



Lomé, Republic of Togo 9-11 September 2019

Report

ITU Regional Economic Dialogue on Telecommunications/ICTs for Africa (RED-AFR) back to back with a Workshop on Economics, Finance and Business models for 5G and new Technologies for Digital Africa was held Lomé, Togo 9-11 September, 2019. The event organized by the ITU Telecommunication Development Bureau (BDT) in close collaboration with the ART&P, Togo. The events were officiated by Mr Kassim TIDJANI representative of Ministère des Postes, de l'Économie Numérique et des Innovations Technologiques, Togo and the welcoming address delivered by Mr. Abayeh BOYODI, Directeur General of ART&P, Togo.

68 participants from 21 countries, including regulators, operators, academia, regional organizations (UEMOA), ESMT etc. attended the meetings above.

The Dialogue included an Experts' Knowledge Exchange session of ITU-D Study Group 1 Question 4/1 on *"Economic policies and methods of determining the costs of services related to national telecommunication/ICT networks, including next-generation networks"*. The purpose of this session was to collect the regional experience and exploring new ways of building synergies between the work that is taking place in the region and the activities that are under way in the ITU-D Study Groups. The details and presentations are available at the event website: <https://www.itu.int/en/ITU-D/Regional-Presence/Africa/Pages/Regional-Economics-and-Finance-Dialogue-%28RED%29-for-Africa-.aspx>

RED-AFR19 considered the following sessions; Session 1: Policies, regulations and economic approaches for the digital ecosystem: towards the Sustainable Development Goals (SDG); Session 2: Incentives to foster investment and business opportunities for digital services; Session 3: Collaborative regulation: innovative instruments to promote inter-sectoral collaboration; Session 4: Economic and financial aspects in the digital ecosystem; and Session 5: Economic and regulatory challenges to promoting the potential of emerging technologies for digital transformation.

SUMMARY OF DISCUSSIONS

Session 1; Policies, regulations and economic approaches for the digital ecosystem: towards the Sustainable Development Goals (SDG).

Ms. Anne Rita SSEMBOGA, ITU presented the ITU roadmap of the SDGs. The roadmap is a living document intended to give course to ITU actions related to the implementation of the 2030 Agenda and SDGs. She emphasized the enormous potential to fast forward progress on the SDGs and improve people's lives in fundamental ways was giving examples across the globe of the impact of ICTs in various sectors such as health, education and agriculture.

In the presentation by **Dr. Thomas Senaji, ITU Expert**, the challenges and opportunities to the attainment of Sustainable development goals (SDGs) by Africa were highlighted and the role of new technologies, namely Internet of things, Big data, Cloud computing and Block chain was emphasized. The role of broadband, its current level development and the crucial need for the investment explained in the framework of support for new technologies. He emphasized that collaborations and partnerships across all sectors of the economy and with all stakeholders should be strengthened in order to deploy and leverage new ICTs for the realization of SDGs including the alleviation of poverty, universal health, food security.

Session 1 Round table: The round table explored the opinions and experiences of policy makers, regulators, and the private sector on policies, regulations and economic issues in particular, assessing the regulatory approaches required to enhance the development of a digital ecosystem towards the attainment of the SDGs and the key issues that policy makers should consider.

- **Mr. Yakouba DAMTARE**, Cadre du Ministère des Postes, de l'Économie Numérique et des Innovations Technologiques, Togo emphasized the need to develop digital skills and early training of children with the necessary ICT skills noting the role of parents in advancing ICTs for young.
- **Ms. June NWACHUKWU**, Principal Manager, Nigerian Communications Commission, Nigeria emphasized the need to define consistent digital policy, *Policy, laws and regulations to foster the growth of the sector*
- **Mr. Bayaille Abdel ADOYI**, Ingénieur Expert Togo- stressed the need for Capacity development, grassroots education and development of skills to foster the use and development of ICTs. He noted the need to contextualize and develop content for Africa for *effective and beneficial use of ICTs*
- **Mr. K. Mota ATARA**, Ingénieur Expert Togo cautioned on the need for Institutional continued support to promote ICTs in underserved areas and the provision of public infrastructure as well as promotion of innovations through private and public partnerships.

