Contribution of Costa Rica to GSR-2020

Superintendency of Telecommunications (SUTEL)

REGULATORY ACTIVITIES IN THE CONTEXT OF COVID-19

For decades, the telecommunication sector has proven to be dynamic, productive, evolving and a source of great potential. Today, with the arrival of an invisible and agile enemy such as COVID-19, the sector has had to cope with a new challenge or capacity for resilience to ensure that people can continue working, studying, entertaining themselves and sharing in a virtual way, with the least possible impact.

Intersectoral collaboration

Participation in a working group led by the Ministry of Science, Technology and Telecommunications (MICITT) as the country's governing body in this sector, and the telecommunication operators, to take action aimed at ensuring service continuity, maintenance and security, as well as at identifying initiatives to support the efforts required to deal with the emergency.

In addition, Gilbert Camacho Mora, a member of the SUTEL Council, was appointed to coordinate with the working group led by MICITT to look into the possibility of implementing activities of benefit to users, such as zero rating, so that data would not be deducted from the capacities agreed under contracts for postpaid services or from the balances of prepaid services, during the emergency period due to COVID-19.

Along similar lines, together with and under the supervision of the assigned Council member, the SUTEL General Directorate of Quality was instructed to organize and coordinate a technical working group with operators to prioritize technical issues that had arisen and assess relevant measures to mitigate the effects of the pandemic on the sector.

As an example of the above, some telecommunication operators increased their Internet traffic capacity at the Internet exchange point (IXP). Likewise, the Costa Rican Institute of Electricity - the sole State-owned operator - was added to the IXP as a means of addressing the increase in traffic generated by the COVID-19 crisis.

Vectors of regulatory action: inclusivity, agility and resilience

Network monitoring. Action undertaken included the constant monitoring and weekly analysis of the behaviour of fixed and mobile telecommunication networks using a distributed system for measuring the quality of telecommunication services at national level (system of probes).

This system, which has a nationwide network of 544 measurement probes to evaluate fixed and mobile telecommunication services, helped to establish the Increased Traffic Network Response Rate (IRIT) to determine, as a percentage at national level, the response rate of fixed network operators' networks to the increase in traffic in a unified manner.

The above system also provided information on the relationship between download speeds outside of operator network maximum load times and the speed recorded during periods of maximum traffic compared with the operator's contracted speeds.

Each percentage obtained through IRIT denotes the level of download speed performance, i.e. a higher percentage level means better performance in supporting operators' telecommunication networks. In the case of Costa Rica, as the pandemic progressed, IRIT percentage levels increased, thereby demonstrating the capacity of national networks to support data traffic, which indicated a stabilization with values close to those recorded before the emergency.

For example, in the week of 23-29 March 2020, IRIT recorded a value of 68.4 per cent for the response rate of fixed telecommunication networks to the increase in traffic, which showed that the networks were saturated owing to all the activities that had started to be performed from home as a result of social distancing measures due to the pandemic.

However, according to the last report for the week of 8-14June 2020, IRIT recorded a value of 91.9 per cent, which showed the stabilization of fixed telecommunication networks and the effectiveness of the measures adopted by operators (including an increase in capacity to the IXP and purchasing of greater international capacity). The results were similar to those recorded under normal circumstances prior to COVID-19.

It should be noted that this process also included the monitoring of the mobile networks of Costa Rica's three telecommunication operators, which were found to have been largely unaffected.

Connectivity and inclusion. As a way of ensuring connectivity by harnessing the universal service and access resources of the National Telecommunication Fund (FONATEL), it was proposed that MICITT should subsidize 20 per cent of the cost of Internet services for micro and small enterprises registered with the Ministry of Economy, Industry and Commerce and small and medium-sized agricultural producers under the Ministry of Agriculture and Livestock for a minimum period of three months.

As a means of dealing with the crisis and bridging the digital divide, it was also proposed that MICITT should expand the coverage goal of universal service and access for the Connected

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Homes programme, which provides a computer and Internet connection to vulnerable households in the country, to more than 61,000 additional families. Under the National Telecommunication Development Plan, the goal was to reach 140,496 beneficiary households in the period 2015-2021.

MICITT, as the governing telecommunication body in Costa Rica, approved the extension of coverage for the Connected Homes programme by 46,462 additional households, thus surpassing the goal of 140,496 beneficiary households to 186,958 households by 2021.

In addition, it was proposed that MICITT should purchase 12,000 items of new computer equipment in order to extend universal service and access for the Equipped Public Centres programme, which provides telecommunication devices to national public centres such as schools, colleges and health centres. Such equipment should be provided for the National Council for the Elderly, the National Council for Persons with Disabilities, education and nutrition centres run by the Ministry of Health, as well as the latter's child nutrition and integrated care centres and MICITT's smart community centres.

Finally, to expand coverage of universal service and access for the Public Connected Spaces programme, which provides free wireless Internet services in public spaces in Costa Rica, such as parks, squares, train stations, libraries and civic centres, it was proposed that 172 additional wireless Internet access areas should be installed.

In April 2020, the programme had 359 wireless Internet access areas in service, thus its target for free Wi-Fi access in public spaces should increase from 513 to 685.

Leadership and lessons learned

Cyclical technological renewal. The experience with COVID-19 puts into perspective the fact that telecommunication regulations must always evolve and promote continuous renewal, so as to promote the adoption of new technologies, thereby ensuring that networks can respond more rapidly and in a more timely manner to incidents at all times, such as the data traffic increases experienced during the period of isolation due to the pandemic.

It is important that proposed regulatory approaches are directed towards innovative technological alternatives, which are not only focused on evaluating network performance or compliance with quality and user experience indicators.

High-capacity networks. The high degree of connectivity required from the telecommunication sector during the COVID-19 crisis to enable, inter alia, teleworking, tele-education, telemedicine and e-commerce, shows the need for regulation to focus on developing networks that allow for redundancy and capillarity (backbone networks), so as to ensure a diversity of high-capacity routes deployed throughout the country.

This initiative should also be considered as part of universal access and service, so that all users, without distinction, can use new technologies, such as fifth-generation (5G) networks.

These aspects are clearly cross-cutting themes that must be included in future strategic approaches to regulatory agendas and on the path towards the digital transformation of regulatory bodies.

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