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Convergence of telecommunication services and the problems of their regulation.

by

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### I. ABSTRACT

The technical development of telecommunications has made it possible to provide voice, data, video and text services in the same fixed or wireless platform. Nowadays. convergence of services is a fact and the paradigm in the information and communications (ICT) sector is offer the "triple play" services, of voice, broadband Internet access and broadcast services, together in the same package and for the same price.

However, as in the past, the application and development of technology do not go together with adequate regulations which allow their unimpeded development and implementation. This problem is of different characters and it is not easy to solve.

In this paper, I will deal with this problem and, making reference to the discussions in this

regard held in forums like the ITU and the WTO; I will clearly explain the advancements made in some legislations, as well as the problem in Mexico.

### II. INTRODUCTION

The structural changes that have occurred within the telecommunications sector have not been fully digested. Among these changes, the elimination of monopolies and the privatization of services could be mentioned. This is due to the fact that this sector is very dynamic, and the rule is technological change and this fact implies commercial opening. From time to time, these changes create recurrent problems: such as how to regulate them, or to recognize that regulating them is neither feasible nor convenient.

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# III. IMPACT OF THE COMMERCIAL OPENING ON THE REGULATION OF TELECOMMUNICATIONS

In my opinion, in order to be able to understand the need to regulate, deregulate or release telecommunication services, it is necessary to recognize the impact that the commercial opening has had, and still has, on the regulation of telecommunication services. Here, I am referring - basically to the World Trade Organization (WTO), due to the fact that when the Uruguay Multilateral Trade Negotiation Round concluded and, as a result of the work performed in the negotiation different rounds. General Agreement Services Trade, among others, was adopted. This Agreement includes a Telecommunications Annex. where some rules relating to this subject are established. The countries that this sianed Agreement committed themselves to following these rules. incorporating them into their national regulation.

Subsequently, and as part of the sequence in the negotiations. in 1997 the Reference Document and the Fourth Protocol were adopted. Both instruments established the guideline in order to revert national regulations, in which the rule was to restrain free concurrence and competition in

this sector. Not all the countries have reverted such situation. Even at present, there are dominant carriers in countries, due to the fact that their Constitution Fundamental Norm does not allow such reversion. This is the case of Mexico: however, it is convenient to point out that the entry into the market of telecommunication services provided by new carriers is generating a regulation that allows competition. In my view, we would be talking about some kind of "self-regulation".

We could say that as a result of the regulation generated by international bodies such as the WTO, APEC, OCDE, as well as the regulation assumed by the countries in bilateral trade agreements, the Party Members or governments have included the starting point competition and protection of free concurrence in their regulations.

As a result of the abovementioned, we could conclude that if the rule in the provision of telecommunication services is to propitiate free concurrence and to protect competition, in the case of "convergence" the issue is made easier if it is assumed that the same carrier should be allowed to provide, basically, voice, data and video services through its network, if this is technically feasible.

## IV. CONVERGENCE IN TELECOMMUNICATION SERVICES

Convergence of telecommunication services is not a new topic, nor does it pose a problem of regulation. Convergence. well as technology, are not and should not be regulated. Regulation must focus on those who operate public telecommunication networks or render telecommunication lona services. as as regulation is a means of control on the part of the State and not an obstacle.

In meetings summoned by the Development Sector of the International

**Telecommunications** Union (ITU), which were held in 1998 and 2002, the connectivity and social access process started the so-called "rural telephone" and, in 2002, in the **Development Conference held** Istanbul, Turkey, coverage (universal service) commitments were reached. through the provision multiple services - Internet. data, voice - associated to computers. In this case, we are about governmental talking programs and telephone service providers. where satellite communication has played and still plays fundamental role, specially in the case of remote, not served

or barely served areas, of difficult access due to their orographic location.

In this case, we are talking about a single service provider who uses a public telecommunications network and receives governmental support. Convergence is a very basic matter, but through the same network operated by a single licensee.

The above-mentioned reference is made because it is important to know where the so-called "convergence in the telecommunications sector" comes from. It is a mere concept, a fashion or a need generated by the competition within the sector. The matters that need a solution, possibly a regulatory solution, are very different and they are not related to "convergence" but to and services networks. mentioned above. There are even problems of definition. trying to delimit its scope. The definition of "convergence" has been handled in different ways. Convergence of services: networks. technologies. providers (licensees); and even equipment are mentioned. The truth is that we, the users - that is my aspiration - want a single provider of voice, data and video services, an also a single invoice.

The Trends
Telecommunications Reform is

part of the periodic publications of the ITU. Convergence has been a recurrent topic in such publications as of 1999. In the last publication of this book, issued in December, 2004, and referring to 2004 and 2005, the specific topic is: Licensing in an Era of Convergence. From this last issue, I have taken the definition following that responds, in my opinion, to is the essence convergence: "... the use of a single technology to provide various services." This definition is included in the Trends **Telecommunications** Reform 2004-2005. A single platform operated by the same licensee in order to provide text, data, images, voice and video services.