Delegates emphasized the role of regional organizations in propelling SDGs through the coordination and identification of priorities at national, regional and international level.

A call for continued support for the Africa region to participate in the development of digital standards and ITU standardization processes was made.

The role of private sector/ industry in supporting the growth of the ICT sector alongside government and the need to use fund from the Universal Service Fund (USF) to support the education of young adults and ensure the safety and protection of young people online was emphasized.

Session 2 incentives necessary for the Africa Region to foster investment and business opportunities for digital services.

Providing a review of the tax policies and practices for digital services around the world, **Mr. Frederick ASUMANU, NCA, Ghana** noted that a number of governments in the region are increasingly imposing, in addition to general taxes and sector-specific taxes on consumers of mobile services and devices and on mobile operators. The taxes are in some cases not align with international best practices which are impacting the development of global digital economies. He noted the advert of taxes on mobile money transaction in countries such as Uganda, Kenya and Tanzania drawing caution to the fact that digital financial services in many markets in Africa is nascent and such taxes may have detrimental consequences on financial inclusion and the use of ICT in related sectors such as health, education, business and SMEs which are dependent on the e-payments and digital / electronic finance.

Mr. Vincent KOLANI, OTR, Togo shared the tax policy regime for digital systems and services in Togo noting that the country strategically has no specific taxation on digital systems/ services. He highlighted the difficulties of measuring and tracking digital commerce; the ambiguity of taxation policies on digital services in the region coupled with the inability of governments in Africa to tax global digital services and commerce. He called for regional approach to draw in global Platform players to contribute to the tax base. This would require regional dialogue and engagement of members states in Africa.

Mrs. Mary GENDA, NATCOM, Sierra Leone shared her countries tax policy regime for digital services. In addition to the regular taxes she noted that levies are imposed on local and international interconnection revenues (between networks within and without the country). She noted the challenges of tracking digital commerce with a huge informal sector of close to 53% and a large cash

economy. Countries like Sierra Leone need not only to define new laws to cater for the increasing digital economy but also incorporate digital technologies and solution in national tax processes.

Lessons and recommendation

- The need for regional studies on the impact of national taxation policies for digital services to inform policy intervention on digital tax regime and the harmonization of policy at regional level coupled with evidenced based research;
- Investment tax incentives and import exemptions for equipment and terminal devices can also be foreseen to encourage operators and ensuring a sustainable development for the telecom sector;
- A caution on the dangers of derogatory taxes that may discourage investments, constrain the growth of the sector and increase the burden of access and affordability was made and;
- The need for more dialogue at regional level to explore means for the digital platform players to equitably contribute to the tax base required to enhance the digital eco-system in the Region.

Mr. Joaquin Restrepo (ITU-R) presented on Spectrum sharing new/old paradigm? – He highlighted

Spectrum Sharing Options

Shared Resource (Separation)	Regulatory (NRAs)	Technical (Standards)
Frequency	Allocation/ Allotment	Dynamic Frequency Sharing
Spatial	Allocation/ Allotment	Dynamic Antenna Pattern
Time	License Term	Dynamic Time Sharing
Signal		Signal Sharing

Secondary use is different than secondary service:
 Secondary Service:
 - Within NTFA
 - NI/NP vis a vis Primary
 - FIFS vs other secondary
 Secondary user:
 - Same service
 - Other service: *NTFA shall include it*

that the spectrum sharing fundamentals are: a) Frequency Separation: e.g. different carrier frequencies, hence used bandwidths do not overlap each other; b) Spatial Separation: e.g. servicing different areas so they do not overlap each other; c) Time Separation: transmitting at different time - Signal Separation: different signal code, allowing to separate each other at the reception. Those separations can be steady or

related to the regulatory framework; and dynamic (changing in short time) which consider technical standards and management. Considering the Report ITU-R SM.2404-0 (06/2017, there are several spectrum sharing scenarios as well as different approaches: regulatory or a technology approaches at international or national levels. Spectrum sharing can be among different radio communication services or applications (different entities or type of users, e.g. governmental vs commercial use); different licensed users of the same/similar application (e.g. PMR services, Point to point links); protected primary users and licence-exempt users (e.g. radars and EESS vs 5 GHz RLANS); and different licence-exempt users.

