



Keys to the Modernisation of Digital Ecosystem Regulation in **Colombia**



RECOMMENDATIONS FOR A NEW DIGITAL FRAMEWORK

1.

PROMOTE CONVERGENCE AND REMOVE ARTIFICIAL BARRIERS TO MAXIMISE THE BENEFITS

Update the 2009 ICT Law 2009 by incorporating:

- The television service.
- General guidelines for modernising regulation.
- A unified body that understands all aspects of the digital ecosystem. This will allow for a more holistic overview so that regulation can be better aligned with the dynamism of technological changes.

2.

LEVEL THE PLAYING FIELD IN THE DIGITAL ECOSYSTEM TO GIVE USERS THE SAME LEVEL OF PROTECTION

- Regulation should avoid distortions that are artificially harmful for some providers to the detriment of others.
- To encourage innovation and competition, regulation based on minimum criteria should be established, with the same conditions for all players.
- Regulation must ensure that new digital ecosystem services give users the same level of protection and transparency as existing services.

3.

ENHANCE USER EXPERIENCE BY ENCOURAGING COMPETITION IN QUALITY OF SERVICE

- Regulation of quality of service must focus on creating transparency in the information available to users, comparable to and in line with international standards and the market context.
- There should be a guarantee that new digital ecosystem services will give users the same level of protection and transparency as existing services.
- Any ex ante regulation of quality should be accompanied by studies to assess the cost-benefit ratio based on real data and market studies. Using these studies, the utility to consumers can be evaluated when a specific regulation is implemented.

4.

CREATE A SINGLE CONVERGED REGULATOR TO ACT ACROSS THE DIGITAL ECOSYSTEM

- Amending the institutional framework to create a single regulator by merging CRC and ANTV will give rise to a convergent regulator that can analyse, regulate and promote the harmonious development of the entire digital ecosystem. Under this premise, such a regulator must also incorporate the ANE, which administers one of the key resources for providing telecommunications and broadcasting services. ANTV should remain solely as a content regulator.

5.

REMOVE SECTOR-SPECIFIC TAXES TO ALLOW GREATER AFFORDABILITY AND UNIVERSALISATION OF SERVICE

- To reduce affordability barriers, the Colombian government could remove VAT on mobile handsets and smartphones, similar to the approach adopted for laptops and computers.
- In such a strategic sector for the future development of the country, taxation on telecommunications should not distort consumption and investment decisions.
- Gradually reduce or remove certain targeted taxes. Abolishing consumption tax on voice services could connect more than 310,000 Colombians to mobile internet.
- All the stakeholders in the digital ecosystem should contribute to FONTIC, and use of the fund should focus on universalising internet service.
- A rethink of the need for FONTIC and its purpose is necessary to ensure it aims to extend ICT services into unconnected areas, avoiding asymmetric tax treatment of those who already meet their obligations through other regulations (e.g. through spectrum licensing conditions).

BENEFITS FOR USERS

- There will be greater choice of providers for a single service or substitute services, leading to an increase in consumer surplus through lower prices and higher quality.

