GSMA MOBILE 360 SERIES

AFRICA

KIGALI • 17-19 JULY 2018

Africa Policy Day

Monday 16th July 2018

Kigali Convention Centre

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Regional Regulatory Capacity Building

Jean-Francois Le Bihan
Policy Director Sub-Saharan Africa, GSMA

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

What is the GSMA Capacity Building programme?

What is the GSMA Capacity Building programme?

- Free training courses developed exclusively for regulators, policymakers and government officials
- Courses focus on the key topics within the mobile industry for the region
- Developed by leading experts in each field

Why are we doing it?

- Responds to ever increasing training requests from regulators
- Addresses a widening capacity gap caused by the accelerating pace of change within the telecommunications sector
- Helps policymakers and regulators develop appropriate regulatory frameworks that serve to deliver the social and economic benefits of mobile-enabled services

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Our Courses

- Advanced Spectrum Management for Mobile Telecommunications
- Children and Mobile and Technology
- Competition Policy in the Digital Age
- Disaster Preparedness and Response
- Internet of Things
- Leveraging Mobile to Achieve SDG Targets
- Mobile Money for Financial Inclusion
- Mobile Money for Financial Inclusion
- Mobile for Socio-Economic Development
- Mobile Sector Taxation
- Principles of Internet Governance
- Principles of Mobile Privacy
- Radio Signals and Health
- Weighing the Benefits of Universal Service Funds
- Women and Mobile

Delivery

Online

- GSMA Trainers will deliver the courses in a classroom environment
- Courses vary in length from half a day to three days
- All course materials are provided onsite
- Participants are added to an alumni group and are updated regularly on new courses and relevant regional events

Face to face

- Courses are delivered online by GSMA experts and moderators
- All materials provided online
- They vary in length from one week to four weeks
- Approx one hour per day
- Assessments at the end of the course

More information

For more information:

- Visit: gsmatraining.com
- capacitybuilding@gsma.com

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Telecom Policy and Regulatory Frameworks

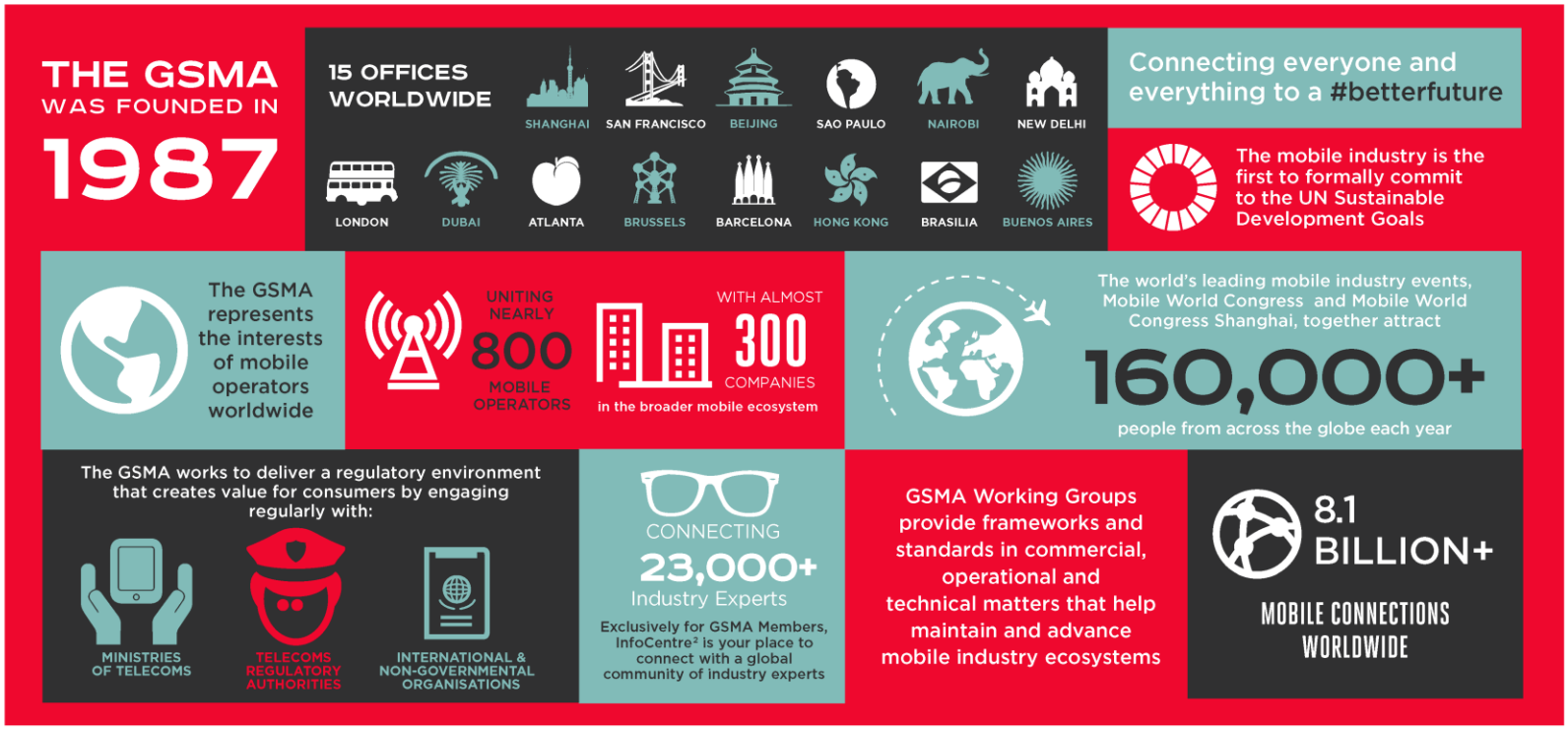
Modernised to Enable the Fourth Industrial Revolution

Fraser Graham
Senior Director Policy Engagement, GSMA

MOBILE 360 SERIES

AFRICA
KIGALI • 17-19 JULY 2018

About the GSMA



MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Promoting Regulatory Modernisation

The digital economy has changed dramatically, but the regulatory environment has not. To enable efficient, competitive and well-functioning digital markets, policymakers should replace outdated telecoms regulation with a new framework applied across the digital ecosystem.

