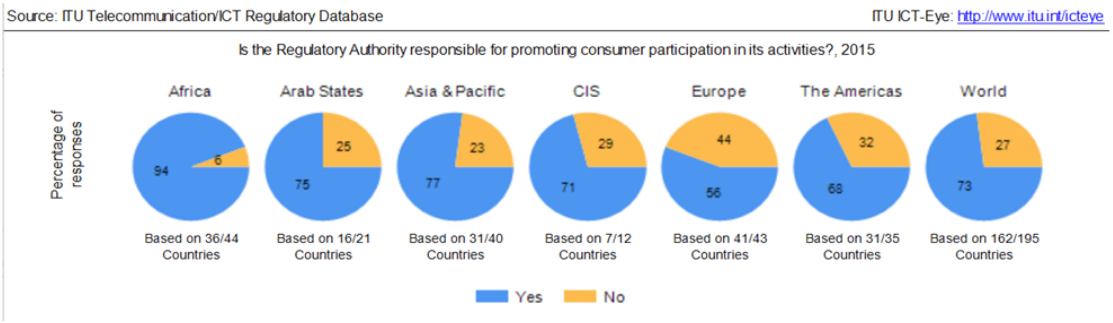
Source: ITU Telecommunication/ICT Regulatory Database.

Figure 4: Feedback from ITU member states on consumer issues



Source: ITU Telecommunication/ICT Regulatory Database.

Figure 5: Feedback from ITU member states on consumer issues



Source: ITU Telecommunication/ICT Regulatory Database.

Figure 6: Feedback from ITU member states on consumer issues

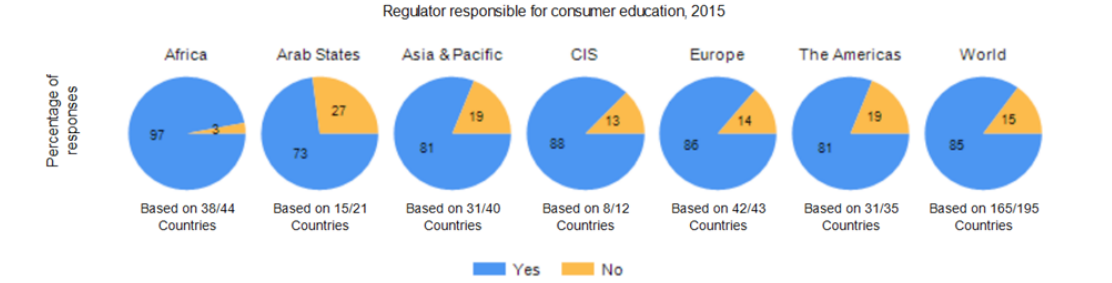


Figure 7: Feedback from ITU member states on consumer issues

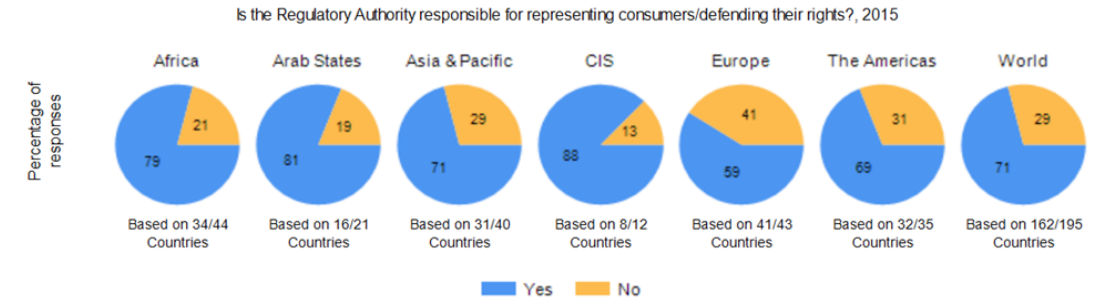
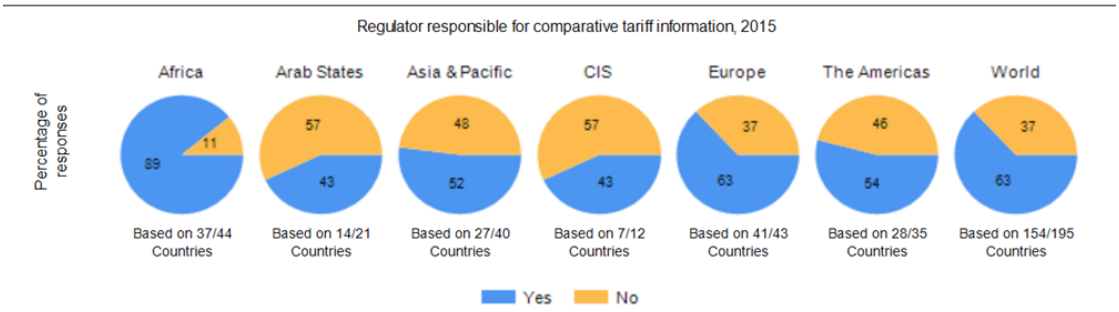


Figure 8: Feedback from ITU member states on consumer issues



A 2013 ITU report also recognizes that modifications to regulatory frameworks, including improved measures around enforcement and implementation of legislation, rules, and regulations to protect consumers are needed because there are significant and ongoing changes in how services, applications and content are provided and sold to consumers and because service providers that previously served different markets are now competing for the same customers. The challenge for national

regulatory authorities, it states, is to understand the underlying dynamics of convergence from a consumer perspective. Although policies and/or regulations to accommodate converging services are still being defined in many countries, price transparency and technology/net neutrality are key consumer rights to be addressed, as well as the protection of personal data/privacy/confidentiality of Information, and the right to complain. Within this context, the ITU report finds that regulators are generally faced with the need to:

- Encourage investment in high-speed networks and advanced technological solutions that are universally available and accessible;
- Protect innovators, creators and consumers from counterfeiting and piracy associated with the online (increasingly cross-border) distribution of goods and services;
- Promote and safeguard e-Commerce: by creating a framework in which reliable and efficient electronic payment mechanisms (card, internet and mobile) can flourish (e.g., e-Identification and trust services for e-Transactions);
- Ensure that consumers have all the information they need to make informed choices and have adequate protection and redress mechanism if things go wrong;
- Safeguard trust in the Internet by developing a robust cybercrime strategy and data protection and privacy strategy that is future proofed to cope with new technologies;
- Create a simpler, clearer regulatory framework and level playing field for distributors of content, avoiding legal uncertainty, duplication and double monitoring that may occur where network and transmission regulation is separate from content regulation.[8]

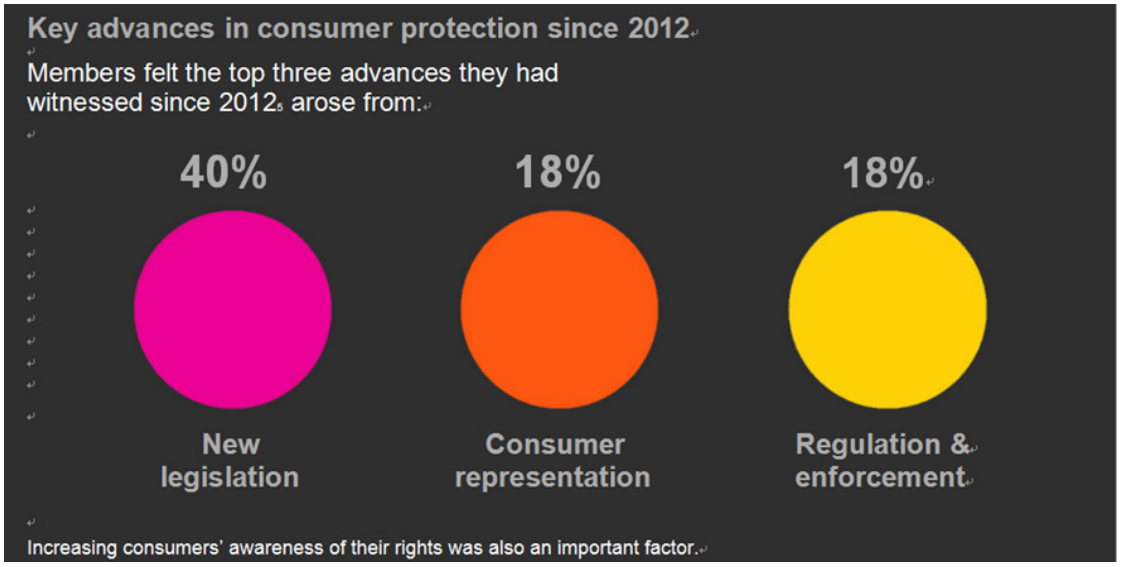
In 2014, Consumers International (CI) set out to assess the state of consumer protection around the world through a global survey of its Member organizations.[9] In its key findings, the survey revealed, as illustrated in figures 9 and 10 below, that new legislation is the factor most commonly thought to have delivered consumer protection advances in the last three years, with more still expected; and that there is recognition that as the digital economy grows and evolves, it poses a number of challenges for those working in the consumer interest, including the issue of how best to ensure legislative, regulatory and standards frameworks that adapted to an environment of rapidly evolving technology . The survey also defined the need to establish respect for consumer data and privacy and the concern that consumer protection mechanisms are being outmoded and outpaced by the speed of change in the digital economy. Finally, the survey also found that access to the digital economy and digital technologies becomes ubiquitous, new means and opportunities for delivering consumer protection become available.[10]

[8] https://www.itu.int/en/ITU-D/Regulatory-Market/Documents/Regulation%20and%20consumer%20protection.pdf.

[9] For the purposes of the research CI's Membership was segmented into four broad regions. The regions were: Africa; Asia Pacific, Central Asia and the Middle East (APCAME); Europe and North America (EurNA); Latin America & the Caribbean (LA&C). http://www.consumersinternational.org/media/1568496/ci-survey-summary-2015-english.pdf.

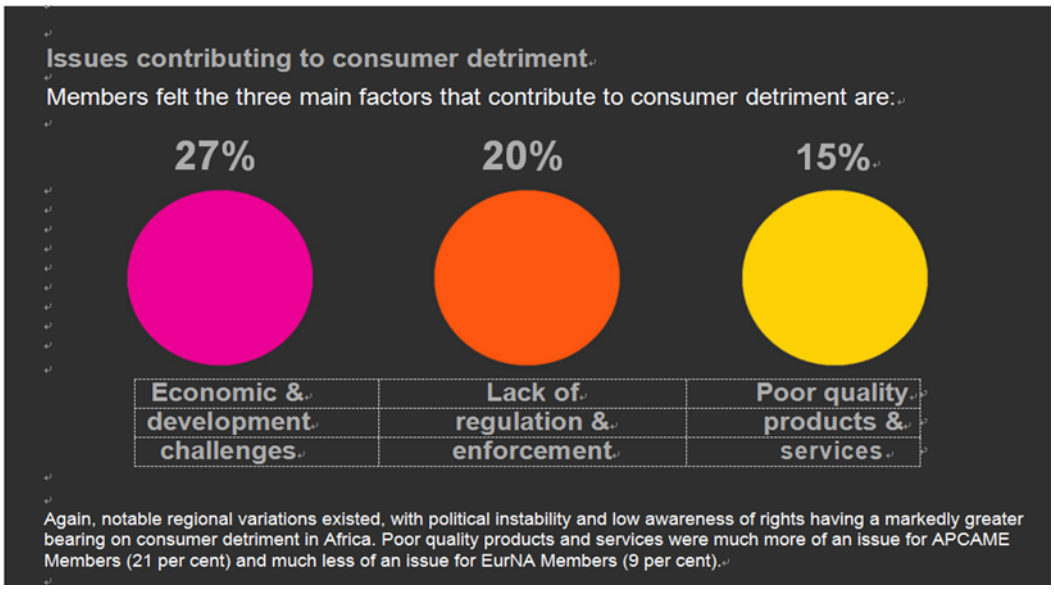
[10] http://www.consumersinternational.org/media/1568496/ci-survey-summary-2015-english.pdf.

Figure 9: Key advances in consumer protection since 2012 by Consumers International



Source: Sursey report 2014, Consumers International, available at: http://www.consumersinternational.org/media/1568496/ci-survey-summary-2015-english.pdf.

Figure 10: Issues contributing to consumer detriment



Source: Sursey report 2014, Consumers International, available at: http://www.consumersinternational.org/media/1568496/ci-survey-summary-2015-english.pdf.

2 CHAPTER 2 – Challenges in the field of telecommunication consumer protection

2.1 Technological innovation

Technological innovation, as defined in the Oslo Manual (Guidelines for collecting and interpreting innovation data domains), covers product and process innovation as well as innovative measures in those spheres that have not been completed.[11]

Product innovation consists in placing on the market a product (good or service) that is either new or significantly enhanced in terms of its basic characteristics, while process innovation is the implementation of a production process, distribution method or support activity that is new or significantly enhanced for goods or services.

From the smoke signals used historically to the emergence of fourth-and fifth-generation digital telephony, and from the telegraph to the Internet, communication tools and media have evolved tremendously over the centuries. At the same time, a simple need for exchange has changed into the need to transmit information in real time, by voice and, increasingly, by means of data, to all corners of the planet. Products and services are now highly diversified, impacting the usages and health of consumers, who now more than ever need to be made aware of how best to work with the products to be found on the market.

2.1.1 Impact of technological innovation on usage and services

– **Services**

Technological innovation and diversity provide the consumer with opportunities for communication, trade and access to information in a way which reduces the digital divide beyond universal service thanks to online services, new applications, software solutions, terminals and devices whose functionalities are constantly being upgraded.

The benefits of technological evolution are unquestionable, and illustrated by the country experience below.

In the case of **Cameroon**,[12] further to a partnership agreement signed in 2015 with a number of mobile telephony operators, the country's tax administration now allows people to pay their taxes by mobile, thereby moving closer to taxpayers and resolving certain mobility issues. Furthermore, during the first national forum on 3G/4G services in Cameroon's digital economy, organized in February 2015 on the initiative of the Telecommunications Regulatory Agency (ART), operators presented the opportunities arising from innovative digital services: e-Commerce, e-Education, eHealth, e-Banking and electronic payment.

The implementation of 4G is under way, with the updating of licensing agreements and terms of reference of licensed operators. Experience with 4G is in its early stages and currently concerns only three pilot cities (Yaoundé, Douala and Garoua), while consumers are not yet fully benefiting from 3G services on account of suboptimal network quality and coverage. During the first National Digital Economy Days, organized by the ministry responsible for posts and telecommunications, the World Bank noted the weakness of the 3G service, estimated at 2 per cent in Cameroon, as against 8 per cent in Mauritania and 17 per cent in Tunisia. Quality of service is the main source of discontent among customers, and has an impact on the costs borne by the end consumer.

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11 http://www.uis.unesco.org/Library/Documents/OECDOsloManual05_en.pdf.

12 Document SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon", Republic of Cameroon.

– Use

Innovative services can be either the source or result of increased use of telecommunications/ICTs, depending on legal and regulatory frameworks and market conditions.

In **Cameroon**, despite a significant rise in tele density (from 25 per cent in 2010 to 92 per cent in 2014), the impact of technological innovations remain inadequate, often due to insufficient network coverage. In 2014, ART commissioned the National Statistical Institute (INS) to produce a "Study on the level of access to, and usages and perception of, electronic communication services", the twofold purpose of which was to have basic indicators relating to ICT access and usages, together with calculated indices or synthetic indicators (Digital Access Index (DAI) and ICT Development Index (IDI)).[13]

Where access and usages are concerned, it emerged that 11.8 per cent of households had a computer, (of which 20.7 per cent in urban and 3.3 per cent in rural areas), and 6.7 per cent of households had an Internet connection at home, (of which 12.3 per cent in urban and 1.4 per cent in rural areas). Private companies are the main Internet users, with a proportion of 89 per cent as against 46.5 per cent in the public sector. As regards indicators, in 2014 the DAI was 0.356 and the IDI was 2.03.[14]

The study recommended that faced with constant technological evolution, government authorities and regulators must provide a regulatory framework in order to ensure consumer access to high-speed devices and services at affordable prices, while encouraging the telecommunication and ICT industry by means of incentives.

In the **People's Republic of China**,[15] the National Committee of Telecom Users (NCTU) actively monitors technological innovation and developments in the 4G market, where services have been commercially available since 2014. After being involved in experimental work and in the technical and commercial introduction of those services, the members of NCTU (from companies, universities and research institutes) put forward suggestions concerning, among other things, the evolution of the 4G market, consumer interests and improving service functionality.

2.1.2 Other consumer issues linked to technological evolution

2.1.2.1 Consumer information, awareness-building and training

Thanks to broadband and the rapid evolution of ICTs and technology, consumers now benefit from rapid access to a wide variety of information from multiple sources. Are the services on offer tailored to the actual needs of consumers or are they themselves generating needs? Bearing in mind the financial implications of the products of technological innovation, it is important to inform and train consumers as to their use, so that they can use them and spend their money on them in full knowledge of the facts.

2.1.2.2 Health effects of exposure to electromagnetic fields

The development of increasingly frequency-hungry new technologies and of operator networks, with the associated growth in infrastructure deployment, is giving rise to recurrent concerns on the part of some consumer protection associations, users and even local communities, with respect to the implications for public health. The results of international studies conducted or currently under way do not as yet provide any reassurance as to the neutrality of such technologies for people's physical well-being.

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13 http://www.art.cm/images/pdf/studies/NIS%20survey%20Updated.pdf.

14 Idem.

15 Document 1/88, "National Committee of Telecom Users work effectively to improve telecom services", People's Republic of China.

In **Cameroon**[16] work has begun on the establishment of a regulatory framework in response to the issue of exposure to electromagnetic fields:

– Decree 2013/0403/PM of 27 February 2013 lays down maximum thresholds for public exposure to electromagnetic emissions from equipment used in electronic communication networks, or from any other equipment capable of producing electromagnetic emissions. The specified obligations are incumbent upon those authorized to install or operate electronic communication networks, the operators of radio networks or facilities and the holders of frequency assignment agreements. More specifically, where educational establishments, nurseries and healthcare premises located within a radius of 100 m from such equipment or facilities are concerned, the operators of radio equipment and facilities are required to take measures to ensure the lowest possible exposure without any reduction in the quality of the service provided.

– The installation of pylons, antennas and masts is the subject of Ministerial Decision 00000054/MINPOSTEL of 18 April 2015. It is applied under the supervision of ART, which is responsible for specifying the technical characteristics of pylons and masts, as well as the characteristics of safety arrangements in terms of fencing, distances, rights of way, signaling, lighting and signage.

2.1.2.3 Environmental impact: the problem of electronic waste

Given the dynamism of industries within the electronic communications sector, which are constantly upgrading electronic communication terminals and equipment and ICTs, as well as the increasing use by consumers of multiple devices and equipment, the problem of electronic waste management has increased over the years and the adverse effects of e-waste on the environment and on the health of citizens is acute. Statistics show that e-Waste is one of the world's fastest-growing waste streams, with an estimated 42-million metric tons generated in 2014.A recent ITU report on Sustainable Management of Waste Electrical and Electronic Equipment (WEEE) in Latin America recognizes that although informal WEEE management has effects on health & quality of life, specific regulatory frameworks are also essential. Effective governance models, including all stakeholders, are also key, with roles & responsibilities well defined. Economic analysis of the environmental and social risks related to a mismanagement of WEEE should also be part of the process to define national frameworks. But WEEE is not a national issue, meaning that coordination among environmental & ICT representatives at national, regional and global level is also important for efficiency and sustainability of actions.[17]

2.2 Market environment and competition

Electronic communication operators and industries engage in fierce competition to attract consumers, using pricing as the bait. Consumers too are increasingly becoming "prosumers" and may as such even achieve stronger power in the market.

2.2.1 Proliferation of pricing and promotional packages

One of the best practices adopted at the Global Symposium for Regulators 2015, held in Libreville, Gabon, aimed at protecting users and providers, provides the need for "*educating and empowering consumers by various measures and initiatives, including through providing platforms for user-friendly and up-to-date comparisons of service offers and tariffs; informing consumers about legal provisions and complaint/redress procedures as well as by promoting a culture of cybersecurity*".[18]

With technological innovation proceeding apace, operators, in their constant search for new market shares, flood consumer terminals with tempting offers designed to generate a sense of need. In the

[16] SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon", Republic of Cameroon.
[17] http://wftp3.itu.int/pub/epub_shared/TSB/2016-Integrated-mngnt/index.html#p=1.
[18] http://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2015/Consultation/BPG_2015_E.pdf.

case of **Cameroon**, there has been a proliferation of tariff offers, some of which have existed since certain mobile telephony operators began their network operations, and which obscure a clear understanding of the basic offers. The failure to migrate subscribers to updated offers and to tidy up tariff offers creates a lack of visibility in terms of the tariffs applied. For some consumers, the non-migration to enhanced offers is voluntary, those subscribers preferring tariffs they find more attractive in the light of their requirements. For the vast majority, however, such non-migration has more to do with their inability to understand the offers, or to the lack of clarity of those offers.

Where promotional offers are concerned, regulators have a key role to play in terms of guiding consumers and preventing abuses on the part of operators. In the case of **Cameroon**, there are cases of commercial harassment, with promotional offers that outlive their temporary nature. In response to this, ART, by Decision 0000 0086/ART/DG/DAJPC of 22 May 2014, establishing the conditions and arrangements for the launch by operators of promotional offers for electronic communication services, set three months as the maximum duration of any promotional offer, with the interval between two promotions for any given offer being no shorter than two months. Furthermore, operators are required, eight days prior to the launch of any promotional offer – the conditions of which, particularly in regard to tariffs, must be clear, exhaustive, sincere and unequivocal – to submit that offer to ART for its approval.

In the case of **Brazil**[19], the National Telecommunications Agency (ANATEL) approved, by Resolution 632 of March 2014, the General Rules on Consumer Rights in regard to Telecommunication Services (RGC). Among other things, this text is aimed at ensuring that consumers have a better understanding of their rights and are able to make their choices more independently in a converging environment. Thus, new promotional offers from the service provider may be subscribed to by any interested consumer, whether or not a customer, whereupon customers must be informed of the fact that their contract may provide for charges in the event of early cancellation (Article 46 of the RGC). A further requirement is that offers must be transparent, the service provider being required to provide consumers, prior to the signature of their contract, with a summary containing clear information pertaining to the offer, such as pricing, the period of validity and the prices that will be charged once the promotion is over (Article 50 of the RGC).

2.2.2 Games and tombolas

The gambling sector is enjoying a new lease of life with the support of electronic communication media, to the benefit of operators proposing such games, and more often than not to the detriment of consumers, who do not always understand the conditions for participation. Similar lack of information applies to tombolas organized by operators, in which customers participate by sending an SMS text. Where the game consists in replying to a series of questions prior to the draw, the hope of winning helps the player to neglect the cost of participation, in as much as a charge is made for each text submitted.

In **Cameroon**, legislation relating to games was supplemented in 2014 by a decision of the Telecommunications Regulatory Agency (ART)[20] stipulating time-limits for games and promotions in the interests of protecting and informing customers.

2.2.3 The rise of dominant consumers and their rights

"Dominance" is a complex term combining political, economic and legal meaning. It is directly related to a specific region, industry or products, on behalf of the people, group or organization's control

[19] Document 1/35, "General regulation on consumer rights of telecom services", Federative Republic of Brazil.
[20] Document SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon", Republic of Cameroon.

ability. The dominant body can make up the industry rules and determinate the scale, structure, quality level, cost, and the price of specific products or services.[21]

According to the laws of economics, in a seller's economic demand era, due to the scarcity of goods and services, the dominance of the market control are in the hands of the sellers. In the era of buyer's economy, supplement of goods and services are far more than demand, manufacturers as sellers lose their pricing power which is the core of the market control ability. Consumers can become strong players because of their purchasing power and freedom to choose.

In accordance with the value source of products and services, the development of the global information and communications industry has experienced five major stages, namely:

- **First stage:** fixed voice communication business led growth;
- **Second stage:** the mobile voice business led growth;
- **Third stage:** the data value-added business led growth;
- **Fourth stage:** data traffic over the broadband network is leading digital services growth;
- **Fifth stage:** Internet of everything is leading growth.

At present, most countries and regions have entered the fourth stage of development. The typical characteristics of this stage are as follows: fiber-optic broadband network are introduced in the city and rural areas; 3G and 4G subscribers accelerated mobile broadband growth; the scale of population dividend are gradually disappearing, while the data dividend is beginning to appear. Nowadays, most developing countries are in the first stage of data dividend – data flow dividend driven growth, some developed economies have entered the second stage – the content dividend driven growth.

Dominant rights in the fields of industry or products keep transferring. Its essence is the transfer of value creation and distribution among market players. In the seller economic environment, suppliers especially dominant operators, can decide the number of products, service quality, price, trading conditions and other factors, the function value of the products and the connection value of network have become the main form of value parts, therefore value distribution right is owned by the leading enterprises and consumers can only passively accept the conditions of products and services trading. In the buyer economic environment, products and services can be easily chosen by consumers, who can dominate the rights of value distribution according to product quality, price and delivery time and other factors. Sometimes they can even take part in value creation through the way of production by orders.

From the development of the global information communication market, the transfer of market dominance took place around 2012 after demographic dividend disappeared. By that time optical fiber networks and 3G mobile broadband were quick deployed, mobile phone penetration rate reached over 90 per cent in some countries, and family broadband penetration rate came to touch the number of 80 per cent. Communication network capacity and bandwidth became no longer scarce, and it turned to total surplus in some countries. The revenue and profit growth are fast declining. Telecom operators were forced to explore the Internet services with more cooperation and opening their abilities. They are aiming at improving ARPU of personal users and increase the value of content services.

After 4G services are put into practice, mobile internet services became the engine of revenue growth. User dominant rights are becoming increasingly clear with:

- **The decline of connection value.** When network resources are no longer scarce, although the value of the pipeline is still effective, its marginal return relying will be diminishing. Users may be more likely to pay for the digital content and services than the access and connection.

[21] Document SG1RGQ/199, "Consumer protection in the convergent era: user dominant right is rising up", People's Republic of China.

- **The dispersion of user entrance.** In the past telephone number was the main entrance for the user to connect with others, even the only entrance. However e-mail address, instant communication number, network homepage, micro-blogging accounts and some other virtual addresses can become additional selection. For some younger people they can be applied even more than the telephone number in daily life.
- **The personal customization.** The value of traditional products are no longer popular, characterized by unified technical standards and business model. In place of it personal customization in terminal, connection mode, entrance, rates and other factors are more popular. Telecommunication operators and service providers are active in this field in order to enhance brand loyalty and customer value.
- **The decentralization of suppliers.** Single products and services can be provided by single company itself with the vertical mode. In such cases those companies connecting people can win the dominate rights. Under convergent environment, many products and services need to be provided by multiple suppliers, such as online digital video services. They need network operators, platform providers and video content creators work together to meet the demand, preventing the operators from the center position of value chain.
- **The integration of production and consumption in digital content services.** The most important change occurred in the links of production and consumption of digital content. Broadband networks and intelligent terminals empower users to generate content (UGC), conveniently and easily. A part of consumers with professional abilities can be content partners of operators and the platform. They can release attractive original video content, simultaneously consume the other people's content, which leads to the integration of production and consumption. The consumer's multiple identities may help driving business model shift. The internal exchange, the mixture of forward and backward charge, level charging mode in different users can be introduced.
- **Constant innovation in products and services.** Single reliable products may be helpful to retain customers but not enough to enhance the value. Network operators and service providers are creating and opening business platforms to potential partners to timely response to customer demand, to shorten the product development cycle, innovative products and services through the fast iteration. The customer driven product R & D become mainstream.

2.3 How changes in business models and service provision affect consumers

2.3.1 Unsolicited value-added services

Such services may include music on hold, non-functioning deactivation codes, customer complaints, information, as well as automatic renewal of subscriptions with difficulties when attempting to un-subscribe.

Measures to remedy such challenges may include:

- Measures by national regulatory authorities to protect customers against abusive operator practices.
- Measures to guarantee consumer protection in the provision of all telecommunication and ICT services.

2.3.2 Changed business models and marketing policies

With increased competition, the telecommunication sector is accelerating its advancement towards more integrated business operations, and attain its objectives of promoting innovation, increasing consumer loyalty, and upgrading user value. Competition among operators has changed from simple price to brand, service and content, including through Confluent Marketing (hereinafter CM), which

includes packaging various kinds of services and providing discount rates based on types and proportions, such as bundling mobile phone, broadband, instant message service and so on.

In the People's Republic of China, China Telecom launched its CM in 2012 to provide end users with three kinds of services: My E-home, Business Navigation, and E-surfing Mobile. E6 (Fixed plus Mobile phones), E8 (Fixed phones plus Broadband), and E9 (Fixed and Mobile phones plus Broadband) were designed to meet various demands under the brand name of My E-home. To improve customer's experience, China Unicom took actions to establish unified access via fixed, 3G and Wi-Fi, consolidate user's accounts to connect to any screen and content. Family One Plus (FOP) is an integrated service plan designed for family users. It includes the core business of fixed to voice and broadband, together with mobile phone, video phone, video inspection, and family gateway. FOP can be divided into three types: FOP voice (Fixed and Mobile phones), FOP online (Fixed broadband and Mobile phones), and FOP infinity (Fixed and Mobile phones plus broadband).China Mobile decided to apply different ways of wireless broadband as entryway of CM. It includes 2G, 3G, Wi-Fi and LTE. Moreover, IMS project was launched in 2009 to realize combination of voice, photo, video and files based on existing mobile, fixed and internet network. By the way of IMS, its enterprise customer can receive the functions of telephone, fax, data transition, video conference, call center and instant message and so on. The typical products are called Enterprise communications Assistant and Merged VPMN.

More new services are bundled to enlarge the scope of CM. IPTV and Video Monitoring are popular services chosen to be combined with broadband and mobile services. These service packages are planned to meet the demand of family and enterprise users, such as China Unicom's product package called Broadband Mobile plus Magic Eye for industry zones.