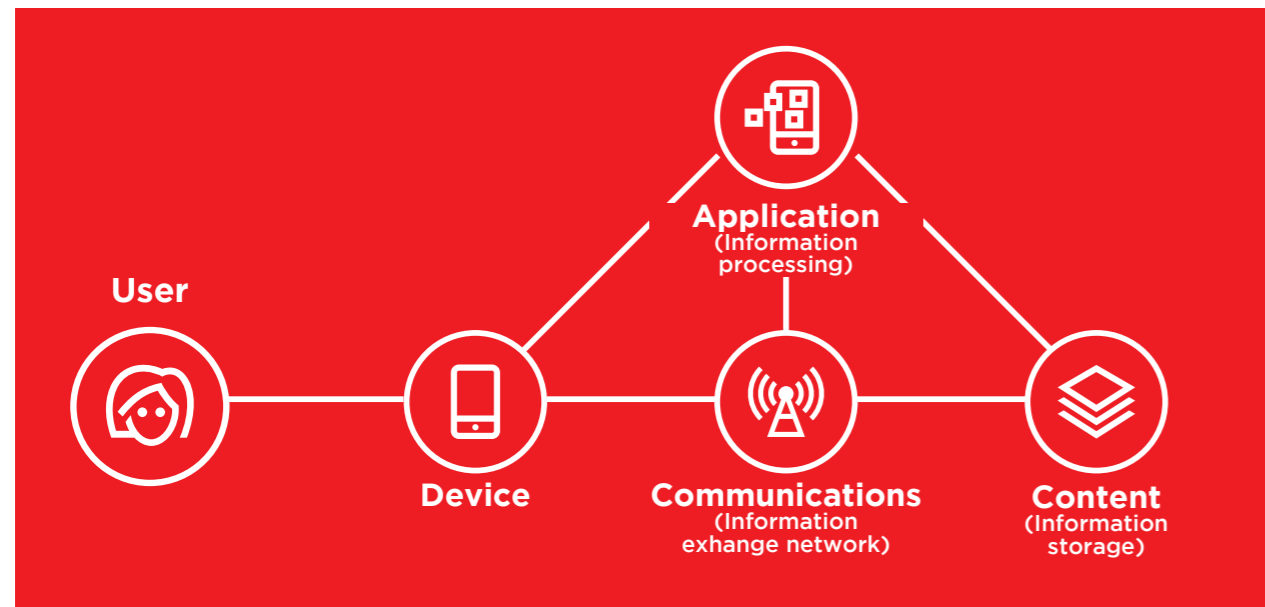
- Regulation on a level playing field that treats all providers the same will encourage competition, generating consumer surplus in the form of price, supply, quality, diversity and innovation.

- Consumers will have greater transparency to be able to decide which products and providers best suit them depending on their needs.

- The existence of a single institution must be reflected in coherent decisions that include the entire ecosystem rather than just some elements. It will also maximise the benefits of convergence by promoting it and removing artificial barriers.
- Decision making will be much quicker and easier, responding appropriately to a sector in constant evolution. There will be fewer barriers to entry and operation, and greater diversity in the provision of services, resulting in incentives for innovation and competition.

- With a transparent, rational taxation system, the prices of services will decrease and consumption will increase, incorporating more people into digital services.
- Tax revenues should not experience major changes, because when available revenue increases, consumption also increases, leading to more revenue from consumption tax.

Keys to the Modernisation of Digital Ecosystem Regulation in Colombia



The technological progress resulting from digitisation has generated tremendous benefits for consumers around the world. Primarily leveraged by mobile, access to digital content is becoming universal, with more than three billion people connecting through mobile devices every day. Colombia has 52 million mobile connections and almost 13 million unique mobile internet users, indicating that access is starting to penetrate lower income levels.

Three key characteristics of the new digital ecosystem are driving this progress¹:

1. Modularity: Digital products and services are made up of a combination of complementary inputs (applications, content, devices and

communications) that multiply, almost endlessly, the array of choices to satisfy consumer needs.

- 2. Economies of scale and scope:** The ubiquity of the internet allows increasingly better services to be made available to companies and users at constantly falling prices, or even free of charge.
- 3. Dynamism:** The constant evolution of the digital ecosystem means that both new and existing companies have powerful incentives to invest and innovate, and therefore to create new products that satisfy user needs more efficiently (cheaper and/or better products). At the same time it generates more competition as a result of entry into neighbouring markets.

¹ For more information, see "A New Regulatory Framework for the Digital Ecosystem" <http://www.gsma.com/publicpolicy/new-regulatory-framework>



Future-proof regulation

Colombia has a modern legal and regulatory framework. It was one of the first countries in Latin America to incorporate the concept of converging telecommunications and IT technologies. But nearly 10 years have passed since this legislation was originally conceived, in a different technological context from today. To stay ahead internationally, legislators should consider updating and future-proofing the legal framework to ensure it captures all aspects of technological convergence. The aim should be to create clear benefits for citizens and companies, who constantly demand more and better connectivity.