–Mr. Fonfana Lanciné, ARTCI, Côte d’Ivoire presented on infrastructure sharing impact on investment. He shared on, the advantages of infrastructure sharing from the economic point of view:

- Optimization of operators' performance, with a reduction in capital expenditure (CAPEX) and operating expenses (OPEX)
- Reinforcement network capacity in dense areas, as well as in isolated areas with difficult access
- Improved coverage, especially in rural areas or extended territories
- Transfer of investment costs to new technologies and services, and/or to staff capacity building.
- Operational risks reduction related to the operation of equipment (shared among several operators)
- Spectrum management efficiency
- Reduction of visual pollution, energy consumption and user complaints about radiation from base stations
- Accelerated deployment of new technologies such as 4G
- Positive impact for national roaming on costs, retail prices and competition in many countries
- $Tariff = Cost + Rate\ of\ Return$. The decrease in capital and operating expenses resulting from shared frequency usage and/or telecommunication infrastructure will result in lower telecommunication service costs and hence a proportional decrease in rates.

The experience of Côte d’Ivoire: IHS CI, is a powerful operator in the infrastructure market of Côte d’Ivoire. IHS has a license for passive equipment and infrastructure with an obligations of non-

discrimination, transparency, and annual production of a reference offer approved by the ARTCI. IHS manages the exploitation of more than 80% of the country park of telecommunication towers, half of which are owned by the company.

Mr. Wendeketa Adolphe KABORE, l'UEMOA highlighted the Initiatives in the sub-region including;

- Directive No. 03/2006 / CM / UEMOA on the interconnection of telecommunications networks and services, which aims to provide a common framework for UEMOA States to implement the interconnection between networks and telecommunications networks and to ensure the interoperability of telecommunications services.
- The work of the West Africa Telecommunication Conference (CTAO) on the harmonization of Right of Way (DDP).
- Adoption on 12th June 2012 of ECOWAS Regulation C/REG.06 / 06/12 concerning conditions of access to submarine cable landing stations (CLS); and
- The Study for the elaboration of a new legislative and regulatory framework to govern the digital economy sector in West Africa (UEMOA and ECOWAS) scheduled to start in October 2019.

Lessons learned and suggested best-practices:

- Allow infrastructure sharing for commercial purposes when it does not distort competition.
- Adapt the regulatory framework as required and define authorizations for infrastructure operators/providers for sharing.
- Establish strong guidelines that allow effective infrastructure sharing.
- Promote collaboration between infrastructure providers.
- Monitor interactions between all stakeholders.
- Network sharing is a challenge for telecom/ICTs, especially in emerging countries, as well as a driving force for the digital transformation. However, even if competition through the sharing of infrastructures is effective, it may be necessary to continue to regulate access.
- It is crucial to encourage infrastructure sharing in the sub-region to lower the cost of telecommunications services to consumers

Session 3: Regulatory tools and innovative instruments to promote intersectoral collaboration at regional and national level

Ms. Carmen PRADO-WAGNER, ITU/BDT, presented on the recent ITU work in the area of ICT policy and regulation for better international coordination and coherence. She highlighted that the work done by ITU on Policy and regulation addresses three main axes: 1) high level policy and regulation exchange platforms, 2) data research and knowledge exchange and 3) support provided on ICT policy and regulatory frameworks and capacity development. In this framework, the tools to support members in defining, elaborating, implementing and reviewing transparent, coherent and forward-looking strategies, policy, legal and regulatory frameworks as well as in moving towards evidence-based decision-making, include: the ICTeye, a unique one-stop shop for telecommunications/ICT regulatory data collection from the annual Telecommunication/ICT Regulatory Survey and Tariff Policies Survey; the ICT Regulatory Tracker, a tool covering 185+ countries for the period 2007-2017, showcasing regulatory progress at national, regional and worldwide level; cutting-edge research and publications focusing on best practice regulation to enable digital transformation and thematic portals notably on the Digital Ecosystem, Infrastructure development and connectivity, International Mobile Roaming Portal, Quality of Service Regulation (available at www.itu.int/treg).