THE GSMA IS ...

Shaping the Debate
Through Policy Research

Delivering Policy Guidance
Through In-Market Engagement

Enabling Dialogue
Through High-Level Policy Forums

What is the Fourth Industrial Revolution (FIR)?

Definitions

- The fourth industrial revolution is the current and developing environment in which **disruptive technologies and trends** such as the Internet of Things (IoT), robotics, virtual reality (VR) and artificial intelligence (AI) are changing the way we live and work. (Whatis.com)
- **Mobile IoT is set to play a central role in delivering Industry 4.0** – a fourth industrial revolution involving the extensive use of data analytics to optimise and automate the production of all kinds of goods. (GSMA)

"… a global transformation characterized by the convergence of digital, physical, and biological technologies" (WEF)

Background and Status

- Previous industrial revolutions liberated humankind from animal power, made mass production possible and brought digital capabilities to billions of people. This is, however, **fundamentally different**.
- The world lacks a consistent, positive and common narrative that outlines the opportunities and challenges of the FIR…

What impact will the FIR have?

Opportunities

- The world has the potential to connect billions more things to digital networks…
- The regulatory and legislative landscapes will significantly shape how researchers, businesses and citizens develop, invest in and adopt emerging technologies

Source: Fourth Industrial Revolution – Klaus Schwab

Threats

- "…organizations might be unable to adapt; governments could fail to employ and regulate new technologies to capture their benefits" *WEF*
- The real risk of digitisation needs to be recognised
- What if the technology is used against Human Rights or civic freedom?

Outcomes

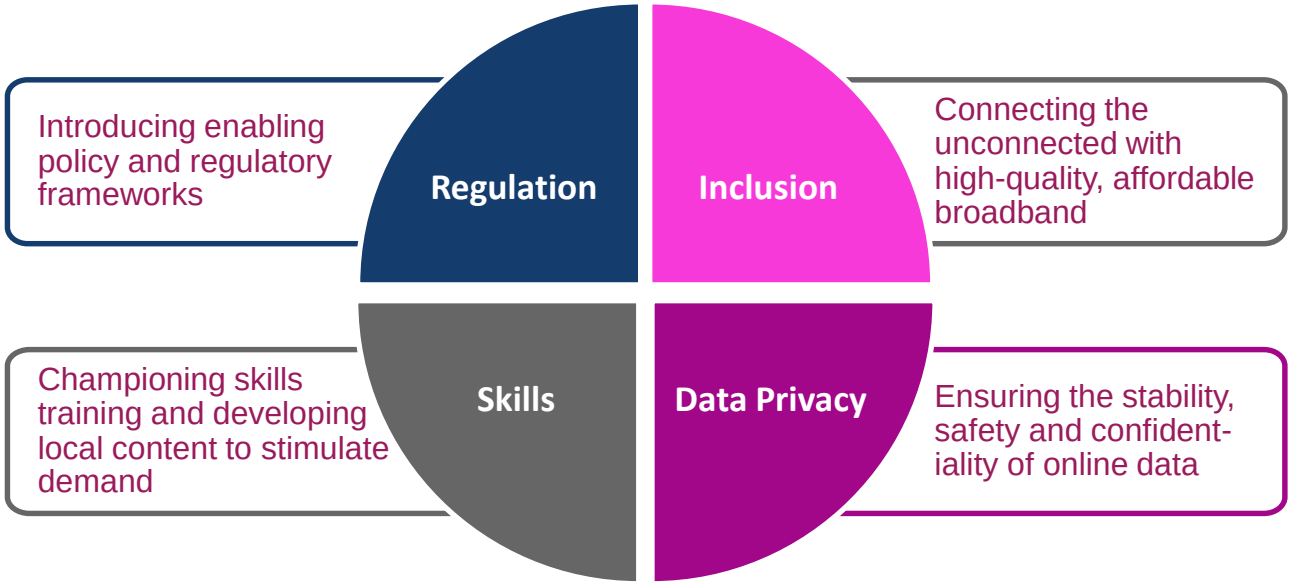
A myriad of use cases:

- Artificial Intelligence, advanced robotics
- Augmented Reality
- Autonomous vehicles, Drones
- Smart cities
- Healthcare transformation, genetic editing

In its scale, scope, speed and complexity, the transformation will be unprecedented.

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Priority actions identified to enable the FIR



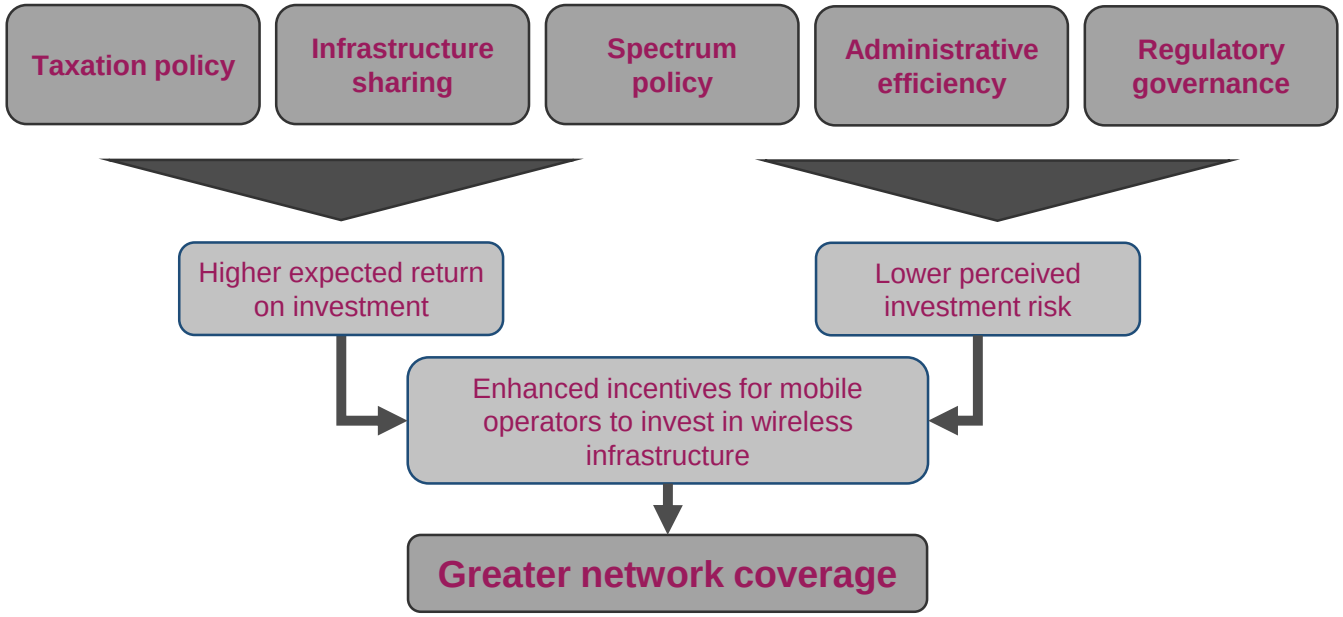
Group Exercise: Split in to four groups, for 10-15 minutes, to examine one of the four priority actions. Report back to main session with suggested key drivers for success