The fast-paced dynamism of the digital ecosystem complicates the task of establishing rules capable of maintaining their validity for any length of time. It is evident in Colombia that stringent regulation can distort the market and affect the emergence of new products and services. We are currently seeing two very specific harmful outcomes of some regulatory policies included in the 2009 ICT Law:

- **Regulatory discrimination:** There is a clear, notable difference in the way different sectors currently providing similar or even identical services are regulated². This is the case of traditional (voice and text) versus IP communication services.

² For more information, see "Competition Policy in the Digital Age" and "Resetting competition policy frameworks for the digital ecosystem"

• Static regulation in a dynamic market:

Today the regulatory framework of most countries in the region, including Colombia, is prescriptive or ex ante, as it lays down the rules under which companies will operate, similar to the 2003 European Union guidelines³ (ex ante determination of relevant markets). However, the EU Recommendation has been revised and updated, leaving only four wholesale markets susceptible to this type of regulation.

To keep pace with the growth of the digital ecosystem and maximise the socioeconomic benefits of this vibrant industry, we believe that Colombia should move towards “future-proof” regulation based on three specific principles:

1. Functionality-based regulation:

Design the regulatory framework to achieve the objectives pursued in the most efficient way, without regard to industry structure, technologies or legacy regulatory regimes, incorporating all elements of the digital ecosystem.

2. Dynamic regulation: The dynamism of this type of market means that regulation must have general principles, be flexible and not hinder the emergence of new services.

3. Bottom-up regulation: In some cases regulation may need to be rethought from the ground up so the legacy of outdated rules does not continue to adversely affect users. In many cases,

competition in the digital ecosystem means that legacy regulation no longer achieves the objective it was created for. In other cases, such as privacy and cyber security, a new regulatory framework needs to be developed.

These principles must not be confused with a lack of regulation. The aim is to have a minimum of general ex-ante principles complemented by ex-post regulation to allow intervention when necessary, to protect user rights, competition and data privacy.

The new regulatory framework to emerge from this will be technology- and market-neutral. It will be cost-effective, as it will aim to achieve public policy goals at the lowest possible cost. It must also be flexible, because it will keep pace with technological and market innovation while preserving and enhancing regulators’ ability to achieve their objectives. Most importantly, this new framework will allow consumers to use digital tools and be protected by regulation that is tailored to their needs and maximises the benefits of access to the digital ecosystem.

³ See “Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services”.

CONVERGENCE: KEYS TO THE MODERNISATION OF DIGITAL ECOSYSTEM REGULATION IN COLOMBIA



PUBLIC POLICY RECOMMENDATION



1 Promote convergence and remove artificial barriers to maximise the benefits

Digital services are inherently convergent. One of the main objectives of any change to the current framework is to acknowledge the advent of a convergent market in which the only limitation for providing services using a particular type of network should be technology, rather than prescriptive regulation. If more services can be delivered through a single technology, supply and competition will increase, generating greater benefits for consumers in terms of diversity, quality and price. From the point of view of the service provider, a more effectively used network will mean achieving lower unit costs and a more intensive use of capital, with a corresponding rise in productivity.

