BACKGROUND NOTE

Digital Dividends

One Network Area in East Africa

Tim Kelly *World Bank Group*

Christopher Kemei *Communications Authority of Kenya*

This background paper was prepared for the <i>World Development Report 2016 Digital Dividends</i> . It is made available here to communicate the results of the Bank's work to the development community with the least possible delay. The manuscript of this paper therefore has not been prepared in accordance with the procedures appropriate to formally-edited texts. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent.
The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

One Network Area in East Africa

Background Note prepared for the

World Development Report 2016: Digital Dividends

Tim Kelly

World Bank Group tkelly@worldbank.org

Christopher Kemei,

Communications Authority of Kenya kemeichris@yahoo.com

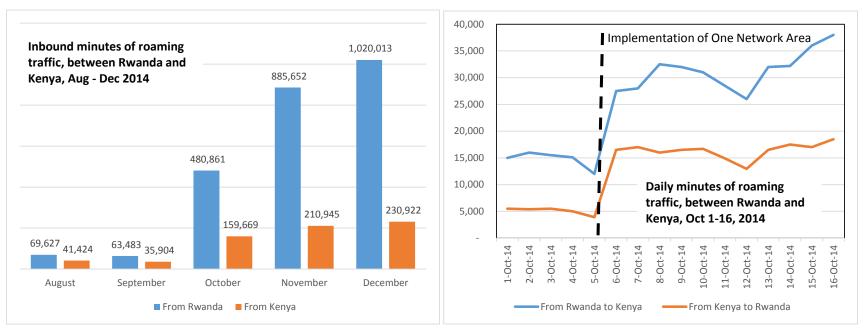
Communications networks underpin regional and global trade. This is particularly true in East Africa where mobile phones are plentiful but postal services are virtually non-existent and cross-border road and railway links are subject to the vagaries of adverse environmental conditions. It takes, for instance, between 5 and 8 days to transport goods from Mombasa, on the Kenyan coast to the South Sudan capital of Juba. But high mobile roaming charges, and surcharges on incoming international traffic (SIIT), create a similar barrier for cross-border electronic communications. Recognizing this, the countries of the East African Community (EAC) made a joint commitment in 2014 to create one network area (ONA) for the five economies of the EAC (Burundi, Kenya, Rwanda, Tanzania, Uganda), with the benefits also being extended to South Sudan. Specifically, for cross-border traffic originating in those countries, rates have been capped, mobile roaming charges eliminated and SIIT abolished.

The early results have been remarkable: Inbound roaming calls to Kenya from Rwanda increased by over 950 per cent, from 63'483 minutes in September 2014 to over a million minutes by December (Figure 1). Furthermore, the main traffic increase occurred on 8th October, the same day the changes were implemented, suggesting consumers are not only price sensitive but also well-informed. In Uganda, one of the most highly taxed countries in Africa, retail roaming rates were cut from US\$0.93 to US\$0.10 per minute. It is expected that the benefits of creating the ONA will include increased trade, enhanced regional integration and reduced costs of doing business, as well as increased revenues to the operators and the governments.² Success with mobile voice traffic should also encourage operators to cut data roaming charges, perhaps without regulatory intervention.

¹ Asebe, 2012. South Sudan logistics and trade bottlenecks. World Bank

² Kemei, 2015. ICT regulation and increased regional/global trade. Powerpoint presentation available at: https://www.dropbox.com/sh/yzgt0nyvy5hd26p/AAAS26caFlhiBN5hNBq6SkE0a/08%20CK.pdf?dl=0.

Figure 1: The impact of one network area on traffic between Kenya and Rwanda



Source: WDR 2016 team, adapted from Communications Authority of Kenya (unpublished data).