Principles of a new regulatory framework

Functionality-based	Pursue regulatory goals based on achieving functional objectives, not legacy structures based on industries or technologies
Dynamic	Give preference to performance-based approach through ex post enforcement over prescriptive, ex ante rules
Bottom-up	Consider new approaches to regulation — including the need for regulation and legacy rules — in light of current market realities

The new framework will reduce regulatory asymmetries, promote dynamic competition and innovation, and allow regulatory objectives to be achieved more effectively at lower cost

Digital inclusion: Enabling supply through an investment-friendly regulatory framework



Stimulate demand by…

…improving citizens digital skills… and increasing the amount of locally relevant content

- **Bringing ICT into the school curriculum** guarantees that citizens of tomorrow receive the skills necessary for the modern economy.
- **Connecting schools to broadband** motivates students and promotes a better learning environment.
- **Increasing awareness of the benefits of internet** beyond entertainment purposes.
- **Drawing attention to harassment of women** online and via the mobile phone. This should be coupled with development of legal and policy frameworks to address harassment.

- **Supporting the local digital ecosystem** in creating a thriving digital economy.
- **Foster an enabling environment** in partnership with industry.
  - Attracting and retaining entrepreneurs through start-up ecosystems and innovation hubs.
  - Developing sustainable innovation through financing, supportive policy environment and educational institutions that feed the start-up community.
- **E-government services** are a major component of locally relevant mobile content.
  - Potentially easy win given the heavy consumer reliance on public services.

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Privacy: Building Trust Across the Digital Ecosystem

Protecting privacy is about building trust and confidence that private data are being protected. This requires all parties involved to adopt a coherent approach that is technology neutral and consistent across all services, sectors and geographies. Risk-based frameworks that safeguard private data and encourage responsible digital governance practices, aligned to local regulation and reflecting commonly accepted privacy principles, can help protect privacy while fostering innovation.

GSMA Mobile Privacy Principles*

- Openness, transparency and notice
- Security
- Purpose and use
- Children and adolescents
- Data minimisation and retention
- Accountability and enforcement