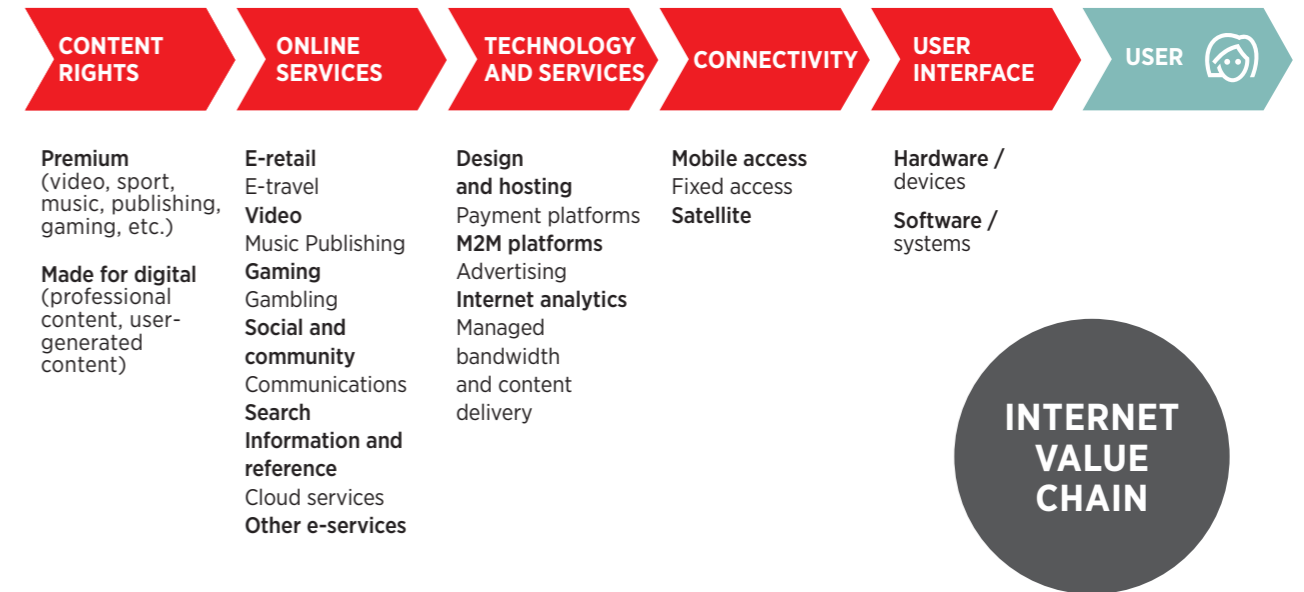
The convergence of services typically regarded as telecommunications (voice, messages, data) has occurred gradually, without a technological barrier. In this respect, Colombia is one of the countries that have allowed convergence of traditional services and unrestricted entry of companies offering over the top (OTT) services.

In Colombia, the ICT Law (1341/2009) covers several links of the digital ecosystem chain, including audio broadcasting. However, television services are still governed by legacy regulation. In relation to content, services and applications, this law guarantees access to networks but is unclear about the provision of OTT services, which compete with traditional ICT and television services.

Principles of regulatory modernisation

Technological neutrality is essential to achieve regulatory modernisation capable of encouraging innovation and investment. It is becoming less easy to justify giving different legal treatment to sectors and services which, as far as users are concerned, are increasingly similar.

A prescriptive rule applied ex ante endangers dynamic, flexible regulation capable of adjusting to the changes of a rapidly evolving market. The regulatory framework must reduce asymmetries between digital services, allowing for an ecosystem in which the value chain can grow⁴, segments are more interdependent, and where regulation should keep pace with the harmonious development of the ecosystem rather than limiting its evolution.



Public policy recommendations

Update the 2009 ICT Law 2009 by incorporating:

- The television service.
- General guidelines for modernising regulation.
- A unified body that understands all aspects of the digital ecosystem. This will allow for a more holistic overview so that regulation can be better aligned with the dynamism of technological changes.

BENEFITS FOR USERS

There will be greater choice of providers for a single service or substitute services, leading to an increase in consumer surplus through lower prices and higher quality.

⁴ For more information, see The Internet Value Chain, GSMA <http://www.gsma.com/publicpolicy/internet-value-chain>

PUBLIC POLICY RECOMMENDATION



2 Level the playing field in the digital ecosystem to give users the same level of protection

Users consume communications services because of the utility they generate for them, regardless of the providing network. Most services that consumers perceive to be the same are provided by different networks and providers. From the user's point of view they are equal services, or perfect substitutes.

However, from a regulatory perspective, services are not treated the same. The quality of a single service can be subject to different rules depending on who the provider is and which network provides it (e.g. traditional voice services versus voice over IP). The situation is similar with licensing, reporting requirements and collaboration with the legal system.

In Colombia there is currently no difference in the regulatory treatment of services provided by internet companies and traditional telecommunications and television companies. A new regulatory framework should ensure that all companies, regardless of the technology they use to provide the service, satisfy the same level of user protection and have equivalent tax burdens. The government should use schemes for cooperation and information exchange with other countries to ensure regulation compliance, regardless of the home jurisdiction of the service provider.

