

DRAFT ITU BRAZIL CONVERGENCE MINI CASE STUDY



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Multimedia Communication Service: A New Service Category to Promote
Convergence

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Multimedia Communication Service: A New Service Category to Promote Convergence

1. General Background

Brazil is the fifth largest country in the world with a population of about 173.8 million, a GDP of approximately USD 508.5 billion and a GDP per capita of USD 2,959. Until the end of 2001, Brazil was the largest Latin American economy and eighth largest economy in the world. In 2002, Brazil became Latin America's second-largest economy after Mexico, and its ranking in the world economy fell to eleventh place. Nonetheless, having the largest population of Latin America and the second-largest population in the western hemisphere, Brazil is one of the most important emerging markets in the world. Although Brazil's history of privatization and liberalization of its telecommunication sector is recent, it has earned a reputation for effective sector reform.

Since 1998, as a result of privatization and the introduction of competition, Brazil's telecommunications market has grown at a rapid pace. The fixed telephony teledensity rate increased from 8.6% in 1996 to 27.9% in 2002. Likewise, mobile telephony subscribers increased from 2,451,008 in 1996 to 40,851,400 in 2002.¹ This outstanding performance came as a result of the new Telecommunications Law of 1997 and the auction of Telebras in 1998, which generated USD 19 billion of investment from foreign and local investors.

¹ ITU Indicators from www.itu.int/itu-d/ict/statistics/

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Until 2002, Brazil was divided into a series of operating regions. Each fixed line operator had one fixed line competitor in the region in which it operated, as well as two competing cellular companies.² Competition has now increased since local telephony operators, who were initially restricted to in-region services, have been subsequently authorized by AGENCIA NACIONAL DE TELECOMUNICAÇÕES (ANATEL), Brazil’s regulatory agency, to provide new telecommunications services other than those indicated in their concession contracts. These additional services include international long distance, local telephony service throughout the country, and wireless telephone services³.

2. Regulatory Background

The Telecommunications Law of 1997⁴, which “changed the role of the State from telecommunications service provider to sector regulator and policy maker” was the main legal instrument through which Brazil’s telecommunication sector was privatized and opened to competition. A comprehensive description of Brazil’s telecommunications privatization and liberalization process can be found in ITU Effective Regulation Case Study: Brazil 2001 (available at <http://www.itu.int/ITU-D/treg/>.) Although, Brazil may have started the liberalization process later than other countries, ANATEL has launched a number of regulatory initiatives to promote convergence.

3. Convergence

² By the means of the General Concessions Plan of April 1998 Brazil was divided into three different fixed line regions, one area for long distance services and eight regions for mobile services. Operators were allowed to provide services only within their respective concession area.

³ In April, 2002, Telesp was granted a long-distance license; in August 2002 Embratel was able to obtain a license to operate local telephone services throughout Brazil; and Telenorteeste Participações TNL received authorization to launch new services and expand outside of its operating area. Following ANATEL’s authorization, TNL launched wireless telephone services in June 2002. In July 2002, TNL launched international and domestic long distance and data transmission service nationwide.

⁴ Other regulatory milestones include: (i) the issuance of Constitutional Amendment No. 8 “which authorized the entry of private, domestic, and foreign investment into the telecommunications sector”; (ii) The minimum law, which “required only specific market segments to be open to competition, namely mobile cellular, satellite telecommunications signal transportation, and value added services”.

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Regulation is often slow to adapt to technological developments such as convergence. Past ITU reports have explained that “despite the widespread availability of digital communication technologies, the movement behind convergence only really came about with the advent of a

dominant single data communications standard, namely TCP/IP⁵, the Internet protocol which brought together multimedia capabilities with a simple protocol”⁶. As in the rest of the world, the advent of TCP/IP in Brazil has brought the ability to integrate Information Technology "IT" hardware and software into telecommunications systems, digitizing networks and making possible an increased array of Internet Services. Furthermore, as is also the case in Brazil, “Information and Communication Technologies (ICT) convergence may also involve an attempt to integrate telecommunication and broadcast media regulations. As networks become digitized and broadband capacity is established, telecom broadcast services can be provided over the enhanced information infrastructure and on the Internet”⁷.

