## Internet traffic in Africa is forecast to rocket so governments need greater data transparency

The African continent is set to undergo the most rapid Internet traffic (IP) growth worldwide between now and 2020. In the same period, fixed broadband speeds in Africa will increase 2,4 fold, with an average mobile speed connection of 5Mbit/s.

The transformation of global digitisation, based on the adoption of personal devices and deployment of machine-to-machine (M2M) connections will have an even greater impact on traffic growth. Over the next five years, global IP networks will support up to 10 billion *new* devices and connections, increasing from 16.3 billion in 2015 to 26.3 billion by 2020. Within Africa, a mobile-centric hub, there will be about 1,5 networked devices per capita in 2020—77% of these will be mobile-connected.

Applications such as digital health monitors, smart meters, video surveillance and a host of other useful M2M services are creating new network requirements and incremental traffic increases.

With the growing dependence on mobile and fixed broadband networks, security concerns are increasingly becoming top of mind for service providers, governments, businesses and consumers. Increased traffic brings with it challenges and opportunities, on the one hand there is obviously a need for more comprehensive security measures to protect data and reduce network exposure to fraud and illegal activities, but on the other, with proper governance, revenues can be created for governments to plough into socio-economic development through micro-contributions levied on telecommunications.

James Claude, Vice-President of Technologies at Global Voice Group (GVG) says that one way governments and regulators can get to grips with the expanding telecommunications sector is through Global Voice Group's Automated Revenue Monitoring System (ARMS)—which would enable them to monitor the telecoms data and modernise in order to meet all the latest telecoms requirements.

Says Claude: "The ARMS solution was developed by GVG specifically to meet the growing needs of regulatory and tax authorities for effective telecoms revenue management and verification systems. ARMS is one of GVG's products at the forefront of fiscal and telecommunications development in many emerging African countries. ARMS provides visibility over the following data:

[if !supportLists]· [endif]Prepaid airtime via

[if !supportLists]o [endif]Scratch cards

[if !supportLists]o [endif]Local electronic top-ups

[if !supportLists]o [endif]Internet top-ups

[if !supportLists]o [endif]International top-ups (via API, web services etc)

[if !supportLists]· [endif]Voice services

[if !supportLists]· [endif]Internet services

[if !supportLists]· [endif]On-Net traffic per operator

[if !supportLists]· [endif]Average revenue per user (ARPU)

[if !supportLists]· [endif]The total number of minutes generated by

successful calls

[if !supportLists]· [endif]The number of active customers (prepaid and

post-paid)

[if !supportLists]· [endif]The number of new customers.

With 735 million mobile subscribers at the end of 2012, Africa is deemed to be the fastest growing mobile market in the world and is the second largest behind Asia. This has brought with it a huge opportunity for abuse, which includes spammers, fraudsters and illegitimate users, resulting in revenue leakages and disputes for mobile network operators. Unfortunately, with the projected increase in traffic, this can only increase.

Says Claude: "The data collected by ARMS can be used for regulatory control, financial and fiscal auditing, market monitoring and intelligence, fraud detection and mitigation (tax evasion, money laundering) and facilitating decision-making at regulatory or government level."

African and emerging countries have many development needs and with proper monitoring and governance systems, they could harness the power of telecommunications to generate funds for their socio-economic priorities. ARMS can provide the required transparency.

Accurate market data leads to better governance of the telecommunications sector, to market growth, to increased revenue for both the government and the private sector, and to better pricing for consumers. The key to good governance is transparency—ARMS can provide the visibility over the telecommunications sector that governments need.