Asymmetries can push up the prices of services only for some providers, e.g. locally provided services versus services imported through the network, because the network crosses geographical borders unhindered. Obvious examples of asymmetries include taxation on the service and the profit, social security and labour charges and, very significantly because of their direct impact on the total cost of mobile, sector-specific taxes and contributions to universal service funds.

Principles of regulatory modernisation

Under the principle that regulation must be functionality-based, it should be independent of the structure of the sector and technologically agnostic. The rules should not vary depending on who the provider is, which technology is used or the physical location of the technology. What matters is the service users receive, which for them is equivalent; having more providers means there will be more choices in terms of quality and price.

EXAMPLES OF REGULATORY DISCRIMINATION				
ISSUE	APPLICATIONS	COMMUNICATIONS	CONTENT	DEVICES
Consumer Protection	General CP law	Specific regulation: portability, opt-in services, specific consumer protection offices	Age-related, violence, sex; otherwise general CP law	General CP law
Competition Enforcement and Economic Regulation	General competition law	Industry specific obligations and regulatory institutions Asymmetric access regulation to SMP operators Retail price regulation and tariffing	Compulsory licensing for some content; otherwise general competition law Restrictions on advertising time Restrictions on foreign ownership	General competition law
Intellectual Property	General IP/competition law	General IP law	Mandated licensing of some content Specific regulation of IP rights management	General IP law Mandated licensing for IP included in some standards Compulsory levies to content right owners
Privacy and Data Protection	General privacy regulation	Industry specific regulation (e.g. "CPNI"); license conditions	Specific regulation (e.g. images of minors; "right to be forgotten")	General privacy regulation
Resource Management	None	Regulated allocation of spectrum, numbering and access to property (rights of way), regulation of technology transitions	Regulated allocation of spectrum for broadcasters	None
Security	Data requests by authorities	Legal interception of communications Retention of call data records Interoperability with military networks	State secrets regulation	Little or no regulation Current battle over encryption
Taxes	Sales tax with potential for jurisdiction shopping	Sales tax Spectrum charges Sector specific taxes Luxury taxes	Sales tax Levies to fund local production and public television	Little or no regulation Current battle over encryption
Universal Access/ Universal Service	No regulation. No obligations to contribute to funds	Obligation to provide basic set of services at affordable prices and wide coverage ("carrier of last resort") Contribution by telcos to universal service fund. Included as license obligation for mobile operators	Included as license obligation for broadcasters. No obligations for others	No regulation

SOURCE: NERA ECONOMIC CONSULTING

Public policy recommendations

- Regulation should avoid distortions that are artificially harmful for some providers to the detriment of others.
- To encourage innovation and competition, regulation based on minimum criteria should be established, with the same conditions for all players.
- Regulation must ensure that new digital ecosystem services give users the same level of protection and transparency as existing services.

BENEFITS FOR USERS

Regulation on a level playing field that treats all providers the same will encourage competition, generating consumer surplus in the form of price, supply, quality, diversity and innovation.

PUBLIC POLICY RECOMMENDATION



3 Enhance user experience by encouraging competition in quality of service

Quality of service is a very broad, difficult to define concept⁵. Telecommunications service providers combine quality of service parameters to meet their specific requirements. By differentiating their products and services and tailoring them to all types of users, they ensure user satisfaction. Competition based on quality of service is therefore a key differentiator in the competitive marketplace.