Mobile App Development

Guidelines for developers

Big Data and Privacy

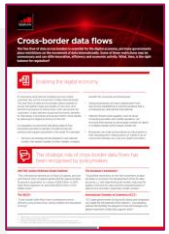
Data handling and use

IoT Privacy/Security

Design and implement-tation

Data Flows

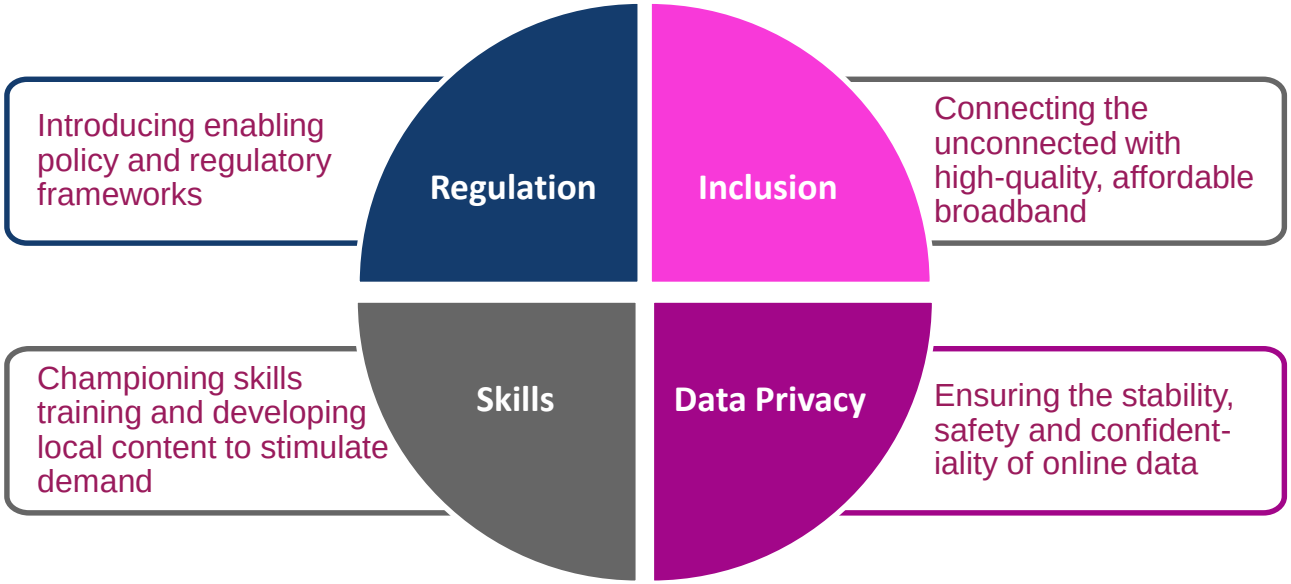
Cross Border Data Fows



*Six principles related to personal data, of nine in total

#M360AFRICA

In Summary: Priorities revisited



GSMA MOBILE 360 SERIES

AFRICA

KIGALI • 17-19 JULY 2018

Mapping the emerging privacy landscape in Africa

Jean-Francois Le Bihan

Policy Director Sub-Saharan Africa, GSMA

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Executive summary

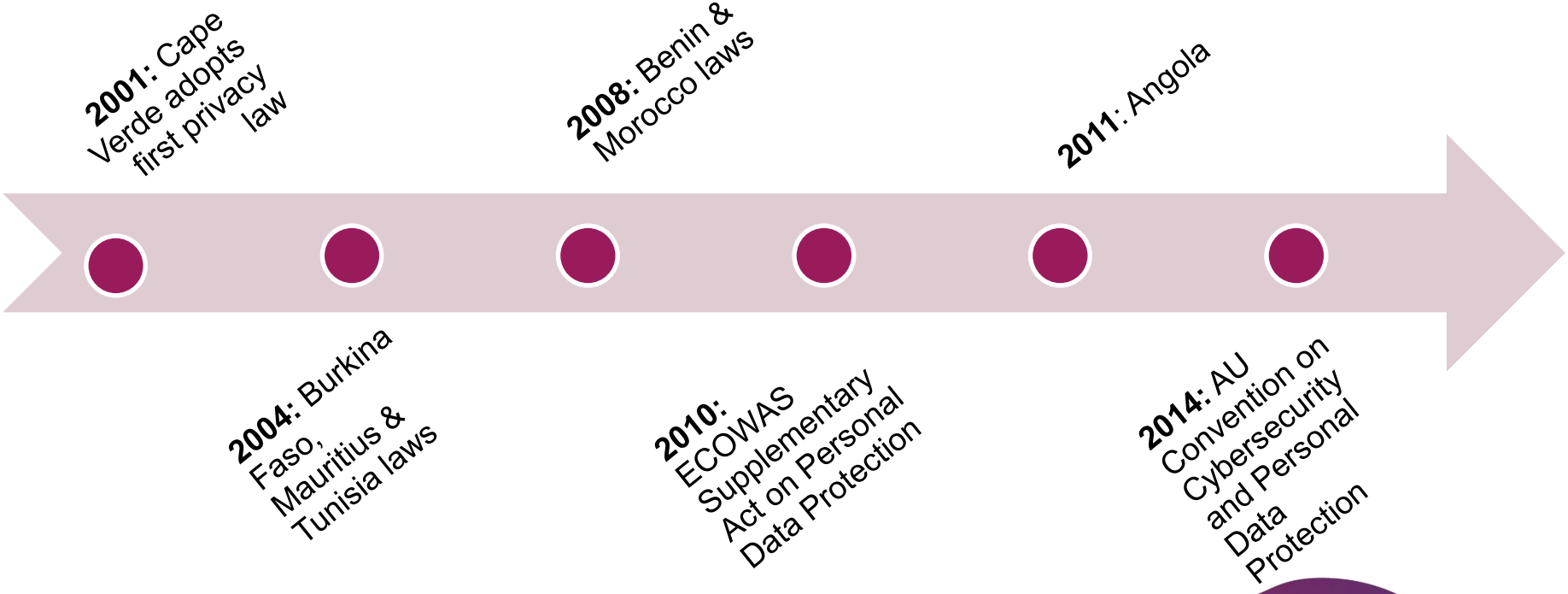
- Over the past 15 years, Africa witnessed the emergence of privacy legal frameworks at national and regional levels.
- So far, most regional frameworks have addressed privacy in conjunction with electronic transactions and cybersecurity.
- 16 countries have adopted privacy laws and some have established data protection authorities now operating for several years.
- New national laws are being discussed and some regional frameworks are being supplemented or are about to be reviewed.

Executive summary (cont.)

- Limited consultation took place during early law-making effort; civil society intervened but private sector didn't get involved.
- In the meantime the digital economy is becoming a reality with mobile apps and a digital lifestyle requiring more data.
- To realise the full potential of digital Africa requires a balanced and innovation-friendly approach to privacy.
- The mobile industry is already a big data player and has views to share with policymakers regarding the next steps.

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Over the past 15 years Africa privacy legal landscape has emerged



#M360AFRICA

Regional frameworks are to great extent aligned with international and AU Convention principles

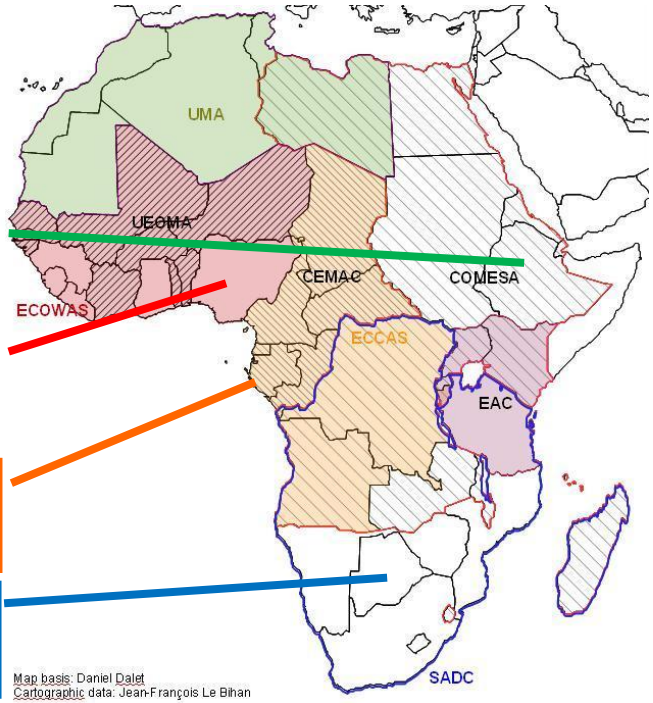
International references like OECD, Council of Europe, EU and APEC were used when drafting the AU Convention and the sub-sequent regional frameworks, thanks to a good level of coordina-tion between partners and consultants.