With the enlargement of CM, the regulatory policies originated with single service have to be changed from scope to tools. Hence, regulators should adapt themselves to the outside environment to help reshape new regulatory policies.

To keep up with developments in market competition and service provision, regulators should renovate their capacity and tools, particularly introducing new measures for regulating CM products. In China, any new CM package must be submitted to the regulator for review before it comes to market. For SMP operators the regulator can even deny the packages if there's strong evidence that it can do harm to competition or consumer benefits. Second, the operator is required to allow their own users to move from any kind of product package to another according to their will. This regulation has been in place for more than 5 years and effectively raised consumers' degree of satisfaction. Third, some monitoring platforms have been established to provide evidence for QoS and user experience. In 2012, MIIT completed a national internet interconnection inspection platform. In 2013, a new platform to verify the real speed of internet access was introduced.

The telecommunication regulator should also cooperate with other regulatory bodies since many CM products are beyond the scope of communication services such as music, video and health management. Collaboration and/or co-regulation is required to avoid loopholes and increase efficiency.

2.4 The rise of personal privacy risk

In the era of voice service, users were faced with the risk of exposing their numbers, locations and content of conversations. With the fast rise of internet and mobile internet, the consumer's behavior is now more and more related to information sharing and interaction. Personal information is more likely to be exposed to internet through the use of PCs, smart phones and notepads. Hence, consumer rights such as data, privacy, and property can potentially be exposed and abused.

The following issues should be addressed:

1) Influence of social networks: exchanging of videos, photos and applications for image enhancement.

2) Applications for backing up chat histories and media files on iCloud and the use that can be made of stored data; applications that can intrude into private life/medical secrecy and to which one divulges information without any guarantees. Cases of medical consultations by SMS proposed by some operators in the absence of any information as to the identity of the practitioner and no guarantees against corruption. In the event of accident, how to determine liability?

3) Problems of subscriber identification; sale of pre-activated SIM cards; telephone or Internet scams.

Between 2012 and 2013 in the People's Republic of China, for example, several incidents took place in which at least a few million users lost their personal information. A recent case took place in the first half of 2014, where an express courier company's information system was invaded by a hacker and more than 14 million customer's personal information was sold on the Internet for only 1,000 RMB (160 US dollars). These incidents have not only brought financial loss but also affected consumer confidence.

In order to effectively protect personal information of telecom and internet users, and to fight crime, the Chinese national congress and government bodies have worked closely together since 2012 to publish a series of laws and regulations to safeguard network information. These rules define the scope of network information, roles, responsibilities, and the duties of different organizations. To put them into practice, MIIT as the regulator released more detailed rules in 2013, including the Regulations for Personal Information Protection of Telecommunication and Internet Users and the Regulations for Real Name Registration of Telecommunication Users.[22] These regulations are a basis to manage information creation, sharing and collection, and to control harmful access to information from the origin.

In April 2013, MIIT published the Notice for Strengthening Administration of Mobile intelligent Devices. It focused on the services on APP platforms. Mobile phone manufacturers are requested not to pre-install software which contain harmful information, expose customer's privacy and harm network security. Software developers are required to register their products and provide software code for testing. These measures have played an active role in fair competition, consumer's right to be informed, and assurance of personal privacy.

Pseudo Base Station hazard

Pseudo Base Station (PBS) is a kind of high technology instrument composed of a main engine and notebook. It can search and find sim cards information in the surrounding environment with itself as center. After successful capture, it can act as anybody's mobile number to send trash SMS to the target users. During its operation, the normal user's mobile phone is forced to be connected to the PBS instead of the public telecommunication network, and make the usage of a mobile network unavailable to the user.

At present, four steps including recognition, location, tracing, and capture are provided to investigate and treat PBS activities. Telecommunication operators can utilize network analysis tools and road testing tools to enforce the previous two steps. Tracing and capture work depends on the capacity and enforcement by police. PBS activities need an industry value chain to accomplish research, production, sale, crime commission and benefit distribution. Therefore, telecom regulators, operators, police agencies and relative organizations should cooperate with each other to effectively manage PBS activities. At the same time, judicial organizations should take active steps to block legal loopholes, and increase sanctions (fines) for PBS activities to deter criminals.

More actions have been taken by the Chinese government and regulator to deal with PBS as shown in **Annex 4**.

[22] https://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2014/GSR14%20Contribution_China.pdf.

2.5 Numbering misuse

The technical aspects of a telephone number, as defined in ITU-T Recommendation E.164, provides for:

1) A maximum length of 15 digits;
2) Variations in national approaches as to whether to support an open dialing plan, a closed dialing plan or a mixture of both;
3) A maximum of 7 digits to be analyzed by an operator to be able to determine routing and costing of a call associated with a given number.

Numbering misuse is the use of the telephone Number in a manner than otherwise determined by the body responsible for allocation. This is different to numbering fraud, which is the correct use of the telephone number but in a manner that is intended to defraud parties associated with a communication call.

It is therefore possible to have three different scenarios:

1) Misuse of numbers (either allocated or not);
2) Fraudulent use of numbers (either allocated or not);
3) Misuse and fraudulent use of numbers (either allocated or not).

Only Numbering Misuse is considered further. Fraud is a wider legal issue in many countries and its resolution falls under the remit of the judiciary system.

Numbering Misuse is the use of numbers in a manner than their intended use. Examples of misuse include numbers being used that are not allocated for use, numbers supporting revenue share when not allowed, numbers terminating outside of the country when not allowed. The main driver for numbering misuse by the numbers of Country A being offered for use in Country B are the high termination rates of international inbound calls in Country A. So why does misuse occur?

Often the company offering the use of a number has no relationship with the National Numbering Plan Administrator (NNPA) whose numbers are being used. The company's concerned claims rights of use over numbers that they have not been granted, and offer revenue sharing to the users of these numbers by exploiting the high termination rates of the international inbound calls in the countries concerned.

Companies are able to claim rights of use over numbers because in many cases the environment of the NNPA lacks complete armory over the resources for which it is responsible. The armory provides for responsibility and actions across the life-time of a number, from allocation, to withdrawal, and includes changes to both use and length of a number. A NNPA should be able to have knowledge of the numbers that have been assigned, for what purpose (as defined in a National Telephone Numbering Plan (NTNP)) the numbers have been assigned, rights to audit the assignee of the ranges (to ensure that the ranges being assigned are justified, or are being used in accordance with the NTNP), and in some cases seeking to either amend the use of the numbers (according to amendments in the NTNP), the length of the numbers (to combat exhaustion), or ultimately withdrawal of the numbers (because they are no longer used, being misused, or changes in the numbering allocation).

A further element to numbering misuse is short stopping. This misuse is where the numbers dialed do not reach the destination indicated and is not allowed by the NTNP. It is not the purpose of this paper to assess any relationship between the companies advertising the numbers, and those companies short stopping, and any suspected fraud, where the revenue is paid legitimately for the use of the numbers but does not reach the country whose numbers are being used. Modern telephony that supports both competition in all aspects (access, international, transit etc.) and various technologies (circuit and packet, fixed and mobile, satellite and terrestrial) is often more complex than previously

encountered. With routes of calls often changing rapidly, determined by cost, and the manner by which telephone numbers are utilized in delivering a call, the requirement is to ensure numbers should be routed to the destination based on an analysis of the number dialed, and the commercial relationships in place that operators route the call.

In **Guinea**,[23] a new numbering plan was adopted and brought into use for Guinea's telecommunication/ICT sector in 2013. In the interests of efficient resource allocation operations, the Postal and Telecommunication Regulatory Authority (ARPT) implemented procedures for managing numbers and blocks of numbers. At the request of operators, numbers are granted by ARPT in blocks of 1 000 000 on the basis of an annual fee of 750 Guinean francs (USD 0.107) per number. Further to any assignment of blocks, ARPT periodically conducts an audit of those blocks. For the renewal of number blocks, an operator must submit to ARPT a substantiated request in due and proper form. ARPT then conducts an audit to ascertain the usage thresholds according to the corresponding ITU rules, and identifies the numbers. In the event that the thresholds have not been reached or that the identifications are not exhaustive, a substantiated refusal is drawn up and sent to the operator.

The responses to the survey were well distributed, and **Annex 3** contains the details of the responses presented to the ITU-D Question 6/1 Rapporteur Group meeting in January 2017. Common to all of the responses was the focus on the management of the resources. Telephone numbering resources are used by various stakeholders and as a consequence meet varied requirements. Operators use numbers for various activities including billing and routing; regulators use the numbers to promote competition and consumers use numbers to communicate and to be communicated. In a value chain of the monies associated with the use of numbers it is consumers who generate the value, and it is consumers who need to have a consistent and transparent understanding of telephone numbers. Such an understanding can evolve and change over time.

It is important that adequate protection is given to consumers through the management and use of the national number plan. Regulators and Operators should take a user centric approach to the evolution and subsequent use of telephone numbers in order to maximize the benefit and value of telephone numbers. Consumer protection can be assisted by clear and consistent rules of allocation and assignment, of the use to which telephone numbers can be put, and the information that a regulator associates with telephone numbers. Other assistance can be provided through legal frameworks that explicitly focus on Consumers, and that may augment consumer protection. Examples of such legislation could be financial services that are accessed by telephone.

The increased use of telecommunications, and the reliance placed upon such use in bridging the digital divide, through the provision of innovative services, such as mobile money, and the empowerment of consumers makes it imperative that the use of numbers is based on good number management and number management is based on clear and transparent rules. The responses to the survey demonstrate that though the national implementations of such rules reflect national approaches to the use of telephone numbers, such rules do contribute to consumer protection.

[23] Document 1/274, "The numbering plan in Guinea", Republic of Guinea.

Box 1: Analysis of numbering misuse survey

The issue of international telephone numbering misuse was addressed at WTDC-14, with agreement to Resolution 78. In support of this Resolution there was a multi-country to ITU-D Question 6/1 proposing a course of action of issuing questions to Member States that was supported and that was, after amendment in Question 6/1, issued to member States. This is an initial analysis of that responses to that Circular.

The Circular was developed in order to assess the extent to which national rules existed over the management of telephone numbers and was further amended to assess the extent to which SIM Box fraud was an issue. The Circular was purposefully kept short to ensure that Member States could easily and simply respond. The questionnaire had 40 respondents, and whilst there were duplications from Member States, only had different submitters.

The information provided by the questionnaire represents a positive approach to numbering by the Member States. There appears to be governance over the national numbering resources, although it does vary. Such governance also ensures visibility both nationally and to the ITU-T of the National Numbering Plan. No assessment of the scope of the resources that are within the national numbering plan is included.

Given the existence of governance over national numbering resources the issue of misuse requires some further consideration. One early question is whether or not the governance that is in place nationally is sufficient, in terms of the resources that are covered by such governance, and the responsibility of the Regulator or Administration has as part of that governance to cover all aspects of number administration throughout the life cycle of the numbering resource. It must be recognized that there are different numbering resources that may be included in the national numbering plan in addition to Telephone Numbers and International Mobile Subscriber/Service identifier; other resources that could be included are national only telephone numbers and short numbers, Issuer Identifier numbers and international signaling point codes.

It is important to note that each Member State has implemented a national approach to numbering resource management. This reflects the different approaches to national numbering resources that exist. That said there are general points to note that such national regulation needs to address.

The general points of number resource management include, for example, whether or not the entity responsible for numbering resource management performs annual audits, or indeed whether or not such audits are permissible. There are other points that can also be included, such as do all operators maintain records of the state of the telephone numbers that they have allocated to them, and are there rules that ensure good husbandry of the numbering resources included within the national numbering plan. It is on these general points that initial guidance can be given.

Furthermore, recognition of the actions of operators to combat misuse is also an effective tool, and one that needs further consideration.

In relation to the issues that have been identified, the analysis revealed that the current governance is national in its approach. This maybe an obvious statement but one that needs to be recognized.

How to address the issue and maintain compliance with Constitution and Convention with regard to the principle of national sovereignty, and then ensure that a national approach to number management that reflect the understanding and needs of stakeholders is maintained.

One initial activity in seeking to understand whether the current national governance is in place is to understand the extent to which numbering resources that are used in misuse are governed (or not) according to general principles. For example to what extent does SIM box fraud occur where there is little or no registration at the time of purchase of a SIM card? What extent do misuse of numbers occur when there is scant regard to Regulations and Guidelines? In this latter question, some responses would suggest that having conformance and enforcement of such regulations is of benefit to reducing fraud.

It is important to recognize that in many cases there will always be opportunity for the misuse of telephone numbers, given that the analysis required to route and charge for a call may be less than the full number being dialed, and that at best information as to who has the rights of use of numbers can ameliorate such misuse. For example, is it possible for an entity being asked to route numbers to identify whether the request is being made by an operator who has the right to do so?

Ensuring that the current approach to management of national numbering resources follows good principles and that the stakeholders understand both their specific roles and their relationships could contribute to the reduction of misuse. Allied to this is ensuring that all stakeholders have the correct legal powers to undertake their roles, and that as part of undertaking these roles information about who has rights of use is understood and what actions they need to have are known.

2.6 The needs of specific groups: people with disabilities, women and children

Digital Inclusion means empowering all, including people with specific needs through Information and Communication Technologies (ICTs). A holistic approach recognizes that activities for one group also positively impact the other groups. The Digital Inclusion activities of the BDT are designed to promote ICT accessibility and use for the social and economic development of people with specific needs, including indigenous peoples and people living in rural areas; persons with disabilities; women and girls; and youth and children.[24]

Gender equality issues often focus on employment, salary, family violence and sex crimes. Some social networks applications have become an accomplice of sex criminals. Online training and social media activities, among others, can be useful tools for women to face gender discrimination and other challenges.

Children are our future. However, young people are also particularly vulnerable in an online environment, where children are accessing the internet on a range of different devices. Gone are the days when the only way to surf the web was on a desktop computer at home, due to the rapid rise in penetration of mobile phones, including those capable of providing access to the internet. The equation has changed in the way information is accessed and shared anywhere with relative ease, regardless of one's location. Mobile phones and internet services are more and more popular in child users. Our children may be using portable devices such as smart phones, laptops, gaming devices (e.g., Nintendo DSi), media players (e.g., iPod Touch) and tablets (e.g., iPad) or cheaper versions and or second hands.

[24] http://www.itu.int/en/ITU-D/Digital-Inclusion/Pages/default.aspx.

Children are often victims of telecommunication fraud or sex criminals. This has contributed immensely for the need to protect children. Harmful content in video or game services in particular are issues to be addressed.

Some special smartphones have been designed to put children under parent's monitoring, with the function parts of GPS, Glonass, North Big Dipper and cellular-aided positioning system, as well as SOS upon one button. In China, a phone called 360 child safety watch can be bought at less than 50 US dollars (See detail in **Figure 11**).

Figure 11: Different kinds of child watch with communication and positioning inside

Source: 360 mall, http://kids.360.com/.

People with disabilities can largely benefit from web, mobile and video services in a digital world to decrease the digital divide. ITU has established a series of tools to help this specific category of users to access digital services at reasonable prices.[25] Many member countries have also defined tools to include specific requirements for operators and service providers to facilitate access to telecommunications/ICTS for people with disabilities. ITU members, including policy makers, regulators and service providers continue to have an important role to play to ensure that ICTs in their countries are accessible for persons with disabilities and to eliminate ICT accessibility barriers. BDT activities are designed to assist ITU members to better understand the accessibility needs of persons with disabilities, the technical solutions that are available and the policy and regulatory solutions they can take to ensure such solutions are widely available at affordable prices.

In addition, the ITU-D Study Group 1 Question 7/1 report for the 2014-2017 period[26] addresses ICT accessibility, looking at:

1) How to promote accessibility in public ICT spaces, such as telecentres and public pay phones?
2) Which requirements for public procurement, including commercial best practices relating to telecommunications/ICT, should apply to persons with disabilities?
3) What are the requirements for mobile phone accessibility?
4) What are the requirements for TV and video programming accessibility?
5) What are the requirements for web accessibility?
6) How can accessibility tools be used by people with difficulties mastering reading and writing?
7) What are the best strategies, policies and projects on accessibility that are already implemented?
8) What commercial solutions exist in the global ICT market place?

[25] http://www.itu.int/en/ITU-D/Digital-Inclusion/Pages/default.aspx.
[26] Question 7/1 report "Access to telecommunication/ICT services by persons with disabilities and with specific needs", available at: http://www.itu.int/md/D14-SG01-C-0482/.

9) What potential practical applications can be identified to promote accessible e-education?

Web accessibility is defined as an accessible website which is designed and developed to accommodate people with a wide variety of accessibility requirements, using a wide range of technologies. An example of key feature of an accessible website is that it uses text descriptions of any information contained in images. This is called alternative text and it is necessary for blind people who use a screen reader to access the webpage to understand the information contained in the image. There are 4 key principles taken from the international standard for web accessibility called the Web Content Accessibility Guidelines 2.0, listed as follows: Perceivable; Operable; Understandable; Robust. The **ITU Model ICT Accessibility Policy Report** also contains best practices and practical tools designed to assist national policy-makers and regulators to create their own ICT accessibility policy frameworks.[27]

In **Turkey**, Bogazici University and Türk Telekom bring to life Turkey's first telephone library. Assistive Technology and Education Laboratory for Individuals with Visual Disabilities (shortly GETEM in Turkish) at the Bogazici University is operating under the University Disability Center and is supported by Bogazici University and outside donors. GETEM has been providing free assistive technology services for the university students with disabilities and free online digital library services for individuals with visual disabilities in Turkey since 2006.

The digital library project is aimed to reach nearly 400,000 individuals with visual disabilities as well as other types of disabilities including individuals with cerebral palsy and individuals with reading disabilities in Turkey. The services within the digital library project are also carried out by municipalities, NGOs and universities in Turkey. The digital library includes Turkish and English materials.[28] Apart from stories, novels and poems, teaching materials including books, articles, class notes and lessons, conference records are also provided digitally. The materials are provided either in human voice or in computer voice. Furthermore, the materials can be listened to using special programs or can be read by refreshable braille displays which turn the electronic text on the computer screen into braille simultaneously.

Visually impaired customers are able to access the audio books free of charge thanks to the PINs they receive when enrolling at GETEM. Users of the Books on the Phone Project, which are available only on home phones, enjoy various options, including selecting the book of their choice, resuming the previous session in their next call or skipping back and forth between chapters. The visually impaired, who have enrolled at the web site www.getem.boun.edu.tr in the GETEM, which continues its work as part of the Bogazici University, are able to listen thousands of audio books free of charge over the Internet. And those visually impaired who do not have access to computers and the Internet will be able to access the audio books through the Books on the Phone Project. In addition, the project has initiated a voluntarily societal movement under which popular national figures and celebrities have started to contribute to the project by reading books and recording material in their voices to provide services to visually impaired citizens.

For the first time in **Mexico**'s history, the Federal Telecommunications and Broadcasting Act sets out the rights of telecommunication service users with disabilities. This legal framework gives Federal Telecommunications Institute of Mexico (IFT) the mandate to issue the relevant guidelines. In line with this mandate, an initial draft was sent out to public consultation from 14 August to 25 September 2015.[29]

2.7 Regulator resources and capacity

Today, the smart connected society presents regulators and policy makers with a complex networked environment – locally and globally – where collaboration between sectors is key to the success of

[27] http://www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Pages/ITU%20publications%20and%20online%20resources.aspx.
[28] http://www.youtube.com/watch?v=peUkdbWx3_w.
[29] Document SG1RGQ/123, "Actions to benefit telecommunication service users in Mexico", Mexico.

smart connected societies. In a digital convergent world, regulatory agencies are faced with new products, services, players, business models, user preferences, price tools. Traditional regulatory tools are no longer effective, and balancing the competition landscape is more challenging. To protect consumers, telecom regulators have to work with other government bodies since service delivery is carried out by operators, but user experience and satisfaction are decided by service providers such as e-commerce, mobile payment and online video providers. ICTs are also increasingly interacting with other sectors, meaning that ICT sector players work more and more with non-traditional ICT players. School, government, health sector connectivity as well as digital financial inclusion require access to ICTs/telecommunications networks and services. The degree of telecommunications liberalization impacts other sectors, since market restrictions result in less competition, higher prices, poor quality of service and fewer connectivity options. However, the interconnected nature of digital societies across the sectors means that there is a need for collaboration between government and industry operators, as well as between regulators across the sectors to provide effective responses to issues arising in networked communication flows.[30]

Regulators are facing challenges in terms of resources and competence for various reasons such as:

- The absence of appropriate laws and regulations, which are not adapted to the convergent world.
- The objectives of regulation are becoming complex and varied besides fostering competition and protecting consumer benefits.
- The regulatory tools including quantitative tools are not sufficient to resolve economic conflicts.
- Cross sectoral competition leads to complex business models and multiple stakeholders.
- The slow growth of regulatory capacity due to budget shortages and insufficient human resources.
- Cross border services including international investment and trade are in need of much closer international cooperation.
- Regulators and policy makers must define the foundation as well as the platforms and mechanisms for collaborative regulation with other sectors such as health, finance, education, energy.

In order to meet the above mentioned challenges, international organizations and regulators are working hard to rebuild regulatory frameworks, from changing ideas and concepts, to establishing new regulations and bodies, among which independent, converged regulatory authorities are highlighted.

In some countries, such as in India and France (see **Figure 12 and Figure 13**), regulatory duties have been enlarged to broadcasting, unified license, and green development.

[30] http://www.itu.int/en/ITU-D/Conferences/GSR/Documents/ITU_BuildingBlocksReg_GSR16.pdf.

Figure 12: Main duties in telecom regulation in India

Source: Official website of TRAI, India.[31]

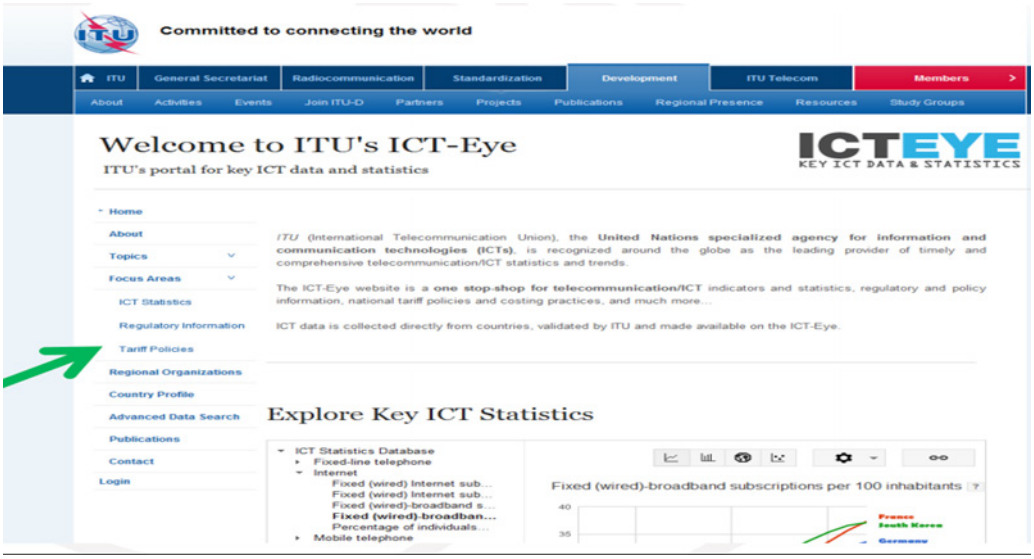
Figure 13: Organization chart of ARCEP in France, 2016

Source: Official website of ARCEP, France.[32]

In order to build capacity, knowledge exchange tools are also essential. A series of tools have been set up by ITU to help member states analyze their markets and make comparisons among different countries. ITU also organizes workshops, seminars and provides capacity building to provide information to developing countries and LDCs on global trends. Some examples of these tools are shown in **Figure 14 and Figure 15** below.

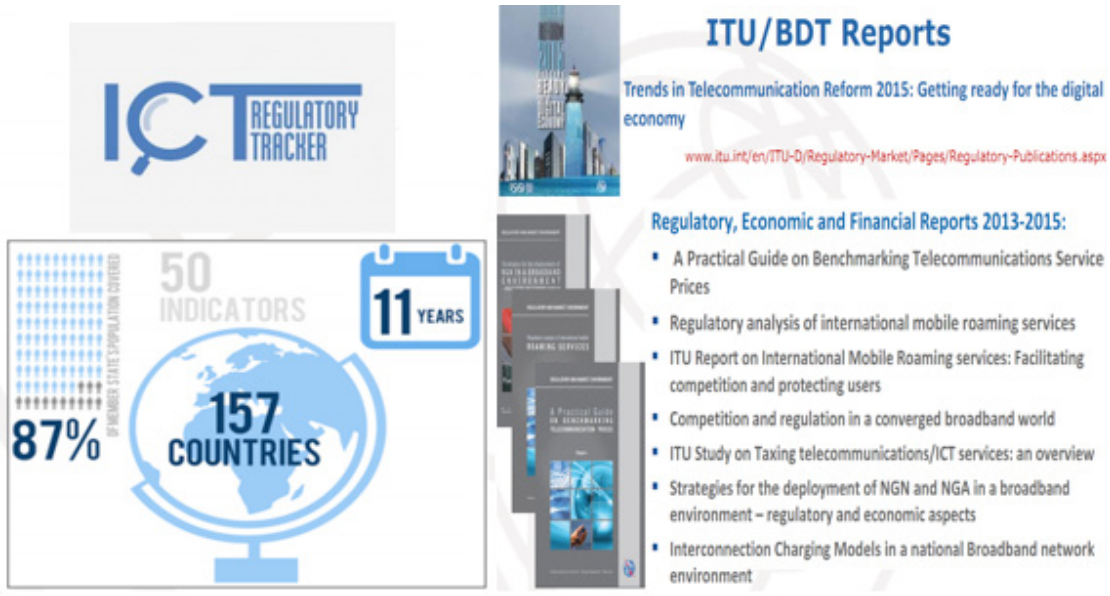
31 Source: http://www.trai.gov.in/.
32 Source: http://www.arcep.fr/.

Figure 14: ITU ICT-EYE for market development



Source: Official website of ITU, 2016.

Figure 15: Study report and tools in BDT for regulation



Source: Official website of ITU, 2016.

3 CHAPTER 3 – The institutional framework of telecommunication consumer's rights

3.1 Legislation and regulations: practices at national level

The protection of telecommunication service customers is based on legal texts. Framed at the international level by the guiding principles (PDPC) laid down by the United Nations for consumer protection, national legislations within this sphere are strongly influenced by the national context and level of technological evolution. From States' contributions concerning their practices in this regard it can generally be deduced that there is a high degree of similarity between certain practices and specific cases of ICT consumer protection practices in a number of countries.

3.1.1 General overview of legislation and regulations at the national level

National consumer protection practices in application of the corresponding regulations and legislation relate to the measures implemented to ensure the effective protection of consumer rights. Such measures include the obligations that are incumbent on telecommunication operators and the system for managing complaints.

In **Cameroon,**[33] for example, to safeguard those rights, operators are required to take appropriate measures relating, among other things, to:

- The protection of privacy;
- Security;
- Information on quality of service, tariffs and electronic communication charges.

A National Consumer Council and appeal boards have also been established at the departmental level to ensure compensation for damages suffered by consumers and the application of sanctions in response to infringements of consumer rights.

In some countries such as the **Democratic Republic of the Congo,**[34] while there are no specific laws for the protection of ICT consumers, a regulatory framework for consumer protection is included within operators' terms of reference, the provisions of which define the obligations in the form of guiding principles for consumer protection, of which there are two types: technical protection and commercial protection.

In **India**[35] these measures take the form of regulations governing consumer protection and a judicial remedy system covering such areas as unsolicited commercial communications, quality of service and mobile-number portability.

In **Saudi Arabia**[36] where complaints management is concerned, the State guarantees the rights of consumers by obliging operators to implement clear and specific complaint-handling procedures.

In the interests of protecting the personal data of ICT users, **Viet Nam**[37] is elaborating legal texts which highlight consumers' responsibility for protecting their personal data. The self-protection of personal information is the consumer's responsibility and is essential whenever he/she puts information

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33 Document SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon, Republic of Cameroon.

34 Document SG1RGQ/22, "DRC's experience with regulatory policy on ICT consumer protection", Democratic Republic of the Congo.

35 Document SG1RGQ/46, Republic of India.

36 Document 1/216, "The applicant/user's protection", Kingdom of Saudi Arabia.

37 Document 1/197, "The state of telecommunications consumers protection – The need for distinct regulation", Socialist Republic of Viet Nam.

online. In **Zimbabwe,**[38] there are no specific laws relating to the telecommunication services consumer but only general rules on consumer protection. Pending specific legislation in that regard, recommendations exist regarding the elaboration of inclusive consumer legislation:

- In the process of formulating laws on consumer protection, countries should conduct wide-ranging consultations among the various components of society.
- Public consumer protection entities such as commissions should be made up from members from the various organizations and staff of institutions that are highly active on issues pertaining to consumer rights.
- In order to be effective, ICT consumer protection laws should be broadly rooted in existing consumer protection legislation.
- A special court to handle consumer litigation should be set up to avoid cases being held up in conventional legal channels.

Brazil[39] has adopted new general regulations on the rights of telecommunication service consumers (RGC). The provisions of this law strengthen consumer protection in the areas of automatic cancellation, instant callback for dropped calls, minimum validity of prepaid credit, promotions, offer transparency and complaints regarding invoicing.

3.1.2 Innovative consumer protection legislation and regulations

In the **People's Republic of China**,[40] to ensure the protection of personal information, the Chinese National Congress and Government published, in 2012, a series of laws and regulations on the safeguarding of Internet data, under the heading "Regulations on protection of the personal information of telecommunication and Internet users and Regulations on registration of the real names of telecommunication users". These laws stipulate that the operators of intelligent mobile telephones must not preinstall on smartphones any hazardous software capable of exposing the private life of users and affecting Internet security. Furthermore, application developers must register their products and provide the codes required for prior testing.