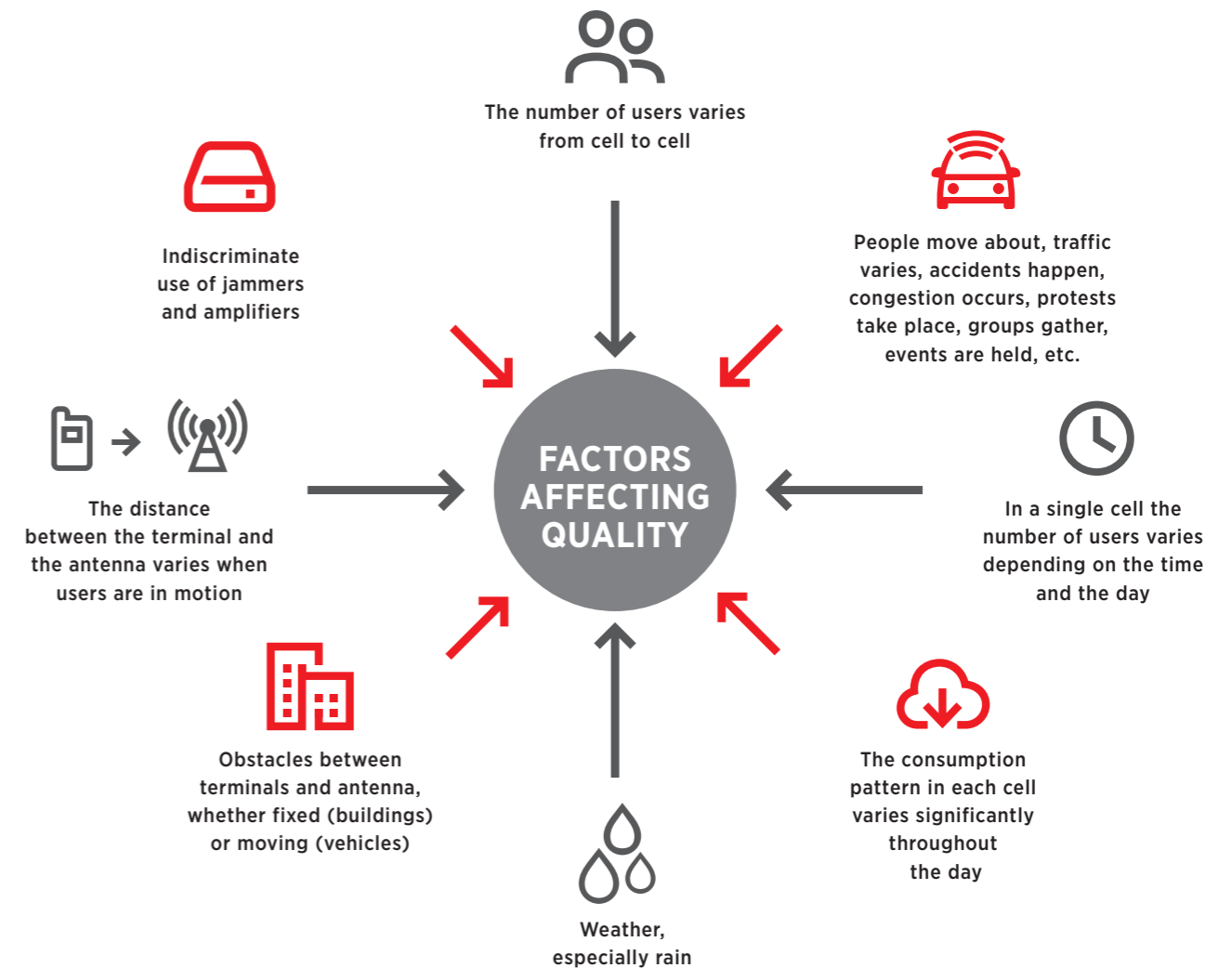
To have quality services, it is first of all necessary to ensure there are no barriers to two basic inputs: spectrum availability and favourable conditions for infrastructure deployment. It is also essential to consider that factors beyond the network directly affect user experience and therefore the perception of quality. These can include anything from the number of users in a cell to traffic jams, public protests, the distance between the terminal and the antenna, jammers and the weather.

In Colombia quality of service is governed by Communications Regulation Commission (CRC) Resolution 3067 (Quality Indicators for Telecommunications Services and other provisions) and later additions and amendments (CRC Resolutions 3503/2011 and 4000/2012). These provide details of indicators and the measurement methodology applicable to each service, including municipalities for which statistics must be reported. In the last few years the Colombian government has maintained a strongly sanctions-based regime in relation to quality of service. This approach could have unwanted consequences such as discouraging innovation, distorting the market, reducing supply and lowering efficacy and competition.