AU Convention
2014 supported by UNECA

ECOWAS Supplementary Act
2010 supported by UNECA

ECCAS model legislation
2016 supported by EU and ITU

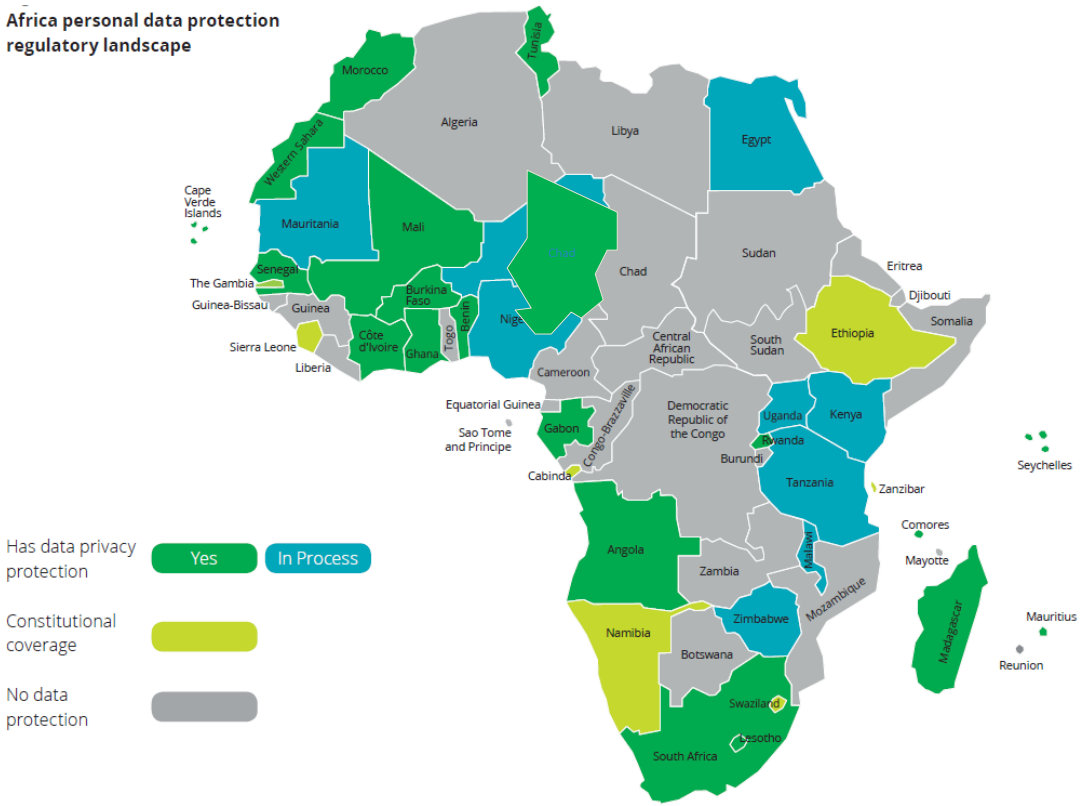
SADC model legislation
2010 supported by EU and ITU



MOBILE 360 SERIES

AFRICA
KIGALI • 17-19 JULY 2018

An overview of national privacy laws in Africa



While early national laws were adopted in the 2000s, others came once regional frameworks were under discussion or adopted.

A new series of laws are currently being discussed and may be adopted soon (like in East and West Africa).

So far, 16 AU member states have a bespoke privacy law.

#M360AFRICA

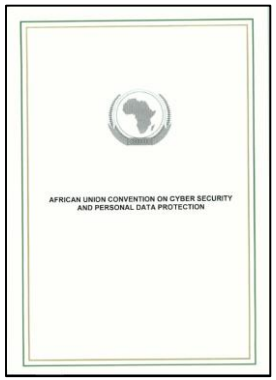
A layer cake of pan-African principles, regional reference frameworks and national legislations

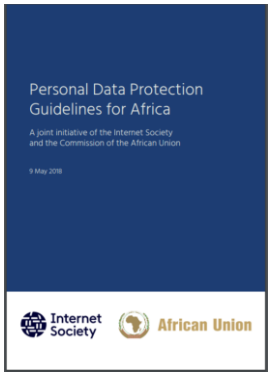
AU

- **African Union Convention on Cybersecurity and Personal Data Protection (27 June 2014, with the support of UNECA)**
- **Guidelines (9 May 2018, with the support of ISOC)**

	West Africa	Central Africa	East Africa	Southern Africa
REC	▪ **2010 ECOWAS Supplementary Act (with the support of UNECA)**	▪ **2016 ECCAS Model Legislation (with the support of ITU and EU)**	▪ **2008 EAC Framework fro Cyberlaws (with the support of UNCTAD)**	▪ **2010 SADC Model Legislation (with the support of ITU and EU)**
MS	▪ 7 MS out of 15 (BF, BN, CI, CV, GH, SN, ML, etc.)	▪ 2 MS out of 11 (GA, TD, etc.)	▪ 0	▪ 7 MS out of 15 (AO, CR, LS, KM, MG, MU, SC, ZA, etc.)

AU Convention and Guidelines

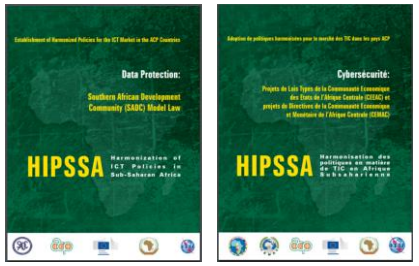




- The AU Convention has been signed by 10 member states in May 2018 (Benin, Chad, Comoros, Congo, Ghana, Guinea-Bissau, Mauritania, Sierra Leone, Sao Tome & Principe, and Zambia); still 45 member states to ratify.
- The AU Convention has recently been supplemented by implementation guidelines (9 May 2018).

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Model legislations to support quicker and harmonised national law adoption



ECCAS

- ECCAS doesn't have binding community law instruments.
- ECCAS followed similar approach for its regional ICT harmonised policy framework following SADC example.
- Limited result as only 3 member states out of 10 have adopted a national privacy law.
- Acceleration effect clear for Chad, to some extend in Gabon, Angola was a precursor.