The matter - and not the definition- in this concept would still have to be considered in relation to the terminal equipment, due to the fact that, nowadays, users want services - voice, video and data - available though a single for device. example. television, a wireless telephone or a computer. Moreover, users want a single provider of services, and a single invoice.

The truth is that, in many countries, the triple play – voice, data and video – is a reality, like in Mexico, but this is limited because two providers are involved. However, users get a single invoice and the

services are provided through by means of public telecommunication networks. This is possible because of the synergy of two providers: a video service provider and a voice service provider (both of them provide data services). This might be basically due to the problems that - fixed or wireless - telephone carriers face if they want to provide video services, because programming problems rather than technological problems. However, in relation to the latter - according to experts, in the case of fixed telephony - the coaxial cable which reaches the last mile user, does not have enough capacity to transmit video permanently. But this is only a question of time.

The opposite occurs with carriers who provide services through а telecommunications network basically cable television providers. Due to reconversion of their networks, it is possible for them to provide voice services, besides the data and video services that Obviously, provide. they providing telephony services is not the same as providing video services. The obligations relating to the quality of the services are different, without detriment to the problems that interconnection of networks, numbering, etc. involve.

It is true that these problems are not a rule in all countries.

## IV. REGULATION OF TELECOMMUNICATIONS IN THE ERA OF CONVERGENCE

Convergence in this sector does not pose, by itself, a problem in order to regulate the services or the networks. The problem regarding regulation is a much older matter and it is related to the means of control that the State - government uses in order to guarantee a permanent provision services, with high quality of international parameters. services. and regular for reasonable prices.

Deregulation of telecommunication services is of relevant importance; but. what should be understood by deregulation and what is the of impact deregulating? Deregulation is an old process, like the concept of "public service" which originates in the French doctrine, developed by Bonnecase. Duguit, Jèse. among others. As a matter of subjection fact. to service regimes made the State take over the provision of such services. Therefore, the State regulated itself, and it restricted participation of other actors in the services market. Obviously. the State was not able to provide all the public services. Consequently, the scope of the concept of public service was

questioned and an alternative was sought so that individuals could render certain services through a concession.

addition to the ln abovementioned, the French parties of Treaties, in view of the opening of services international trade. which started in the GATT Tokyo Round in the early 1970's, and under a new conception of "public services" denaturalized them and started to talk about service to third parties. The deregulation process started here and the French Doctrine regarded it as "regulating again order to simplify administrative requirements and procedures in order to concessions". obtain The objective was to facilitate the opening of services in the international trade to concurrence and competition. This purpose has been successful in many countries.

Due to the fact that the main characteristic of deregulation is "to regulate again", the impact of deregulating telecommunication services would have to be aimed at making governments issue new regulations which allow and make easier to grant concessions/licenses. have new actors in the telecommunications services market, or give those who are already participating in such market, a better alternative in

order to enable them to render other telecommunication services through their networks.

in the 1990's. almost 150 countries carried out reforms in legislation their with the purpose of complying with the provisions established by the WTO. or making their legislation coherent with them. Autonomous organisms were established; privatizations and elimination the of monopolies. or monopolies managed by private companies set the example to be followed; and, naturally, the commercial opening of several telecommunication services. In the case of Mexico. Teléfonos México (TELMEX) de privatized in 1990. TELMEX is at present - the most important telephone company in Latin America.

In the present decade, the boom of the convergence of telecommunication services rendered through the same platform, demands changes in the current regulation, with the purpose of giving legal certainty to all those who participate in such services: the concessionaire/licensee: the users; the investor; and the State itself.

The problem posed by the new regulation — in my view — depends on the legal scheme that each State has: in the case

of customary regulation, the regulation may be facilitated, as in the United States; in the case of Mexico, regulation is not flexible and its starting point is the law which can only be issued and modified by the Congress of the Union. practice, and at least in Mexico, it has been corroborated that the only results of establishment of "rules" by the autonomous body, the Federal **Telecommunications** 

Commission (Comisión Federal de Telecomunicaciones) have been filings for protection (amparos). and their final decisions have been in favor of the individuals, based lawfulness guarantee, that is to say, the authority can only do what the law expressiv authorizes it to do.

The regulatory changes which are necessary to face the era of convergence must focus on – I insist – giving legal certainty to the individuals; facilitating the obtainment of licenses/concessions; avoiding burdens not provided for by the law. The competition in the service market shall determine the feasibility or existence of concessionaires/licensees.

Part of the problems of regulation is the unending discussion regarding basic services and not basic services. This matter has been used as an excuse by many authorities to justify the fact that their

regulatory framework has not been modified. Being simplistic, I would refer to the Basic Telecommunications Agreement, generated by the WTO in 1997, where almost all telecommunication services are considered basic services.

