

## Enabling Digital Financial Inclusion through Satellite Communications Chief Regulatory Officers “CRO” Meeting 12<sup>th</sup> July 2017

### The Importance of Digital Financial Inclusion

Access to financial, banking and money transfer services is a prerequisite for economic growth all around the world and, in particular, in emerging economies. In many countries, the lack of reliable and affordable telecommunications prevents the ubiquitous roll out of financial outlets. In such remote areas, satellite communications are enabling affordable, high quality solutions to enable money transfer and connect bank agencies and ATMs. These services help transform the socio-economic lives of citizens through financial literacy and access.

While numerous examples exist in different countries of successful installations that have made a sustainable, positive impact on society, there is a fundamental difference in the regulatory approach applied to satellite communications (“satcoms”) by regulators across the world. This directly impacts the extent to which the benefits of satcoms can be extended to regions that need them most.

### Case Studies



In **Cameroon**, Express Union has established 220 outlets across the country connected by satcoms to offer money transfers from companies like MoneyGram and Western Union. By doing so, they avoid costly in-country transfer fees and allow families to receive funds from family members based overseas conveniently and at minimal cost.

In **Mexico**, Telecomm Telégrafos led a pilot project in 2012 “Pagos Móviles” using satcoms. More than 2,173 people benefited from the ability to make P2P mobile payments, transfers via SMS, local calls, local SMSs and balance inquiries. The project proved the technical viability of mobile transactions via satellite and will be replicated in other rural communities as it is currently happening.



In **West Africa** Société Générale bank uses satcoms to connect its remote agencies and ATMs to its Headquarters and to the Internet backbone. Connecting remote points of presence is key to ensure services across the continent and provide equal access to all citizens. Using modern, easy to install and maintain satellite terminals, the bank can ensure equal access to all citizens, allowing them to check and clear transactions without the need to travel hundreds of miles to city centre.



In **Kenya** Equity Bank Group uses satcoms to deliver financial services to 200 sites across the country, including some of its most remote places. Local agents also use this connectivity via portable terminals to offer other data based services, which increases business opportunities for them and for the wider community. Each satellite terminal is provided with smart devices preloaded with information on banking and finance subjects, addressing local knowledge gaps and helping to drive economic growth.

In **Indonesia** Bank Rakyat Indonesia went so far as to launch its own satellite in 2016 with the intention of overcoming connectivity problems across the Indonesian islands and to add a further 10 million customers who today do not have access to banking services.

In the **Democratic Republic of Congo** 800 cell towers are connected via satellite providing numerous services for local communities including mobile banking. Solar panels are used to power both the satellite equipment as well as the mobile base tower. The mining settlements in the DRC can also be nomadic, so if necessary the satellite equipment and cell towers can be disassembled and moved to a different location.



## Security of Transactions

---

Clearly financial transactions must be cyber-secure and systems enabling them must be robust to such threats. The point-to-multipoint architecture of satellite means that they have orders of magnitude fewer points of entry than terrestrial networks. In addition when connecting remote communities, satellite links often bypass terrestrial communications networks altogether. Newer satellites, developments in ground technologies, encryption and the fact that you need a physical antenna to send and receive a satellite signal all mean that hacking satellite signals is not at all easy to do.

## Regulatory Concerns

---

Because satellite communications are given different regulatory treatment in a number of areas as shown below in comparison to other telecommunications networks and services, satellite service providers are often impeded or blocked from offering financial services.

### 1. The Need for Blanket Licensing and Proportionate License Fees

---

The most favorable regulatory regimes apply a blanket license policy for the deployment of satellite earth stations. This means that they grant the service provider a service license for terminals (sometimes also an installer license is required) subject to a cost-based administrative fee, which is independent of the number of satellite dishes deployed.

The opposite extreme are countries that although applying the blanket license policy, either unreasonably increase the annual ISP/installer license fee and/or limit the number of licenses to no more than a handful.

Other countries have no blanket license policy at all and impose a fee for every satellite dish installed. Both these regimes:

- ⇒ **Unintentionally foster the creation of a parallel black market** that escapes the control of the Government or the National Regulatory Agency. The result is that the few companies holding the official licenses allow other ISPs to work under the umbrella of their license for often an unreasonable fee. This impedes competition in the market and raises costs to the end users.
- ⇒ **Prevent any large-scale deployment** that could benefit a maximum of citizens in the country and limit the availability of the services to only corporate users operating in remote regions that have no choice but to pay for satcoms, as their businesses rely on communications.

### 2. The Need for Proportionate Import Duties

---

In addition to ISP licenses and equipment licenses, many countries also apply disproportionate import duties on satellite equipment. While other telecommunications equipment often attracts an import duty of around 10 to 15% of the equipment cost, very often import duties on satellite equipment are *much* higher, in the range of 30 to 35% of the cost of the equipment *and* the cost of transport. Examples also exist of countries that apply an official import duty of more than 50% of the value of goods *and* the cost of transport.



- ⇒ Clearly such discriminatory treatment acts as a **direct barrier to the deployment of any satcoms service**, leading to an immeasurable loss in the potential socio-economic development of the country concerned.

### 3. The Need to permit Satellite Services on a territory

---

The most extreme scenario is of countries that do not allow any satellite services to be provided at all unless they are provided through the national state-owned telecommunications operator. Typically, national state-owned telecommunications operators are conservative and slow to embrace new satellite technologies. In addition, if they hold a monopoly, then they are also not motivated to be cost-efficient and therefore offer services at high prices.

- ⇒ The result is a limited penetration of satellite services *if at all* and again a loss in the potential socio-economic development of the country concerned. In addition, the benefits of competition are lacking in these markets raising costs and limiting innovation.

### Recommendations

---

The importance of digital communications in modern-day society cannot be over-stated. At the same time much of the world is confronted with the harsh reality of no communications coverage at all.

Regulators, especially those in emerging economies, should therefore seek to adopt favourable regulatory regimes that allow service providers in their countries to provide financial and other vital services to citizens no matter where they are located.

#### A favourable regulatory regime means:

- One that fosters a **competitive market** that enables price competition and innovation in the local market;
- A **blanket licensing regime** which is independent of the number of satellite terminals deployed;
- **Cost-based license fees**, to encourage uptake and deployment of satellite services for under-served areas;
- **Non-discriminatory and proportionate import duties** on satcoms equipment in line with other telecommunications or television reception equipment.