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**Submissions from entities in the United Nations system and elsewhere on
their efforts in 2016 to implement the outcome of the WSIS**

Submission by

World Bank

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 20th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

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World Bank Briefing
WSIS Implementation Annual Update

1. Introduction

Following is the submission by the World Bank pursuant to the request by the UN CST for information regarding implementation of WSIS outcomes. The following briefing contains three main sections focusing on the work of the World Bank in the following areas: (1) Summary of the 2016 World Development Report (WDR); (2) summary of major trends and opportunities in ICTs; and (3) selected examples of the World Bank’s operational and analytical activities in these areas.

2. World Development Report

Each year the World Bank publishes its flagship report, the World Development Report (WDR). The 2016 WDR was entitled, “Digital Dividends”¹ and focused on the role that ICTs and the Internet play in economic development. Digital technologies have spread rapidly in much of the world. Digital dividends—that is, the broader development benefits from using these technologies—have lagged behind. In many instances, digital technologies have boosted growth, expanded opportunities, and improved service delivery. Yet their aggregate impact has fallen short and is unevenly distributed. For digital technologies to benefit everyone everywhere requires closing the remaining digital divide, especially in internet access. But greater digital adoption will not be enough. To get the most out of the digital revolution, countries also need to work on the “analog complements”—by strengthening regulations that ensure competition among businesses, by adapting workers’ skills to the demands of the new economy, and by ensuring that institutions are accountable.

Digital technologies can be transformational by promoting inclusion, efficiency, and innovation. But the benefits often remain unrealized and the development impacts have fallen short. The digital divide is still wide in both in access and in capability, with six billion people still lacking access to high-speed Internet. The largest barriers are not in technology

Digital development strategies need to be much broader than ICT strategies. “Connectivity for all” remains an important goal and a tremendous challenge. But to bring the largest benefits, countries also need to create the right environment for technology. When analog complements to digital investments are absent, the development impact will often be disappointing. But when countries build strong analog foundations, they will reap ample digital dividends—in faster growth, more jobs, and better services.

3. Trends & Opportunities

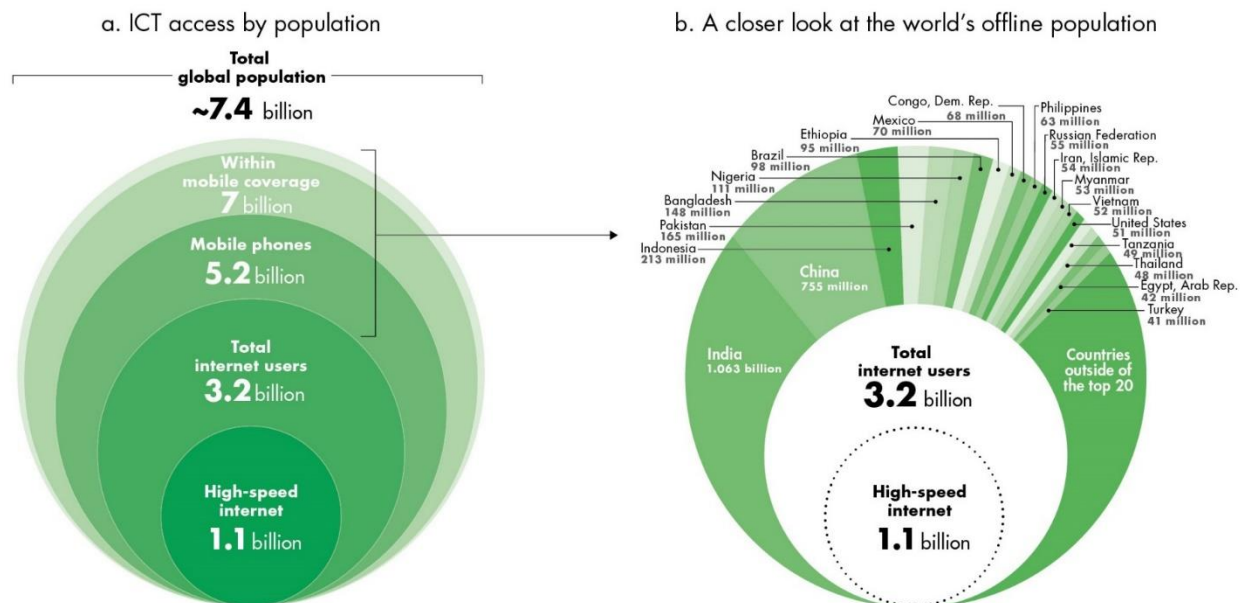
As noted in the WDR, the digital revolution has brought many benefits and digital technologies are spreading rapidly – at and a much higher rate than previous technological innovations - in developing countries, yet the Internet remains unavailable, inaccessible or unaffordable to most of the world’s population. Accordingly, SDG target 9(c) provides, “Significantly increase access to

¹ <http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf>

information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020.”