Mr. Victor NKYA, TCRA, Tanzania provided a national experience on collaboration for digital financial inclusion in Tanzania. He noted that achieving Digital Financial Services (DFS) requires collaboration among different regulators. In addition to the primary regulator, Central Bank – Bank of Tanzania (BOT); other regulators involved in the collaborative framework include:

- Tanzania Communications Regulatory Authority (TCRA)

- Social Securities Regulatory Authority (SSRA)
- Tanzania Insurance Regulatory Authority (TIRA)
- Fair Competition Commission (FCC)
- Financial Services Providers (banks and microfinances)
- Capital Markets and Securities Authority (CMSA)
- Financial Sector Supporting Project (FSP)
- Ministry of Finance and Planning (MoFP)
- Tanzania Mobile Network Operators Association (TAMNOA).

Mrs. Pouvanah SOCKALINGUM, ICTA noted that Mauritius regulator fully supports initiatives and strategies to promote collaborative regulation and has entered into formal agreements through Memorandum of Understanding (MoU) with the following institutions;

- Competition Commission of Mauritius (CCM) – (March 2010) to promote cooperation when dealing with anti-competitive practices
- Internet Watch Foundation (IWF) of United Kingdom – (October 2013) to raise awareness / take actions in the context of online child sexual abuse
- Statistics Mauritius – Dissemination of official statistical data relating to economic & social activities of Mauritius
- Consumer Protection Unit – e.g. complaints from consumers
- Data Protection Office
- Bank of Mauritius - e.g. Mobile banking & mobile payment systems)
- Economic Development Board - New investment opportunities related to telecom activities
- Formal agreements - Through Memorandum of Understanding (MoU)
- For e.g. ICTA shares MoUs with the following bodies/organisations:
 1. Competition Commission of Mauritius (CCM) – (March 2010) to promote cooperation when dealing with anti-competitive practices
 2. Internet Watch Foundation (IWF) of United Kingdom – (October 2013) to raise awareness / take actions in the context of online child sexual abuse

Mr. Amah Vinyo CAPO, ART&P, Togo provided an example of Togo’s intersectoral collaboration on digital financial inclusion noting the need for collaborative frameworks to be binding and at the same time flexible to allow for the rapid digital developments.

Mr. James Stephen MPANGO, UCC, Uganda elaborated on the directives and instruments in place such as the national payments systems bill for DFS inclusion in Uganda; the MoU between UCC the telecom regulator and the Central Bank and other collaborative initiatives with the tax authority, the National Identification Authority, Bureau of standards, among others.

Mr. Michel Aziafa Latévi LAWSON, Chef Division FLOOZ (Atlantique Telecom Togo) shared on the experience of intersectoral collaboration on digital and financial inclusion. Given the continued growth of the usage of smartphones, mobile money is a huge potential for financial inclusion. He described the different tools and means to access digital financial inclusion in Togo and as well as the challenges, such as the Know your customer (KYC) identification, high price of smartphones, and the non-harmonization of regulatory requirements.

Best practices/ Lessons learned

- The need for have well defined legal and regulatory instruments and where overlaps exist between the different regulators stakeholders functional MoUs should be adopted with defined roles and responsibilities.
- Regulations should be based on services as opposed to institutional based regulation to include to regional collaboration to enable cross-border financial transactions.

- Regulatory collaboration in the DFS space should address QoS, infrastructure access and sharing, interoperability, Cybersecurity, consumer protection, education, redress mechanism and the development of robust secure digital platforms.

Session 4: Economic and financial aspects in the digital ecosystem

Dr. Raul KATZ, Columbia University, USA shared on the results from the ITU Global study on the economic contribution of broadband, digitization and ICT regulation done in September 2018. Following this global study, an Econometric modelling report for Africa was prepared and presented during the RED-AFR. It is a set of econometric analyses that estimate the economic contribution of broadband and digitization, as well as the impact of ICT policy on the development of the digital economy in the Africa region.