ANATEL began addressing the convergence phenomenon in 2001, when, with the assistance of ITU, the agency studied the impact of technological developments in the telecommunications sector, including broadcast and information technology⁸. The only precedent in regulating convergence in Brazil at the time was Resolution 190 of 1999, the purpose of which was to facilitate interconnection between mass communication service infrastructure, such as cable, satellite and MMDS networks⁹ and valued added infrastructure, mainly Internet infrastructure. This Resolution was intended “to allow the use of that

⁵ TCP/IP is defined as a set of protocols including Transmission Central Protocols (TCP) developed for the Internet in the 1970's to get data from one network device to another. TCP uses a retransmission strategy to insure that data will not be lost in transmission.

⁶ ITU Trends in Telecommunication Reform 1999: Convergence and Regulation, Foreword.

⁷ Anders Henten – Rohan Samarajiva – William H. Melody, *Designing Next Generation Telecom Regulation: ICT Convergence or Multisector Utility?*, January 2003, p. vii.

⁸ See Section 3.5 of ITU Effective Regulation Case Study: Brazil 2001, p. 10.

⁹ Multichannel Multipoint Distribution Service (MMDS) is a broadcasting and communications service that operates in the ultra high frequency (VHF) portion of the radio spectrum between 2.1 and 2.7 GHz. MMDS is also known as wireless cable. It was conceived as a substitute for conventional cable television. However, it also has applications in telephone, fax and data communications.

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infrastructure (cable, TV, satellite TV and MMDS) by any (operator) for the provision of Value Added Services (VAS) like Internet Access”¹⁰. The Resolution generated an increase in the number of cable modems users in Brazil from 88,000 in 2001 to 131,000 in 2002, representing 19% of the total broadband users in Brazil¹¹. Resolution 190 was also geared towards promoting free-market competition between Internet Service Providers by permitting the use of cable TV infrastructure without having to invest in a new network.

4. Multimedia Communications Services

After a thorough analysis and public consultation, ANATEL issued Resolution No. 272 on 9 August 2001, regulating Multimedia Communication Services. Multimedia Communication Services, or Serviços de Comunicação Multimídia in Portuguese, are referred to in this report by their Portuguese acronym, SCM.

Services Covered by SCM

According to Resolution 272/01, SCM refers to multimedia information, described as “audio, video, data, voice (corporate voice) and other sound, image, text and related signals, conveyed, sent and received through fixed telecommunication services rendered by the private sector in the collective interest¹², on a domestic or international basis and in any format, to subscribers within a certain service area”¹³.

SCM was devised and regulated by ANATEL to accommodate the growing need for convergence of telecommunication services, as well as to conform to the technologies recently

¹⁰ Speech by Dr. José Leite Pereira Filho, member of ANATEL Board, “The Broadband and Digital Broadcasting Conference”, American Chamber of Commerce – Sao Paulo, 23 April 2003, p. 10.

¹¹ Idem.

¹² The Telecommunications Law introduced two new service classifications. *Collective Interest Services* are those services that must be rendered by the service provider to any interested party, without any kind of discrimination. *Restrictive Interest Services* are services to be used by the provider itself or rendered to a specific group of users chosen by the service provider.

¹³ Article 67 of Resolution 272/2001.

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developed in an increasingly globalized telecom market. The following are some of the most important applications under SCM: “broadband access to Internet, data communications, audio and video, telemedicine and tele-education”¹⁴. The basis of this new service is to avoid the need for multiple authorizations to cover a wider range of information transmission means¹⁵.

Additionally, Regulation 272/2001 allows SCM providers to access the Public Switched Telecommunications Network (PSTN), so that calls may be freely made from the PSTN to SCM users and vice-versa anywhere in Brazil. In other words, calls must originate or terminate with an SCM user. SCM operators are prohibited from providing services with the same characteristics as those of the Public Fixed Telephone Service.