ICTs are playing an ever-increasing role in new technologies that are becoming pervasive (e.g., the Internet of things”, “cloud” computing, and biometrics (for digital identification)) as well as across sectors including the environment (e.g., green growth and clean-tech), agri-tech, med-tech, edu-tech and energy, to name a few. Strategically, ICTs are first transforming service delivery across sectors, allowing greater connectivity as more people and institutions which is expected to result in a virtuous cycle of innovation itself resulting in greater efficiencies. But for this virtuous cycle to operate effectively, it requires removal of underlying barriers, a foundational level of ICT capacity and literacy and accountable institutions. As more and more sectors are becoming dependent on high-speed broadband Internet connectivity, corresponding attention will need to be paid to ensuring an open, safe and secure ICT ecosystem (public & private stakeholder involvement in policy, institutional and legal matters) that includes cyber-security for safe and secure infrastructure and services as well as the data protection for the communications and data that flow over those networks.

The following graphic shows the dimension of the challenge and complexity in meeting these targets.



Sources: World Bank 2015; Meeker 2015; ITU 2015; GSMA, <https://gsmaintelligence.com/>; UN Population Division 2014. Data at http://bit.do/WDR2016-FigO_5.

Note: High-speed internet (broadband) includes the total number of fixed-line broadband subscriptions (such as DSL, cable modems, fiber optics), and the total number of 4G/LTE mobile subscriptions, minus a correcting factor to allow for those who have both types of access. 4G = fourth generation; DSL = digital subscriber line; ICT = information and communication technology; LTE = Long Term Evolution.

4. Operational Projects and Analytic Initiatives

In its fiscal year 2016, the World Bank provided \$61 billion in funding for development projects around the world and across sectors. An estimated 75% of those projects have an ICT component. This section provides briefly a few examples of some of those projects, as well as a few examples of the Bank's analytical work supporting its lending operations.

a. Selected Operations.

i. *ICT Infrastructure.*

In the ICT infrastructure area, the Bank provides financing for the buildout of and access to essential broadband communications infrastructure. Included among recent projects are the West Africa Regional Connectivity Project (WARCIP) which ensures connectivity for a number of coastal as well as land-locked countries to affordable, high-speed broadband Internet via the ACE submarine cable system. The projects ensure equitable participation in the ACE consortium, open access to capacity as well as build-out of essential landing and backbone infrastructure for the distribution of high-speed capacity on a public/private partnership basis.

Similarly, in the Pacific, the Bank is financing access for a number of Pacific Island countries to international submarine cable systems reducing the isolation of the islands through providing affordable broadband access and prices to consumers, redundancy to legacy satellite systems as well as great security against natural disasters through early warning systems relying on those connections.

ii. *Digital Development/Applications.*

On the applications side, the Bank has financed a number of innovative operations aimed at comprehensive digital development programs. Among these are:

- In Burkina Faso, one of the principal innovations financed by the *eBurkina* project is the development of a dynamic ecosystem – based on an earlier “Open Data” initiative - of applications developers, to provide an integrated digital platform for online service delivery as well as capacity building.
- An e-health loan in Gabon focused on reforming health care delivery via the introduction of management information systems allowing health care workers, equipped with mobile phones, to better diagnose, deliver and report on health service delivery, patient management as well as remote diagnosis/telemedicine.
- Bangladesh's integrated e-government project aims to expand the government's capacity to deliver on-line services to citizens while reforming back-end procedures and creating a shared services infrastructure for secure electronic transactions with agencies targeting the poor for social protection service delivery.

b. Analytical Initiatives.

i. The Digital Development Partnership (DDP).

The Bank established a multi-donor trust fund – open to sovereigns, foundations as well as private sector donors - to facilitate the operationalization of the 2016 WDR. The DDP provides a platform for digital innovation and development financing, bringing together stakeholders from both the public and private sector to catalyze support to developing countries in the articulation and implementation of their digital development strategies and plans. Priority work areas of the DDP include:

- *Data and Indicators:* scaling up the use of data and indicators – including big data – to benchmark and advance the readiness of client countries to reap digital dividends.
- *Digital Economy Enabling Environment:* The convergence of ICT, media, and content technologies and platforms requires a regulatory framework in support of the digital economy through updating regulatory environments to remove bottlenecks to the development of competitive digital ecosystems.
- *Internet Access for All:* Addressing the emerging digital divide identified in the WDR through technical assistance to support a range of policy, regulatory and technical matters.
- *Digital Government:* Supporting governments in the development of digital government infrastructure platforms and shared services to improve service delivery, foster transparency and efficiency in public administration, and empower all citizens and entrepreneurs.
- *Mainstreaming Digital Services, Solutions, and Platforms:* Fostering digital capabilities in a range of areas – transport, environment, etc., where collaboration with other stakeholders can facilitate growth and inclusion Digital delivery affects all fields of socio-economic activity.

ii. Combatting Cybercrime.

As part of a broader institution-wide focus on cyber-security in operational work, the Bank – working with six other external partners, and funded by the Korea World Bank Partnership Facility – is undertaking a path-breaking initiative in building capacity of policy-makers, lawmakers, law enforcement and civil society in developing countries on the legal aspects to more effectively prevent and combat cybercrime. The initiative includes (1) a Toolkit that synthesizes good international practice in combatting cybercrime, (2) an interactive, on-line Assessment Tool that enables countries to assess their current capacity to combat cybercrime and identify capacity-building priorities, and (3) a Virtual Library with materials provided by Project participating organizations and others. The project website – to be launched in Q1 /17 is www.combattingcybercrime.org .