

Contribution from OneWeb

GSR Best Practices
2021 Consultation

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Topical Area: Transformational leadership to unleash the power of emerging technologies and business models.

The world is poised to enter a new era, an era of global connectivity that will transform the world the way the industrial revolution did, and before that the printing press. Once everyone can connect to the internet no matter where they are – on land, at sea, or in the air – every single one of the UN's 17 Sustainable Development Goal's (SDGs) can be addressed and supported by better connectivity.

Therefore Regulators need to encourage ubiquitous connectivity, because with connectivity comes education, jobs, information, e-health, e-finance, and the concomitant rise in a nation's Gross Domestic Product (GDP). With connectivity, a nation can address all of the SDGs: poverty, hunger, health, education, gender equality, clean water, clean energy, economic growth, improved infrastructure, decreased inequalities, sustainable cities, responsible consumption, climate action, oceans, land use, justice, and of course, partnerships. Partnerships with connectivity providers is how Regulators will unleash the power of emerging technologies and business models.

Regulators are encouraged to position themselves as powerful backers and advocates for any new technology that will increase connectivity, rather than seeing themselves in the older model of the regulator as simple enforcer. Regulators can set goals for universal service, and financially reward suppliers of connectivity for helping to reach those goals. Regulators should encourage their existing licensees (telco's, mobile network operators (MNOs), internet service providers (ISPs)) to look at the revolutionary infrastructure provided by the new low-Earth orbit (LEO) satellite constellations, as they can reach any place and any person on Earth, with speeds and broadband comparable to 4G quality services today. These LEOs will also provide infrastructure and backhaul for most 5G applications – but unlike terrestrial technology, these LEOs will provide that 5G-quality service in currently underserved areas.

Topical Area: Inducing new, effective, and agile financing mechanisms to digital infrastructure, access, and use

Many people around the world now use their personal mobile devices for far more than just calls – phones are now used for myriad purposes, including payments and banking. People pay each other, pay for goods in retail stores, pay for goods purchased online. Regulators need to ensure that this new scrippless payment and banking is legal and safe – and expanded in use to government services and utilities (such as paying water and electric bills), if not already possible. It is unsurprising that the Mobile Money platforms prospered in developing markets, where the majority of the population is unserved by traditional banking systems, however, this makes access to connectivity even more of a societal imperative.

Once again, connectivity to these mobile devices is crucial to this new economy, and must not be left to terrestrial technologies alone, which will never reach all places, leaving populations behind in this digital

evolution. Only space-based technologies can reach every spot on the globe economically. (Certainly the LEO constellations are likely to be used, but Regulators must keep in mind that traditional geostationary satellites (GEOs), medium-Earth orbit (MEO) constellations, and even some sort of drone or balloon or other high-altitude platform (HAP) technology might be added to the technology mix.)

Topical Area: Prototyping regulatory patterns for the post-Covid digital world

Regulators must be ready not just to enforce rules, but to issue mandates that encourage the adoption of all technologies that can support these needs. This is a new role for many Regulators, but one that is crucial to connecting their people.

Regulators must also work with their Ministries to view access to connectivity as a public good, much like access to clean water. Many nations still view “spectrum rights” as a way to make money, to auction that access and use the funds for other public needs. However, in the long run, this will actually delay a nation’s economic growth, as it will hamper the introduction of new LEO and other satellite technology, and crucially, it will hamper the inclusion of populations unserved by terrestrial networks in the digital era. That is because satellites are inherently multinational, and if every nation in its footprint auctions the spectrum rights, no company in the world can afford that exponentially burdensome fee. For the LEO constellations, that cover every nation in the world, such fees will completely prevent the service from being offered.

In the past, governments were focused on “jobs and taxes” when contemplating what a new technology or company could offer their nation. Today, governments must view raw connectivity as the conduit to jobs (and taxes) as well as to education, health, and financial growth.

Crucially, the current world financial hubs (London, New York, Tokyo) came about because of the density of population and related access to infrastructure. With the infrastructure of “connectivity” now a reality, people can work for financial institutions from anywhere in the world. This will disrupt the way the financial world thinks and works, and Regulators in nations everywhere need to be ready for the growth in their own countries of people using connectivity for their jobs, and getting the education needed to work those jobs. Instead of travelling to foreign places, a nation’s people will be able to get a degree from their own homes, learning from the world’s best universities just by connecting to the internet from anywhere.

Regulations for traditional satellites are often written in very specific, technical language. When regulations are so specific, it can be hard to update them when a new technology comes along – or in anticipation of new technology not yet invented. Regulators are encouraged to provide “regulations” that are outcome-focused and foster services and the quality of those services, without prescribing exact technology.