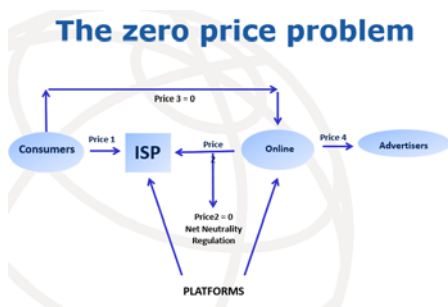
According to the fixed broadband model, this technology has a small economic contribution in Africa during the last seven years (2010-2017). An increase of 10 per cent in fixed broadband penetration yields an increase in 0.3 per cent in GDP per capita. More fundamentally, while holding a positive sign, the results are not statistically significant. On the other hand, as expected, fixed capital formation and education remain positive contributors to GDP growth.

According to the mobile broadband model, an increase of 10 per cent in mobile broadband penetration yields an increase in 2.5 per cent in GDP per capita, which means that this technology has had a significant economic impact in the Africa region during the last seven years (2010-2017).

Lessons learned and suggested best-practices:

Regarding the impact of policy and regulatory framework on digitization development in Africa, it was noted that the contribution to digitization development was tested through a multivariate regression model with fixed effects based on two independent variables: the ITU ICT Regulatory Tracker¹ and a year lag of the same variable for control purposes. The model provided further evidence of the importance of the regulatory and institutional variable in driving digital ecosystem growth. An increase of 10 per cent in the ITU ICT Regulatory Tracker yielded a positive increase in the CAF Digital Ecosystem Development Index of 0.348 per cent in the subsequent time period.

Mr. Jose Pedro SEIXAS, Expert on Economics and Regulation, ITU presented on the evolving concept of market definition. To determine whether competition is effective regulators need to define and



analyze markets. Markets are defined by the limits of demand and supply substitutability, in this sense, substitutability refers to the ability of a customer or supplier to switch from one product or service, to an alternative in response to a change in the relative price, service or quality of the first product or service. In the past prices have been taken as the indicator of consumer welfare. But, when the consumer price is zero or otherwise not a factor, the direct competitive pressure shifts to product characteristics, service quality and innovative

features.

Lessons learned and suggested best-practices:

The identification and definition of relevant markets, taking into account the fundamental differences between traditional international telecommunication services and OTTs. Consider and develop enabling policies or regulatory frameworks to foster fair competition between network operators and providers of OTTs and also to examine, if necessary, the reduction of the regulatory burden on traditional networks and telecommunication services.

¹ <https://www.itu.int/net4/itu-d/irt/#/tracker-by-country/regulatory-tracker/2018>

In addition, **Mr. Pedro SEIXAS**, shared on the appropriate regulatory framework for future technologies, services and business models. Reforms to competition rules and regulation in the digital economy are important. Certainly it is important not to prevent innovation in the digital world, but how to deal with excessive market concentration? should governments regulate digital services? The concentration of platforms services can have benefits but also can cause significant harm, for instance, it can raise prices for consumers, reduce choice, or impact the quality of the services, loss of privacy, the value of each consumer personal data, etc. Most importantly, it can be harder for new companies to enter these markets and scale up. This can asphyxiate innovation as larger companies have less to fear from new small entrants and new entrants hesitate to enter these markets.

In conclusion, a differentiated approach to large platforms should be applied by imposing a code of conduct. Competition enforcement should be targeted at specific harms based on a thorough analysis of the market and less on market definition on a case by case analysis. Governments should reinforce the merger regime used so far, in order to address potential competition problems with large platforms, and encourage mechanisms for better control of personal data.

Lessons learned and suggested best-practices:

- Creating a new digital markets unit (either independent or as a function of an existing authority/regulator) with specific powers. For this, it is important to set a code of conduct for companies with “strategic market status”; on data mobility and open standards; and to secure access to non-personal anonymized data.
- Adapting the merger control rules so that the Competition and Markets Authority (CMA) can “better stop digital mergers that are likely to damage future competition, innovation and consumer choice”.
- An obligation on digital companies that have been designated with a strategic market status to make the CMA aware of all intended acquisitions.
- The CMA’s assessment taking account of the scale as well as the likelihood of harm.
- Strengthening regulator’s competition enforcement powers so that breaches can be dealt with more quickly and easily, adjusting also the standard of judicial review for antitrust infringements and use of interim powers.
- Monitoring of personalized pricing: where companies use their data-driven algorithms to set prices according to the individual’s willingness to pay.
- Suggests government to monitor the use of artificial intelligence and protect vulnerable consumers.