Principles of regulatory modernisation

Legacy regulation persists in the dynamic digital market, for example setting blanket standards of service quality for mobile networks. A modern regulatory framework must recognise that network performance expectations change according to the needs and circumstances of each user (i.e. a single user can have different needs depending on whether they are travelling, working, at home, or consuming entertainment).

Absolute parameters of quality that do not evolve with the market or adapt to specific conditions of place, time and space can become obsolete, irrelevant or even onerous, without generating tangible benefits. It must be ensured that users have the best possible quality and the same protection and rights for similar services. This means shifting to an approach based on customer perception, reducing indicators and granularity, and promoting self-regulation schemes that include voluntary publishing of surveys. It will also be necessary to review the monitoring and control scheme so that fines can be reinvested by companies.



Public policy recommendations

- Regulation of quality of service must focus on creating transparency in the information available to users, comparable to and in line with international standards and the market context.
- There should be a guarantee that new digital ecosystem services will give users the same level of protection and transparency as existing services.
- Any ex ante regulation of quality should be accompanied by studies to assess the cost-benefit ratio based on real data and market studies. Using these studies, the utility to consumers can be evaluated when a specific regulation is implemented.

BENEFITS FOR USERS

Consumers will have greater transparency to be able to decide which products and providers best suit them depending on their needs.

⁵ For more information about Quality of Service, see visitar <http://www.gsma.com/latinamerica/qos>

PUBLIC POLICY RECOMMENDATION



4 Create a single converged regulator to act across the digital ecosystem

Convergence has brought competition not only from new providers with or without their own network, but also from the entry of companies that cross the boundaries between traditional telecommunications and television services.

Colombia has several bodies that regulate activities of the Information and Communications Technology sector. The Communications Regulation Commission (CRC), attached to the Ministry of Information and Communications Technology (MinTIC), watches over the healthy development of the sector and regulates the activities of the economic agents that provide telecommunications services. The National Spectrum Agency (ANE), also part of the MinTIC, plans, allocates, monitors and controls radio spectrum. The National Television Agency (ANTV), an independent body, is responsible for monitoring access to television, ensuring information pluralism and impartiality, and competition and efficiency in providing service. The Superintendence of Industry and Commerce (SIC) monitors competition, consumer protection, industrial property and personal data protection.

The involvement of several bodies in developing public policy for digital services (CRC, MinTIC, ANE, ANTV, SIC) can lead to asymmetric regulations that do little to create legal certainty and generate inefficiency in decision making.

Principles of regulatory modernisation

Different institutions have different objectives and functions. Under the principle of functionality-based regulation incorporating all the elements of the digital ecosystem, consideration should be given to changing the number of regulatory bodies in Colombia. This will reflect the regulatory needs demanded by a convergent ecosystem in which ex post regulation predominates over ex ante regulation.

This recommendation is line with the *OECD Review of telecommunication policy and regulation in Colombia*⁶, which suggests that an independent converged regulator “(...) would be better placed to assess the implications of video content and bundles in the competition dynamics of these markets”. The OECD outlines its arguments in favour of regulation of telecommunications markets by independent regulatory bodies which, “if well designed, should enable a clear separation between industrial policy and sector and competition regulation, and reduce exposure to political drivers in any regulatory action”⁷.



Public policy recommendations

- Amending the institutional framework to create a single regulator by merging CRC and ANTV will give rise to a convergent regulator that can analyse, regulate and promote the harmonious development of the entire digital ecosystem. Under this premise, such a regulator must also incorporate the ANE, which administers one of the key resources for providing telecommunications and broadcasting services. ANTV should remain solely as a content regulator.

BENEFITS FOR USERS

The existence of a single institution must be reflected in coherent decisions that include the entire ecosystem rather than just some elements. It will also maximise the benefits of convergence by promoting it and removing artificial barriers.

Decision making will be much quicker and easier, responding appropriately to a sector in constant evolution. There will be fewer barriers to entry and operation, and greater diversity in the provision of services, resulting in incentives for innovation and competition.