In **Gambia**,[41] in response to the rapid development of Internet services and extent to which children are going online, the Government is currently initiating a law on child protection against the darker sides of cyberspace. This law, which is intended to ensure comprehensive protection for children in their use of the Internet, focuses on the legal, technical, organizational and procedural aspects and the strengthening of skills and international cooperation in the fight against cybercrime.

3.2 The various organizations and their functions

3.2.1 International organizations

Consumer organizations are advocacy groups that seek to protect people from corporate abuse like unsafe products, predatory lending, false advertising, astroturfing and pollution. Consumer organizations may operate via protests, litigation, campaigning, or lobbying. They may engage in single-issue advocacy (e.g., the British Campaign for Real Ale (CAMRA), which campaigned against keg beer and for cask ale) or they may set themselves up as more general consumer watchdogs, such as the Consumers' Association in the United Kingdom.

One common means of providing consumers useful information is the independent comparative survey or test of products or services, involving different manufacturers or companies. Another

[38] Document 1/230, "Consumer protection: the Zimbabwean experience", Republic of Zimbabwe.
[39] Document 1/35, "General regulation on consumer rights of telecom services", Federative Republic of Brazil.
[40] Document 1/52, "Recent progress in the field of telecommunications consumers", People's Republic of China.
[41] Document 1/133, "A case to adopt Child Online Protection initiatives across LDCs", Republic of the Gambia.

area where consumer organizations have operated is food safety. The needs for campaigning in this area are less easy to reconcile with their traditional methods, since the scientific, dietary or medical evidence is normally more complex than in other arenas, such as the electric safety of white goods. The current standards on mandatory labelling, in developed countries, have in part been shaped by past lobbying by consumer groups.

The aim of consumer organizations may be to establish and to attempt to enforce consumer rights. Effective work has also been done simply by using the threat of bad publicity to keep companies' focus on the consumers' point of view. Consumer organizations may attempt to serve consumer interests by relatively direct actions such as creating and/or disseminating market information, and prohibiting specific acts or practices, or by promoting competitive forces in the markets which directly or indirectly affect consumers (such as transport, electricity, communications, etc.).[42]

Figure 16: The European consumer voice in standardisation

ANEC (European Association for the Co-ordination of Consumer Representation in Standardisation)

ANEC (European Association for the Co-ordination of Consumer Representation in Standardisation) is the European consumer voice in standardisation, representing European consumer interest in the creation of technical standards, especially those developed to support the implementation of European laws and public policies. An introduction to ANEC and its role in standardisation can be found in the brochure "What we do for you" or the leaflet "ANEC in 60 seconds".

ANEC is an international non-profit association established under Belgian law with a central secretariat in Brussels, Belgium. It is recognized by the European Commission and EFTA Secretariat and is member of the European Consumer Consultative Group (ECCG), of several EC consultative committees and numerous expert groups. ANEC has signed the European Transparency Register (No. 507800799-30) and abides by its Code of Conduct. ANEC participates principally through its voluntary experts in the standards development work of the three European Standardisation Organisations (ESOs) recognised by the European Union and EFTA:

- CEN (www.cen.eu);
- CENELEC (www.cenelec.eu);
- ETSI (www.etsi.org).

ANEC also participates in other organizations which develop standards whose use could directly or indirectly affect the European consumer, including the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), as well as UNECE (the United Nations Economic Commission for Europe), in which ANEC participates under the umbrella of Consumers International in the UNECE GRSP Informal Group on Child Restraint Systems. In total, ANEC participates in more than 155 technical bodies of the European and international standards organizations.

ANEC also has an interest in the application of standards, including market surveillance and enforcement, accreditation and conformity assessment schemes. We also seek to influence the development or revision of European legislation related to products and services that is likely to affect the consumer, especially where reference is made to standards.

The representation of consumers in European standardization being seen as a public interest activity, ANEC is financed by the European Union (95%) and EFTA (5%) as an "Annex III Organisation" under

[42] https://en.wikipedia.org/wiki/Consumer_organization.

Regulation (EU) 1025/2012. In 2015, the ANEC budget totaled 1,32M€, with the participation of voluntary experts being considered by the European Commission and EFTA Secretariat as a contribution in kind. In 2007, the ANEC Secretariat calculated the value of this contribution to be 260.000€, and estimated its value to be at least 350.000€ in 2013.According to ANEC, standards address more than issues of interoperability for consumers, and can:

1) Raise consumer protection and reduce the risk of accidents;
2) Help promote environmental protection and sustainability;
3) Make the quality of services more consistent;
4) Ensure people of all ages and abilities have equal access to products and services;
5) Serve to underpin the digital age and the information society.

BEUC (The European's Consumers' Organization)

Figure 17: The European's Consumers' Organization (BEUC)

BEUC was created on 6 March 1962 by consumer organizations of Belgium, Luxembourg, France, the Netherlands, Italy and Germany. After working together for a number of years, these organizations decided to create a European association, based in Brussels. BEUC acts as the umbrella group in Brussels for its members and its main task is to represent them at European level and defend the interests of all Europe's consumers. BEUC was a pioneer, one of the first lobbying organizations to set up base in the European capital in a bid to influence the decision-making process. Many others followed, and the number of lobbyists rose exponentially to the present-day figure of over 15,000. BEUC investigates EU decisions and developments likely to affect consumers, with a special focus on five areas identified as priorities by its members: Financial Services, Food, Digital Rights, Consumer Rights & Enforcement and Sustainability.

Just like the EU itself, BEUC's membership has grown, and its members now include 43 well respected, independent national consumer organizations from 31 European countries (EU, EEA and applicant countries). BEUC is acknowledged as a trustworthy representative by both decision-makers and opponents alike, thanks in particular to the collective skills, knowledge and expertise of its member organizations.

It is their mission to bring together consumer organizations of the European Union and other European countries in order to promote, defend and represent the interests of European consumers in the elaboration and implementation of European Union policies with the European Union institutions and with other bodies.

BEUC supports the empowerment of consumers through competitive markets, complemented by health and safety safeguards. The aim is that only safe products and services, which do not put at risk people's health, future generations or the environment, should be available on the EU market. Where consumers cannot be empowered, regulatory measures must protect their economic and legal interests. This is especially essential for vulnerable consumers.

ICRT (International Consumer Research & Testing)

Figure 18: International Consumer Research & Testing (ICRT)

ICRT is a global consortium of more than 40 consumer organizations dedicated to carrying out joint research and testing in the consumer interest. ICRT's principal objectives are to facilitate co-operation between its members and to promote research and testing in the field of consumer goods and services. ICRT members co-operate in a programme of continuous testing on a wide range of popular consumer products such as digital cameras, mobile phones, television sets, cars, washing machines, dishwashers, vacuum cleaners and light bulbs. In addition, there are numerous other smaller collaborative tests, on a whole range of consumer products from anti-wrinkle creams to athletic shoes.

Safety has always been a topic of concern to consumer organizations. ICRT members have played a key role in promoting higher safety standards for consumer goods. ICRT also facilitates information exchange and testing between members in areas such as food, health, the environment and financial services.

All ICRT member organizations act exclusively in the consumer interest. They do not accept advertising and are independent of commerce, industry and political parties. Member organizations range in size from the largest consumer organizations worldwide with memberships between 200,000 and 7 million to smaller organization with less than 10,000 members.

Their mission is to be the world-leading organization that empowers its members to provide high quality and independent information to consumers worldwide. ICRT pursues this mission by:

- Increasing the cost effectiveness of testing through the co-operation of international joint tests and research;
- Providing a comprehensive legal framework for joint testing with established rules and guidelines;
- Developing common test programmes and evaluation methods;
- Helping smaller organizations to grow through a programme of capacity building and knowledge sharing.

In addition to the above mentioned organizations, there are many institutions under United Nations who are dealing with affairs relating to consumer issues. These include WHO, UNDP, UNESCO, UNIDO, UNICEF and Commission on the Status of Women under ECOSOC.

Réseau des Consommateurs Africains des TIC (RéCATIC)/African ICT Consumers Network (AICN)

Figure 19: Réseau des Consommateurs Africains des TIC (RéCATIC)/African ICT Consumers Network (AICN)

Réseau des Consommateurs Africains des TIC (RéCATIC)/African ICT Consumers Network (AICN), was created in 2008, with 20 consumer associations from across the African continent, with the objective of advocating the need to and creating the necessary mechanisms to help countries reflect and include consumer rights in national laws on telecommunications in African countries.

The aim is to create a regional and international advocacy body to assist regional bodies in promoting eight (8) Consumer rights contained in the Guidelines for Consumer Protection, adopted by the UN General Assembly on April 9, 1985 in Resolution 39/248, by integrating such principles in national telecommunications and ICT laws to bring solutions to the problems that consumers encounter in the areas of:

- Price and geographical accessibility to telecommunications and ICT services;
- Transparency in pricing of telecommunications and ICT services;
- The security of personal data;
- The protection of children online;
- Resolution of consumer complaints;
- The infrastructural pollution;
- Consumer information and education to better use telecommunications and ICT services.

RéCATIC also aims to:

- Professionalize regional consumer movements by strengthening the capacity of member associations.
- Promote the development and harmonization of regulations in the provision and pricing of telecommunications services in African countries.
- Work towards an effective and efficient protection of consumers of the 53 states of Africa through the implementation of programs to meet the needs of consumers at the national, regional and continental levels.
- Provide the African continent with mechanisms and effective tools for protecting the interests of consumers of ICT.
- Increase consumer awareness about their rights and responsibilities as consumers.
- Contribute to the development and implementation of policies to facilitate universal access.
- To collaborate and cooperate with any regional or international organization specializing in the telecommunications industry including African Telecommunications Union (ATU) and the International Telecommunication Union (ITU).

3.2.2 Domestic organizations

Entities specializing in ICT

Consumer organizations are advocacy groups that seek to protect people from corporate abuse like unsafe products, predatory lending, false advertising, astroturfing and pollution. The aim of consumer organizations is generally to establish and to attempt to enforce consumer rights. Effective work has also been done; however, simply by using the threat of bad publicity to keep companies' focus on the consumers' point of view.

One common means of providing consumers useful information is the independent comparative survey or test of products or services, involving different manufacturers or companies.

Consumer organizations may attempt to serve consumer interests by relatively direct actions such as creating and/or disseminating market information, and prohibiting specific acts or practices, or by

promoting competitive forces in the markets which directly or indirectly affect consumers (such as transport, electricity, communications, etc.).

Consumer organizations may also operate via protests, litigation, campaigning, or lobbying. They may engage in single-issue advocacy (similar to the British Campaign for Real Ale (CAMRA), which campaigned against keg beer and for cask ale) or they may set themselves up as more general consumer watchdogs, similar to the Consumers' Association in the United Kingdom. Some specialized organizations also deal with consumer protection, including in the telecommunication/ICT sector.

In **Cameroon**, the Agence de Régulation des Télécommunications is responsible, on behalf of the State, for regulating, monitoring and overseeing the activities of telecommunication/ICT sector operators. Established by Act 2010/012 of 21 December 2010 governing electronic communications in Cameroon, it also has the duty of ensuring the protection of consumers, which are both the raison d'être and the beneficiaries of the economic activity in question. The manner in which the tasks laid down in the implementing texts of the internal legislation, as well as the Agency's decisions and directives, go hand-in-hand with respect for the general principles of the United Nations, namely protection, satisfaction, equality and participation.[43]

For its part, **Brazil** established the National Telecommunications Agency (ANATEL), which, by Resolution 632 adopted in March 2014, approved the General Regulations on the Rights of Telecommunication Service Consumers (RGC). This was done in response to repeated complaints and in order to empower consumers and unify the regulatory provisions relating to fixed and mobile telephony, television and broadband by bringing them under a single resolution. Furthermore, in order to stimulate competition and promote balance within the market, smaller operators have lighter obligations. On 31 January 2014, ANATEL established a new website dedicated to its customers: www.anatel.gov.br/consumidor.[44]

In the **People's Republic of China,** the Ministry for the Information Industry (MII) (formerly the Ministry for the Information Industry and Telecommunications (MIIT)) established, in 1999, a social organization known as the National Committee of Telecommunication Users (NCTU), the purpose of which, as laid down in its regulations, is to ensure the ongoing improvement of telecommunication service quality, giving priority to users, in whose interests it must gather opinions and advice relating to regulation, particularly in regard to telecommunication service monitoring; maintain close links with telecommunication operators; and provide advice on how to improve the operation of telecommunication services. In so doing, it aspires to enhance quality levels in response to the ever-increasing demand for telecommunication services. NCTU is governed by a "Congress" whose delegates are recommended and elected by telecommunication-sector organizations for a three-year term of office. The Congress, which is the highest decision-making body, elects and appoints the executive members. The Executive Bureau may stand in for the Congress when the latter is not sitting, taking important decisions on its behalf. Day-to-day activities are the work of the Secretariat, which is attached to the services branch of the national regulatory agency.[45]

In **India,**[46] the Telecom Regulatory Authority of India (TRAI) is responsible for laying down standards for the quality of service to be provided by service providers, for monitoring adherence to that quality of service, and for conducting periodic audits of the relevant services in the interests of consumers.

[43] Document SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon", Republic of Cameroon.
[44] Document 1/35, "General regulation on consumer rights of telecom services", Federative Republic of Brazil.
[45] Document 1/88, "National Committee of Telecom Users work effectively to improve telecom services", People's Republic of China.
[46] Document SG1RGQ/46, Republic of India.

Consumer protection organizations in the broad sense of the term

Some countries do not have entities specializing in ICT sector regulation. In **Viet Nam,**[47] for example, ICT consumer protection is the responsibility of the Viet Nam Competition Authority under the supervision of the Ministry of Industry and Commerce. Alongside this authority is the Viet Nam Association of Standards and Consumers, which is a social, professional, voluntary, not-for-profit organization which operates in the area of standards, quality and consumer rights protection.

In **Zimbabwe**, the Consumer Protection Commission has a broad mandate to defend the interests of consumers in general.[48]

3.2.3 Non-governmental organizations

Consumers International (CI) is an independent global campaigning voice for consumers. With over 240 Member organizations in 120 countries, it can be seen as a powerful international consumer movement to help protect and empower consumers everywhere. The consumer in today's digital world depends on communications networks such as the Internet, and the ability to access and share knowledge across those networks. The consumer movement has an important role in ensuring that such networks and the works exchanged across them are accessible, affordable, reliable and safe.

"Project Consumer Data Protection with Emerging Economies" aims to improve conditions for co-operation between Brazil, the People's Republic of China and Germany in the field of consumer data protection. It relates to the data protection of 800,000,000 people, equating to more than one third of internet users worldwide.[49]

Internet access has become fundamental to the lives of today's consumers, and will only continue to become more important in developed and developing countries alike. Consumers International (CI) launched a two-year campaign titled "Holding Broadband Service Providers to Account" to empower consumer organizations around the world to demand more equitable and accessible broadband service offerings, respecting consumers' rights and broader human rights, as a necessary condition of achieving a socially-inclusive information society.[50]

CI's past work on broadband includes a broadband disclosure statement that encouraged consumers to demand that ISP provide them with a clear statement of the service it provides, that they can compare with what other providers offer. "Don't Lock Me In!" advises consumers how to stop ISPs from locking them in to a long-term commitment through inflexible contracts or bundles. "Holding Broadband Providers to Account: A Consumer Advocacy Manual" covering similar issues.

3.2.4 Consumer networks

In **Cameroon**, the statistics point to the existence of some 20 consumer rights protection associations, for the most part of a general nature, with only a very small number appearing to specialize in issues relating to electronic communications and ICTs. The lack of internal organization found in some of them has a negative impact on their effectiveness. Such groupings need to be better organized, structured and trained if they are to be able, in turn, to educate consumers and echo their concerns. Awareness-building seminars have been organized to that end by the regulator, whose role is to facilitate the work of operators while ensuring satisfaction on the part of consumers, although without providing financial support to the organizations which defend their rights.[51]

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47 Document 1/197, "The state of telecommunications consumers' protection – The need for distinct regulation, Socialist Republic of Viet Nam.

48 Document 1/230, "Consumer protection: the Zimbabwean experience", Republic of Zimbabwe.

49 https://www.giz.de/en/worldwide/32176.html.

50 http://www.consumersinternational.org/our-work/digital/key-projects/broadband/.

51 Document SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon", Republic of Cameroon.

In the **Democratic Republic of the Congo**, players within the sector actively pursuing consumer protection work on a general basis. This is in particular the case of:

- **UDECOM:** Union pour la Défense des droits des Consommateurs au Congo (Union for the defence of consumer rights in the Congo), which works to ensure protection for the consumers of goods and services on a general basis.
- **UCST:** L'Union des Consommateurs des Services des Télécommunications (Union of telecommunication service consumers), which, by contrast, is more sector specific, confining the scope of its activities to telecommunication service consumers.

In practical terms, these two associations are neither active nor effectively operational in the field. They struggle to have an impact in the protection of consumer interests. For want of a serious structure, they remain unconnected to any international organizations (RéCATIC, for example) that are active in the field of ICT consumer protection.[52]

3.3 Mechanisms: how they work and results

3.3.1 Regulatory body and consumer network partnerships

In pursuing their mission to protect consumer rights, ICT sector organizations have recourse to several strategies.

Various consumer protection agencies are operating in **India**. They base their activities on the following methods and strategies:

- Consumer awareness-building and education;
- Establishment of consumer networks and self-help groups.

Many consumer protection groups registered with TRAI transmit complaints to the complaints unit of the service provider in question and are involved in their processing.[53]

A case study on the collaborative machinery between the national regulatory agency and consumer associations in **Benin**[54] shows that since 2010 a partnership has been developing between the authority responsible for the regulation of electronic communications and posts (ARCEP-BENIN) and a platform of eight Partnered Consumer Associations (PCAs). To encourage these PCAs in their commitment to playing their part in the sector's development, a collaborative framework has been established and has enabled the development of a win-win partnership. Pursuant to the framework partnership agreement signed between ARCEP-BENIN and the PCAs, the latter have submitted various projects for the approval of and financing by the regulatory authority. In this regard, a CFAF 5 million financial envelope has been granted to each association for implementing projects of common interest. The encouraging results obtained in 2015 have led to the continuation into 2016 of this PCA/regulator partnership for strengthening ICT product and service consumer information and awareness-building throughout the national territory. This is an ongoing undertaking within Benin which needs to be shared in the interests of its improvement through similar measures adopted elsewhere.

3.3.2 Establishment of regional regulatory offices for protection of consumer rights

In their ongoing desire to be ever more prompt in protecting the rights of ICT consumers, ICT regulatory authorities are decentralizing in order to be closer to consumers.

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52 Document SG1RGQ/22, "DRC's experience with regulatory policy on ICT consumer protection", Democratic Republic of the Congo.

53 Document SG1RGQ/46, Republic of India.

54 Document SG1RGQ/73, "Collaboration entre une Agence de régulation et les associations de consommateurs: cas du Bénin", Republic of Benin.

This is the case in **India**, where TRAI has set up five regional consumer protection offices around the country.[55] Through these offices, it has been conducting consumer outreach programmes, seminars and workshops in all parts of the country to facilitate interaction between consumers and service providers. The regional offices help consumers to find out about the various regulations established by TRAI in regard to quality of service, mobile number portability, unsolicited marketing communications, rights and reductions, and so on. They also facilitate direct interaction between service providers, consumers and various other stakeholders with a view to their holding discussions in open forums concerning the various options for lodging complaints, along with any other matters relating to consumer protection. Such interaction also helps to ensure that direct feedback is received from all stakeholders.

3.3.3 Economic and financial measures adopted by national authorities in the interests of consumers of telecommunication/ICT services

India is highly committed to ensuring compliance with the texts that govern the ICT sector in terms of consumer rights protection. To this end, TRAI conducts, through its regional offices and independent agencies, audits designed to ascertain quality of service and the reliability of metering and billing systems. Financial penalties are imposed on service providers which fail to meet the standards in regard to quality of service or billing transparency, or to adhere to the stipulated deadlines for processing complaints, repairing faults, etc.[56]

3.3.4 Customer complaint management system

In **Côte d'Ivoire** (Document 1/41, *"Externalisation de la gestion client : impact des calls center sur le droit de recours des consommateurs auprès du service clientèle"),* the arrival of call-centre specialists has presented operators with a real opportunity. The technology used by call centres helps to virtualize Customer Relations Management (CRM). As a result of outsourcing, telephone companies are no longer in control of their CRM. These circumstances, brought about by technology and systems, can represent a threat to consumer rights, particularly the right to lodge a claim with the operator's customer service unit.

This problem becomes all the more critical when operators are unable to deal with customer complaints within the space of two weeks. This slowness can be attributed to the fact that the operator has to examine the data from its provider (call centre) before responding to a claim or complaint.

Measures to remedy this situation:

- For better consumer protection, the operator should specify in its contract with the user that customer relations are handled by a call centre;
- It should be obligatory to provide a customer service strictly for complaints, separate from the legal side, which is not always the approach to the operator the customer wishes to take;
- Subscriber recruitment should not be based solely on marketing imperatives, but should also take account of consumer rights protection;
- Regulators should be more vigilant with regard to the tendency by operators to outsource services without reference to the obligations laid down in their terms of reference;
- Operators' terms of reference should stipulate certain areas in which they must not have recourse to third-party services (outsourcing) for discharging their obligations.

[55] Document SG1RGQ/46, Republic of India.
[56] Idem.

3.3.5 Reasons for poor results obtained by consumer networks seeking to protect consumer rights

Within the ICT sphere, consumer networks are up against several difficulties which can prevent them from achieving their objectives. Like a number of other countries, the **Democratic Republic of the Congo** puts forward a number of reasons for ineffectiveness on the part of associations.[57] These include:

- Absence of a clearly defined vision;
- Lack of appropriate training;
- Lack of responsible organization/structure;
- Absence of the requisite ICT and regulatory expertise;
- Operating in isolation, without any affiliation to international and regional organizations devoted to ICT consumer protection.

3.3.6 Measures that regulatory authorities can take to protect consumer's rights

For the protection of consumer rights, regulatory authorities undertake a range of measures for the benefit of consumers and operators.

A detailed case study on consumer protection in **Cameroon**, while referring to the regional context, shares information on the particular the legal framework for protection of the rights of electronic communication network and service users that is established within the Central African Economic and Monetary Community (CEMAC) by Regulation 21/08-UEAC-133-CM-18 on the harmonization of regulations and regulatory policies for electronic communications.[58] In **Cameroon** too there are standard contracts. However, since consumers have not been consulted in the past in relation to the definition of the terms and conditions of such standard contracts, the National Regulatory Authority has organized a meeting with stakeholders, including consumer associations, to validate future model contracts with standard terms and conditions.

There is recognition of the need for capacity building so that associations can become more effective and cooperation with the regulator more effective. It was suggested that BDT could assist members by helping regulators establish call centres, providing guidelines on how to establish better collaboration between associations and regulators, and building capacity through workshops or seminars on consumer protection issues.

Basing itself on the provisions that relate to its regulatory mission, the regulator in the **Democratic Republic of the Congo**, ARPTC, has implemented a number of measures and activities to ensure consumer protection,[59] including:

- Regular taking to task of operators in cases of flagrant violation of consumer interests, with the requirement, in some cases, that corrective action be taken or compensation made, particularly through the repayment of monies to consumers, etc.;
- A requirement in the terms of reference of operators that they respect consumer interests, among other things through the obligation to inform consumers in advance of network maintenance activities liable to cause call outages or degradation;

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57 Document SG1RGQ/22, "DRC's experience with regulatory policy on ICT consumer protection", Democratic Republic of the Congo.

58 Document SG1RGQ/38, "Consumer protection in respect of electronic communication products and services in Cameroon", Republic of Cameroon.

59 Document SG1RGQ/22, "DRC's experience with regulatory policy on ICT consumer protection", Democratic Republic of the Congo.

– Inclusion of strict arrangements and conditions for the proper conduct by operators of promotional offers for telecommunication services, such as to ensure that the benefits promised to consumers actually materialize and to protect consumers against bogus offers;

– Definition within the law of the principle of universal service in respect of telecommunication service offerings that are of the requisite quality, permanently available throughout the country and affordable for all Congolese consumers.

On 31 January 2014, **Brazil**'s regulator ANATEL created a new website for consumers. The portal is constantly updated, and contributions by organizations and entities for consumer protection, which are always welcome, can be submitted directly by e-mail.[60]

A case study from **Oman** provides the example of an adhesion contract prepared by the telecom operator for the provision of mobile services and approved by the Telecommunications Regulatory Authority (TRA) in Oman.[61] Through its approval process, the TRA aims to safeguard the interests of the beneficiary and ensure that the contract includes fair and transparent terms and conditions.

A case study from **India** analyses the Indian regulatory framework on availability of consumer information to protect their interest.[62]

Most countries have established telecommunication users group of different types and with different names and differing scopes of work and focus. The **People's Republic of China**'s NCTU plays an active role in keeping up with technological innovation and market developments.[63] In 2014, NCTU established close links with local organizations at the provincial level. In December, it organized, at Shaoxing in the province of Zhejiang, a forum intended to expedite the project on user satisfaction. People's Republic of China's experience proves that such organizations can help national regulatory authorities to manage the market more effectively and improve quality of service. Countries that do not have such institutions should be encouraged to take measures towards that end.

Consumer organizations can strengthen information exchanges and collaborative work and organize thematic training to promote the protection of telecommunication user rights and interests.

3.3.7 Looking towards the future

Where ICT consumer rights legislation and protection is concerned, the available legal tools vary from country to country. But even countries with little or nothing in the way of relevant legislation, far from avoiding the issue, are making efforts to develop specific laws to regulate the ICT sector.

In the **Democratic Republic of the Congo** several measures have been taken to provide the country with legal texts in line with the current ICT environment.[64] Those measures include the following:

1) Examination of a proposed draft law on consumer protection in the DRC;

2) Examination by the regulator of a draft decision establishing the procedure for handling complaints by customers and consumer associations;

3) Project for the setting up of a call centre for the registration, in real time, of complaints by telecommunication service customers, with a view to taking automatic action on cases of violation of consumer interests;

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60 Document 1/36, "Consumers' website in Brazil, Federative Republic of Brazil.
61 Document SG1RGQ/100, "Standard Customer Agreement", TRA Oman, Sultanate of Oman.
62 Document SG1RGQ/46, Republic of India.
63 Document 1/88, "National Committee of Telecom Users work effectively to improve telecom services", People's Republic of China.
64 Document SG1RGQ/22, "DRC's experience with regulatory policy on ICT consumer protection", Democratic Republic of the Congo.

4) Acquisition of suitable equipment and platforms for monitoring the Quality of Service (QoS) of voice and data services (3G);

5) Professionalization resulting from the national consumer movement through strengthening of the capacities of consumer associations.

4 CHAPTER 4 – Economical aspects of consumer's rights protection

4.1 Cost based pricing and the need for models to evolve in the new ecosystem

Telecommunication services are quite close to user's daily life, with most people being very sensitive to price. In some countries and regions, due to the scarcity of information infrastructure, the price level means that most telecom services are far beyond the affordability of most users.[65] There are different economic and regulatory realities in different countries and markets which means that there are different models in relation to pricing models, as can be seen in the section below.

According to cost based pricing accepted widely in the world, various regulators are introducing different sets of tariff regulations, including government pricing, government guidance pricing and price cap. No matter what kind of pricing is applied, cost models are needed for regulators to make the cost and structure of telecom services clear to operators and regulators and to impact the tariffs for consumers based on transparent and clear information. It needs not only accounting separation in telecom operators but also precise and stringent regulation upon operators' market behavior. Many more cost models are established to provide more cost information to regulators and to operators than before. Cost models are addressed in ITU-D Study Group 1 Question 4/1,[66] which also addresses the reduction in prices to consumers over the years.

Many other factors are influencing the cost of telecom services in addition to equipment and buildings. Even for the same services such as voice or broadband access, it is normal to include different costs such as installation and labor costs. It became clear that market realities are far more complicated than simplistic theoretical models based on a hypothetical ideal operator on whose costs regulation of the market would be based. The end users are also not concerned about the cost amount and structure. They are more concerned about their budget and if it can be affordable.

This is due mainly to the following factors:

a) Applications and associated services are proliferating, facilitating discrimination of increasingly complex indirect costs.

b) An imbalance arises almost always between operators and regulators when collecting cost data for telecom services. This necessitates monitoring mechanisms which cannot be provided by cost models based on the "ideal operator" cost models.

c) Non-human or equipment costs have become more important for many services. In addition, rapid convergence towards NGN and the wide range of commercial services on offer require integral simulation of the totality of services and their impact on the consumption of resources.

d) Great change has taken place in the area of service provision in different regions related to consumer's experience. Operators and regulators must be able to prove that costs attributed to the consumer arise exclusively and fairly from consumption of resources by the consumer for each service.

e) "Single price for a single product" is applied less and less in market practice. A service may now include one or more applications grouped in accordance with the interests of each segment of the customer base.

f) Consumers are willing to pay more attention to affordable price with reasonable quality of service.

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[65] Documents 1/275, "New environment directly influencing methods of determining costs of electronic communication services in the new sectoral ecosystem" and 1/276 (Rev. 1), "Overview of an accounting model", Tactikom (Republic of Senegal).

[66] ITU-D Study Group 1 Question 4/1 report "Economic policies and methods of determining the costs of services related to national telecommunication/ICT networks, including next-generation networks" available at: http://www.itu.int/md/D14-SG01-C-0479/.

g) Business models are changing a lot to deliver various services to end users. Traditional cost models used by regulators and operators are not capable of adaptation to all configurations of the services on offer.

Regulators are focusing on the price cap over retail price in order to avoid dominant player's controlling pricing. At the same time, the wholesale prices including interconnection charges are becoming more relevant to ensure a level playing field and effective competition.

