



Outcome report: The change of paradigm to online life, projections, opportunities (ITEC)

Session Date and Time: Session 6, Thursday, 8 July 2021 (17:30 – 19:00 (CEST)). 90 minutes.

Numer of Participants: The session counted with 98 participants from them we there was 83 participants in average.

Master of ceremony: Pablo Palacios, Programme Officer, ITU Regional Office Chile.

Moderator: Martha Suarez, President of the Dynamic Spectrum Alliance (DSA).

Speakers:

- Alejandro Adamowicz, Regional Strategy and Technology Director, GSMA Latin America, GSMA.
- Roberto Cabanillas, Director of Digital Service, Ericsson.
- Sebastian Kaplan, LATAM Public Policy Manager, Connectivity and Access, Facebook.
- Ernesto Majó, Deputy Executive Director, LACNIC.
- Shernon Osepa, Director, Caribbean Affairs and Development Internet Society (ISOC).

1. Session summary:

This session offered a view of the new trends, the advances on technologies, what are the new emerging networks for the Region from the ICT operators' perspective. The session discussed the following aspects:

- Considering the changing paradigm of normal live after COVID-19, which projections in new generation networks can we expect in the coming years?
- Considering the need for new services, the need for interconnection, etc. that the pandemic has exposed, how has the industry reacted?
- What projections and new services are foreseen towards smart grids?
- What technological needs are identified as coming priorities?
- What projections for managing the digital divide can be achieved by 2030

2. Main outcomes highlighting the following:

- Ericsson has been serving operators across the region and throughout the world to deploy 5G networks.
- The traffic of 5G is incrising incredibly and is expected to grow eight times by 2023.

- So far, more than 160 operators have implemented 5G, despite the pandemic. Ericsson is expecting more than 3.5 million connections in terms of the number of subscribers and amongst operators.
- The adoption curve for 5G is five years faster than the curve we had with 4G.
- Ericsson is upgrading the software to have kilometers of extended coverage, to go to 50 or even 100 kilometers with the same antenna.
- GSMA highlighted the situation in Latin America through mobile connections. 57% are connected, 39% of people have the services available but don't use them.
- In Argentina, e-commerce grew in the last year by 124% in real terms. In Chile, reports of traffic show 40% increase. In Mexico, the outlook is that the pandemic accelerated by ten years the development and use of ICTs. And in Brazil, there's been a huge increase in the sales of PCs and computers.
- 5G is the base technology for the fourth industrial revolution, Internet of Things in particular, plays an important role. GSMA forecasts that about USD 700 billion will be invested in a global level in the next ten years. In Latin America, we're looking at a proportion of 70 million accesses by 2025, and this value contribution can be seen in the service industries, in manufacturing, in ICT, and everything that's linked to construction, mining, and agriculture.
- LACNIC distributes the internet addresses, IP addresses, IP4 and IP6 which is the basis for the implementation of 5G and IoT, then necessary resources to deploy their services.
- The challenge is to offer the resources to connect 240 million inhabitants in our region, and currently we have only around a million IPv4 addresses available, but to connect the 400 million internet users that we have in the region.
- In 1999, LACNIC set up a new version of IP, the IP Version 6, which opens up an infinite opportunity to identify devices on the Internet and that helps with the deployment of all the services that are needed.
- 27% of Internet users can access to IPv6 on the Internet, but there are countries with a higher rate, around 40% in Mexico, Brazil, Uruguay, and there are many countries that still need to make more efforts.
- Facebook has a connectivity sector whose work is to add more people to the Internet world and have more people connected.
- In Latin America, there is still a usage divide and a coverage divide. We still have 2.6 billion people not connected in the world and 1.6 billion people don't even have coverage.
- On one side, we have availability, that means the number of people that is covered, but there is also a problem with affordability, the cost of being connected to Internet, and then the challenge with the relevance of the increased demand for internet content and services.
- The role of internet during the pandemic can contribute with different connectivity initiatives through our alliances to bring innovation.