Mr. Abossé AKUE-KPAKPO, Directeur de l’Economie Numérique, Commission de l’UEMOA explained about the business models for emerging technologies such as submarine and terrestrial cable, satellite, regional backbones. He highlighted the following concerns for the African region:

- The determination of rates/tariffs for International Internet Connectivity is becoming very important in order to improve transparency in the pricing of IIC and guarantee affordable access.
- Policy on cache – there is need for regional policy/ guidelines/principles on cache management as capacity is different for each country which makes it pricey for low capacity countries
- Studies on competition assessment on digital services are necessary - specific for the region
 - M&A possible area of regulatory intervention – especially in advanced markets- may not be applicable in the region
 - Consumer protection and awareness
 - Data protection regulation- transparency and access to data for competitive firms
 - Unbundling- possibility for OTT players- consideration in advanced economies with dominant platform players

Session 4: Round Table New business models in the digital economy. The round table examined issues such as how to achieve an improvement in the performance of the industry in a converging ecosystem? *ii)* What role can regulators play, together with industry and academia, to encourage digital development? *and iii)* How to adapt the workforce in the new digital environment?

- **Mr. Philippe GOABGA- Telecel Burkina Faso** emphasized the need for policy and regulators to adopt flexible regimes drawing caution to the high and derogatory taxes and fees imposed on licensed operator's which are affecting revenues and ability to expand investment in infrastructure. The responsibilities and obligations of OTT players in the national digital ecosystem should be defined and shared equitable with licensed national network operators.
- **Mr. Drissa DOUMBIA, ESMT, Senegal** noted the increasing divergence in the education systems and the skill sets required for the current digital revolution. ESMT and the academia community is placed to provide the industry and young people with intermediary to advanced digital skills to work in the digital economy. These efforts should be propelled through national policy and funding.
- **Mr. Maman ABDOULAYE, Chef de Département Contrôles des Tarifs ARCEP, Niger** emphasized the need to reduce tax burden to the telecommunication/ICT industry, the need for public private partnership for infrastructure development and need for regulators to support the industry by encouraging innovations and incubation start-up. The Niger Smart city project in Niger is one of such examples.
- **Mrs. Ngokila Belinda RYKIELLE, ARCEP, Gabon** proposed for regulators to focus on growing the sector through the encouragement of localized innovation, reducing barriers to entry; adopt incentive taxation regime and invest in public backhaul infrastructure as incentives for the growth of the industry.

Session 5: The economic and regulatory challenges for promoting the potential of emerging technologies for digital transformation.

a) Digital opportunities for SMEs

Ms. Aida NDIAYE, Facebook provided a review on the digital opportunities for SMEs in Africa from social networks. Noting that SMEs are the backbone of African economies; SME contribute 90% of GDP and employ up to 60% of the population in some African countries. Social networks provide a wide range of digital tools that are intuitive and easy to access via social networks. Millions of SMEs in Africa are using these tools to increase their income. For instance 96% of Ivorian SMEs say they use Facebook to communicate with their customers. Governments need to put in place Incentives to promote the digitalization of SMEs. These include:

- Defining framework for Protection and Data Sharing. This would require;
 - Putting in place appropriate data protection frameworks for SMEs
 - Promoting safe use of the cloud
 - Promoting the interoperability of platforms
- Connectivity and access by promoting the development of connectivity solutions for SMEs (provide access to Wifi points) and the deployment of the last mil
- Strengthening digital skills and
- Promote training programs on digitalization

Lessons, recommendation and best practices

- Facebook policy on data protection for Africa is based on the European law of GDPR-where data belongs to the user.
- Facebook has taken the responsibility to educate users how data is used and protected. The platform gives the option to users to opt out of the use of personal data.
- Face book is working in partnership with private sector that deal with fact findings organization to develop technologies to detect fake news. However;

- Need for solid framework for data protection- a number of countries yet to adopt the Malabo data protection convention
- Harmonization of legislation critical for borderless communication thus a sub-regional approach should be adopted
- Need for capacity building for policy maker and regulators data protection frameworks in Africa and participation of the industry/ private sector.