Undoubtedly, it has to be taken into consideration that services represent at least 60% of the costs in the trade of goods, and that telecommunications account for a big portion of this percentage: however, this does not mean that due to this fact thev should be considered "basic services", since such consideration shall depend on the needs of each country. Basic services are, for example, the provision of drinking water and electric power, which are listed as public services and are in charge of the State. which can bear the cost of no profitability.

State. when considerina telecommunication services as "basic", condemns them to be subject to а series requirements in order to rendered. Additional burdens are imposed on the individual regulation. through Such burdens make telecommunication services not feasible and, naturally, make the concessionaire give up its license/concession.

Therefore, the first point that should be taken into

consideration is that regulation should expressly indicate what the basic services are. It should not define them, in order to avoid discretional interpretations. Basic services will be related to coverage matters, that is to say, basic services those shall be rendered in rural, not served, or remote areas, and in this case we would be relating access and connectivity to the universal service. This does not mean that, as part of the service. other universal services like the Internet, data and video can not be rendered.

When, in fact, the services are classified as basic, with respect to those which are not, the regulation itself should give the concessionaires/licensees the alternative to render voice. audio and data services through the use of the same platform. The regulation NOT SHOULD establish technical-operative issues. should establish the right of the concessionaire/licensee render these services, through simplified procedures and requirements. In this way, we would be deregulating.

Together with the abovementioned – and this is the most frequently used scheme -, the obligations and rights of the concessionaire/licensee would be established in the licenses/concessions, and they would only focus on operation and provision of services matters. With regard to the provision of services, they would impose permanence. regularity and quality conditions. The means of control on the part of the State should be established in the Law. for legal certainty purposes.

Most of the countries immersed in the preparation of the new regulation which is to incorporate the concept of convergence. In my opinion, this is a respectable matter but is not enough. infrastructure should be regulated, but the services should be regulated to minimum. Only matters relating protection of the the investment. legal certainty. permanence of the services should be incorporated into the law or basic regulations, but they should not be strictly regulated, or technology will move forward much faster, as it has already happened.

The **Federal Telecommunications** of Law Mexico DOES NOT regulate regulates services. it infrastructure in the and Mexican Law there are enough safeguards for the individuals the Federal contained in Constitution. The problem we are facing is the struggle in the telephone sector in relation to those who provide restricted audio and video services. It is

considered that this problem will be solved in the following months in order to make it possible for all concessionaires to provide voice, data and video services. It is true that some barriers relating to the capacity of the telephone networks will have to be overcome, mainly those in the local loop.

Up to the present, the changes by some regulatory bodies in different countries have been focussed differently. A very illustrative example which shows the main modifications to the existing regulation, or to the regulation is included in Trends in Telecommunication Reform 2004/2005. Licensing in an Era of Convergence, which is a periodic publication of International

Telecommunications Union (ITU). However, if a thorough analysis is sought, the WEB pages of the United States can be accessed.

In Chapter 3 of this issue, the Dale authors N. Hatfield. University of Colorado Bulder, and Eric Lie, from ITU/BDT, with regard to the European Union, consider new aimed promoting rules at competition in the electronic communications sector, under a simple administrative concept "Light-touch" procedure allowing companies to enter markets quickly. This regulation under revision, but the

changes are aimed at simplifying procedures.

Likewise, in the case of Japan, regulation is aimed making the entry into service flexible. markets lt makes changes in the distinction of network and service operators. established in Telecommunications **Business** abolished tariff regulations; improved consumer protection rules.

Malaysia's Communications and Multimedia Act specifically introduces the phenomenon of convergence and it focuses it on types of licenses. Brazil is opened to generic licenses, excluding fixed-telephone services, open broadcast and pay television.

In fact, regulations in this field are subject to revision. Not in order to include convergence as such, but to make it possible to render video, data and voice services in the same platform. These are the three services that integrate the so-called "triple play" (ICT).

### CONCLUSION

In my opinion, the changes to the regulation should:

- i) Provide legal certainty;
- ii) Facilitate the entry into the telecommunications

- market, eliminating obstacles to free concurrence and competition;
- iii) Not regulate technologies, not oblige licensees/concessionaire s to use a specific technology;
- iv) Be pro-competitive;
- v) Establish the foundation of the regulation in the Law:
- vi) Propitiate the granting of generic licenses/concessions, rather than individual licences/concessions;
- vii) Strengthen the means of control of the State with the purpose of preventing licensees/competitors from hindering participation by other operators.

It is obvious that each country, according to its own needs, shall select the regulation that best suits its interests. However, being the community of countries immersed in the globalization of economies, the trend will be to strengthen the entry of new competitors into the markets, with new options and prices.

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