SADC

- SADC doesn't have binding community law instrument beyond the Transport, Communication & Meteorology Protocol.
- SADC followed a similar route for its regional ICT harmonised policy framework
- 50% of members states have privacy laws like ECOWAS with a hard law approach.
- Interest by SADC members and Secretariat to review existing framework and its level of implementation as part of the 4th Industrial Revolution.

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

East Africa, ICT powerhouse with no privacy law

Uganda

- No data privacy law but some provisions from various legal sources.
- 2015 draft of bill (with RICT) under consultation early 2018 at Parliament.
- Timeline to be clarified.

Kenya

- Bill finalised by the Privacy Legislative Task (Telkom represents MNOs & private sector).
- Senatorial hearing scheduled 18th July.
- Open public consultation to come.

Rwanda

- No overarching privacy legal framework but constitutional provisions and technical piece.
- Network Security Regulation with RURA to interpret customer data definition remit.
- Data revolution strategy under discussion to inform further policy and law making.

Tanzania

- Process to draft a bill started in 2009 and reached a milestone in 2014.
- In December 2017, the project was advertised again.
- No clear timeline yet.

An uneven landscape: Southern/West Africa half way and East Africa possibly catching up

- Proposed and existing national laws may still not yet fully cover all aspects of data protection and privacy.
- According to CIPESA, Uganda's Data Protection Bill, 2015 and Ghana's Data Protection Act, 2012 lack clauses on notification of breach and data portability and have limitations on the right to access, among others.
- Limitations to cross-border flows may remain a challenge even when clear reciprocity principles between regions are established.
- Export ban of customer data in Rwanda's Network Security Regulation is a hurdle to roll out innovation.
- Export of anonymised data as part of Big Data for Social Good not straightforward despite ECOWAS framework.

MOBILE 360 SERIES

AFRICA

KIGALI • 17-19 JULY 2018

Big Data and Cross-Border Data Transfers

Boris Wojtan

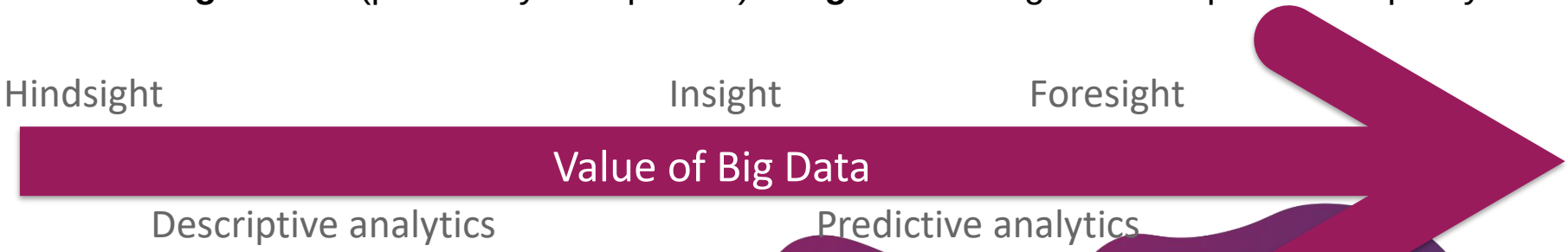
Director of Privacy, GSMA

Big Data — what is it?

The exponential growth both in the availability and automated use of information.

References to Big Data generally involve:

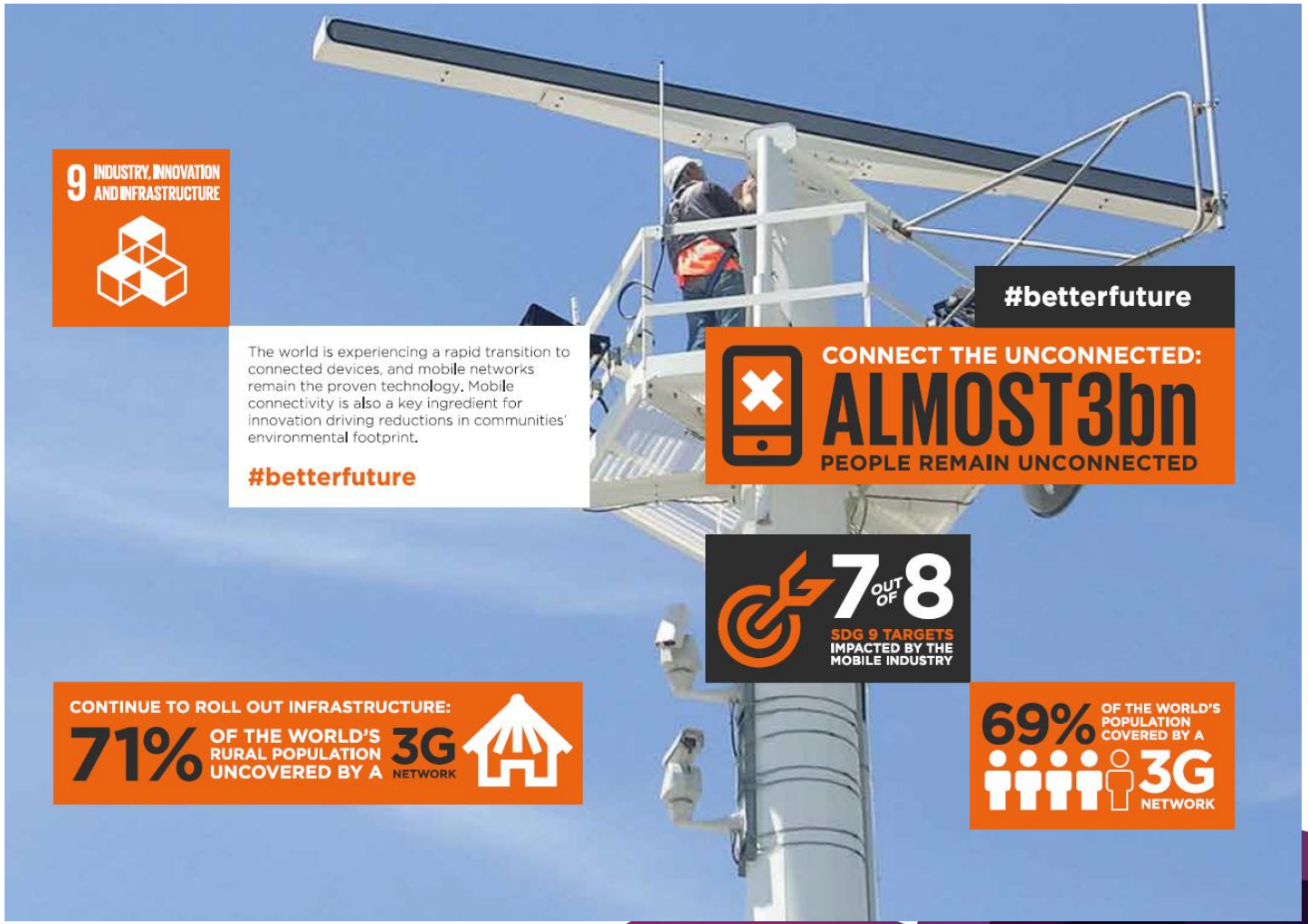
- **Large** data quantities from **multiple and diverse** data sources (volume, variety)
- Created in **near-real time**, (velocity)
- The use of **data processing** techniques to analyse the data, **identify correlations and generate** (potentially unexpected) **insights** that might have a predictive quality