Mr. E. Marius BAGNY, Expert Ingénieur, Togo shared on telecommunication network coverage to support digitalization of the agricultural sector in Togo. The speaker focused his presentation on applications for e-agriculture developed in Togo, highlighting the challenges that farmers are facing and the related applications developed for climate monitoring and water supply.

Dr. Thomas SENAJI, ITU Consultant explored universal service obligations and requirements in a collaborative digital economy. He focused on the evolution of universal access funds, approaches and strategies, financing models, requirements and obligations that have been put in place overtime to achieve the objectives of Universal access. Noting the digital advances; the impact of digitalization on the economy and related sectors; the evolution of sector players and global platforms; and growing needs for infrastructure, competencies and skills, governments need to holistically redefine their Universal access and services requirements. Some of the challenges that have bogged the effectiveness of Universal Service Fund in Africa and need to be addressed include;

- Poor policy formulation limits the implementation of an effective USF model in Africa,
- inadequate stakeholder engagement,
- lack of accountability,
- inaccurate base line data and research
- undue political influence; and
- the narrow scope of universal service

Ms. Salamata ROUAMBA, Fixed and Mobile markets Director, ARCEP, Burkina Faso presented the country processes and approaches for Universal access including economic regulatory practices to ensure universal affordability and access. She explained how the USF is being managed and used in Burkina Faso, and illustrated some of the projects implemented with these funds:

- Development of environmental impact studies for construction of national backbone;
- Development of a study for white zones determination (1182 localities identified with a population of 1,786,898);
- Coverage of a village in the Sahel region (northern Burkina Faso) to guarantee market competition.
- Production of audio and video popularization content for the rural areas for the benefit of farmers;
- The interconnection of 6 public universities and provision of broadband connectivity;
- VSAT connection to remote health centers to the central statistics collection system (e.g. prevention and/or epidemic management).

Some of the challenges faced by ARCEP are the modification of projects in progress by the beneficiaries; the misunderstandings about the use of universal services funds (fund engagement procedure, ineligible projects, etc.); and insufficient resources.

b) The appropriate regulatory framework for future technologies, services and business models

Mr. Jose Pedro SEIXAS, Expert on Economics and Regulation, ITU, shared on the regulatory framework for future technologies, services and business models. Reforms to competition rules and regulation in the digital economy are important. Certainly it is important not to prevent innovation in the digital world, but how to deal with excessive market concentration? Should governments regulate digital services? The concentration of platforms services can have benefits but also can cause significant

harm, for instance, it can raise prices for consumers, reduce choice, or impact the quality of the services, loss of privacy, the value of each consumer personal data, etc. Most importantly, it can be harder for new companies to enter these markets and scale up. This can asphyxiate innovation as larger companies have less to fear from new small entrants and new entrants hesitate to enter these markets.

In conclusion, a differentiated approach to large platforms should be applied by imposing a code of conduct. Competition enforcement should be targeted at specific harms based on a thorough analysis of the market and less on market definition on a case by case analysis. Governments should reinforce the merger regime used so far, in order to address potential competition problems with large platforms, and encourage mechanisms for better control of personal data.

Lessons learned and suggested best-practices:

Based on the Key Furman report the following recommendations were highlighted:

- Creating a new digital markets unit (either independent or as a function of an existing authority/regulator) with specific powers. For this, it is important to set a code of conduct for companies with “strategic market status”; on data mobility and open standards; and to secure access to non-personal anonymized data.
- Adapting the merger control rules so that the Competition and Markets Authority (CMA) can “better stop digital mergers that are likely to damage future competition, innovation and consumer choice”.
- An obligation on digital companies that have been designated with a strategic market status to make the CMA aware of all intended acquisitions.
- The CMA’s assessment taking account of the scale as well as the likelihood of harm.
- Strengthening regulator’s competition enforcement powers so that breaches can be dealt with more quickly and easily, adjusting also the standard of judicial review for antitrust infringements and use of interim powers.
- Monitoring of personalized pricing: where companies use their data-driven algorithms to set prices according to the individual’s willingness to pay.
- Suggests government to monitor the use of artificial intelligence and protect vulnerable consumers.