The new ecosystem has made market regulation based on dominant operators' costs more challenging since the latter ceased to be monopolies or quasi-monopolies. Furthermore, network sharing by multiple applications (e.g., Voice, data, SMS, Voice+SMS, Voice+data, Voice+SMS+data) creates internal imbalances in terms of consumption of resources such that two operators that are in every respect identical, within the same market, may end up with very different costs for voice services.

This is the basis of the "Confluent Marketing" concepts which, beyond estimating the unit cost of services provided, may be associated with measurements and forecasts of quantities consumed in order to formulate service plan offers for different customer base segments.

The cost models used by regulators and by operators must be capable of adaptation to all configurations of the services on offer. Reference to one or more dominant operators must be abandoned in the interests of equitable regulation for all operators in a given market.

4.2 Tariff packages: main attempt by operators

It is very common in the business world and not only just in the telecom market that standard tariffs often exist for single products or services as well as tariff packages for a set of products or services. Tariff packages are common in public services such as transportation, tourism, education, health and housekeeping, due to the following factors:

1) Helpful for companies to maintain customers and avoid sharp revenue volatility;
2) Accepted by consumers for its simplicity and preference;
3) Easily selected by service providers or users from time to time;
4) Packages can be added or reduced by providers to meet different kinds of need;
5) It needs not approval from regulators or other government bodies (for retail services);
6) It can be applied in many industries even in crossover marketing and sales.

In reality, with the rapid development of telecom markets, more and more players and services are entering user's life. People are not only using communication products and services to be connected but also applying them to enjoy music, for video and games, for social contacts and networks, to invest, make purchases and so on. More and more services are delivered and provided by networks and mobile devices. Mobile internet has become a big catalyst for digital life and work. Tariff packages are now becoming more and more popular for most users since they can simplify use and lower the threshold for entry.

Competition among operators has changed from simple price to brand, service and content. The typical way is to provide Confluent Marketing (hereinafter CM), which includes defining packages for various kinds of services and providing discount rate based on types and proportions, such as bundling mobile phone, broadband, instant message service and so on. CM is widely applied in various regions. AT&T (United States of America) provides TV, PC and smart phones via fiber broadband. British Telecom (BT) (United Kingdom) helps its users to realize intelligent family life through BT Fusion and Bluetooth. France Telecom (France) provided its family and enterprise customer with different CM products such as Family Talk, Business Talk and Livebox under the united brand name of Orange. Vodafone's fixed broadband is mixed with mobile broadband to meet the customer's demand in the

way of consolidated bills. KDDI (Japan) developed FMBC to combine broadcasting service with mobile and fixed communication services.

In 2012, China Telecom marketed and launched its CM in various ways to provide end users with three kinds of services named My E-home, Business Navigation, and E-surfing Mobile. E6 (Fixed plus Mobile phones), E8 (Fixed phones plus Broadband), and E9 (Fixed and Mobile phones plus Broadband) were designed to meet various demands under the brand name of My E-home. In 2016, with the fast deployment of 4G services, Chinese users can get various kinds of tariff packages from all 3 operators. The threshold price has been dropped to less than 10 US dollars per month, as seen in **Figure 20**.

In the British market, the biggest mobile operator Vodafone is now providing home users with different broadband tariff packages to meet various speed demand, as illustrated in **Figure 21**. In Australia, home users can find proper packages for their digital home application in voice, video and internet, shown in **Figure 22**.

FMC package is the initial type for most operators. It usually combines one fixed telephone number with several mobile numbers, allowing subscribers to talk freely among different numbers and get additional data flow. It can prevent decreasing speed of fixed voice to some extent. Broadband plus 3G and 4G is the popular product package. It was often combined with terminals and voice bills discount. It can help users to get lower price and stimulate service consumption but cannot realize actual network cooperation.

Figure 20: Comparison of tariff packages for 4G services in the People's Republic of China

中国移动			中国联通			中国电信		
月费（元）	流量	语音（分钟）	月费（元）	流量	语音（分钟）	月费（元）	流量	语音（分钟）
58	500M	50				59	500M	100
88	700M	200	76	400M	200	79	700M	200
			106	800M	300	99	1G	300
138	1G	500	136	1G	500	129	1G	500
158	2G	500	166	2G	500	169	2G	700
			196	3G	500	199	3G	700
238	2G	1000						
268	3G	1000	296	4G	1000	299	4G	1500
338	3G	2000	396	6G	2000	399	6G	2000
588	6G	4000	596	11G	3000	599	11G	3000

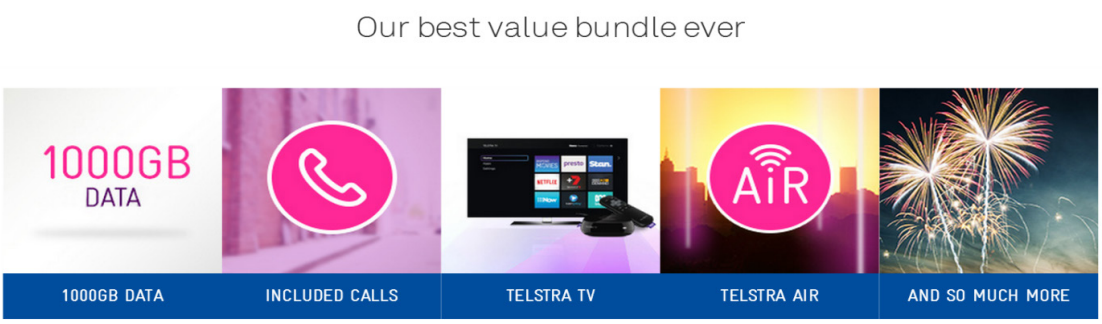
Source: Official website of CMCC, CT, CU and MIIT.

Figure 21: Broadband packages for home users in the United Kingdom

Broadband **ADSL** Broadband and Home Phone	Superfast **Fibre** Broadband and Home Phone	Superfast **Fibre+** Broadband and Home Phone
Great for: small households or occasional use	Ideal for: households who use a number of devices	Perfect for: households who do loads of streaming
Speed — Up to **17 Mbps**	**Speed** — Up to **38 Mbps**	**Speed** — Up to **76 Mbps**
Monthly cost — **£2.50** a month for 12 months, then **£5 a month** Plus £18 a month line rental 18-month contract	**Monthly cost** — **£7.50** a month for 12 months, then **£15 a month** Plus £18 a month line rental 18-month contract	**Monthly cost** — **£10** a month for 12 months, then **£20 a month** Plus £18 a month line rental 18-month agreement

Source: Official website of Vodafone, United Kingdom.

Figure 22: Bundle packages for home users in Australia



Source: Official website of Telstra, Australia.

More new services are bundled to enlarge the scope of CM. IPTV and Video Monitoring are popular services chosen to be combined with broadband and mobile services. These service packages are planned to meet the demand of family and enterprise users, such as China Unicom's product package called Broadband Mobile plus Magic Eye for industry zones.

How are consumer benefits affected by CM packages? The first right relates to *awareness*. Various packages of CM products are so complex and detailed that only few consumers can understand what their conditions are and if any restricting terms exist. Operators are not ready to explain them to the public. Secondly, *rights of choice are influenced by some conditions* included in product packages. Some of CM products cannot be purchased by each user. Some terms of the package are so rigid that consumers cannot change their details. In other cases, users are not able to change from one package to another. The third one is related to the *quality of service*. It may be more complex than simple service because of scarcity of standards for CM products. If users cannot share services independent from quantity or quality, it's very difficult to locate responsibility. The fourth factor is about *rights of fair transaction*. Most of CM packages are in the form of fixed terms or specified regions, therefore consumers cannot alter them which leads to poor consumption experience.

To keep up with the development in market competition and service provision, regulators should update their resources, capacity and tools, particularly introducing new measures for regulating CM

products. In the **People's Republic of China**, for example, any new CM package must be submitted to the regulator for review before it comes to market. For SMP operators the regulator can even deny the packages if there's strong evidence that it can do harm to competition or consumer benefits. Second, the operator is required to allow their own users to move from any kind of product package to another according to their will. This regulation has been in force for more than five years and has effectively raised consumers' degree of satisfaction. Third, some monitoring platforms have been established to provide evidence for Quality of Service (QoS) and user experience. Furthermore, the telecom regulator is required to cooperate with other regulatory bodies since many CM products are beyond the scope of communication services such as music, video and health management.

4.3 Choice of the PRICE-QUANTITY pair (in the broad sense) by consumers

In a traditional commercial world, companies are much stronger than consumers when the price is to be decided mainly because of more cost information and control over supply.[67] In a world bundled with online and offline markets, the previous factor is quickly disappearing. With technology innovation and productivity advances, with many products and services thus being over supplied.[68]

In a buyer's economy, consumer's benefits can be improved in terms of freedom of choice and self-independent pricing. This market may be characterized by:

1) Customer demand is the core of production and operation;
2) Abundant supply of commodities, with plenty of supply, consumers can choose any goods;
3) Customers can get the satisfaction of pre-sale, on-sale and after-sale service;
4) Fierce competition among sellers in color, variety, service, price, promotion and other aspects of the product;
5) The price level of products and services are fast declining.

In telecom markets, passive confirmation and acceptance is decreasing. In the past, consumers often complained about content, and terms of transaction. Today, particularly in the field of tariff conditions, consumers still they have little power to express their attitudes and desires. As a result, reasonable consumption and average price cannot be obtained at the same time. Even if they encounter a billing error, it is difficult for single users to correct errors in terms of time and cost.

In an era of greater access to networks and connectivity, consumers can have more freedom to choose. This right can be embodied in independent self-pricing, which means the user can establish their own pricing portfolio most consistent with their own needs according to the service content, quantity, type, quality and other factors.

In theoretical analysis, choice of the pair PRICE-QUANTITY by consumers can have obvious advantages as follows:

1) Self-defines reasonable price after information collection;

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[67] Unless there is a translation issue, the heading "self-independent pricing by consumers" does not correspond to the realities of the market. Prices are always set by the operator, which may nevertheless formulate offers in which the pair PRICE-QUANTITY can be used to target several segments of the consumer base. A consumer may thus "strike a deal" in relation to the particular customer base segment to which he/she belongs. It must be understood, however, that the operator will have established that segmentation on the basis of an in-depth analysis of consumption behaviour and, if competent, will have simulated the impact of each segment on the consumption of resources and thus on their cost.

[68] Where an operator has developed an oversupply and sells it at a low (non-predatory) price, so that the effect of volume corrects the cost of the service, all is well and the supply ceases to be an oversupply. But if the operator sells a service at a loss, without any cross-subsidy, it will ultimately cease to function and customers will turn to the competitors, whose supply will become less of an oversupply. This reasoning can be extended as long as the market has not corrected the excess capacity, which can therefore not be the norm. If operators, in the light of the services offered, practice predatory pricing and/or cross-subsidies, the regulator will be obliged, with a modern costing model, to prove this in order to be able to prohibit ant-competitive practices.

2) Quick obtain from multi-sellers after price is determined;

3) Establishes the balance between seller and buyer after negotiation;

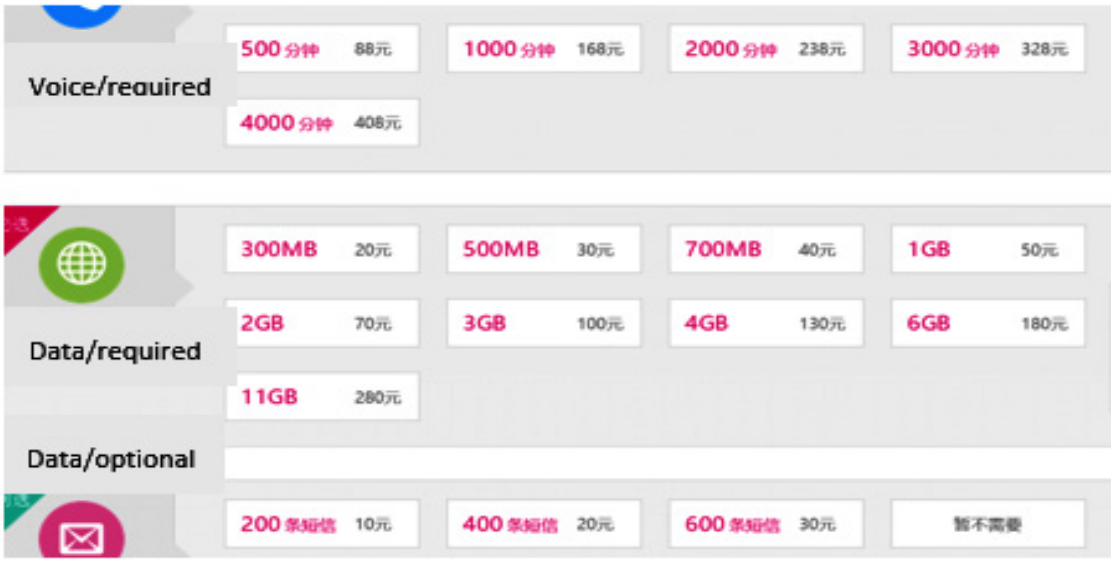
4) Encourage consumers to buy more at the same price level.

Providers are concerned that declining price levels may damage their profitability. Competition is moving from price to brand, service and innovation. But on the other hand, choice of the pair PRICE-QUANTITY by consumers may bring faster sale cycles and more loyalty to providers.

When telecom operators decide to meet the demand of choice of the pair PRICE-QUANTITY by consumers, they are requested by regulators to provide users individual products or services with enough information, describing the amount, speed, time to use, standard price for single products and possible discount for bundled services. All of this information should be provided to consumers through various channels, including website, mobile app and traditional media. With the aid of professional tools, most consumers can easily find which kind of package can be close to their demand. Operators are often reluctant to abandon their pre-planned packages, which may be much cheaper than self-defined packages since it may be accompanied with other terms of transaction such as terms of usage, speed limitation and minimum consumption promises.

In the Chinese market, since 2014, after 4G services became commercial, China Mobile, China Telecom, China Unicom have begun to allow their users to set up free combination packages through the network business hall and mobile business hall with the aid of the transformation of business support system. Nowadays the Chinese mobile users can change from one package to another according to their own will if there is no transaction terms for the previous tariff set by themselves as shown in **Figure 23**.

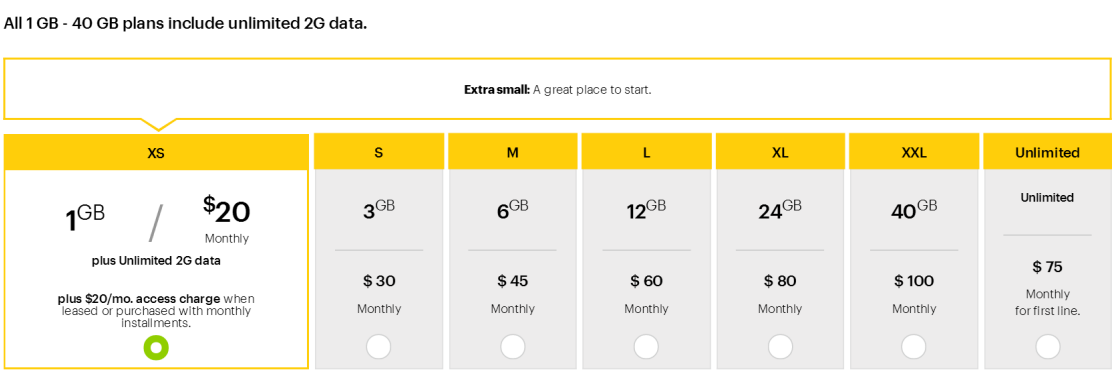
Figure 23: User-defined tariff package by China Mobile



Source: Official website of CMCC.

In some regions, smaller operators may be more active in providing tariff plan for individual users. For example, in the United States Sprint and T-Mobile are lagging behind Verizon and AT&T in terms of market share. They are utilizing the trend from voice to data and introducing unlimited data packages (with speed limit when over some amount). This can be considered another kind of self-independent pricing. Subscribers can use any kind of services with no limit if they order the proper tariff package, as shown in **Figure 24**.

Figure 24: Unlimited tariff package in United States by Sprint



Source: Official website of Sprint, United States of America.

4.4 Compensation: Far beyond real property damage

User compensation is always a sensitive problem to service providers. In past decades, many compensation requirements have been caused by billing mistakes. Users have to provide enough evidence to operators and find it is difficult to collect helpful information without an operator's co-operation. It is even more complicated for bundled products or services when conflicts take place between operators and users. Some third parties will take responsibilities for service or content provision. In recent years, quality of service, security accidents, speed gap have become focus points around user's attention. Compensation are far beyond real property damage.

Many countries have included the right to compensation in their laws and regulations. In the field of telecom services, user's rights to compensation can be applied to normal civil laws and also to specified industry laws. Regulation authorities are entitled to support telecom users to ask for their legitimate rights to compensation. How to define "legitimate" compensation is a key task.

In theory, compensation is designed to cover the victim's real damage, especially property loss. In the case of billing error, the operator as the beneficiary should return the expense overcharged to the user in time. In practice, if the amount is very huge and the time is too long, time cost should be added to the compensation amount. The key problem lies in the evidence collection, where a normal user cannot get paper or electronic information evidence in time without the operator's aid. Thus the regulator is requested to help users to ask for evidence in laws and regulations. In most cases, regulators and users are in the same positon to request the operators' response.

User's loss can be classified into two types: direct damage and indirect damage. If the regulations describe the detail how the damage can be calculated by relative parties, then direct damage can be solved in most cases. Unfortunately, international practice shows that the laws and regulations left these jobs to be done by regulators and courts. As a result, many users cannot get enough compensation in time.

The most difficult job is to make a definition for indirect damage. The gap between operators, service providers and consumers is so huge that every single case may be considered as an independent case and the normal result is that no or less indirect damage can be accepted by judge. The result is clear: it allows the infringer to continue such behaviors as law is not enforced and punishment can be ignored.

With the quick enlargement of internet services, some online services are provided jointly to end users by network operators and service providers. In the field of mobile payments which are more and more popular in internet users, personal privacy such as account number, password, location, transaction orders are continuously collected by smartphones and applications. If such personal data information is not protected effectively, the potential loss will take place and turn into direct damage. In Japan, Korea and China, as in many countries, many young people are relying on mobile payment, but they are enjoying the convenience at the risk of privacy data loss.

Joint responsibility is now being discussed to meet the demand of protecting consumer's private data. Telecom operators and service providers should cooperate to safeguard user's private data in terms of technology tools and statutory obligations. If the incident takes place, operators and service providers such as banks can freeze the account and track the origin of the criminals in order to avoid greater loss or recover the loss.

Prevention is much better than punishment and compensation. Some countries are taking actions to educate consumers how to safeguard their benefits. In December, 2015, Brazil's regulator ANATEL launched the campaign "ANATEL Explains".[69] The campaign consists of informative pieces (tutorials, videos and flyers). Twice a week new content is published on ANATEL's website and social network. "ANATEL Explains" was created to empower consumer, giving them information, in simple language and few technical terms, about telecommunications service and consumers' rights.

The campaign was designed to publicize these main types of information:

1) Consumer rights on telecommunications service and the rules that telecommunication providers must follow. The rights and obligations established on ANATEL's resolutions are put together in simple language.

2) Information on how consumers can protect their rights, for examples: how and when to complain with ANATEL and how ANATEL works.

Until the beginning of March, 2016, 25 tutorials were published on ANATEL's website (http://www.anatel.gov.br/consumidor/index.php/2015-11-26-16-43-20). Issues such as broadband speeds, billing and charges, how to cancel your contracts, the way a service was sold, were explained in the informative pieces. **Figure 25** contains some examples from the tutorials.

The campaign started December, 2015 and continues throughout 2016. According to Elisa Leonel, ANATEL's Consumer Affair Superintendent, the campaign is an initiative to help consumers know and exercise their rights. "*When consumers are well informed about the services and what their rights are, they can choose the option that best suits your needs. With 'ANATEL Explains', we want to give consumers that this is the most important of their tools: knowledge*", she says. The campaign was created to help and advise consumers, and is a great source to give consumers the ability to understand telecommunication services and know their rights.

[69] Document SG1RGQ/210, "'ANATEL explains campaign", Federative Republic of Brazil.

Figure 25: Examples from "ANATEL Explains" campaign

Source: Document SG1RGQ/210, "'ANATEL explains" campaign, Federative Republic of Brazil.

5 CHAPTER 5 – Conclusions and guidelines

5.1 Conclusions

In the era of operator dominance, the working gravity of the telecom regulatory authority is to optimize the allocation of resources, balance the market competition and protect the interests of consumers. The focal point is the market leading operators. Regulators try to achieve policy objectives by way of opening markets, introducing external competitive power, supervising interoperability, wholesale prices and other means.

In the area of consumer protection, the focus of the work is to improve consumers' right to know, guarantee the right to choose and the right to fair trade, and ensure claim damages. The basic premise of this mode of regulation is weaker consumers and stronger operators. In a digital convergent era, products and services are going well beyond the traditional industry boundary of information transmission, stepping further in digital content creation and sharing, and an integration of the online and the offline network economy. Therefore, the regulatory philosophy and model must be adapted to the requirements of the market environment.

5.2 Guidelines for regulators and other relevant organizations

Based on international practice and country cases study, telecommunications national regulatory agencies should follow the idea and principle of "incentive regulation" as the core of the action, connotation, reconstruction of telecommunications consumer protection means, mechanism and policy.

– **Improvement in traditional functions**

  - Constantly relax restrictions on market access, encourage diverse market players to expand competitive differentiation, prosperous business supply, enhance consumer choice space and freedom;
  - Optimize the communication resource allocation of number, spectrum, and domain name address, encourage big players to create an open platform and promote small and medium-sized enterprises to innovate products and services;
  - Establish flexible pricing mechanism, focus on the fairness of upstream wholesale price, accelerate the market pace of retail rates, and further enhance the range and proportion of independent self-pricing by users.

– **Meet the demand of new convergent and collaborative environment**

  - Adopt an inclusive approach at international, regional and national level for the promotion and implementation of United Nations Sustainable Development Goals (SDGs), calling upon policy makers, regulators to integrate SDG targets in their national plans and to bring consumer interests and rights at the center of discussions of all socio economic development and policies;
  - Optimize the competitive relationship between supply and demand related to Business-to-Business (B2B) and Business-to-Consumer (B2C), greatly reduce the beforehand management and quantity control measures, and set up the supervision mechanism in process and afterwards;
  - Innovate the management mode of supervision of service quality, and improve the broadband, intelligent, mobile monitoring platform and user monitoring mechanism owned by third parties to promote the sustainable quality of service;
  - Foster consumer and business education in the field of telecom and internet services;

- Ensure that the technological challenges associated with the convergence of networks and services are mastered, notably quality of service, interoperability, security, privacy, universal access to services for all layers of the population, cost reduction;
- Expand the scope of Universal Access Strategies to include the promotion of consumer rights, information, education and awareness, particularly focusing on security and safety;
- Encourage information infrastructure investment and operation by the aid of PPP and special funds such as Universal Service Fund (USF) to strength provision ability to low income people in the high cost areas and remote areas.

– **Mechanism and management Innovation**

- Establish management mechanisms of national guidance, industry self-regulation and consumer participation, which can play an active role in the area of fair price, service reliability, timeliness aspects of compensation of telecommunication products and services;
- Establish and improve the organization and mechanism of consumer privacy and data security;[70]
- Strengthen consumer information networks, establish service platforms at national, regional and international level, and further enhance consumer's rights as well as professional knowledge on the use of big data platforms and mobile internet applications;
- Establish effective mechanisms for education, awareness raising and dissemination of information on issues such as QoS parameters, tariffs, safety and use of internet in particular for children, women and people with disabilities;
- Empower consumer organizations by strengthening information exchanges and collaborative work and jointly organizing thematic training to promote the protection of telecommunication user rights and interests, and formalize the organization of a Forum on Consumer Protection to be held at least once every two years.

– **Enhance all kinds of cooperation**

- Strengthen partnerships between stakeholders to create knowledge exchange platforms and dialogue at national, regional and international level for consumer protection and rights;
- Improve cooperation with international bodies in the field of ICTs, in particular ITU, to: exchange knowledge and information; define and raise awareness of best practices, including the ITU-D Global Symposium for Regulators 2014 Best Practice Guidelines (GSR14), and of ITU Resolutions, including ITU-D Resolution 64 (Rev. Dubai, 2014) and ITU-T Resolution 84 (Hammamet, 2016) on consumer protection at national and regional level; and, integrate the protection of consumers and information on consumer rights into ITU-D activities;
- Promote the establishment of consumer associations at national and regional level, strengthen their professionalism, and assist in building their capacity building at national, sub-regional and regional levels;
- Improve collaborative management mechanism between national telecom regulators and digital content management authorities. Deepen international cooperation among

[70] Today we adopt rules protecting the privacy of broadband customers. In discussing the scope of the rules, we define "telecommunications carriers" that are subject to our rules and the "customers" those rules are designed to protect. We also define the information protected under Section 222 as customer Proprietary Information (customer PI). We include within the definition of customer PI three types of information collected by telecommunications carriers through their provision of broadband or other telecommunications services that are not mutually exclusive: (i) individually identifiable Customer Proprietary Network Information (CPNI) as defined in Section 222(h); (ii) personally identifiable information (PII); and (iii) content of communications. We also adopt and explain our multi-part approach to determining whether data has been properly de-identified and is therefore not subject to the customer choice regime we adopt for customer PI. We next adopt rules protecting consumer privacy using the three foundations of privacy—transparency, choice, and security (https://www.fcc.gov/document/fcc-adopts-broadband-consumer-privacy-rules).

regulators to prevent Trojan virus, network attack and fraud to shape a safe, reliable network environment for consumers;

- Exchange best practices and encourage public-private partnership initiatives with a view to managing electronic waste and preserving the ecosystem, as required by standard 14001.2015 (certification of sector operators), which expresses the notion of quality.

5.3 Guidelines for operators and service providers

The principles as established in the United Nations Guidelines on Consumer Protection[71] establish benchmarks for good business practices for conducting online and offline commercial activities with consumers are as follows:

- **Disclosure and transparency:** Operators and service providers should provide complete, accurate and not misleading information regarding the goods and services, terms, conditions, applicable fees and final costs to enable consumers to take informed decisions. Businesses should ensure easy access to this information, especially to the key terms and conditions, regardless of the means of technology used.
- **Fair and equitable treatment:** Operators and service providers should deal fairly and honestly with consumers at all stages of their relationship, so that it is an integral part of the business culture. Businesses should avoid practices that harm consumers, particularly with respect to vulnerable and disadvantaged consumers.
- **Commercial behaviour:** Operators and service providers should not subject consumers to illegal, unethical, discriminatory or deceptive practices, such as abusive marketing tactics, abusive debt collection or other improper behavior that may pose unnecessary risks or harm consumers. Businesses and their authorized agents should have due regard for the interests of consumers and responsibility for upholding consumer protection as an objective.
- **Consumer complaints and disputes:** Operators and service providers should make available complaints-handling mechanisms that provide consumers with expeditious, fair, transparent, inexpensive, accessible, speedy and effective dispute resolution without unnecessary cost or burden. Businesses should consider subscribing to domestic and international standards pertaining to internal complaints handling, alternative dispute resolution services and customer satisfaction codes.
- **Education and awareness-raising:** Operators and service providers should, as appropriate, develop programs and mechanisms to assist consumers to develop the knowledge and skills necessary to understand risks, including financial risks, to take informed decisions and to access competent and professional advice and assistance, preferably from an independent third party, when needed.
- **Protection of privacy:** Operators and service providers should protect consumers' privacy through a combination of appropriate control, security, transparency and consent mechanisms relating to the collection and use of their personal data.
- **Build consumer trust in converged services:** Promote and safeguard e-commerce and mobile commerce by introducing measures to build trust amongst consumers. Encourage operators to develop security precautions including built-in security features to prevent unauthorized transactions and data breaches. Recognize the need to protect and educate consumers with different access needs who may be particularly susceptible to deceptive commercial practices or have difficulties fully understanding payment mechanisms.

[71] http://unctad.org/en/PublicationsLibrary/a35r63_UNCPP_en.pdf.

Abbreviations and acronyms

Various abbreviations and acronyms are used through the document, they are provided here.