- Facebook has worked to provide connectivity in rural areas “Express Wi Fi”. Facebook is working with operators and different infrastructure companies to facilitate a neutral access to devices and network.
- Facebook highlights the need to work in innovative policies in order to reduce the costs, facilitate deployment, in order to have more spectrum and reduce cost and regulatory flexibility, that support innovation, promote investment, competition, and new business models.
- ISOC is focused in the policy side because they want Internet to be open to everyone, therefore they are working with governments and regulators so that Internet remains open.
- ISOC works in capacity building, and digital literacy to contribute to the adoption and utilization of Internet.
- ISOC focuses its work in two main areas: projects in order to enhance the access to Internet access and the secure access. ISOC works in building community networks, therefore ISOC works with the community so that they can, themselves, deploy a network within their community.
- ISOC works in Internet Measurement, this data support the decision making processes to have a stronger and more robust Internet.
- ISOC works with new technologies and the impact of these new technologies on people who still do not have access to Internet. In Latin America, the Internet penetration is approximately 57%, in the Caribbean is between 25% to 85% since there are countries like Haiti, which is the poorest country on this side of the world with a penetration of 25%, but all the countries in the Caribbean have a higher penetration rate of 85% or almost 90%.
- According to Ericsson the digital transformation is a goal to help assist the society with the link to AI, the interaction between human and machine in order to have a safer life, more productive, and we are living what we call the Internet of Skills to take advantage of these new assistive technologies.
- According to Facebook, currently there is a new world coming, a hyperconnected world with an infinity of devices that are interconnected, and that means the world will be very different from what we have lived in, in the past.
- When we think about vehicles and personalized network applications, these all depend on connectivity and the framework and infrastructure being suitable to support these applications and all these devices, then we think there are many connected devices that will come about that may help us to stay in touch with family members in a closer way and which feels more real. We'll have virtual augmented reality, which will help us to maybe spend time with our family members, even if they're somewhere else in the world.
- And people who have audio/visual disabilities may be able to be assisted in hearing in areas where there's a lot of noise or see better in difficult conditions, also the way we provide medical diagnoses to patients, and it also is going to work to help doctors to predict illnesses based on various data gathered.

- And I think we have to look at licensed and unlicensed aspects, Wi Fi is going to be very important for these applications and something we are looking at the six band in our region to ensure the future of connectivity after the pandemic.
- According to Ericsson, apart from the fact that it is another generation, we see for example the first tele operated scan where a doctor in a hospital with a joystick was moving the hand of a paramedic in an ambulance, connected vehicles, the first 5G drone in Latin America, among other examples.
- According to GSMA, one important example of the use of 5G will be the e-education with virtual reality, the operation of machinery, remote use of applications, etc.
- Facebook highlighted the important role of the governments. Without the intervention of the governments, we cannot establish partnerships and the relevant regulatory policies.

3. Panellists contributions to the outcome reports

- All speakers highlighted the main role that governments play in the adoption of new technologies, the development of national policies, the implementation of incentives to implement new networks and to develop new applications.
 - 5G will play a crucial role to allow the development of digital economies, the deployment of much beneficial applications and services.
 - The interrelation between 5G, IoT, AI, Machine Learning, interconnection of machines, interconnection of final users, interconnection business to business, etc. will increase the implementation of smart sustainable cities and communities.
 - Not only governments are working in the development of the Internet, but many international organizations, operators, technology providers, etc. all are contributing to the development of free and open Internet.
 - It is important not only to ensure connectivity, but also ensure quality of service, ensure security and sound use of applications and services.
 - There are already several new applications, important examples of the use of remote applications in real time. This benefit can be reached with the use of 5G and even when 4G offers a good broadband access, but the reduction of the latency and the new concept of the networks, play a determinant role to deploy new services.
 - To implement 5G services is necessary to have resources, apart of the spectrum, we need to consider the IP addresses necessary for the interconnections. So far we do not have more IPV4, therefore is critical to encourage the use of IPV6 to connect the uncounted number of new devices.
 - There are new projects to interconnect people, to have Internet of Things, Internet of Everything, Internet of Skills, Internet of Abilities, etc. The future will consider a holistic concept to have all interconnected.
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