⁶ OECD Review of Telecommunication Policy and Regulation in Colombia” http://www.oecd-ilibrary.org/science-and-technology/oecd-review-of-telecommunication-policy-and-regulation-in-colombia_9789264208131-en, OECD 2014, p. 146
⁷ “OECD Review of Telecommunication Policy and Regulation in Colombia”, OECD 2014, p. 143

PUBLIC POLICY RECOMMENDATION



5 Remove sector-specific taxes to allow greater affordability and universalisation of service

Telecommunications are a necessity, not a luxury. High taxes have been proven to result in higher prices for users. A higher tax burden increases the price of services, leading in turn to lower consumption and exclusion of those at the bottom of the income pyramid.

Digital inclusion is a development goal of most countries, to the extent that the right to internet access is recognised as a human right. If digital services are drivers of inclusion, development and productivity, they should have better tax treatment. The government should implement support policies, such as a more balanced tax structure, so that the mobile industry can develop and deliver the benefits of digital inclusion⁸.

Mobile operators in Colombia paid more than USD 1.36 billion in taxes and regulatory fees to the government in 2014, more than 26% of their revenue. Of the total amount paid, 37% was for sector specific taxes (Colombia is the country with the second highest proportion of specific taxes in Latin America). Mobile operators also have to pay other regulatory fees, such as the regulatory commission fee and fees for the use of spectrum, intended to cover the costs of spectrum management.

The new digital ecosystem poses a complex tax treatment of corporate income, creating a need for regional and international dialogue to determine where certain services provided to a country's inhabitants should be taxed. According to the OECD⁹:

"Broadband should be made increasingly accessible and affordable to people living in rural and remote areas [...] Sectoral over-taxation should be avoided and public authorities can also establish incentives and finance networks when markets alone are unable to meet the demand".

A complete rethink is necessary of the purpose and reach of revenue collection through the ICT Fund (FONTIC), because these days obligations to reach remote areas, at least as far as mobile services are concerned, are met through the coverage requirements of spectrum licensing. Further taxation on mobile services would make no sense, unless contribution to the fund is removed for these circumstances or the extent and use of the fund are redefined to take all digital service providers into account.

Principles of regulatory modernisation

The diversity of fees and taxes on telecommunications gives rise to two central issues: (i) the inconsistency between the public goal stating that ICT must be considered a fundamental right and actions that make delivering this technology more expensive, thus reducing its affordability, acquisition and use; (ii) because taxes affect the entire range of services differently, the notion of technological neutrality and agnosticism is lost, creating distortions and allowing a choice, through taxation, of winning and losing companies.

⁸ For more information about the impact of taxes on mobile affordability, see <http://www.gsma.com/latinamerica/connected-society>
⁹ <http://www.oecd.org/internet/broadband-policies-for-latin-america-and-the-caribbean-9789264251823-en.htm>

IMPACT OF REFORM ON SECTOR-SPECIFIC TAXES BY 2021 ¹⁰ :						
	TOTAL MOBILE CONNECTIONS*	MOBILE BROADBAND CONNECTIONS*	NEW SITES / UPGRADED SITES	GDP	EMPLOYMENT	TOTAL TAX REVENUES
Removing the Consumption Tax on Voice Usage	+440,000	+312,000	100/170	+US\$ 1,400 million	+1,200	+US\$ 100 million
Removing the FONTIC [^] contribution	+250,000	+178,000	340/590	+US\$ 900 million	+2,700	+US\$ 119 million

* ADDITIONAL CUMULATIVE EFFECT OVER 2016-2020, OTHERWISE FIGURES SHOW ADDITIONAL EFFECT IN 2021;
[^] FONTIC: FUND FOR INFORMATION AND COMMUNICATION TECHNOLOGIES

Public policy recommendations

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¹⁰ http://www.gsma.com/latinamerica/wp-content/uploads/2016/10/Taxation-ColombiaPager_ENG.pdf

OTHER STUDIES PUBLISHED



RESETTING COMPETITION POLICY FRAMEWORKS FOR THE DIGITAL ECOSYSTEM

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