Abbreviation/acronym	Description
AABE	Argentina's State Property Administration Agency (Agencia de Administración de Bienes del Estado) (Argentine Republic)
AICN	African ICT Consumers Network
ALD	Assistive Listening Devices
ANATEL	Brazilian National Telecommunications Agency (Agência Nacional de Telecomunicações) (Federative Republic of Brazil)
ANEC	European Association for the Co-ordination of Consumer Representation in Standardisation
ANT	Access Network Transport
APT	Asia-Pacific Telecommunity
ARCEP	Autorité de Régulation des Communications Électroniques et des Postes
ARPU	Average Revenue Generated per User
ARPT	Postal and Telecommunication Regulatory Authority (Autorité de Régulation des Postes et Télécommunications) (Republic of Guinea)
ARPCT	Autorité de Régulation de la Poste et des Télécommunications du Congo (Democratic Republic of the Congo)
ART	Telecommunications Regulatory Agency (Agence de Régulation des Télécommunications) (Republic of Cameroon)
ATU	African Telecommunications Union
B2B	Business-to-Business
B2C	Business-to-Consumer
BDT	Telecommunication Development Bureau
BEREC	Body of European Regulators for Electronic Communications
BEUC	European Consumer Organisation (Bureau Européen des Unions de Consommateurs)
BT	British Telecom
CAMRA	Campaign for Real Ale (United Kingdom of Great Britain and Northern Ireland)
CEMAC	Central African Economic and Monetary Community
CEN	European Committee for Standarization
CENELEC	European Commiteee For Electrotechnical Standarization

Abbreviation/acronym	Description
CERT	Cybersecurity Emergency Response Team
CI	Consumers International
CITC	Communications and Information Technology Commission (Kingdom of Saudi Arabia)
CM	Confluent Marketing
CONATEL	National Telecommunication Commission (Comisión Nacional de Telecomuncaciones)
CPNI	Customer Proprietary Network Information
CRA	Communications Regulatory Authority (Islamic Republic of Iran)
CRM	Customer Relations Management
DAI	Digital Access Index
EC	European Commission
ECCG	European Consumer Consultative Group
ECOSOC	United Nations Economic and Social Council
EEA	European Economic Area
EFTA	European Free Trade Association
ESMT	Ecole Supérieure Multinationale des Télécommunications
ESO	European Standardisation Organisation
ETSI	European Telecommunications Standards Institute
FG DFS	Focus Group on Digital Financial Services
FG SSC	Focus Group on Smart Sustainable Cities
FOP	Family One Plus
GETEM	Assistive Technology and Education Laboratory for Individuals with Visual Disabilities
GPS	Global Positioning System
GRC	General Regulation on Consumer Rights
GRSP	Group on Child Restraint Systems
GSR	Global Symposium for Regulators
HNT	Home Network Transport
IAP	Internet Access Provider
ICRT	International Consumer Research & Testing

Abbreviation/acronym	Description
ICT	Information and Communication Technology
IDI	ICT Development Index
IEC	International Electrotechnical Commission
IFT	Federal Telecommunications Institute (Instituto Federal de Telecomunicaciones) (Mexico)
IMT	International Mobile Telecommunication
INS	National Statistical Institute (Institut National de la Statistique) (Republic of Cameroon)
IoT	Internet of Things
IPTV	Internet Protocol Television
ISO	International Organization for Standardization
ISP	Internet Service Provider
ITU	International Telecommunication Union
ITU-D	ITU Telecommunication Development Sector
ITU-T	ITU Telecommunication Standarization Sector
JCA-AHF	Joint Coordination Activity on Accessibility and Human Factors
LDCs	Least Developed Countries
MII	Ministry for the Information Industry (People's Republic of China)
MIIT	Ministry of Industry and Information Technology (People's Republic of China)
NCTU	National Committee of Telecom Users (People's Republic of China)
NDRC	National Development and Reform Commission (People's Republic of China)
NGN	Next Genearation Network
NGO	Non-Governmental Organization
NN	Net Neutrality
NNPA	National Numbering Plan Administrator
NorSIS	Norwegian Centre for Cybersecurity (Norway)
NRA	National Regulatory Agency
NTNP	National Telephone Numbering Plan
OFCOM	Office Fédéral de la Communication (Confederation of Switzerland)
OTT	Over-the-Top

Abbreviation/acronym	Description
PBS	Pseudo Base Station
PCA	Partnered Consumer Association
PI	Proprietary Information
QoE	Quality of Experience
QoS	Quality of Service
R&D	Research and Development
RéCATIC	Réseau des Consommateurs Africains des TIC
RGC	General Rules on Consumer Rights
SDGs	Sustainable Development Goals
SIM	Subscriber Identity Module
SMS	Short Message Service
TDAG	Telecommunication Development Advisory Group
TRA	Telecommunications Regulatory Authority (Sultanate of Oman)
TRAI	Telecom Regulatory Authority of India (Republic of India)
TSAG	Telecommunication Standardization Advisory Group
UCST	Union of Telecommunication Service Consumers (Union des Consommateurs des Services des Télécommunications) (Democratic Republic of the Congo)
UDECOM	Union for the Defense of Consumer Rights in the Congo (Union pour la Défense des droits des Consommateurs au Congo) (Democratic Republic of the Congo)
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNGCP	United Nations Guidelines on Consumer Protection
USF	Universal Service Fund
USSD	Unstructured Supplementary Service Data
VINASTAS	Viet Nam Standard and Consumers Association (Socialist Republic of Viet Nam)

Abbreviation/acronym	Description
VPMN	Visited Public Mobile Network
VUSTA	Viet Nam Union of Science and Technology Association
WEEE	Waste Electrical and Electronic Equipment
WHO	World Health Organisation
WiMAX	Worldwide interoperability for Microwave Access
WSIS	World Summit on the Information Society
WTDC	World Telecommunication Development Conference
WTSA	World Telecommunication Standardization Assembly

Annexes

Annex 1: List of contributions during study period 2014-2017

These are the contributions received for consideration by Question 6/1. Many thanks are extended to all the contributors.

Reports

Web	Received	Source	Title
1/REP/36	2017-03-01	Rapporteurs for Question 6/1	Report of the Rapporteur Group meeting on Question 6/1 (Geneva, Thursday, 30 March 2017, 14:30 – 17:30 hours)
RGQ/REP/24	2017-01-13	Rapporteurs for Question 6/1	Report for the Rapporteur Group meeting on Question 6/1 (Geneva, Wednesday, 11 January 2017, 09:30-12:30 and 14:30 – 17:30 hours)
1/REP/26	2016-09-20	Rapporteurs for Question 6/1	Report of the Rapporteur Group meeting on Question 6/1 (Geneva, Thursday, 22 September 2016, 14:30 – 17:30 hours)
RGQ/REP/15	2016-04-14	Rapporteurs for Question 6/1	Report of the Rapporteur Group meeting on Question 6/1 (Geneva, Tuesday, 5 April 2016, 09:30-12:30 and 14:30 – 17:30 hours)
1/REP/16	2015-09-17	Rapporteur for Question 6/1	Report of the Rapporteur Group Meeting on Question 6/1 (Geneva, Thursday 17 September 2015, 11:00 – 12:30)
RGQ/REP/6	2015-04-14	Rapporteur for Question 6/1	Report of the Rapporteur Group Meeting on Question 6/1 (Geneva, Tuesday, 14 April 2015, 09:30-12:30 and 140:30 – 17:30 hours)
1/REP/6 (Rev.1)	2014-09-17	Rapporteur for Question 6/1	Report of the Rapporteur Group Meeting on Question 6/1 (Geneva, Wednesday 17 September 2014, 14:30 – 15:45 hours)

Question 6/1 contributions for Rapporteur Group and Study Group meetings

Web	Received	Source	Title
1/470	2017-03-17	BDT Focal Point for Question 1/1	GSR-17 provisional programme focusing on living in a world of digital opportunities
1/468	2017-03-17	Argentine Republic	National Plan for the Development of Competitiveness and Quality Conditions of Mobile Communication Services
1/467	2017-03-17	Argentine Republic	Argentina reconverts the "Enabling environment for the development of telecommunications/ICTs"
1/453	2017-03-13	Iran University of Science & Technology	Consumers' rights in information technology in Iran (v0.8)
1/442	2017-01-11	Rapporteurs for Question 6/1	Report of the Rapporteur Group meeting on Question 6/1, Geneva, 11 January 2017

Web	Received	Source	Title
1/417 [OR]	2017-02-10	Rapporteur for Question 6/1	Final Report for Question 6/1
RGQ/311 + Ann.1	2016-12-30	Telecommunication Development Bureau	Overview of input received through the ITU-D Study Group 1 Question 6/1 Global survey on telephone numbering misuse and misappropriation
RGQ/310	2016-12-30	Haiti (Republic of)	Expérience d'Haïti pour la protection des consommateurs
RGQ/302 (Rev.1) [OR]	2016-12-06	Co-Rapporteurs for Question 6/1	Draft Final Report for Question 6/1
RGQ/298 +Ann.1	2016-11-25	Palestine(*)	Explain the special resolution to protect subscribers added services through operators networks
RGQ/264	2016-11-14	Norway	Creating a metric for cyber security culture
RGQ/261	2016-11-14	Tactikom (Sénégal)	New environment having direct influence on methods of determining costs of electronic communication services in the new sectoral ecosystem. Amendments to Chapter 5 of the draft final report
RGQ/255	2016-10-31	Oman Telecommunications Regulatory Authority (TRA)	Standard customer agreement
1/364	2016-09-07	United Kingdom and Northern Ireland	Initial consideration of responses to numbering misuse survey as a contribution to the Question 6/1 report
1/358 +Ann.1	2016-09-07	Telecommunication Development Bureau	Overview of input received through the ITU-D Study Group 1 Question 6/1 Global survey on telephone numbering misuse and misappropriation
1/348	2016-08-15	Benin (Republic of)	Actions réglementaires en faveur de l'implantation des stations radioélectriques et la protection des personnes contre les contre les effets des champs électriques, magnétiques et électromagnétiques
1/340	2016-08-05	Co-Rapporteur for Question 6/1	Lignes directrices pour la Question6/1
1/325	2016-08-05	Côte d'Ivoire (Republic of)	Risks associated with the reallocation of cancelled numbers: rights and freedoms of subscribers appearing in a telephone directory
1/323	2016-08-05	Côte d'Ivoire (Republic of)	Renforcement du cadre légal de la protection des consommateurs: Cas de la Côte d'Ivoire
1/308 +Ann.1	2016-08-04	BDT Focal Point for Question 6/1	GSR 2016 Discussion Papers and Best Practice Guidelines

Web	Received	Source	Title
1/293 [OR]	2016-08-02	Co-Rapporteur for Question 6/1	Draft Report of Question 6/1: Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks
1/274 (Rev.1)	2016-07-22	Guinea (Republic of)	The numbering plan in Guinea
1/246	2016-04-05	Rapporteurs for Question 6/1	Report of the Rapporteur Group Meeting on Question 6/1, Geneva, 5 April 2016
RGQ/242	2016-04-15	Rapporteur for Question 6/1	Working document: draft Question 6/1 report following the 5 April 2016 Q6/1 meeting
RGQ/210	2016-03-18	Brazil (Federative Republic of)	"ANATEL explains" campaign
RGQ/200	2016-03-21	United Kingdom of Great Britain and Northern Ireland, Australia, Papua New Guinea, Vanuatu (Republic of)	Title to be added (contribution from UK, Australia, Samoa, Vanuatu and Papua New Guinea
RGQ/199	2016-03-16	China (People's Republic of)	Consumer protection in the convergent era: user dominant right is rising up
RGQ/195	2016-03-14	Rapporteur pour la Question 6/1	Chapitre 4 du rapport de la Question 6/1
RGQ/179	2016-03-06	African ICT Consumers Network (AICN)	Resolution 64 (Rev. Dubai, 2014)
RGQ/178	2016-03-06	African ICT Consumers Network (AICN)	Les lignes directrices de Bahreïn
RGQ/165	2016-02-17	Gambia (Republic of the)	A case to adopt child online protection initiatives across LDCs
RGQ/164	2016-02-18	Benin (Republic of)	Collaboration between a regulatory agency and consumers' associations: the case of Benin
RGQ/162	2016-02-18	Benin (Republic of)	Regulatory measures for the protection of telecommunication service consumers in Benin
RGQ/159	2016-02-22	Central African Republic	Legislative and regulatory framework for the protection of ICT consumers in the Central African Republic
RGQ/123	2015-09-11	Mexico	Actions to benefit telecommunication service users in Mexico
1/230	2015-09-03	Zimbabwe (Republic of)	Consumer protection: the Zimbabwean experience
1/225 +Ann.1	2015-09-01	BDT Focal Point for Question 6/1	Background Documents for Report
1/216	2015-08-30	Saudi Arabia (Kingdom of)	The applicant/user's protection

Web	Received	Source	Title
1/198	2015-08-21	Zimbabwe (Republic of)	To use of not to use cloud computing?: The question for the developing world
1/197	2015-08-21	Viet Nam (Socialist Republic of)	The state of telecommunications consumers protection – The need for distinct regulation
1/189	2015-08-12	Telefon AB – LM Ericsson	Evolution in mobile broadband networks, for its consideration in the reports
1/166	2015-07-31	Brazil (Federative Republic of)	Telecommunication consumer and its rights: proposed text for Chapter 2 of the Report of Question 6/1
1/159	2015-07-31	Co-Rapporteur for Question 6/1	Draft outline for the final report of Question 6/1 and task distribution
1/153 (Rev.1)	2015-07-29	Australia, Papua, New Guinea, Samoa (Independent State of), United Kingdom of Great Britain and Northern Ireland, Vanuatu (Republic of)	Proposed amended questions on numbering misuse
1/133	2015-07-16	Gambia (Republic of the)	A case to adopt Child Online Protection initiatives across LDCs
1/106	2015-05-07	Rapporteurs for Question 6/1	Report of the Rapporteur Group Meeting on Question 6/1, Geneva, 14 April 2015
1/88	2015-04-03	China (People's Republic of)	National Committee of Telecom Users work effectively to improve telecom services
RGQ/106 (Rev.1)	2015-03-31	Australia, Samoa (Independent State of), United Kingdom of Great Britain and Northern Ireland, Vanuatu (Republic of)	Proposed questions to assist combatting Numbering Misuse
RGQ/100	2015-03-31	Oman (Sultanate of)	Standard Customer Agreement
RGQ/73	2015-03-10	Benin (Republic of)	Collaboration entre une Agence de régulation et les associations de consommateurs: cas du Bénin
RGQ/66	2015-03-03	United Kingdom of Great Britain and Northern Ireland	Numbering misuse – A tutorial
RGQ/46	2015-02-26	India (Republic of)	Input for Question 6/1
RGQ/38	2015-02-25	Cameroon (Republic of)	Consumer protection in respect of electronic communication products and services in Cameroon
RGQ/22	2014-09-08	Democratic Republic of the Congo	DRC's experience with regulatory policy on ICT consumer protection

Web	Received	Source	Title
RGQ/12 (Rev.1)	2014-12-15	Rapporteurs for Question 6/1	Draft work plan for Question 6/1
1/52	2014-08-28	China (People's Republic of)	Recent progress in the field of telecommunications consumers
1/44	2014-08-13	BDT Focal Point for Question 6/1	List of resources which may be useful for the work on Question 6/1
1/41	2014-08-05	Côte d'Ivoire (Republic of)	Externalisation de la gestion client: impact des calls center sur le droit de recours des consommateurs auprès du service clientèle
1/38 +Ann.1	2014-08-04	Telecommunication Development Bureau	Quality of Service Training Programme (QoSTP)
1/36	2014-07-31	Brazil (Federative Republic of)	Consumers website in Brazil
1/35	2014-07-31	Brazil (Federative Republic of)	General regulation on consumer rights of telecom services

Contributions for QAll for Rapporteur Group and Study Group meetings

Web	Received	Source	Title
1/458 +Ann.1	2017-03-17	Telecommunication Development Bureau	Feedback received through the survey on ITU-D Study Group Questions, Procedures, and Proposals on Future Activities
1/457	2017-03-17	Telecommunication Development Bureau	Innovation activities in ITU-D
1/454	2017-03-15	Russian Federation	Proposals for the revision and rearrangement of ITU-D Study Groups 1 and 2' Study Questions
1/447 +Ann.1-2	2017-03-09	Rapporteur for Question 9/2	Analysis of feedback received through the global survey on the work of ITU-D study groups
1/434	2017-02-22	Vice-Chairman, ITU-D Study Group 2 , and Co-Rapporteur for Question 8/2	Study Groups, study Questions, and working method for WTDC-17
1/432 +Ann.1	2017-02-17	Côte d'Ivoire (Republic of)	Draft texts for the revision of the study Questions and new Questions for the period 2018-2021
1/431	2017-02-17	Côte d'Ivoire (Republic of)	Proposal for new Question on Internet of Things for the study period 2018-2021
1/396	2017-01-30	Chairman, ITU-D Study Group 1, Vice-Chairman, ITU-D Study Group 1	Survey on ITU-D Study Group Questions, Procedures, and Proposals on Future Activities
1/371	2016-09-07	Telecommunication Development Bureau	Update on innovation activities to ITU-D Study Groups

Web	Received	Source	Title
1/332	2016-08-05	General Secretariat	WSIS Stocktaking 2014-2016 Regional Reports of ICT Projects and Activities
1/331	2016-08-05	General Secretariat	WSIS Prizes 2016-2017
1/330	2016-08-05	General Secretariat	WSIS Stocktaking 2016-2017
1/310	2016-08-04	General Secretariat	WSIS Action Line Roadmaps C2, C5 and C6
1/309	2016-08-04	General Secretariat	ITU's Contribution to the Implementation of the WSIS Outcomes 2016
1/307	2016-08-04	General Secretariat	WSIS Forum 2016 and SDG Matrix
1/306	2016-08-04	General Secretariat	WSIS Action Lines Supporting Implementation of the SDGs
1/305	2016-08-04	General Secretariat	WSIS Forum 2016: High Level Track Outcomes and Executive Brief
1/304	2016-08-04	General Secretariat	WSIS Forum 2016 Outcome Document – Forum Track
1/303 (Rev.1)	2016-08-04	General Secretariat	WSIS Forum 2017 – Open Consultation Process
1/253 (Rev.1) +Ann.1	2016-05-31	Chairman, ITU-D Study Group 1	Compendium of Draft Outlines for expected outputs to be produced by ITU-D Study Group 1 Questions and Resolution 9 (September 2016)
RGQ/204	2016-03-18	BDT Focal Point for Question 8/1 and Resolution 9	Outcomes of RA-15,WRC-15 and CPM19-1 related to ITU-D
RGQ/152	2016-02-18	Kazakhstan (Republic of)	Contribution from Kazakhstan to Questions 1/1, 2/1, 3/1, 4/1, 5/1, 6/1, 7/1, 8/1 and 5/2
1/232 +Ann.1	2015-09-13	Chairman, ITU-D Study Group 1	Work plan for ITU-D Study Group 1 (September 2015)
1/231 (Rev.1)	2015-09-04	Chairman, ITU-D Study Group 1	Compendium of Draft Outlines for Expected Outputs to be Produced by ITU-D Study Group 1 Questions and Resolution 9 (September 2015)
1/229 (Rev.1)	2015-09-02	Argentine Republic	Draft new Resolution: "Telecommunication/ICT accessibility for persons with disabilities and persons with specific needs"
1/228 (Rev.1)	2015-09-02	Argentine Republic	Modification of the Resolution ITU-R 61 "Contribution in implementing the outcomes of the World Summit on the Information Society"

Web	Received	Source	Title
1/200	2015-08-25	Telecommunication Development Bureau	ITU-D Study Groups Innovation update
1/183	2015-08-07	Telecommunication Development Bureau	1st ITU-D Academia Network Meeting
1/145	2015-07-24	General Secretariat	WSIS Forum 2015: High level policy statements, Outcome document, Reports on WSIS Stocktaking
1/126	2015-07-06	Uganda (Republic of)	Increasing women's participation in ITU Study Groups' work
1/125	2015-06-29	BDT Focal Point for Question 1/1	ITU GSR15 discussion papers and best practice guidelines
1/70	2014-09-18	Chairman, ITU-D Study Group 1	Appointed Rapporteurs and Vice-Rapporteurs of ITU-D Study Group 1 Questions for the 2014-2018 period
1/66	2014-09-04	Telecommunication Development Bureau	List of information documents
1/65	2014-09-03	Australia, Samoa (Independent State of), United Kingdom of Great Britain and Northern Ireland, Vanuatu (Republic of)	Numbering misappropriation
1/64	2014-09-03	Intel Corporation	New question for ITU-D Study Group 1 (2014-2018): Assistance to developing countries for the implementation of ICT programs in education
1/50	2014-08-28	United States of America	Selected recent developments in U.S. spectrum management
1/48	2014-08-23	Nepal (Republic of)	Need for developing detailed table of contents for each Question under both the ITU-D Study Groups at the beginning
1/38 +Ann.1	2014-08-04	Telecommunication Development Bureau	Quality of Service Training Programme (QoSTP)
1/22	2014-06-27	BDT Focal Point for Question 1/1	Status report on Regulatory and Market Environment
1/5 (Rev.1-2)	2014-09-08	Telecommunication Development Bureau	Candidates for Rapporteurs and Vice-Rapporteurs of ITU-D Study Group 1 and 2 study Questions for the 2014-2018 period
1/4	2014-09-01	Telecommunication Development Bureau	List of WTDC Resolutions and ITU-D Recommendations relevant to the work of the ITU-D Study Groups
1/3	2014-08-20	Telecommunication Development Bureau	Resolution 9 (Rev. Dubai, 2014): Participation of countries, particularly developing countries, in spectrum management

Web	Received	Source	Title
1/2 +Ann.1	2014-08-20	Telecommunication Development Bureau	Resolution 2 (Rev. Dubai, 2014): Establishment of study groups + Full text of all ITU-D Study Group 1 Questions in Annex 1
1/1	2014-06-11	Telecommunication Development Bureau	Resolution 1 (Rev. Dubai, 2014): Rules of procedure of the ITU Telecommunication Development Sector

Liaison Statements

Web	Received	Source	Title
1/446	2017-03-03	ITU-T Study Group 11	Liaison Statement from ITU-T SG11 to ITU-D Study Group 1 Question 6/1 and to Study Group 2 Question 4/2 on ITU-T SG11 work on the combat of counterfeit ICT devices and mobile device theft
1/433	2017-02-22	ITU-T Study Group 11	Liaison Statement from ITU-T SG11 to ITU-D SG1 Questions 2/1, 3/1, 6/1 on Operational Plan for implementation of WTSA-16 Resolution 95
1/257	2016-06-28	ITU-T Study Group 12	Liaison Statement from ITU-T SG12 to ITU-D SG1 and SG2 on revised definition of Quality of Experience (QoE) and new terms in Rec. P.10/G.100
1/256	2016-06-28	ITU-T Study Group 12	Liaison Statement from ITU-T SG12 to ITU-D SG1 and SG2 on ITU inter-Sector coordination (reply to TSAG LS17)
RGQ/127	2015-12-21	ITU-T Study Group 11	Liaison statement from ITU-T SG11 to ITU-D Study Group 1 and 2 on the progress on standardization work to combat Counterfeit ICT devices
RGQ/6	2014-11-27	ITU-T Study Group 11	Liaison Statement from ITU-T SG11 to ITU-D Study Groups on the Progress on the Technical Report on Counterfeit ICT Equipment
RGQ/3	2014-09-12	ITU-T Study Group 12	Liaison Statement from ITU-T SG12 to ITU-D SG1 Q6/1 on indices

Liaison Statements for QAll

Web	Received	Source	Title
1/460	2017-03-17	ITU-T JCA-AHF	Liaison Statement from ITU-T JCA-AHF to ITU-D SG1 on recent meeting reports of Joint Coordination Activity on Accessibility and Human Factors (JCA-AHF)
1/456	2017-03-17	ITU-T JCA-AHF	Liaison Statement from ITU-T JCA-AHF to ITU-D SG1 on Call for voluntary contributions to the ITU Accessibility Fund
1/398	2017-01-31	ITU-T Study Group 12	Liaison Statement from ITU-T SG12 to ITU-D SG1 and SG2 on operational plan for implementation of WTSA-16 Resolution 95 (Hammamet, 2016)

Web	Received	Source	Title
RGQ/260	2016-10-31	ITU-T Study Group 15	Liaison Statement from ITU-T SG15 to ITU-D Study Groups 1 and 2 on the latest version of the Access Network Transport (ANT), Smart Grid and Home Network Transport (HNT) Standards Overviews and Work Plans
1/287	2016-07-29	TSAG	Liaison Statement from TSAG to ITU-D Study Groups on ITU inter-sector coordination
1/286	2016-07-29	ITU-T JCA-AHF	Liaison statement from ITU-T JCA-AHF Chairman to ITU-D SG1 on JCA-AHF recent meeting report
1/257	2016-06-28	ITU-T Study Group 12	Liaison Statement from ITU-T SG12 to ITU-D SG1 and SG2 on revised definition of Quality of Experience (QoE) and new terms in Rec. P.10/G.100
1/256	2016-06-28	ITU-T Study Group 12	Liaison Statement from ITU-T SG12 to ITU-D SG1 and SG2 on ITU inter-Sector coordination (reply to TSAG LS17)
RGQ/204	2016-03-18	BDT Focal Point for Question 8/1 and Resolution 9	Outcomes of RA-15,WRC-15 and CPM19-1 related to ITU-D
RGQ/186	2016-03-09	ITU-R Study Groups-Working Party 5D (IMT System)	Liaison statement from ITU-R WP 5D to ITU-D SG1 on Working document towards a preliminary draft new report ITU-R SM.(innovative regulatory tools)
RGQ/181	2016-03-07	ITU-T Study Group 15	Liaison statement from ITU-T SG15 to ITU-D SG1 and 2 on the latest version of the Access Network Transport (ANT), Smart Grid and Home Network Transport (HNT) Standards Overviews and Work Plans
RGQ/172	2016-03-03	ITU-D Study Group 1	Liaison statement from ITU-T Study Group 15 to ITU-D SG 1 and 2 on ITU-T SG15 OTNT standardization work plan
RGQ/171	2016-03-03	ITU-T Study Group 15	Liaison statement from ITU-T Study Group 15 to ITU-D SG 1 and 2 on new technical classification and numbering of ITU-T L-Series Recommendations
RGQ/139	2016-02-08	TSAG	Liaison statement from TSAG to ITU-D study groups 1 and 2 on ITU inter-Sector coordination
RGQ/124	2015-11-18	ITU-R Study Group Department	Liaison statement from ITU-R Study Group Department to ITU-D SG 1 and 2 on Resolutions approved at the Radiocommunication Assembly (RA-15)
RGQ/118	2015-09-29	Asia-Pacific Telecommunity (APT)	Liaison statement from the APT Standardization Program Forum (ASTAP) to ITU-D Study Group 1 and 2 on NGN activities
1/202	2015-08-24	ITU-T JCA-AHF	Liaison Statement from ITU-T JCA-AHF, Chairman to ITU-D SGs on Draft meeting report of Joint Coordination Activity on Accessibility and Human Factors (JCA-AHF) in Geneva on 17 June 2015

Web	Received	Source	Title
1/128	2015-07-10	ITU-T Study Group 15	Liaison Statement from ITU-T SG15 to ITU-D SGs on the latest versions of the Access Network Transport (ANT), Smart Grid and Home Network Transport (HNT) Standards Overviews and Work Plans
1/127	2015-07-04	ITU-T Study Group 15	Liaison Statement from ITU-T SG15 to ITU-D SGs on ITU-T SG15 OTNT standardization work plan
1/124	2015-07-12	TSAG	Liaison Statement from TSAG to ITU-D Study Groups on ITU inter-sector coordination
1/120	2015-06-23	ITU-R Study Groups-Working Party 1B	Liaison Statement from ITU-R WP1B to ITU-D Study Group 1 on Working document towards a pre-liminary draft new report ITU-R SM on Innovative regulatory tools
1/116	2015-05-19	ITU-T Focus Group on SSC	Liaison Statement from ITU-T FG-SSC to ITU-D SGs on Final deliverables of the Focus Group on Smart Sustainable Cities (FG-SSC) and proposal of a new Study Group
1/113	2015-05-12	ITU-T Study Group 13	Liaison Statement from ITU-T SG13 to ITU-D SGs on Development of the Roadmap on IMT
1/100	2015-04-30	ITU-T Study Group 11	Liaison Statement from ITU-T SG11 to ITU-D Study Groups on the progress on standardization work to combat Counterfeit ICT devices
1/99	2015-04-29	ITU-T Study Group 16	Liaison Statement from ITU-T SG16 to ITU-D SGs on ITU-D SG1 and SG2 Questions of interest to ITU-T Study Groups
1/98	2015-04-29	ITU-T Focus Group on Digital Financial Services	Liaison Statement from ITU-T Focus Group on Digital Financial Services (DFS) to ITU-D Study Groups on BDT's work on ITU m-Powering Development
1/97	2015-04-29	ITU-T Focus Group on Digital Financial Services	Liaison Statement from ITU-T Focus Group on Digital Financial Services (DFS) to ITU-D Study Groups concerning its work
RGQ/68	2015-03-03	ITU-T Study Group 16	Liaison Statement from ITU-T SG16 to ITU-D SGs on ITU-D SG1 and SG2 Questions of interest to ITU-T Study Groups
RGQ/28	2015-02-10	ITU-R Study Groups-Working Party 5D	Liaison Statement from ITU Radiocommunication Study Groups WP5D to ITU-D Study Groups concerning the Handbook on "Global Trends in IMT"
RGQ/27	2015-02-10	ITU-R Study Groups-Working Party 5D	Liaison Statement from ITU Radiocommunication Study Groups WP5D to ITU-D Study Groups concerning the Handbook on "Global Trends in IMT"
RGQ/21	2015-01-23	ITU-T FG DFS	Liaison Statement from ITU-T Focus Group on Digital Financial Services (DFS) to ITU-D Study Groups on BDT's work on ITU m-Powering Development
RGQ/20	2015-01-22	ITU-T FG DFS	Liaison Statement from ITU-T Focus Group on Digital Financial Services (DFS) to ITU-D Study Groups concerning its work

Web	Received	Source	Title
1/18	2014-05-23	ITU-T JCA-AHF	Liaison Statement from ITU-T Joint Coordination Activity on Accessibility and Human Factors (JCA-AHF) on Assistive Listening Devices (ALD) and the allocation of Mobile Phone Services in the 2.3-2.4 GHz band
1/16	2014-03-10	ITU-T Study Group 11	Liaison Statement from ITU-T Study Group 11 to ITU-D SG1 and SG2 on Request for status update from GSMA and ITU on proposed studies on the issue of mobile theft, grey market and counterfeit devices
1/15 (Rev.1)	2014-03-10	ITU-T Study Group 11	Liaison Statement from ITU-T Study Group 11 to ITU-D SG1 and SG2 on Technical report on counter-feit equipment
1/12	2014-02-10	ITU-T Focus Group on Innovation	Liaison Statement from the ITU-T FG on Innovation to ITU-D SG1 and SG2 on New Standardization Activities for ITU-T study groups and ICT Innovation Panel
1/9	2013-10-22	ITU-T Focus Group on Innovation	Liaison Statement from the ITU-T FG on Innovation to ITU-D SG1 and SG2 on inputs on ICT innovation panel

Annex 2: Summary of workshops, meetings or training activities

India workshop in March 2016

Rapid technological change and its impact on consumer behavior is taking place within an increasingly liberalized market place in which the global drive to compete brings new challenges to both existing and nascent regulatory authorities.