Putting connectivity & data to work

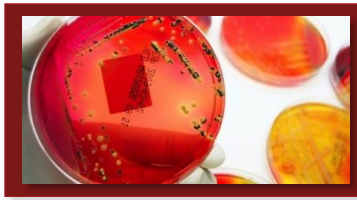

1 NO POVERTY
The mobile industry uses connectivity to bridge human divides and create socio-economic opportunity. Expanding mobile access to the internet will accelerate economic growth and create new opportunities for every community.
#betterfuture
#betterfuture
MOBILE MONEY AVAILABLE IN 93 COUNTRIES VIA 271 SERVICES
SUPPORT POOREST POPULATIONS TO ACCESS MOBILE AND MOBILE-ENABLED SERVICES
MORE THAN 60% OF HOUSEHOLDS IN DEVELOPING COUNTRIES DO NOT HAVE INTERNET ACCESS
MOBILE INSURANCE 31m POLICIES ISSUED
INCREASE ACCESS TO NEXT GENERATION OF PLATFORM SERVICES TO MEET BASIC NEEDS OF POOREST POPULATIONS


2 ZERO HUNGER
The mobile industry aims to advance the productivity and profitability of smallholder farmers and the agriculture industry at large through scalable and commercial mobile services.
#betterfuture
SUPPORT THE DEVELOPMENT OF
IoT/M2M SOLUTIONS
TO IMPROVE AGRICULTURAL PRODUCTIVITY
EXPAND MOBILE BROADBAND TO REMOTE AND UNDERSERVED AREAS TO ENABLE ACCESS TO ONLINE MARKETPLACES AND M-AGRICULTURE PLATFORM SERVICES
MOBILE AGRICULTURAL SERVICES
22m USERS
ACROSS 185 SERVICES
#betterfuture


9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
The world is experiencing a rapid transition to connected devices, and mobile networks remain the proven technology. Mobile connectivity is also a key ingredient for innovation driving reductions in communities' environmental footprint.
#betterfuture
#betterfuture
CONNECT THE UNCONNECTED:
ALMOST3bn
PEOPLE REMAIN UNCONNECTED
7 OUT OF 8
SDG 9 TARGETS IMPACTED BY THE MOBILE INDUSTRY
CONTINUE TO ROLL OUT INFRASTRUCTURE:
71% OF THE WORLD'S RURAL POPULATION UNCOVERED BY A 3G NETWORK
69% OF THE WORLD'S POPULATION COVERED BY A 3G NETWORK

Big Data — what can it do?

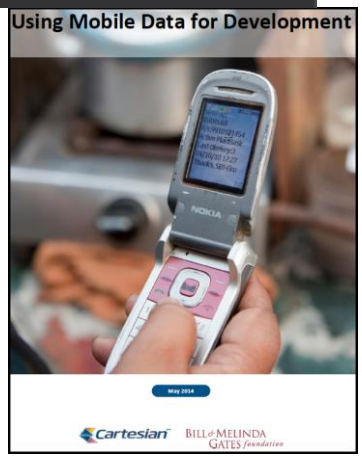
Potential areas of use



Predicting the spread of infectious disease

Optimising urban planning and management

Open data innovation — creating opportunities



Regulatory considerations for advancing Big Data opportunities (Data Innovation and Data Protection)

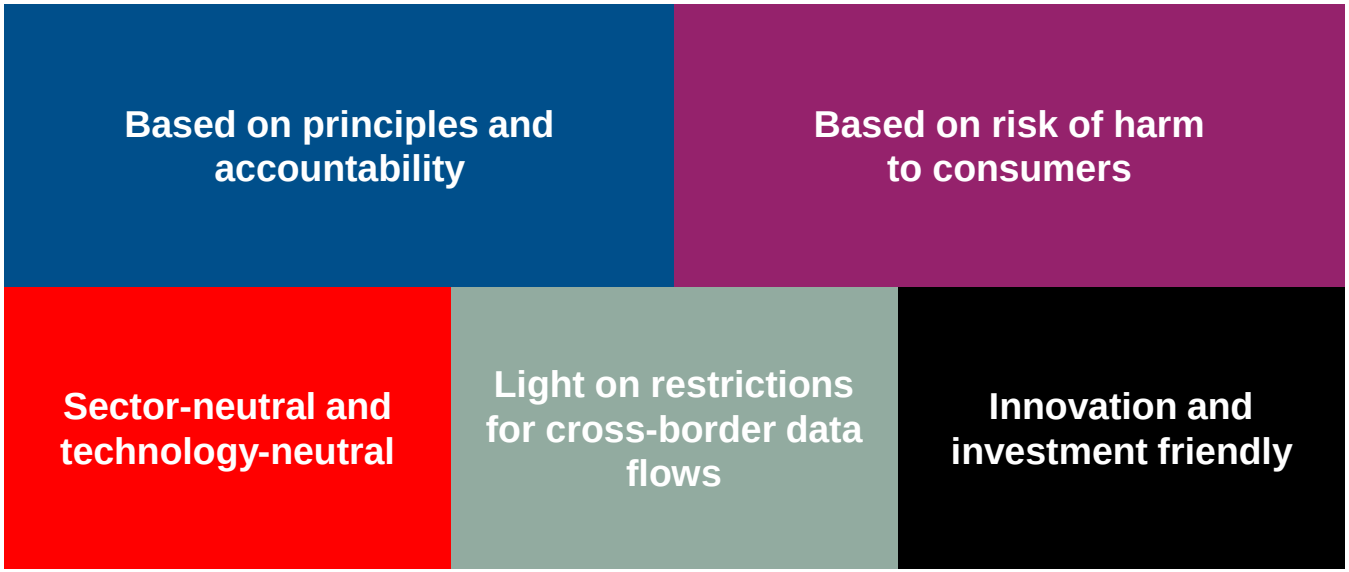
Could over-regulation on user privacy destroy both private value and public good – what is the right balance?