In order to ensure that consumers benefit fully from the services the Internet / broadband has to offer, regulators need to ensure that networks are efficient and reliable, widely accessible (including in remote rural areas) and affordable. In order to encourage private investment in the infrastructure needed to meet those objectives, regulators need to create an environment in which communications investment is commercially viable, whilst at the same time promoting competition to increase choice and drive down prices. The challenge for regulation is to promote favorable market conditions in which competition can flourish and foster innovation, whilst at the same time ensuring that consumers' interests are protected.

The ITU-TRAI Training on Consumer Protection aimed at sharing real experiences, brainstorming on possible solutions to address existing as well as emerging challenges amongst telecommunication, broadcasting and converged ICT regulators in the area of protecting consumers in the digital age.

Website: http://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Pages/Events/2016/Mar-ITU-TRAI/home.aspx.

Table 1A includes the agenda for the workshop.

Table 1A: Agenda for India workshop in March 2016

	Day 1: Monday 21 March	Day 2: Tuesday 22 March	Day 3: Wednesday 23 March
9:00 – 9.30	Registration and TEA/COFFEE	TEA/COFFEE	TEA/COFFEE
9.30 – 10.30	Welcome Welcome address: Mr Sudhir Gupta, Secretary, TRAI Welcome and brief of the program: Mr. Sameer Sharma, Senior Advisor, ITU Keynote Address : Dr. Syed Ismail Shah, Chairman PTA Inaugural address : Mr. R.S. Sharma, Chairman, TRAI Vote of thanks : Mr. C.P.S Bakshi, Advisor, TRAI Group Photo	Special Address: Regulatory Initiatives on QoS and Consumer Protection in Thailand: Mr. Takorn Tantasith, Secretary General, NBTC, Thailand Session 4: Quality of Service Monitoring in India Regulatory framework on Quality of Service: Mr. A. Robert Ravi, Advisor TRAI Framework of QoS monitoring and implementation in India : Mr Chandra Prakash, Member (T) (Rtd.) Regulating Unsolicited Commercial Communications: Service Provider's Perspective : Mr. Anurag Jain, Airtel Implementation of the Metering and Billing Standards: Mr. Apoorva Yatindra, M/s Anil Ashok &Associates Audit & assessment of QoS parameters of TSPs in India : Mr. Biswapriya Bhattacharjee, Vice President, IMRB International Session Chair : Mr. U. K. Srivastava, Pr. Adv TRAI	Session 8: Emerging issues for consumers for online services : The Reconnecting the Customer Inquiry, International Mobile Roaming regulation, Australian Internet Security Initiative for the reduction of malware and botnets Ms. Jennifer McNeill, General Manager, Content, Consumer & Citizen, ACMA, Australia Protecting rights of consumers for online services: Ms. Andirauga Nongkas, Principal Consumer Analyst, NICTA, Papua New Guinea Session Chair : Dr. Syed Ismail Shah, Chairman PTA, Pakistan
10.30 – 11.00	MORNING TEA	MORNING TEA	MORNING TEA

	Day 1: Monday 21 March	Day 2: Tuesday 22 March	Day 3: Wednesday 23 March
11.00 – 12.30	Session 1 : Consumer Protection in Telecom and Broadcasting sector: Indian Perspective and framework Initiatives taken by TRAI to safe-guard consumers interest : Mr. Agneshwar Sen Advisor, TRAI Consumer issues in India: Mr Apoorva Mehrotra, Business head, Vodafone Consumer Issues : Mr. George Cheriyan, Director CUTS International Making it Easy & Simple for Customers to use Broadcasting Services : Mr. Harit Nagpal , CEO, TataSky Session Chair: Mr. Sameer Sharma, Senior Advisor, ITU	Session 5: QoS and Consumer Protection Quality of Service Monitoring and Consumer Protection :Provisions of QoS and Consumer Protection, Initiatives to protect consumer interests, Issues and challenges : Dr. Syed Ismail Shah, Chairman PTA, Pakistan Provisions , reporting and enforce-ment of QoS: Mr. Murun Ganbold, Expert, Regulatory Dept., CRC, Mongolia Quality of Service Compliance: Reporting mechanism, Consumer complaint redressal mechanism, Challenges and innovative tech-niques: Mr. Satha Touch, Licensing Officer, TRC Cambodia Session Chair : Ms. Jennifer McNeill, General Manager, Content, Consumer & Citizen, ACMA, Australia	Session 9: Consumer Protection : Challenges and Way Foreword Session Chair : Mr. S.K Gupta, Pr. Adv TRAI Mr. Sameer Sharma, Senior Advisor, ITU Ms. Jennifer McNeill, General Manager, Content, Consumer & Citizen, ACMA, Australia Dr. Syed Ismail Shah, Chairman PTA, Pakistan Ms. Sharizan Abdul Aziz, MCMC, Malaysia Closing Ceremony : Mr. Sameer Sharma, Senior Advisor, ITU Mr. R.S. Sharma, Chairman, TRAI
12.30 – 14.00	LUNCH	LUNCH	LUNCH
14.00 – 15.30	Session 2: Protecting consumer interest in broadband services: ICT development trends, Consumer Protection , Quality of Service framework : Sameer Sharma, ITU Consumer protection under broad-band convergent world-How China is taking actions: Pricing, QoS promise and Speed Monitoring : Dr. CHEN Jinqiao, Deputy Chief Engineer, CAICT, MIIT, P.R. China Session Chair : Mr. U. K. Srivastava, Pr. Adv TRAI	Session 6: Monitoring broadband quality of service and Consumer complaint handling mechanism Monitoring broadband quality of service: Ms.Hemali Menaka Pathirana, Deputy Director Compliance (Consumer Complaints/ Public Awareness), TRCSL Sri Lanka Consumer complaint handling mechanism: Mr. Roger Jimmy, Consumer Affairs Officer, TRR , Vanuatu Session Chair: Ms. Sharizan Abdul Aziz, MCMC, Malaysia	
15.30 – 16.00	AFTERNOON TEA	AFTERNOON TEA	
16.00 – 17.00	Session 3: Consumer Protection in Era of Online Services : EU Case Study : Mr. Klaus Pendl, European Union	Session 7: Consumer protection in the digital era Framework of QOS monitoring & QOS Parameters , audit and report-ing , Ms. Sharizan Abdul Aziz, MCMC Malaysia	

Some common lessons that emerged out of this discussions / interactions as follows:

- Consumer protection is a long term investment in trust, loyalty and not simply a cost centre;
- Promote consumer involvement and awareness;
- Ensure accurate reliable information is available;
- Ensure consumers have access to effective redressal mechanism;
- Enforceability of standards where necessary;
- Global response to security concerns;
- Engage industry before during and after regulatory mechanisms are invoked and encouraging industry to resolve consumer and quality issues through collaborations, engagements, education and awareness.

People's Republic of China workshop in November 2016

ICTs are recognized as the foundation upon which the pillars of economic and social development can grow. There is increased recognition that we need ecosystems that include not only ICT/telecommunication operators and service providers, but also banks and other partners, to connect the world and create value for business. This will bring regulatory questions and opportunities for business and consumers. As the Internet of Things is impacting people and societies, there are issues that regulators and policy makers, as well as consumers, face with regard to business models, e-commerce, cross-border transactions and communications. We need to work together to create an inclusive dialogue to foster an enabling regulatory environment between regulators across the sectors and remove the barriers that hinder progress for consumers.

ITU-D Study Group 1 Question 6/1 dedicated to "Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks" has as one of its outcomes requested by WTDC-14, the organization of seminars in all regions on consumer protection, covering areas such as consumer information, protection and rights, laws, economic and financial bases, and consumer networks. In this regard, the workshop on 10 and 11 November 2016 focused on "Consumer protection in a digital collaborative economy".

The Question 6/1 expert meeting on 9 November 2016 aimed to further progress the ongoing work on Question 6/1 on developing practical guidelines for consumer protection and as such will prepare inputs for consideration during the January 2017 ITU-D Study Group 1 Question 6/1 Rapporteur Group meeting.

Table 2A includes the workshop agenda.

Table 2A: Agenda for China workshop in November 2016

8 November		
Time	**Agenda item**	**Venue**
15:30-21:30	Arrival and registration	CQUPT Hotel
18:30-19:30	Dinner	CQUPT Hotel
9 November		
Time	**Agenda item**	**Venue**

8:30-10:00	**Expert Meeting** 1. Review the expected content/outline for the Question 6/1 expected deliverables for the 2014-2017 study period 2. Review the draft Final Report for Question 6/1	Conference Room 203 in Yifu Building
10:00-10:30	Coffee/tea break	
10:30-12:00	**Expert Meeting** 1. Consider/discuss contributions and input that have not yet been incorporated into the Q6/1 deliverables and propose action to be taken 2. Discuss the work plan, actions and agree on meeting outputs to be presented to the January 2017 Question 6/1 Rapporteur Group meeting (revised Draft Report, Guidelines, possible Draft Recommendation, etc.) 3. Discuss interesting topics in consumer protection that could be worth considering for study during the next study period 4. Any other business	Conference Room 203 in Yifu Building
12:00-13:00	Lunch	CQUPT Hotel
13:00-14:00	Lunch Break (Free Time)	
14:00-18:00	Visit: Chongqing City Planning Museum and Smart Zone	Chongqing Downtown
18:30-19:30	Dinner reception hosted by China Telecom Chongqing Branch	Road Nanbin
10 November		
Time	**Agenda item**	**Venue**
8:30-9:15	**Opening Ceremony** **Host**: Prof. Wan Xiaoyu, Dean, School of Economics and Management, Chongqing University of Posts and Telecommunications 1. Introduction to the guests 2. Speech by Mr. Zhang Huan, Ministry of Industry and Information Technology 3. Speech by representative from co-organizers - Ms. Xu Hong, Deputy Director General, Chongqing Administration of Communication - Prof. Li Lin, Schoolmaster, Chongqing University of Posts and Telecommunications. 4. Speech by Ms. Sofie Maddens, Head of Regulatory and Market Environment Division, ITU 5. Group photo	Lecture Hall in Yifu Building

9:15-10:15	**Workshop theme 1: Are current consumer protection measures suitable for connecting the world and the Internet of things?** **Moderator:** Dr. Chen Jinqiao, Co-Rapportuer of Question 6/1 for ITU-D Study Group 1, Deputy Chief Engineer of CAICT, MIIT 1. Invitation Report: Mr. Chen Yuping, Secretary General, National Telecom User Committee 2. Invitation Report : Ms. Yin Yuan, Vice-President, China Telecom Chongqing company 3. Invitation Report: Mr. Wu Suoning, Chief Editor, People's Post 4. Discussion	Lecture Hall in Yifu Building
10:15-10:40	Coffee/tea break	
10:40-11:40	**Workshop theme 2: Can digital platform enable consumers and entrepreneurs?** **Moderator:** Mr. Bohyun Seo, TDAG Vice-Chairman, Expert from the Republic of Korea 1. Invitation Report: Ms. Sofie Maddens, Head of Regulatory and Market Environment Division, ITU 2. Invitation Report: Vice-President of China Mobile Chongqing Company 3. Invitation Report: Mr. Liu Xuehui, Product Manager, Incorporated China Branch, Qualcomm 4. Discussion	Lecture Hall in Yifu Building
12:00-13:00	Lunch: buffet	CQUPT Hotel
13:00-14:00	Lunch Break (Free Time)	
14:00-15:00	**Workshop theme 3: Information consumption in Chongqing** **Moderator:** Mr. Wu Suoning, Chief Editor, People's Post 1. Invitation Report: Leader of Chongqing Economic and Information Committee 2. Invitation Report: Ms. Xu Xiaoli, Inspector General, Consumer experiment in North East Asia, Ericsson 3. Invitation Report: Prof. Wan Xiaoyu, Dean, School of Economics and Management, Chongqing University of Posts and Telecommunications 4. Invitation Report: Representative from Chongqing internet company 5. Discussion	Lecture Hall in Yifu Building
15:00-15:20	Coffee/tea break	

15:20-16:20	**Workshop theme 4:Channels available for payment - International Mobile Roaming** **Moderator:** Mr. Zhou Jianming, Senior General Manager, China Mobile Group 1. Invitation Report: Prof. Zeng Jianqiu, Beijing University of Posts and Telecommunications 2. Invitation Report: Ms. Venerande Mukamurera, Expert representative from Rwanda 3. Invitation Report: Vice-President of China Unicom Chongqing Company 4. Discussion	Lecture Hall in Yifu Building
16:20-16:40	Coffee/tea break	
16:40-17:40	**Workshop theme 5: Protect consumers in a global e-Commerce world** **Moderator:** Mr. Me. Moshiur Rahman, Expert representative from Bangladesh 1. Invitation Report: Secretary General, Chong Qing Consumer Protection Committee 2. Invitation Report: Dr. Gu Qifeng, Deputy Dean, BiMBA Project, National Development Research of Beijing University 3. Invitation Report: Mr. Zian Shah Kabir, Expert representative from Bangladesh 4. Discussion	Lecture Hall in Yifu Building
18:30-19:30	Welcome dinner	CQUPT Hotel
11 November		
Time	**Agenda item**	**Venue**
8:30-11:30	Investigation: Smart health and broadband village	Chongqing Tongnan
12:00-13:30	Lunch	Chongqing Tongnan
14:00-15:30	Investigation: Smart school	University Town
18:30-19:30	Dinner	CQUPT Hotel

Workshop theme 1: Are current consumer protection measures suitable for connecting the world and the Internet of things?

Moderator: Dr. Chen Jinqiao, Co-Rapporteur of Question 6/1 for ITU-D Study Group 1, Deputy Chief Engineer of CAICT, MIIT

Invitation Report: Mr. Chen Yuping, Secretary General, National Telecom User Committee:

[Presentation]

Invitation Report: Ms. Yin Yuan, Vice-President, China Telecom Chongqing company *[Presentation]*

Invitation Report: Mr. Wu Suoning, Chief Editor, People's Post

Discussion

Workshop theme 2: Can digital platform enable consumers and entrepreneurs?

Moderator: Mr. Bohyun Seo, TDAG Vice-Chairman, Expert from the Republic of Korea

Invitation Report: Ms. Sofie Maddens, Head of Regulatory and Market Environment Division, ITU *[Presentation 1] [Presentation 2]*

Invitation Report: Vice-President of China Mobile Chongqing Company

Invitation Report: Mr. Liu Xuehui, Product Manager, Incorporated China Branch, Qualcomm *[Presentation]*

Discussion

Workshop theme 3: information consumption in Chongqing

Moderator: Mr. Wu Suoning, Chief Editor, People's Post

Invitation Report: Leader of Chongqing Economic and Information Committee *[Presentation]*

Invitation Report: Ms. Xu Xiaoli, Inspector General, Consumer experiment in North East Asia, Ericsson *[Presentation]*

Invitation Report: Prof. Wan Xiaoyu, Dean, School of Economics and Management, Chongqing University of Posts and Telecommunications *[Presentation]*

Invitation Report: Representative from Chongqing internet company *[Presentation]*

Discussion

Workshop theme 4: channels available for payment – international mobile roaming

Moderator: Mr. Zhou Jianming, Senior General Manager, China Mobile Group *[Presentation]*

Invitation Report: Prof. Zeng Jianqiu, Beijing University of Posts and Telecommunications *[Presentation]*

Invitation Report: Ms. Venerande Mukamurera, Expert representative from Rwanda

Invitation Report: Vice-President of China Unicom Chongqing Company

Discussion

Workshop theme 5: protect consumers in a global e-Commerce world

Moderator: Mr. Me. Moshiur Rahman, Expert representative from Bangladesh

Invitation Report: Secretary General, Chong Qing Consumer Protection Committee

Invitation Report: Dr. Gu Qifeng, Deputy Dean, BiMBA Project, National Development Research of Beijing University

Invitation Report: Mr. Zian Shah Kabir, Expert representative from Bangladesh

Discussion

– Expert meeting for Q6/1 and workshop on consumer protection report can be found at: http://www.itu.int/oth/D0708000010/.

Benin workshop in March 2017

The International Telecommunication (ITU) Regional Forum on Consumer Information, Protection and Rights for Africa organized by the Telecommunication Development Bureau (BDT), in collaboration with the Government of the Republic of Benin, the Network of African Consumers in ICT (RéCATIC) and the Regulatory Authority of Postal and Electronics Communications (ARCEP) provided a platform for sharing experiences to address existing as well as emerging challenges amongst telecommunication, broadcasting and converged ICT policy makers, regulators and the industry in the area of consumers' rights and protection in the digital age.

Table 3A: Agenda for Benin workshop in March 2017

Day 1: Tuesday 14th March	
9.00-9.30	Registration
9.30- 10.15	**Opening Ceremony** Welcome address: ***Romain Houéhou, Secretary-General ,RéCATIC*** Keynote address: ***Ali Drissa Badiel, ITU Area Representative, West Africa*** Keynote address: ***Flavien Bachabi, Chairman, ARCEP*** Opening address: ***H.E. Rafiatou Monrou, Minister Digital Economy and Communication, Benin***
10:15-10:45	**Coffee Break**
10:45- 12:00	**Session 1: A Macro – Overview – ICT4SDG and Consumer Protection:** This session reviews the role of ICTs as a foundation for economic and social development-What do SDGs mean for consumers in Africa and what is the role of ICTs in achieving the SDGs 1.1 Global ICT trends, SDGs and implication for Consumer –***Ali-Drissa Badiel, ITU*** 1.2 International, Regional & global partnership for SDGs – ***UNDP Benin*** 1.3 Sustainable Development: Using What We Have to Get What We Need – ***Shola Sanni, Policy Manager, GSMA-Africa*** 1.4 The Equity Challenges –***Russell Southwood – Balancing Act Africa***
12:00-13:00	**Session 2: Institutional Frameworks and Practices – Policy, Regulation & Advocacy:** The session explores the current concepts and issues pertaining to the implementation of right protection & institutional frameworks at global and regional level and national level. 2.1 ***Meriem Slimani, Standardization and Development Coordinator, African Telecommunications Union (ATU)*** 2.2 ***Representative of ARCEP Benin / ReCATIC*** 2.3 ***Reuben Gwatidzo -Consumer Advocacy Zimbabwe***
13:00-14:00	**Lunch**

14:00- 15:30	**Session 3: Connecting the Unconnected: Technology and Financing** **Developments and Challenges:** The session will explore New technologies for developments: infrastructure, broadband rollout plans, IPv6, Internet exchange points (IXP) and the impact on international transit in Africa; How can technology lead to content creation and vice-versa and the need to revising UAS to achieve connectivity. 3.1 Global and regional initiatives and approaches – ***Ali-Drissa Badiel, ITU*** 3.2 National frameworks and practices; Burkina Faso case study by ***Joseph NANA, CT-MDENP*** 3.3 Gambia – The "Bantaba Outreach' by ***Solo SIMA, Director Consumer Affair PURA***
15:30- 16:00	**Coffee/Tea Break**
16:00- 16:45	**Session 4: Round table**
	Moderator: Russell Southwood The round table examines the policy, regulatory and advocacy gaps, challenges and solutions for Consumer Protection and Rights in Africa. 4.1 ***Aminata Kaba, Directrice Générale Adjointe, Autorité de Régulation des Postes et Télécommunications (ARPT)*** 4.2 ***ARCEP/Benin*** 4.3 ***Ghislaine Carine Essomba Avom – Central Africa Telecommunications Regulators Assembly (ARTAC)***
Day 2: Wednesday, 15th March	
9.00-9.15	**Recap of day 1 session – Chairman of the forum/ITU**
9.15- 10.30	**Session 5: Consumer protection and Quality of service –** This session will examine the consumer protection measures adopted in the broadband & IoT era with a focus on QoS and QoE. 5.1 QoS and the Digital Tsunami ***Shola Sanni, Policy Manager, GSMA Africa*** 5.2 QoS frameworks, audit and assessment of QoS parameters for digital services, enforcement and redress mechanisms – Country case studies a. Burkina Faso – ***Joseph Nana, CT-MDENP*** b. Ghana – ***Abed BANDIM – NCA*** c. Nigeria – ***Hadiza Kachallah – NCC***
10:30-11:00	**Coffee break**

11:00- 12:00	**Session 6: Consumer Affordability and Entrepreneurship –** The session will examine the tariff monitoring and regulatory approaches adopted to protect consumers from excessive pricing, the mechanisms for enhancing consumer price awareness in the digital environment including price bundles and OTTs. 6.1 The App Economy and implication for consumer protection and Rights – ***Andre ONANA – ESMT*** 6.2 International mobile roaming, tariff and costing practices – ***Anne Rita Ssemboga, ITU*** 6.3 Price awareness and monitoring approaches for consumer protection Country experience: a. ***Reuben Gwatidzo – Consumer Advocacy Zimbabwe*** b. ***Suzy Owona – ART Cameroon***
12:00- 13:00	**Session 7: Platforms to empower consumers and entrepreneurship** – Case studies on digital financial inclusion: 7.1 Global Symposium paper on DFS – Ms. Anne Rita Ssemboga ITU, 7.2 Best practices: country experience, operator experience a. Cote d'ivoire – ***Peya Bridgette*** b. Benin central bank c. MTN Mobile Money SA/ASMAB
12:45- 14:00	**Lunch break**
14:00- 15:30	**Session 8: Emerging issues for consumers' for online protection** – Session examines how consumers can be protected in a global world of e-commerce (mobile devices, mobile/online payments, counterfeit devices). 8.1 Global consumer protection of e-Commerce – ***Andre Onana – ESMT*** 8.2 Safe & Secure Mobile Experience: The Key Issues – ***Shola Sanni, Policy Manager, GSMA-Africa*** 8.3 Country experience – ***Gwa Tobbie Mohammed, NCC, Nigeria***
15:30- 16:00	**Tea break**
16:00- 16:45	**Session 9- Round table discussion – Marking the World Consumers Rights Day -Theme: Building a digital world consumer can trust.** **Moderator:** ***Abile Romain Houehou, ReCATIC*** **Panellists:** a. ***Agathe Affougnon*** b. ***Robin Accrombessi*** c. ***Hervé Guèdègbé*** **d.** ***Russell Southwood, Balancing Act***
Day 3 Thursday 16th March, 2017	
9.00-9.15	**Recap of day 2- Chairman of the forum**

9:15- 10.30	**Session 10: Child Online Protection –** The session presents COP at the regional and international level highlighting the importance of international cooperation and regional harmonization. 10.1 International cooperation and COP Guidelines, ***Anne Rita Ssemboga ITU*** 10.2 Policy and Practice- ***Siakou Fall, Data Protection Commission CDP, Senegal*** 10.3 The SADONUM Platform- ***Fatou Ndiouck, BOYE***
10:30-11:00	**Tea break**
11:00- 12:00	**Session 11: Effective Information, education and communication strategies –** The session will explore policy, regulatory and industry initiatives undertake to empower consumers in Africa and enhance their ICT knowledge and skills.
	Country case study 11.1 Consumer Out Reach Programs in Uganda – ***Ibrahim Bbossa, UCC*** 11.2 ICT Education and consumer outreach in Rwanda – ***Vénérande Mukamurera, RURA*** 11.3 The Kitsong and Digital literacy Program for Botswana –***Suzan D. Jacobs, BOCRA***
12:00- 13:00	**Session 12: Round table – Take home:** Collaborative partnerships models and approaches for consumer Information Protection and Rights for Africa- Requirements and way forward- **Moderator:** ***Aminata Kaba, Directrice Générale Adjointe, Autorité de Régulation des Postes et Télécommunications (ARPT)*** ***Anne Rita Ssemboga, ITU Presentation: collaborative Regulatory models*** **Panelists:** a. ***Abile Romain Houehou, ReCATIC*** b. ***Mariem Slamini, ATU Representative*** c. ***Shola Sanni, GSMA-Africa***
12:45- 14:00	**Lunch break**
14:00- 15:30	Closing Ceremony

The Forum was attended by 131 delegates from 21 countries including regional institutions and academia such as African Telecommunications Union (ATU), Ecole supérieure multinationale des télécommunications (ESMT) and GSMA-Africa. All presentations and materials are available at the Forum Website: http://www.itu.int/en/ITU-D/Regulatory-Market/Pages/Events2016/Benin/Home.aspx.

The forum reviewed a number of topical issues including:

- An overview of ICT4SDG and Consumer Protection and consumer protection and rights for Africa;
- The institutional frameworks, policy, regulation and advocacy for consumer protection at global and regional level and national level;
- Connecting the Unconnected: Technology and financing developments and challenges for infrastructure, broadband rollout plans and the need to revising UAS to achieve connectivity;
- Consumer protection and Quality of Service in the broadband & IoT era;

- Consumer Affordability and Entrepreneurship. The session examined the tariff monitoring and regulatory approaches adopted to protect consumers from excessive pricing, the mechanisms for enhancing consumer price awareness in the digital environment including price bundles and OTTs;
- Platforms to empower consumers and entrepreneurship: Case studies on digital financial inclusion;
- Emerging issues for consumers' for online protection, examining how consumers can be protected in a global world of e-commerce (mobile devices, mobile/online payments, counterfeit devices);
- A round table discussion in commemoration of World Consumers Rights Day whose theme was 'Building a digital world consumer can trust";
- Child Online Protection;
- Effective Information, education and communication strategies to empower consumers in Africa and enhance their ICT knowledge and skills.

1. The Forum acknowledged:
    - The Commemoration of the World Consumers rights Day Celebration which featured a round table discussion with a theme building a digital world consumer we can trust" with a call for increased cooperation at national and regional level on the promotion of consumer rights and advocacy.
2. The Forum noted:
    - The contribution of ICTs and particularly of the mobile sector in Africa to the attainment of the SDGs in particular by facilitating direct employment and enhancing efficiencies to all sectors of the economy;
    - The slow rate of digital transformation due to inadequate infrastructure, affordability, gender and rural urban inequities – this affects the potential and impact of ICTs for SDGs;
    - With the growing economic and social importance of digitalization, there is a need to protect consumers using Internet services and to ensure that they can continue to use these services safely and securely. Safeguarding children & vulnerable persons online, mitigating fraud and security threats, as well as the sale & use of counterfeit devices are major concerns for consumers in Africa;
    - The inadequate legal and institutional frameworks for ICT consumer protection at regional and national level and the limited support provided by Governments and Regulator to ICT Consumer Associations and networks are barriers to effective consumer protection when using ICTs;
    - QoS and QoE remain a major concern for consumers in the region. This is heightened by an exceptional demand for data as well as by inadequate investment in infrastructure to match the demand and additional supply constraints such as high cost of international internet connectivity, insufficient power, counterfeit and poor quality networks and devices;
    - The growing significance of the APP economy in Africa; governments and regulators are still struggling to formulate responses to the multifaceted phenomenon; institutional frameworks, competition and consumer laws are lagging behind;
    - Traditional voice services have definite measurement criteria for tariffs and monitoring usage – i.e. per second or per minute call, the tools and mechanisms for monitoring data and bundled tariffs and the usage of data are not definitive and not known to the majority of ICT users in the region.

3. The forum adopted the following guidelines and recommendations;

- Strengthen partnerships between stakeholders to create knowledge exchange platforms and dialogue at national, regional and international level for consumer protection and rights in Africa;
- Raise awareness of the ITU-D Global Symposium for Regulators 2014 Best Practice Guidelines (GSR14) as well as of ITU-D Resolution 64 (Rev. Dubai, 2014) and ITU-T Resolution 84 (Hammamet, 2016) on consumer protection at national and regional level and to integrate the protection and information on consumer rights in Africa into ITU activities;
- Formalize the organization of a Forum on Consumer Protection to be held at least once every two years;
- Promote the establishment of consumer associations, their professionalism, and assist in building their capacity building at national, sub-regional and regional levels;
- Establish effective mechanisms for education, awareness raising and dissemination of information on issues such as QoS parameters, tariffs, safety and use of internet in particular for children, women and people with disabilities;
- Adopt an inclusive approach at international, regional and national level for the promotion and implementation of SDGs, calling upon policy makers, regulators to integrate SDG targets in their national plans and to bring consumer interests and rights at the center of discussions of all socio economic development and policies;
- Expand Universal Access Strategies to include the promotion of consumer rights, information, education and awareness, particularly focusing on security and safety.

Annex 3: Analysis of the Questionnaire on numbering misuse

The survey questions can be found in the associated Circular letter at: http://www.itu.int/md/D14-CA-CIR-0009/.

How are telephone numbering and associated resources managed (allocate, audited and withdrawn) in your country?

All of the respondents indicated that there was the concept of control over numbering resources. This was done either through primary legislation or regulations. There were differences in the approaches that were taken, with some Member States indicating that there were charges involved as part of the management of the allocation.

There was some variation in the detail that was provided. In some cases the respondents cited ITU-T recommendations as directing the development of national rules. In other cases the respondents appeared to have different management responsibilities. For example, some respondents appeared not to have the ability undertake annual audits or reclaim numbers and other resources if appropriate.

Charging for the allocation of numbers was by no means universal. However, as this was outside of the intent of the questionnaire, and at a level of detail not sought, no conclusion is offered on this issue.

Is there a National Telephone Numbering Plan, outlining the use that can be made of national telephone numbers and associated resources?

All but one of the responding countries had a National Telephone Numbering Plan.

Are details of the National Telephone Numbering Plan and associated resources that have been allocated made available within your countries or notified to the ITU-T?

The majority of respondents make the information available both nationally and notify the ITU.

What are the national rules for managing (allocated, audited and withdrawn) numbering and associated resources?

The information received was varied. Some of the respondents indicated where further information could be found, whilst others provided the detail of the management process. With those that provided the further detail of the national management process there was diversity of the environment in which the processes occurred. This reflects the national approach to the management of numbers.

What experiences do you have of misuse of other associated resources e.g. SIM BOX? Others? Please provide details.

The focus of many of the answers to this question when experience of misuse was acknowledged was on SIM Boxes. It appears from the responses that misuse of SIM box is most prevalent in many Member States in Africa. There were some occurrences in the Caribbean.

The response to the issue raised by SIM box fraud varied between those Member States. There was recognition that operators themselves are taking action, that national guidelines to combat illegal SIM box activity existed. A further point that was noted was that “re-origination” was used in association with by-pass. Associated with this was the role of Calling Line Identification in association with SIM boxes. One country had banned “spoofing” of CLI.

In one instance a respondent provided details of the positive use of SIM boxes.

In at least one case it would appear that the instance of the number misuse was related to exploitation between the length of the overall numbers and the number of digits required for analysis for routing and charging purposes.

Any other comments?

Whilst many of the respondents indicate that there were no other comments or issues to be raised, those that did respond covered a number of issues. These issues included identification of misuse of numbers based on an exploitation of the telephone numbers allocated (as opposed to the number required for analysis), and the need for continuous review of the numbers assigned.

Also identified was the ability to fight against misuse requiring the systematic identification of all subscribers and the tax rate for international incoming calls. Other issues that were cited included the role of CLI and the lack of proper regulation of international telecommunication traffic. It was also suggested that transportation of SIM cards be prohibited.

In parallel to these issues being raised several respondents indicated a continuous activity to improve the national regulatory environment to address these issues.

Annex 4: Selected country cases

Argentina

The National Plan for the Development of Competitiveness and Quality Conditions of Mobile Communication Services establishes that telecommunication/ICTs and media services networks should be expanded to provide more and better services to consumers at competitive prices and higher quality.

To this end, the current State policy aims to accelerate the Sector's growth and development fostering competition in the market and proposing changes in the legal and institutional framework through clear rules, which ensure sustainability and predictability in order to restore the pace of investment in the Telecommunications/ICTs market, and to combat any type of market distortion.

In that sense, the Sector is undergoing a paradigm shift because this new regulation aims to ensure competitiveness, which will contribute to improve the quality of services for the well-being of consumers/users, increasing productivity and promoting development and innovation.

The Ministry of Communications, as Enforcement Authority, is currently developing and updating various Regulations aiming to protect and defend customers and users rights.

- The Mobile Communication Service General Regulations, which shall provide for the introduction of mechanisms, which allow customers to access information on the quality of the services being provided and obtain bonuses and/or compensation in case of non-compliance with established quality levels;
- The Spectrum Management and Control Regulations, which shall introduce greater competition among all services;
- The National Chart of Spectrum Bands Allocation in order to increase the availability of frequencies for the provision of mobile communication services;
- The National Interconnection and Licensing Regulations with the aim of generating greater sustainable competition in all networks and services, encouraging market entry for state-of-the-art services in the framework of technological convergence;
- The Number Portability Regime, which shall be revised and updated;
- The Universal Service General Regulations establishing the National Communication Entity, an autonomous body under the Ministry of Communications, as the organization in charge of designing the various programs to be funded from the Universal Service Fund; and
- The National Contingency Plan for disaster response.

This National Plan was launched in contrast to the macroeconomic context of the last years of the previous government, which showed growing difficulties to import the necessary capital goods for the provision of mobile communication services.

Lack of investment in infrastructure, delay in the granting of licenses and in the allocation of resources for the provision of services or in the approval of company control changes, among others, resulted in poor quality mobile communication services, particularly voice.

This National Plan is based on national regulations which provide that telecommunication and ICTs service providers may, and in some cases have to, share network infrastructure, buildings (terraces, roofs, towers, lots and/or structures), facilities, and associated resources, to achieve greater efficiency.

In this sense, the National State has many properties that makes available to the public/private sector operators for them to install equipment and infrastructure taking into account the growing development and capillarity of telecommunication networks, which generate increasingly difficult access to

sites where to install both antenna structures and necessary equipment for the normal operation of Mobile Communication Services.

The State Property Administration Agency (AABE) shall be the only organization that may grant permits for the precarious use of real property owned by the National State, regardless of their jurisdiction of origin. To this end, telecommunication licensees and independent companies sharing passive infrastructure will be provided a list of state properties with potential suitability for the installation of shared infrastructure.

In accordance with the legislation in force, independent companies sharing passive infrastructure do not require a license, authorization or permit to carry out their activity, without prejudice to the non-discrimination obligation.

To this end, the Judicial Power of the Nation, the Legislative Power of the Nation, the Provinces, the Autonomous City of Buenos Aires, the Municipalities, the Villages and the National Universities are invited to adhere to the above mentioned to facilitate the utilization of state assets for the deployment of telecommunication/ICTs and media service networks.

Another important feature is that the National Plan, through the National Communication Entity, foresees taking non-ionizing radiation measurements to control that they are within levels that are not detrimental to human health.

The Ministries of Communications, Environment and Sustainable Development, and Health will carry out research on non-ionizing radiations and the application of new technologies for health protection, and will carry out outreach campaigns with the participation of the private sector and NGOs with experience in the field.

Benin

In order to protect the rights and interests of telecommunication service users, ARCEP-BENIN during 2015 began a process of auditing standard contracts and general service conditions of fixed and mobile telephone operators and of Internet Access Providers (IAPs).

The results of this activity have made it possible to identify failings which could leave these standard contracts and general service conditions open to abuse as regards consumers and open the way to recurrent complaints.

The audit is undertaken as a preliminary to the approval of standard contracts and operators' general service contracts. This mission was authorized by a decision establishing the list of mandatory provisions in model contracts or general conditions for the provision of telecommunication services for consumers in the Republic of Benin.

The following points must be included in standard contracts or general service conditions, in accordance with article 3 of the regulator's decision:

- Definitions of technical terms or terms with specific meanings;
- Object of the contract or general conditions for providing services, defined clearly and precisely;
- Contract duration and method of renewal;
- Conditions of subscription and service provision;
- List of documents required;
- Obligations of the customer;
- Obligations of the operator;
- Confidentiality clause;

- Information relating to equipment, in particular concerning precautions for use;
- General conditions of operation, and specifically those relating to protection of personal and medical data;
- Quality of service clauses;
- Prices or means of price setting;
- Criteria for billing and conditions of payment;
- Financial guarantees, where necessary;
- After-sales services;
- Warranty clauses and so on.

Once the decision was adopted, the operators concerned were informed with a view to ensuring that their standard contracts or general service conditions would be aligned with it.

Adoption of this legal instrument provides ARCEP-BENIN with the means of approving and monitoring standard contracts or general conditions for the provision of electronic communication services, ensuring greater respect for consumer rights. It enables the regulatory authority to investigate complaints from consumers or consumer organizations, as required under article 4 of Decree 2014-599 of 9 October 2014 concerning the mandate, organization and operation of ARCEP-BENIN.

Partnership of ARCEP-BENIN and consumers' associations

In its relations with consumer associations, ARCEP-BENIN carried out a census which in 2010 identified eight consumers' associations in the ICT sector.

Following the census, the consumers' associations formulated a number of demands addressed to the regulator with a view to:

- Reflecting consumers' interests in the regulator's activities;
- Improving quality of service;
- Ensuring transparency with regard to charges;
- Ensuring security of personal data;
- Ensuring access for consumers to telecommunication services in the context of universal service;
- Improving awareness of consumers rights and obligations;
- Ensuring assistance from the regulatory authority in providing feedback to the public on training received;

ARCEP-BENIN has noted several types of requirement among consumers' associations concerning:

- Their strong desire to improve their knowledge of the sector; and
- The need to improve their knowledge as regards consumers' rights and obligations in connection with easily investigated complaints, in accordance with current laws and regulations.

In order to encourage consumers' associations to share in the development of the telecommunication/ICT sector, a framework for collaboration has been put in place and has facilitated a number of activities, including:

- A capacity-building workshop (3-4 February 2011);
- Two consumer satisfaction surveys in 2011 and 2013;
- Approval of an information leaflet on consumers' rights and obligations, in collaboration with partner associations of consumers (20 December 2011);

– National seminar on the effects of non-ionizing radiation and protection of the public (24, 25, 26 April 2012);
– Audit of the mobile telephony operators' customer services (October 2013).

A document base has been set up and made available to consumers' associations and ICT services and can be used by them as a basis for training. It comprises:

– The telecommunication services guide for users;
– Flyers on consumers rights and obligations;
– Question and answer information sheets to help expedite processing of users' complaints.

These measures are reinforced by:

– Opening of a customer complaints desk;
– Setting up a toll-free complaints line (131);
– Setting up a Facebook discussion forum for ARCEP-BENIN and users to express their concerns on service provisions.

On 28 November 2014, this collaborative framework was formalized in a framework cooperation agreement between ARCEP-BENIN and the eight partner associations of consumers. This agreement provides for the implementation of projects of common interest by partner associates with funding from ARCEP-BENIN.

Brazil

The provision of convergent telecommunication services has many implications on the consumers rights, since most of convergent service operators have been dealing with their clients separately, as customers of a single service, even when they contracted a bundle. From customer's point of view, it is hard to understand different rules applied to similar services provided by the same operator over the same network infrastructure. Therefore, a redefinition on consumer protection needs, through providing them a better understanding and a clearer view of their rights regarding telecommunication services must be a priority.

For that reason and focusing on solving repeated complaints, empowering consumers and unifying the regulation terms of fixed and mobile telephony, TV and broadband by turning them into one convergent resolution, the National Telecommunication Agency – ANATEL approved on March, 2014, the General Regulation on Consumer Rights of Telecom Services (GRC), Resolution nº. 632/2014-ANATEL. In order to stimulate competition and promote balance to the market, smaller operator has lighter obligations. Considering the complexity of new rules it was fixed different dates for them to be in force. The first term was July 8, 2014.

New rules are as follows:

– **Automatic cancellation:** Cancel a telecommunications service became simpler after the new regulation. Even without talking to an attendant, the service can be canceled by internet or by typing a number on the call center through the interactive voice response system. The automatic cancellation must be processed by the service provider in a maximum of two working days. During this period, consumer can regret and the provided service will be charged. Consumers are warned that this ease is only for canceling the entire contract (Article 15 of the RGC).
– **Instant call back for dropped calls:** The provider will be required to return the call every time the phone interaction between the consumer and his call center drops. The service provider is required to return the call at least one time within 5 minutes to the consumer. (Article 28 of the RGC).

- **Prepaid credit:** minimum 30 day expiration. All credit for prepaid mobile services must have a minimum expiration term of 30 days. The companies must also offer options with expiry date of 90 and 180 days in their own stores and at electronic recharging points. Whenever consumers want to buy credits, it will be possible to check the expiration term through SMS or by calling a number provided by the company (Article 68 of the RGC).
- **Promotions apply to all:** Many providers have promotional offers (with lower prices or even some freebies) to capture new customers. With the new regulation, anyone, customer or not, has the right to join any deal advertised by the service provider. If the interested consumers are already clients, they need to be aware about the possibility of having an early termination fee in their contracts (Article 46 of the RGC).
- **Transparency in offers:** Before formally closing any contract, the service providers must give consumers a short summary with clear and organized information about the offer. It should be informed, for example, whether or not the announced price is valid within a specific period, presenting details of when it starts, when it ends and what price will be practiced after the end of the promotion (Article 50 of the RGC).
- **Billing Related Complaints:** Whenever a customer reclaim about a billing and has not yet paid the invoice, the company will issue a new billing document without the disputed value and then analyze the situation. If it was already paid, and the analysis concludes that the value has been improperly charged, or if the company does not respond the claim within 30 days, the customer will be entitled to receive the claimed amount in double. If after the payment it was verified that the consumer was properly charged, the consumer will return the amount received. (Articles 83 and 85 of the RGC).

On January 31, 2014, ANATEL launched a new Consumers website: www.anatel.gov.br/consumidor. It was created to convey, in simple language and few technical terms, the most relevant information about telecommunications service and consumers' rights. The website intents to narrow the relationship with telecom consumers and provides better information on sectorial issues of consumers' interest.

Central African Republic

Legal framework of CEMAC

Within the area covered by CEMAC (Central African Economic and Monetary Community), of which the Central African Republic is a member country, Directive 07/08-UEAC-133-CM-1 of 19 December 2008 established the legal framework for protection of the rights of users of electronic communication networks and services, guaranteeing the rights of users with respect to their private life, the right to information, service quality and performance, dispute resolution between subscribers and operators, processing of personal data and protection against cybercrime and cyberattacks.

In addition, CEMAC Regulation 21/08-UEAC-133-CM-18 further strengthens and defines the foundations for harmonization of the regulations and regulatory policies governing electronic communications in this community space.

Among the objectives of this subregional regulatory framework are the following:

- Introduction of universal services;
- Full sector liberalization with high-quality services at affordable prices;
- Non-discriminatory access to ICT services;
- Meeting the needs of vulnerable social groups, particularly persons with disabilities;
- Strengthening the rights and obligations of consumers;
- Sustainable consumer protection.

National legal framework

The Central African Republic is part of the CEMAC community space. Thus, in addition to international directives and regulations, those adopted at the community level have to be applied at the national level. With respect to the objectives established by the two above-mentioned community texts, Act 07.020 of 28 December 2007 regulating the telecommunication sector in the Central African Republic was deemed to be inconsistent not only with Regulation 21/08-UEAC-133-CM-18 of 19 December 2008, but also with five CEMAC Directives, particularly Directive 07/08-UEAC-133-CM-1 of 19 December 2008.

Thus, a Draft Law on Digital Communications in the Central African Republic, jointly revised and approved by operators, consumers and the National Commission for Texts, has been elaborated and is currently before the Government. It will very shortly be brought before the future National Assembly for adoption at the end of the current political transition.

This draft law is intended in particular to strengthen:

- Universal access;
- Non-discriminatory access to ICT services;
- The rights and obligations of consumers;
- Quality of Service;
- Protection of consumers against exposure to electromagnetic fields;
- Child Online protection;
- Personal-data security;
- Respect for privacy and confidentiality;
- Women's rights and the gender dimension;
- Cybersecurity and the fight against cybercrime and cyberattacks;
- The encouragement of young women to take up careers in ICT, through ITU's "International Girls in ICT Day", which the Government intends to adopt.

Measures taken by the regulator in the interests of consumer rights protection and with respect to the Draft Law

Aware of the need for legislation covering protection of the rights of electronic communication consumers, the regulator has taken measures to:

- Identify all associations of electronic communication consumers;
- Organize a five-day workshop on the rights and obligations of electronic communication consumers;
- Conduct a regular audit of the quality of service of electronic communication operators;
- Ensure the introduction of legislation that takes account of the CEMAC directives and regulations and of the GSR14 guidelines on the rights of electronic communication consumers;
- Create a consumer service in the new structure of the Telecommunication Regulatory Agency established in December 2015, the duties of which include:
    - Posting, on the Telecommunication Regulatory Agency website, of an online guide and guidelines on the protection of telecommunication and ICT service consumers;
    - Fostering, through online channels, best practices, standards, technical guidelines and procedures for making ICT networks less vulnerable and less exposed to threats;

- Recognizing consumers' right of appeal and the option to refuse functionalities and services;
- Establishing free phone numbers for use by consumers;
- Producing brochures on the rights and obligations of consumers;
- Making consumers aware of the potentially harmful effects of ICTs on health, education, etc.;
- Regularly informing consumers, including minors, about the risks of exposure to electromagnetic radiation from ICT products;
- Protecting minors, women, persons with disabilities and indigenous and tribal people;
- Making available online, and keeping up to date, information on the protection of minors with respect to ICTs;
- Monitoring the tariffs applied and ensuring fair competition;
- Establishing a partnership agreement between consumer associations and the Telecommunication Regulatory Agency;
- Following the GSR14 guidelines and regularly assessing their implementation.

China (People's Republic of)

With the high speed development in the continuous ten years, China telecommunication industry maintains its No.1 place and enhances the leading position. The huge customer has brought the operators and service providers' big chance, as well as the variety and personality of services. More challenge has risen up in the field of fair competition, QoS, reasonable tariff packages, and disputes settlement. Chinese government bodies and regulator are trying their best to establish regulations, perfect organizations, optimize service process and working mechanism, and enhance public supervision. A relative systematic institutions of telecommunication consumer protection have been set up.

First of all, the different multiple layer of laws and regulations have come into being. There are three core laws published by national congress which are called The Act for Consumer's Rights (2013 amendment), The Resolution for the safeguard of internet (2000), and The Resolution for ensuring the protection of network information (2012). In addition, The Telecommunication Regulations of P.R.C was published by the central government State Council as the basic rules for telecommunication market. MIIT also issued a series of departmental rules to regulate the consumer-protection such as The Standard for Telecommunication Service (2012) and the regulations for personal information protection of telecommunication and internet users (2013). Relative government bodies such as NDRC (National Development and Reform Commission) and SAIC (State Administration for Industry &Commerce) also released some rules for the management of providers and consumers.

Secondly, trilateral parties including government bodies, association organization and the public have been combined to shape the frame of the protection of consumer rights. At the government level, MIIT, NDRC, SAIC and relevant organizations work together to regulate the field of market entrance, network interconnection, QoS, technology standard, tariff, and dispute settlement. At the third party level, the enterprises involved in the provision of telecommunication and information services are launching the professional organizations whose name are called China Association of the Communication Enterprises and Internet Society of China. They are collaborating with NTUS (The National Telecommunication User Society) belonging to China Consumers' Association to participate the activities of QoS supervision and market inspection. At the society level, National Telecommunication User Appeal Center has been established for more than ten years with the guidance of MIIT. Since 2002 the unified number 12300 has been put into practice for the convenience of customers which is dealing with the problems related to operators headquarter. The local users can get additional assistance from the local center placed at province level.

In addition, a quarterly announcement for telecommunication service quality has been enforced by independent academic institution for at least ten years. It has become the symbol of operator's service quality. Moreover, in order to help the media and public better supervise the activities of operators and service providers, the regulator approved NTUS to invite the lawyers, economists, and engineers as its consultants.

Côte d'Ivoire (Republic of)

In Côte d'Ivoire, Article 168 of Ordinance 2012-293 on telecommunications/ICT provides that operators and service providers shall wait a minimum period of three months before reallocating a cancelled telephone number.

Despite the implementation of subscriber identification by operators and service providers, unidentified SIM cards continue to turn up, or cards are activated and then passed from person to person, with the result that judicial requisitions that the regulatory authority is required to transmit to network and service operators in the search for wrongdoers are in some cases unsuccessful.

The search for information concerning a number whose owner is being pursued can prove ineffective for several reasons – for example persons identified on the basis of SIM cards that have been lost or stolen, or whose owners have died. In such cases, the true identity of the wrongdoer is unlikely to be found.

Beyond such cases, which result in false identification and stalled investigations, the fact that a number may change hands several times can make it very difficult to secure accurate information on the identity of an offender or suspect.

As for the three-month waiting period to be observed before reallocating a number that is no longer active, there is a proven risk of the same number being identified four times in the same year, producing a chain of four successive holders of the same number. In such cases, a judicial requisition as part of a criminal investigation spanning more than one quarter is sure to run into difficulties if the holder of the number in question has changed during the same period.

This situation inevitably creates uncertainty and can result in the failure of judicial procedures and investigations.

One thing is for sure: the constant reallocation of numbers can result in innocent persons being caught up in an investigation that has nothing to do with them.

The following solutions are proposed in the interests of avoiding the kinds of judicial error to which the above situation can lead.

Solutions:

- Harmonize the time period for reallocating a number with the time taken to enter it in the directory;
- Provide that any number appearing in the directory cannot be reallocated until one year has elapsed;
- Grant a notice period of three months to the holder of a number that appears in a directory;
- Judicial enquiries relating to a given number must take account of the chain of successive holders of that number, since the current holder will not automatically be the author of any offences committed using that number.

Haiti

- An administrative circular letter from CONATEL has set up a unit for the protection of consumers of telecommunications services. The objectives of this unit are collecting consumers' claims and complaints, monitoring and making recommendations to the Directorate;
- From the outset, the unit has set itself the objective of: being functional, by defining a framework based on the principles of management effectiveness aimed at the functionality of the means of receiving claims and complaints as well as to inform the relevant actors about the existence of the unit and to define a mechanism for dealing with complaints.

Activities carried out:

- Establish a space to physically receive complainant consumers at CONATEL's subsidiary office;
- Implement and make functional a short code (189) for operators: Digicel and Natcom;
- Make available a form in both French and Creole to receive complaints;
- Contact CONATEL's decentralised offices to receive complaints;
- Training staff to ensure proper reception of complainants;
- Establish a database in order to archive efficiently the complaints received;
- Correspondence to operators to notify them about the existence of the CPC and to ask them to designate a contact person for the CPC;
- Create a guide for telecommunications consumers in Haiti.
- Since its implementation in July 2016 to date, the unit has received and processed an average of 20 complaints. People designated by the operators have been contacted for following-up the claims and complaints. Around 15 complaints were received in August 2016 and the number is improving. The operators involved have reacted positively. The CPC has, among other things, developed working procedures with operators for the treatment and follow-up. The existence of the unit gives a boost to improve the quality of the service provided by the operators as well as the treatment that their customers received.

Islamic Republic of Iran

Consumer rights as well as other economic issues, as well as underlying trends and mechanisms for consumers should be addressed by countries. The situation of consumers can be improved in terms of quality of service and incorrect usage pattern, thus avoiding mistrust of manufacturers.

In Iran, the Communications Regulatory Authority of Iran (CRA) is responsible for monitoring of licensees, as well as quality of service and pricing of information technology products and services. CRA is also responsible for telecommunications and information technology sector market structure including the liberalization of the sector and privatization issues. CRA is also responsible for defining and enforcing regulation in the sector. It helps both consumers and service providers by creating the enabling environment that defines rights and obligations of stakeholders and creates the environment to enable them to benefit from digital opportunities.

Information Technology section

- **Rules and policies**

CRA has defined rules and regulations governing relationships between service providers and customers in terms of delivering service in data transmission networks, focusing in particular on consumer

protection. CRA has included in telecommunication operators licenses a number of obligations relating to subscriber and consumer rights:

- Information on services and services rates must be complete and clearly presented to subscribers and consumers at no cost;
- An appropriate location should be considered for meeting and answering subscribers and consumers' demands with exact address and hours of such activity;
- In the event of a dispute between the licensee (licensee holder) and customers and subscribers, or if any of the sides does not fulfil its obligations, in the first stage, negotiations between the sides should attempt to resolve differences, and in case of disagreement, the investigating authority shall act in accordance with the license conditions;
- Licensees are obliged to establish technical facilities to meet the needs of subscribers to the extent possible.

– **Complaint resolution for ICT costumers**

- In order to increase customers' satisfaction in 2015, a free complaints system was established on each licensee's website upon the order of the Ministry of Communications and Information Technology. Such systems electronically register complaints to service provider organizations such ISPs and mobile operators in relation to services provided in the fixed telephone, Internet or mobile sectors.
- The overall time of handling complaints by the operator can be variable depending on the type of complaints and ranges between 6 days, 12 days, 20 days and 30 days (due to lack of sufficient technical equipment or tower installation or landline outages, etc.).
- The system shall manage the complaints electrically as a non-personal service as below:
  - The ability of recording the complaints electrically by using a portal from the IT service provider in the organizations' complaints system by real or legal persons;
  - Investigating complaints and performing the necessary measurements, electronically, by the operator or the Department of Communications Regulatory Authority in relevant area;
  - Responding to the complaint within 7 working days based on an expert assessment.

Radiocommunications sector

According to the granted licenses to mobile operators and WiMAX operators, CRA has created "the electronically recording complaints system" in order to address concerns from users and consumers and to respond to their complaints in relation to operators antennas and possible radiation, including:

– The ability of the complaints to be submitted to the organizations' complaints system by real or legal persons;

– Investigating complaints and performing the necessary measurements either by the operator or the Department of Regulatory and radio communications in the relevant area;

– Comments on complaints to be provided by the Atomic Energy Organization of Iran as the country radiation trustee with regards to the measurements results.

The satisfaction evaluation system in the field of IT services

The Communications Regulatory Authority (CRA) of the Islamic Republic of Iran, in order to enhance competition and to improve the quality of service, has created a system to assess user's satisfaction in the field of information technology services. Users can participate in the survey, and can cooperate in identifying strengths and weaknesses of operators. In addition, licensees and users can consult the results of the conducted survey on the organization portal after the end of each period. In this regard, the National Association of Consumer Rights offers Certificates of consumers' rights protection and

also provides awards to those who have played a significant role in the country's ICT industry and has been ranked highly in terms of the provision of services in order to increase motivation, competition between service providers and to increase consumer confidence.

Kazakhstan

Background

Provision of telecommunication services is governed by the Constitution of Kazakhstan, the Civil Code, Law No. 567 of 5 July 2004 on communications, Law No. 274-IV of 4 May 2010 on protection of consumers' rights, and Order No. 171 of 24 February 2015 of the Acting Minister for Investment and Development approving rules for the provision of communication services.

Reciprocal relations with users in the provision of telecommunication services are regulated by the Rules for the provision of communication services, which stipulate the conditions applicable to all the parties involved, procedures for concluding standard contracts for those services, and applications for such services, changing subscription terms, or obtaining additional services.

Cost and tariff for telecommunication services

Communication operators use a system of separate accounting of income, expenditure and assets deployed, in order to facilitate accounting of cost price for the basic types of services considered. The methodology of attributing costs, income and assets is based on the "Rules for separate accounting of income, expenditure and assets by communication operators for regulated forms of telecommunication services and other technologically related services, approved by Order No. 312-OD of the Agency for the Regulation of Natural Monopolies and Protection of Competition, dated 12 December 2003.

In setting tariffs for telecommunication services, communication operators are guided by the following:

- For services included in the List of universal telecommunication services – the Law on communications.
- For services included in the Register of entities subject to natural monopoly – the Law on natural monopolies and regulated markets.
- For services included in the Register of entities occupying a dominant position in a given commercial market – the Law on natural monopolies and regulated markets.
- For non-regulated services- prevailing conditions in the telecommunication service market.

Mexico

Background

In Mexico, the Constitutional Reform in the area of Telecommunications, Broadcasting and Economic Competition, published in the Official Gazette of the Federation on 11 June 2013, establishes, in article 6, section VI of the Constitution, that a new Act shall be passed setting out the rights of telecommunications users and audiences, along with mechanisms to protect them. The Federal Telecommunications Institute of Mexico (IFT) was created under this reform as an autonomous body with legal personality and its own property, having been set up on 10 September 2013. The new Federal Telecommunications and Broadcasting Act, published on 14 July 2014, includes two important chapters, one dealing with the rights of users and the other with the rights of users with disabilities, which set out the actions that IFT must take for the benefit of these user groups.

Action taken

In accordance with the current legal framework, IFT has taken specific action to give effect to the rights of telecommunication service users and provide proper follow-up, bearing in mind the need to

keep users informed and ensure that they have access to tools that make it easier to file complaints and compare the tariffs offered by different mobile operators, and also to establish equal access to telecommunication services by people with disabilities.

The actions taken are listed below:

- Comparison tool for mobile telephone service plans. This online tool is an information mechanism that IFT makes available on its Internet portal so that users can consult and compare in detail, quickly and easily, the current mobile telephone plans offered by virtual mobile licensees and operators.
- The tool enables users to compare post-payment plans and prepayment schemes, as well as view additional packages and identify those that are available for each mobile service plan offered.
- The online tool is informative and brings together the services offered by virtual mobile licensees and operators so that users can decide whether to subscribe to or renew services, reducing the time needed to visit web pages or customer centres individually.
- First survey of telecommunication service users. In April 2015, IFT presented its first survey to find out about patterns of use and the experience and satisfaction of telecommunication users. Information obtained from surveys enables an objective diagnosis to be made of the needs and interests of users of mobile telephony, fixed telephony, pay-to-view television and Internet services. Work is now under way on a second survey, the results of which will soon be published on IFT's web site (http://www.ift.org.mx).
- Comparable information reports. In June 2015, users were provided with a comparable information report on mobile telephony plans and tariffs which analyzed the services on offer until 31 May 2015, as published on the web pages of the licensees Lusacell, Movistar, Nextel, Telcel and Unefon, each of which is registered with IFT. In August 2015, another comparable information report on plans and tariffs offered by virtual mobile operators was published, analysing and comparing the prepayment services currently on offer.
- The Charter of Users' Minimum Rights is a document issued by IFT and the Office of the Federal Prosecutor for Consumer Affairs pursuant to article 191 of the Federal Telecommunications and Broadcasting Act, which sets out the minimum rights that users enjoy in accessing, subscribing to and using services.
- Operators are obliged to disseminate the contents of this Charter on their web pages and to provide it to users who subscribe to their services. This results in better-informed users who can speak up for their rights in the face of any violation.
- The "I'm a User" portal is an online tool that enables users to submit complaints about their provider swiftly in the event of shortcomings with the service or if they consider any of their rights to have been violated, thereby initiating a pre-conciliation procedure, which is monitored regularly by IFT and the Office of the Federal Prosecutor for Consumer Affairs in order to ensure that the rights of users are upheld. By eliminating overlapping between the two institutions, this tool makes protecting the most important element of the telecommunication ecosystem – the user – more efficient.
- The Communication and Distribution Strategy for Telecommunication Service Users has been implemented with the aim of distributing tools and data that may be beneficial to users, such as videos on products released by the Institute, including "Tariff Comparison Tool" and "What can you do with your unused credit?" Likewise, various products have been developed to raise user awareness of the proper use of telecommunication services. These have included "Mobiles and flying", "Communicating well in emergency situations" and "International Personal Data Protection Day".
- Guidelines on Telecommunication Service Accessibility for People with Disabilities. For the first time in Mexico's history, the Federal Telecommunications and Broadcasting Act sets out the

rights of telecommunication service users with disabilities. This legal framework gives IFT the mandate to issue the relevant guidelines. In line with this mandate, an initial draft was sent out to public consultation from 14 August to 25 September 2015.

Norway

Introduction

The Norwegian Centre for Cybersecurity (NorSIS)[72] has conducted a study to provide new insight in the Norwegian Cybersecurity culture. The study aims to develop grounds for effective cyber security practices and to improve national cyber resilience. Cyber criminals and foreign intelligence agencies have over time analyzed our cultural characteristics to disclose vulnerabilities to exploit. This gives them definite advantages. Therefore, we should feel obliged to increase our understanding of the dynamics in how a cyber security culture is shaped and how it affects the digitalization in businesses, sectors and on a national level. Human factors have long time been recognized as fundamental to cyber security, but so far efforts to understand this important phenomenon has been limited in scope. NorSIS sees mapping cyber security culture as a way of understanding yourself, your company and your country.