Key regulatory considerations:

- How can policymakers facilitate the use of Big Data by governments in order to meet pressing public policy needs?
- How strict should rules be in relation to companies 'specifying' the uses of personal data, given that Big Data may well lead to predicting future 'undiscovered' uses?
- How can consumer 'notice' and 'consent' rules be applied in the context of Big Data without inhibiting innovation? (e.g., when new data uses are conceived after collection)
- How can policymakers facilitate cross-border data transfers while ensuring consumers' privacy is respected? (e.g., through privacy protective methods)
- Who controls one's data when smart devices process data without human intervention to make market predictions?
- See *Mobile Privacy and Big Data Analytics* for more information: https://www.gsma.com/publicpolicy/wp-content/uploads/2017/02/GSMA-Big-Data-Analytics_Feb-2017.pdf

Data privacy regulation: the right approach

Smart privacy regulation for consumers is:



Cross-Border Data Flow (CBDF)

CBDFs help digital economy to flourish returning social and economic benefits to individuals, businesses and governments

"The international dimension of flows [of goods, services and finance has] increased global GDP by approximately 10 percent, equivalent to a value of $7.8 trillion in 2014. Data flows represent an estimated $2.8 trillion of this added value." *UNCTAD1 quotes McKinsey Global Institute*

If more countries base data privacy laws on internationally recognised principles, they can trust each other more and allow personal data to flow

GSMA

Cross-border data flows

The free flow of data across borders is essential for the digital economy, yet many governments place restrictions on the movement of data internationally. Some of these restrictions may be unnecessary and can stifle innovation, efficiency and economic activity. What, then, is the right balance for regulation?

Enabling the digital economy

E-commerce and internet-enabled services within countries rely on the movement of data internationally. The free flow of data across borders allows people to access the global range and quality of services, and permits businesses to reduce their costs and prices for customers. It also delivers social and economic benefits to individuals, businesses and governments more rapidly by allowing the digital economy to flourish.

In a regulatory environment that allows data to flow, businesses are able to operate, innovate and access solutions and support anywhere in the world. For example:

- Services can emerge and be adopted in one national market, then expand readily to other markets, bringing benefits for consumers and businesses.
- Startup businesses can have a global reach from Day One by establishing an internet presence that is simultaneously national and international.
- Internet infrastructure suppliers, such as cloud computing providers and mobile operators, can structure their services to serve large numbers of clients in multiple markets at the lowest overall cost.
- Businesses can scale up (and down) at critical points in their development, making direct or indirect use of cloud and software-as-a-service (SaaS) providers.

The strategic role of cross-border data flows has been recognised by policymakers

UNCTAD[1] quotes McKinsey Global Institute:

"The international dimension of flows [of goods, services and finance has] increased global GDP by approximately 10 percent, equivalent to a value of $7.8 trillion in 2014. Data flows represent an estimated $2.8 trillion of this added value."

The European Commission[2]:

"Unjustified restrictions on the free movement of data are likely to constrain the development of the EU data economy [...] risk fragmenting the market, reducing the quality of service for users and the competitiveness of data service providers, especially smaller entities."

The OECD[3]:

"Cross-border data flows have increased economic efficiency and productivity, raising welfare and standards of living."

International Chamber of Commerce (ICC)[4]:

"ICC urges governments to ensure all citizens and companies can realize the full potential of the Internet [...] by adopting policies that facilitate the adoption of new technologies and global movement of data that supports them."

MOBILE 360 SERIES

AFRICA

KIGALI • 17-19 JULY 2018

Proof of Identity and Access to Mobile Services: Designing policies for trust, inclusion & proportionality

Yiannis Theodorou
Director, Policy & Advocacy, Digital Identity and Mobile for Humanitarian Innovation, GSMA

MOBILE 360 SERIES
AFRICA
KIGALI • 17-19 JULY 2018

Proof of Identity and Access to Mobile Services: Designing Policies for Trust, Inclusion & Proportionality

In the digital age, identification becomes ever more critical to gaining access to mobile connectivity and a range of services. In around 54 countries across Africa, governments require proof-of-identity from users to register SIM cards in their own name, while more than half a billion people lack a form of official identification on the continent. Robust privacy and data protection frameworks ensuring trust incentivise people to register for mobile subscriptions in their own name, mitigating the risks of digital and financial exclusion.

The GSMA recently conducted research on SIM registration policies, and the linkages between access to identity and access to mobile services, as well as the existence (or lack) of privacy frameworks on consumers' trust.

Yiannis Theodorou, GSMA Advocacy and Regulatory Director, Digital Identity, Mobile for Humanitarian Innovation (ytheodorou@gsma.com)

- Download our Report: https://www.gsma.com/access-to-mobile-services
- Watch our Video: https://youtu.be/1jftiQF5ya4

GSMA MOBILE 360 SERIES

AFRICA

KIGALI • 17-19 JULY 2018

Jean Francois Le Bihan

Closing Remarks….