In order to create a resilient digital Norway, it is paramount that the government apply a holistic approach. The study shows that it will be necessary to increase the reach and quality of cyber education, establish effective online law enforcement, and engage private and voluntary sector in a struggle to increase the national "cyber hygiene".

Measuring cybersecurity culture

In creating a metric for measuring the national cybersecurity culture, there are at least two critical challenges: One is the question of terminology, i.e. what do we actually mean when we refer to "cybersecurity culture"? The other is the level of analysis, i.e. how can we identify a "cybersecurity culture" concept that is valid and applicable to both businesses and nations? That is to say that whilst the concept might be developed within the confines of industries and businesses focused on cybersecurity, also nations have "cybersecurity cultures". It may, however, not play out the same way. There is a huge gap in how "culture" is shaped and expressed depending on the level on which it is discussed. For example, whereas a business, an organization and an institution all have defined purposes and thereby measures, the scope of a nation is much vaguer.

Secondly, while business can actively tutor and educate their personnel in cybersecurity, citizens of a state cannot be equally monitored. Is it, then, possible to generate a general comprehension of "cybersecurity culture" that is equally applicable to business and nations?

We believe that measurements of cybersecurity cultures can benefit from a more comprehensive approach, taking a step back from simple registrations of whether employees open phishing-emails and rather look at the attitudes and perspectives towards technology and cyber security, and how this resonates with other core values, interests and abilities.

Key findings

The study is unique as we encompass a broad approach to cybersecurity culture, and because the scope is much larger than any study we are aware of. We worked with 29 partners in the public and private sector, and reached 150.000 individuals in Norway. Our key findings are:

– **Fear of cybercrime creates a chilling effect on the digitalization process**

Although most people (approximately 90 per cent) thinks that the police should handle online crime, far less (46 per cent) trusts that the police will be able to help them. The police reported in 2015, that a mere 13 per cent of individuals that are victims to online crime actually files a police report. At the

[72] Document SG1RGQ/264, "Creating a metric for cyber security culture", Norway.

same time, as many as 44 per cent thinks that individuals and activist groups has a role to play in the fight against online crime. Apart from the fact that such involvement may cause suspicion towards innocent, let the guilty go free and tamper with ongoing investigations, we believe that it may cause a chilling effect for the digitization efforts. 44 per cent reports that they have abstained from using online services due to digital threats. Norway is currently undergoing a digital transformation in both public and private sector, and this development is worrying.

– **The Norwegian citizenry is not properly educated in cybersecurity**

The government is not educating the population in cybersecurity, despite that the digitization demands it. The society expects the individual to know how to protect themselves from digital threats. We find that only 50 per cent of the population has received cybersecurity education during the last two years, and that businesses are taking that responsibility upon themselves. This causes vulnerable groups to be left out, such as the young and the elderly.

– **There is a low awareness of the concept of online hygiene**

People see cybersecurity as a means to protect themselves, but are not aware of the complex co-dependencies in a digitized society. In short, cybersecurity to them is about protecting themselves, not the people around them. In a digital world, everything is connected to everything else. Long and complex digital value-chains makes up our critical infrastructures, our financial systems etc. Our study reveals shortcomings in the way cybersecurity is taught today, and we need to develop new educational methods if we are to prepare the citizenry for a new digital reality.

Oman

Article 7, Item 5, of the Telecom Act stipulates the TRA's role in safeguarding the interests of beneficiaries:

"To safeguard the interests of beneficiaries and dealers with respect to the prices of equipment and the rates, quality and efficiency of telecommunication services".

The Standard Customer Agreement is as an adhesion contracts that the TRA negotiates with the operator on behalf of the beneficiary in order to circumvent any prejudice or bias on the part of the telecom operator. Below are the obligations related to the Standard Customer Agreement:

"Within six (6) months following the Effective Date, the Licensee shall submit to the Regulatory Authority for its approval a form of standard customer agreement containing the terms and conditions for the provision of Licensed Services to Customers".

"The Standard Customer Agreement form shall become effective if the Regulatory Authority did not object to it within thirty (30) days of its receipt or on a later date specified for its execution. If the Regulatory Authority has objected to the Standard Customer Agreement form during such period, the Regulatory Authority shall notify the Licensee in writing of the reasons for this objection and the Licensee shall accordingly modify the Customer Agreement form and present it to the Regulatory Authority within fifteen (15) days of its receipt of such objection. This shall be applicable to the modified Standard Customer agreement form".

"The Licensee may from time to time modify the Standard Customer Agreement. This modification shall be subject to Condition 8.5."

"The Licensee shall notify all Customers of the terms and conditions of the Standard Customer Agreement and any modifications thereto and shall thereafter provide Licensed Services based upon the Standard Customer Agreement.

State of Palestine

The Palestinian Ministry of Telecommunications has issued a decree protecting the rights of subscribers to mobile telephone services, particularly the additional services offered by operators and service providers over operator networks. The decree deals with a number of issues:

- Timing the sending of all types of text messages;
- Obtaining the subscriber's explicit and documented approval to take part in promotions for additional services;
- Registering the subscriber for certain services free of charge and processing the matter at the end of the free period;
- The mechanism for subscribing to and canceling additional services;
- Obliging operators and the providers of additional services to adhere to the standards and specifications set by the official bodies, such as the consumer protection department, regarding awards;
- Putting forward proposals to test the additional services offered by mobile telephone operators and the providers of additional services.

Saudi Arabia

In continuing Communications and Information Technology Commission (CITC) efforts, to protect the interests and rights of users of ICT services in the Kingdom of Saudi Arabia, CITC has recently developed a document under the title (the applicant /user protection). This document addresses a range of procedures which the service providers obliged to follow when providing or cancelling, or billing ICT services. Also, the document touches in how to deal with the credit limit, the Internet packages, and the obligations of the service provider to protect the user during international roaming, in addition to its obligations in dealing with the user complaints.

The document included eleven articles for the most important issues of interest to users, along with their own terms which must be adhered to by the service providers. Those issues and some of the associated terms, will be reviewed below:

a) Billing:

The document stipulates that the service provider must provide free means enables the user to control consumption, for any service used, whether prepaid or postpaid service. It must also provide the user regularly with clear and correct and detailed bills, according to the details set forth in the telecom bylaw, and the terms of the provision of ICT services documents, and it must be free of charge, and in Arabic or English depending on the user's choice, and sent to the user on paper or electronically according to the user request.

b) The user credit limit:

The document emphasized that the service provider must specify the credit limit for each user and include it in the contract, and in the bill sent to the user. Also, the service provider is not entitled to raise the credit limit without the user's prior knowledge and consent. In addition to that the service provider is obliged to enable the user to know credit limit at any time through the following means: text messaging, voice call, visiting the customer service center, the website for the service provider/e-Applications, and to notify the user when the credit limit reaches 80 per cent, through a message SMS sent to the user for mobile service, and any other suitable means for the other services.

c) Mobile internet:

The service provider must enable the user to use the mobile internet service only after the user request this service. The Service Provider must notify the user via SMS when a consumption of its subscribed internet package reached 80 per cent, and suspend the Internet service as soon as the

user consume the entire amount of the internet package, with notifying the user of stopping the service, and how to return it, and the cost to use the Internet without the package, and any other packages user can subscribe to.

d) International roaming service:

The document stipulates that the service provider should enable the user to use the international roaming service only after the user's request for the service according to the service request procedure described in this document. Also, the service provider must enable the user to use the mobile internet service while roaming internationally only after the user's request for the service separately when the user request voice calls and other telecom services. The service provider must notify the user as soon as the user connect to a service provider network in the country the user traveling to via free text messages in Arabic and English regarding some information such as the domestic and international call rates (incoming and outgoing), SMS, and use of the Internet in the country of travel. In addition to enabling the user to access to customer services while roaming internationally in any time free, and notifying the user that there is no credit limit for the service while roaming internationally.

e) Cancellation or suspension of the service:

The document did not neglect user right in service continuity, or the right to cancel it, which stipulates a set of articles that the service provider must follows when the user request suspension or cancellation of the service, as well as when the service provider initiates suspension or cancellation of the service, the document stipulates the user right to request cancellation of the service, and ordered the service provider to execute the request, and simplify the procedures pertain to such request, and to make cancellation request for any service available at all its centers, and to not ask the user to visit customer service offices to cancel the service, except in cases of final cancellation of the full basic service if such service was established through the user presence in the customer service office, and allow the cancellation of added service through the means available to request the addition of that service, and document the cancellation process, either through written documents, or text messages.

Also the document prevented the service provider of cancelling or suspending the service on its own except in accordance with the cases stipulated in the telecom bylaw and in the terms of the provision of ICT services documents, and to not cancel the service before suspending it for a period of not less than 15 days before the process of the service cancellation, and to notify the user before the suspension or cancellation process via text messages.

f) User complaints:

The document addressed user complaints thoroughly in order to ensure the rights of users, by forcing the service provider to set specific and clear procedures to deal with them, such as:

- That all procedures pertain to complaint handling at the service provider must be according to a specific electronic system, to keep all the complaint procedures from the beginning of submitting the complaint until closing it, this system should be interactive with the user, where the user can respond to the service provider, and see the progress of the complaint electronically;
- That the complaint submission be available through all possible means, whether electronic or via phone call, or personal presence, and not requiring the user to use a single mean to submit a complaint, and to have an easy and a clear access to those means;
- Providing the user with a reference number for the complaint;
- The complaint handling procedures should not exceed (15) days from the date of submitting the complaint;
- That the user after submitting the complaint should be provided with the expected duration to address the complaint via text message, which shows how to follow up the complaint, and if the expected duration ends before processing the complaint, the latest development

regarding the complaint and the new expected duration to address the complaint should be reported to the user, and in any case the complaint handling should not exceed (15) days from the date of submitting the complaint, taking into account the duration of each stage of tackling the problem with the service provider.

The document also stipulates some of the service provider obligations toward the applicant, where the service provider must make it clear to the applicant before entering into a service contract as follows:

- Details of the required service price, including the service tariff and any amount required to be paid in advance at the beginning of the service contract, or upon completion of the service;
- Details of the service and its inclusions which the service provider is committed to provide;
- Details of the conditions and obligations on the applicant, and the consequences of failure to do so;
- Details of any restrictions or exceptions to the use of the service, and any fees will be applied when overcome these limitations;
- Billing dates;
- Adjustment mechanism and cancellation of the service;
- Cases where the service provider has the right to suspend and cancel the service for the user.

In addition to that, the service provider must facilitate the service request procedures, and provide access to all services in all its centers, and to not limit the provision of some services in specific places and not others. Also, the service provider must get the applicant approval of the service and his knowledge and acceptance of all the terms and conditions, the obligations and provisions of the service, according to the service request procedure specified in the document, which aims to document the process of requesting the service, whether through written contracts, or text messages.

Vietnam

Vietnam is one of the first ASEAN Countries paid attention to consumer protection field. From 1999, the National assembly already Adopted Ordinance No. 13/1999/PL-UBTVQH10 on the protection of Consumers' Interests.

The Law on Protection of Consumers' Rights ("Law 59") to replace the 1999's Ordinance on the Protection of Consumers' Rights, can into effect from 1st July 2011 (passed by the National Assembly on 15 November 2010).

Continuously, the Government level was issued two decree: Decree No. Issued 99/2011/ND-CP ("Decree 99") detailing and an implementation of a Guiding the number of articles of Law 59 on 27 October 2011 and Decree No 19/2012/ND-CP (Decree 12) on Sanctions Against administrative violations of Consumers' rights protection.

Decision No. 02/2012/QD-TTg of the Prime Minister on January 13th, 2012 (came into effect from March 1st, 2012) promulgating the list of essential goods and services to the subject to registration on standard contract, general conditions transaction. According to the Decision, business individuals and organizations trading in 9 groups of goods and services have to implement the registration procedure with relevant State authorities in order to protect the interests of consumers. The good and services listed include 04 items (kind of services) from the telecom sector as: Fixed telephone service (Public Switched Telephone service), post-paid mobile telephone service, Internet connection and Pay television (Telecom application services).

Regulation on consumer protection in the telecommunications sector: Vietnam so far doesn't have a separately legal documents to regulate telecommunications services' user protection. However

in the system of legal documents on telecommunications sector has made many provisions express this content.

In terms of state management, consumers protection being assigned as a function of the Vietnam Competition Authority under the Ministry of Industry and Trade. Besides there Vietnam Standard and Consumers Association (VINASTAS) is a social organization – professional, voluntary, not-for-profits who operate in the field of standards, quality and protect consumer rights aims to: gather and unite, help members to improve vocational qualifications, develop and apply technical measures and technologies in the field of standards and quality and protection of consumer rights in Vietnam. Association Standards and Consumer Protection Vietnam are members of the Vietnam Union of Science and Technology Association (VUSTA) and Consumers International (CI).

The implementation of consumer protection sector in Vietnam were described as follows:

- When realize customer rights are violated, at first the customer will call to support service line of corresponding provider to complaints and requests for settlement.
- The operator resolves customer complaints under their customer care process and the majority of complaints will be fully processed at this stage.
- For any complaints have not been satisfactorily resolved, customer can send comments to Vietnam Standard and Consumers Association for assistance and also can complain to the Vietnam Competition Authority or Vietnam Telecom Authority (specialized management agency) for assistance and settlement.
- The protection of consumers has done indirectly in the management of the state. In the telecommunications licensing process, Vietnam Telecom Authority has always attended and require operators have to committed, complied with regulations on the quality of service, resolve complaints and resolve customers' rights when stopped offering service it is considered as the conditions for approval telecom licenses.

Zimbabwe

Consumer protection has taken centre stage in Zimbabwe as the nation is seriously trying to ensure protection of consumer rights in the wake of the new Constitution which came into operation in 2013. The constitution is now being used as a base to review the existing laws and guidelines on consumer protection both in relation to Telecommunication/ICTs and other services. The country is reviewing its consumer laws and coming up with strategies to enhance consumer protection. The strategies include a review of the current law, wide stakeholder consultation, and participation of consumer agencies in the review of the law and putting in place public institutions to enforce consumer rights.

The major piece of legislation on consumer protection, other than the Consumer Rights entrenched in the bill of rights contained in the Constitution, is the Consumer Contracts Act Chapter 8:03. The Common law of the Country, which is Roman Dutch law, is very limited in terms of consumer protection, as redress can only be obtained through applying the laws of contract and delict only. The purpose of this piece of legislation is to provide relief to parties to consumer contracts where such contracts are and would be unfair. The Act defines a consumer contract as a contract for the sale or supply of goods or services or both, in which the seller or supplier is dealing in the course of business.

The law as it stands has been inadequate in terms of protecting consumers in general as it has been limited to contracts, particularly written contracts between parties. Day to day transactions where no written contracts are involved are not covered yet these are the kind of transactions that involve the ordinary man in the streets who needs protection. This therefore leaves the subscribers to telecommunication services exposed to abuse, as they do not usually have comprehensive contracts with service providers. The law is also silent on consumer rights and does not take these into account. It also has no affordable dispute resolution process as it is limited to litigation. The law does not cover oral contracts yet oral contracts are binding in Zimbabwe.

In order to bridge this gap, the Zimbabwean Government has come up with a draft law which is still undergoing parliamentary scrutiny.

The draft Act also establishes a Commission, to be known as the Consumer Protection Commission (CPC), which shall be a body corporate capable of suing and being sued in its corporate name. The board of the Commission will have its members coming from various organizations as follows:

4.1.1 one member shall be a representative of Environmental Management Agency Council;

4.1.2 one member shall be a representative of the Farmers Association;

4.1.3 one member shall be a representative of the Ministry responsible for Industry and Commerce;

4.1.4 one member shall be a representative of the Competition and Tariff Commission;

4.1.5 one member shall be a representative of the Standards Association of Zimbabwe;

4.1.6 one member shall be a representative of Zimbabwe National Editors Forum;

4.1.7 one member shall be a legal practitioner registered as such in terms of the Legal Practitioners Act.

4.1.8 three members shall be representatives of registered consumer organizations.

It is also important to note that the Chairperson of the Committee is expected to be one of the three representatives of registered consumer organizations.

Annex 5: ITU GSR Best Practice Guidelines

GSR 2014 Best Practice Guidelines on Consumer Protection in a Digital world[73]

The digital economy unquestionably offers consumers new and exciting possibilities, as well as fascinating challenges on which regulators need to focus greater attention. Consumers face new challenges linked to the ever increasing availability of new Information and Communication Technologies (ICTs) in the form of numerous devices, new online services and new applications. In order to protect the rights of all users in an open and inclusive digital world, it is essential to define in advance policies and regulatory measures to complement solutions and initiatives involving co-regulation and self-regulation with a view to educating and empowering consumers.

Regulators who participated in the 2014 Global Symposium for Regulators acknowledged the need to achieve a balance between the rights of all stakeholders to ensure that everyone, consumers and business, can enjoy the benefits of digital technologies. They consequently formulated some guidelines on good regulatory practices to protect consumers' interests. Implementing these guidelines will improve the regulatory frameworks needed to ensure better protection for all stakeholders and especially consumers. These guidelines are set out below.

a) Charting a strategic direction

We believe that governments must 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, specific consumer protection legislation, cybersecurity and cybercrime legislation, including on child online protection, regulations on quality of service, regulations concerning on-line content, 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 and self-renewing regulatory mechanisms in order to build a secure and reliable cyber space.

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, guaranteed quality of service, privacy, confidentiality and protection of personal data, the possibility to opt-out; the right to file a complaint; number portability; and intellectual property rights and virtual 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 and other relevant bodies at the national, regional and international level. In doing so, clearly allocating responsibilities between the parties is fundamental, as well as information and resources sharing, as appropriate. We further recognize that multinational cooperation is required in order to deal effectively with cross-border phenomena such as issues related to content provided by "Over-the-Top" players (OTTs), 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.

b) 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

[73] http://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2014/BestPractices/GSR14_BPG_en.pdf.

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

c) 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 unfair mass advertising, 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 protection conditions.

d) 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 and are contrary to the principles of good faith. Furthermore, unjustified and disproportionate differences between the rights and obligations arising under the contract should be prohibited irrespective as to whether or not it was concluded online. 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).

e) Multiple channels for redress

We believe that the regulator's 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 lower cost. Specialized telecommunication/ICT mediation centres might prove particularly effective with this regard.

f) Quality of service

A series of measures can be taken to ensure that the consumer has easy and reliable access to ICT services. This could involve 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.

g) 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, commit themselves to greater transparency in 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 nature (public or private) of their communications. 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 Cybersecurity 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.

h) Empowering consumers

The ICT regulator 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 centres and NGOs, could greatly contribute to raising consumer awareness.

i) The consumer's right to information

Regulators need to ensure that all service providers make available timely and accurate information in a clear, transparent and comparable manner that is conducive to rational decision making. Consumers must understand their rights and obligations, prices and how they are calculated, and the quality of service provided. All regulations related to the consumer's right to information should be systematically updated so that they can be enforced in practice.

j) 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 digital environment.

Conclusions

Effective information, education and protection in all possible forms, covering the full range of users of telecommunication services and information and communication technologies, are the principal pillars for restoring consumer confidence.

The gathering of delegates at the World Telecommunication Development Conference in Dubai in 2014 took a big step forward by including the study of **Question 6/1 "Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks"** in the programme of study for the study period 2014-2018.

The Swiss contribution[74] to the Global Symposium for Regulators held in 2014 in Bahrain perfectly illustrates the issues considered in the report on Q6/1, and we should use that content in finalizing the report. Effective protection for consumers of electronic communication services requires regulatory action, going beyond issues of access and quality of access, on:

- E-Commerce;
- Social media;
- International cooperation.

[74] Office Fédéral de la Communication (OFCOM), Confederation of Switzerland.

a) E-Commerce

Consumers must be protected when engaging in online commerce at all stages of the contractual process.

Advertising: first, consumers have to be given the means of protecting themselves from aggressive advertising. In Switzerland, unfair mass advertising, or spamming, is prohibited, unless the customer has previously opted-in. Consumers targeted by abusive advertising campaigns can demand that their telecommunication service provider give them the name and address of the connection so that they can identify the advertiser. Furthermore, telecommunication service suppliers are under an obligation to fight unfair mass advertising.

Although not actually prohibited, unsolicited phone calls (cold calling) are disagreeable for consumers. In Switzerland, callers who do not respect the asterisk customers have had placed in the telephone directory to indicate that they do not wish to receive unfair advertising messages from third parties are subject to criminal penalties. If that measure is to be effective, however, call centres should also be obliged to publish an entry in the telephone directory, the use of hidden numbers should be prohibited and it should be possible to reach advertisers at both the number from which the cold call was placed and the number published in the directory. By the same token, customers should be able to demand that their telecommunication service supplier provide the name and address needed to identify the party making the cold call.

Contracts concluded online: legislators need to draw up transparent rules on the terms and conditions for concluding contracts online and the form of such contracts. In particular, parties engaging in e-commerce to sell merchandise, works or services must clearly indicate their full identity and contact information. This is what is stipulated in Swiss law, which also provides that the various technical stages leading to the conclusion of the contract must be indicated, that appropriate technical tools must be made available for detecting and correcting entry errors before an order is sent and that the customer's order must be confirmed without delay by e-mail message.

Contract validity: once the contract has been concluded, the consumer must not be left without remedies. In order to ensure that they are better protected against the risks related to Internet impulse buying, consumers must be able to cancel the contract within a deadline of several days (for example, 14 days). In addition, Swiss law prohibits the use of general terms and conditions that provide, to the customer's detriment and contrary to the rules of good faith, for an unjustified and disproportionate difference between the rights and obligations arising under the contract, whether it was concluded online or not.

Disputes: in the event of a dispute, consumers find it difficult to place the matter immediately before a civil court because of the length and cost of the proceedings. Alternative mechanisms (conciliation, arbitration) should therefore be introduced for settling disputes, so that consumers can defend their rights rapidly and at a lower cost.

Consumer information: the State should spare no effort in providing consumers with all the information they need to be informed e-commerce participants. In Switzerland, for example, the federal administration has drawn up guidelines for online purchases, the "*Guide des achats en ligne*", in French, German and Italian and in cooperation with the parties concerned.

b) Social media

In recent years, social media such as Facebook, Twitter and Instagram have grown exponentially worldwide. Estimates put the number of Facebook users alone at between 1.3 and 1.5 billion people at the end of 2013. Social media have substantial economic, social and political potential; they play a role, for example, in democracy-building processes. A relatively recent phenomenon, social media are also a source of many regulatory problems. In Switzerland, the protection of children and young people is a priority on the political agenda.

Legal aspects: Swiss telecommunication law, like comparable legislation in other countries, was drawn up at a time when the provision of telecommunication services still depended on the possession of a specific network designed for that specific purpose, or on authorized access to such a network. With developments in technology, the link between network and services has disappeared. Today, services may be provided by various means; they may even be provided by social media without the active participation of network operators. Should platforms such as Facebook and Twitter therefore be regarded as telecommunication service providers? To what rights and obligations should they be subject? These are pending legal questions that need to be discussed at international level as well.

Lack of data control and transparency: the fact that users lose almost all control over their data when they use social networks is a serious problem. The Council of Europe Committee of Ministers[75] recommends that platform operators engage in more transparent data processing, obtain the consent of the persons concerned and clearly indicate to users whether or not their communications are private or public.

Users should be able to make informed decisions about the degree to which their data can be accessed by others. Social network operators should not collect or process data from non-members and should use a configuration and software that respect user privacy. In addition, users should undertake not to publish content on other people unless the latter have given their consent. These recommendations could be implemented internationally as a form of industry self-regulation, for example a code of conduct. Platforms that try to keep their customers by blocking the transfer of personal data to a competitor are another instance in which users have found they have no control over their data. In future, it will probably become necessary to introduce legislation on data transfers or to regulate the interfaces between social network platforms.

Aspects relating to the protection of children and young people: social networks expose children and young people to specific risks, notably in terms of adult-only content and sexual predation by third parties. Because they do not have the requisite technical knowledge and are not really aware of the problem, young people are not always able to protect themselves against the risks related to problematic contacts or the transmission of personal data. The Internet never forgets; the permanency of data is a problem that children and young people are unable to gauge correctly. Often, the adults around them – their parents or teachers, for example – also lack the experience and technical knowledge needed to alert them to the risks of social media. Legal tools do not suffice to protect children and young people. They need to be supplemented with a series of measures that include public advocacy, content alerts and self-regulation initiatives in the industry. At the same time, the media savvy of children, young people, parents and teachers needs to be improved. Such measures must be drawn up using an interdisciplinary approach and must be complementary so as to create a coherent general framework.

c) International cooperation

In a globalized digital environment, the best national consumer protection measures are pointless if they cannot be implemented beyond borders. Multinational cooperation is required in order to deal effectively with cross-border phenomena such as e-Commerce and social media. In that regard, Switzerland applauds the preparation of guidelines on best practices.

GSR 2016 Best Practice Guidelines on Digital Financial Inclusion

As the digital economy unfolds, digital financial inclusion is likely to prove one of the most transformative applications it brings about. Banking the unbanked, like connecting the unconnected, is a major milestone towards universal growth and prosperity. [76] At the nexus of technology and finance, digital financial inclusion can be a powerful drive towards achieving the Sustainable Development Goals.

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[75] Recommendation CM/Rec(2012)4 of the Committee of Ministers of the Council of Europe to member States on the protection of human rights with regard to social networking services.

[76] http://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2016/BPG_16_en.pdf.

The digital marketplace is constantly evolving and calls for new regulatory regimes. The fifth generation of ICT regulation is coming out of age, unleashing the potential of collaboration to set an enabling environment for innovation and investment.

Collaboration among all the various government agencies involved in overseeing the digital economy is essential to ensure that regulatory frameworks are consistent, predictable, fair and effective. Collaborative regulation can and will lead digital financial inclusion onwards and upwards, boosting entrepreneurship and e-Trade while enabling e-Government services and sustainable living styles.

We, the regulators participating in the 2016 Global Symposium for Regulators, recognize that there is no single, comprehensive blueprint for best practice, but agree that country experiences can be enlightening and guide us towards regulatory excellence. In the increasingly complex and dynamic ICT ecosystem, it is important to agree on common principles and put forward clear and simple rules.

We have, therefore, identified and endorsed these regulatory best practice guidelines to facilitate access to and the development of digital financial services for everyone.

– **Unleashing the potential of two-sided markets**

We recognize that the introduction of m-payments creates a significant opportunity to spread useful and responsible services for the unbanked or underbanked people.

Innovative two-sided platforms enable digital financial services such as mobile banking, mobile money micro finance, mobile commerce and international remittance services. While regulation is not a goal in itself, various regulatory measures can be considered to leverage the potential of such platforms for digital financial inclusion.

Holistic and balanced privacy and data protection legal frameworks need to be enacted, in accordance with internationally-agreed core principles. In order to enhance trust in new financial digital services, it is equally important to broaden the enforcement powers of the ICT regulator and strengthen sanctions in the case of fault, fraud or abuse.

Clear and straightforward rules and procedures for consumer protection of users of digital financial services should be implemented, in particular for terms and conditions of online contracts, the use of personal data by service providers, tariffs for services and quality of service. Transparent, fast and effective mechanisms for handling consumer complaints should be made available and enforced.

Interoperability among operators and service providers is essential for reaping the benefits of digital financial services. Regulatory measures geared towards interconnection, USSD access and tariff issues related to digital finance could enable interoperable services at the national level and globally.

Regulatory measures for reducing the cost of digital transactions and mobile payments can be put in place.

In view of weighing the impact of current regulations and revising them accordingly, we consider that ongoing monitoring and periodic assessment of the state of digital financial services are needed. Likewise, the views and experiences of all stakeholders should be taken into account and assessed. Adequate revision of regulatory policies should then be carried out.

– **Coining new regulatory approaches**

We believe that adopting suitable regulatory framework and policies related to digital financial services will encourage services providers to reach out to the unserved and underserved.

New regulations for digital financial services should be based on a functional approach. The regulatory agencies involved in the various aspects of such services need to reassess their regulatory objectives and examine how they can best be achieved, regardless of technology or legacy market structures.

Furthermore, regulations shouldn't allow different regulatory treatment or a two-track regulatory approach for incumbents and new players, both from the ICT and the finance sector.

A lighter licensing regime may be generally appropriate to allow digital financial services to thrive. Innovative licensing schemes for market entry, including provisional and temporary licenses, can be envisaged.

We reiterate that all regulators should consider transposing international best practices and guidelines for digital financial inclusion at the national level.

– **Addressing overlaps between sectors**

We believe that the various regulators need to collaborate to tackle issues related to digital financial inclusion, from their inception to adoption to ensuring consumer redress. The ICT regulator and the authorities regulating financial services as well as the dedicated competition and consumer protection authorities should know and fulfill their respective powers and responsibilities. Where their mandates overlap, specific mechanisms could be considered to ensure the interplay (such as memoranda of understanding or less formal agreements). Good governance principles and practical solutions should be leveraged for a truly collaborative approach to regulation.

A sound national framework for collaborative regulation goes a long way towards creating working synergies and effectively enabling new services. Such a framework could include:

Harmonization of the Telecommunications/ICT Act with the relevant financial legislation and regulatory policies as well as with those in critical cross-cutting areas such as consumer protection, cybersecurity, privacy and data protection.

Ongoing dialogue and regulatory cooperation regarding competition between financial and telecom service providers as well as over-the-top players.

Periodic open consultations and meetings with stakeholders, public and private, to monitor policy implementation.

A harmonization of legal and regulatory requirements for digital financial services at the regional or sub-regional level can have a multiplier effect on innovation and investment in national markets. The issue needs to be brought to the agenda of Regulatory Associations and Regional Economic Communities in view of facilitating the spread and benefits of digital financial inclusion in developing regions.

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Printed in Switzerland
Geneva, 2017

07/2017