There were initial doubts as to whether SCM would be allowed to provide pay TV services, given that Article 67 of Resolution 272/2001 could be construed as enabling “SCM operators to transmit audio and video signals of either (1) certain events, or (2) on the basis of a contractual relationship, or (3) in the form of pay per view”¹⁶. Furthermore, national broadcasters challenged article 67 before the courts, arguing that it violated their exclusive right to broadcast to the public. However, the Court of Appeals rejected this argument and upheld Article 67¹⁷. ANATEL further clarified the court decision through Sumula 06 of 24 January 2002 which specified that the SCM licenses did not authorize its holder to provide: (i) public fixed telephone service; (ii) free live TV and radio broadcasting; and (iii) paid TV.

In addition to the license, the SCM operator must comply with the Terms of Authorization. “The Terms detail the obligations of the operator in a fashion very similar to that of a

¹⁴ Presentation of Dr. Jose Leite Pereira Filho, Member of the Board of ANATEL, to ITU-T Seminar, Multimedia in the 21st Century, Portosegura, VA, 4 June 2001, p. 9.

¹⁵ The SCM replaced, among others, the so-called network and circuit services, telecommunication transport network services, packaged commuted network services and circuit commuted network services, which were cataloged as “specialized limited services”. As of August 9, 2001 ANATEL decided not to issue any further “specialized limited services” license. The operators who had these types of licenses are now required to request the adaptation “adaptação” of their former specialized limited services into SCM licenses.

¹⁶ Designing Next Generation Telecom Reform. Annex to Draft Report, Country Summaries, www.regulateonline.org

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contract”¹⁸. The purpose of the Terms of Authorization is to “clarify the conditions under which SCM operators will be able to transmit video, voice and data in order to differentiate SCM from existing Paid TV Operators. SCM shall be used for videoconferences, educational television and transmission of signals between producers and TV Broadcasters, i.e., not for pay-per-view exhibitions. The SCM regulations are not linked to the transmission means used by the SCM operator¹⁹.

License Requirements

There are no limits to the number of licenses that ANATEL may issue. In fact, by December 2003, 151 different companies had obtained an SCM license²⁰. The fee for the license is 9,000 “reais”, equivalent to approximately USD 3,000. If the SCM provider uses radio frequencies to render the service, it must pay an additional fee for the use of those frequencies established under Resolution 68 of 1998²¹.

Terms and Conditions of the License

The SCM license is granted for an indefinite term, and does not require prior bidding. The interested party must submit an application and if certain minimum requirements are met, the license shall be granted²². The SCM licenses are granted on a non-exclusive basis and the

¹⁷ Idem

¹⁸ The L.I.N.K. offering Multimedia Communication Services-March-April 2003 is www.thelink.lu

¹⁹ The following transmission means among others may be used for SCM: Frequency bands: 2.5, 3.5, 10.5 and 24 to 31 GHz; MMDS Network; DTH Network; Cable TV Network; XDSL Technology.

²⁰ Information obtained from ANATEL’s web page <http://www.ANATEL.gov.br>.

²¹ Resolution 68 of 1998 establishes the terms and conditions under which radio frequencies must be paid for. The system is based on bandwidth usage and other considerations. Also, according to radio frequency rules (Resolution 259 of April 2000), the following frequencies are reserved for fixed local telephony and to SCM: 3.450 MHz to 3.500 MHz; 3.550 MHz to 3.600 MHz; 10.15 GHz to 10.30 GHz; 10.50 GHz to 10.65 GHz; 25.35 GHz to 28,35 GHz; 29,10 GHz to 29,25 GHz and 31,00 GHz and 31,30 GHz.

²² Requirements are posted in ANATEL’s web page and they refer to: (i) information regarding the applicant, including declarations of their partners that they do not participate in other companies rendering the same service; (ii) documents attesting to the technical qualification of the company requesting the license; (iii) a declaration of financial solvency; and (iv) evidence on being current on its tax obligations.

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licensees are obliged to comply with telecommunications regulations applicable to all telecommunication operators. The licenses provide for the rendering of the services to subscribers throughout Brazil and internationally.

SCM License Success

The regulation establishing the SCM service has been considered a success. The fact that more than 150 companies have obtained an SCM license speaks for itself. Additionally, license holders have highlighted the advantages of SCM²³. One operator, for example, announced that its SCM license, which replaced a previous specialized limited services license, would enable it to offer transmission capacity, as well as to send and receive multimedia content to subscribers throughout Brazil and internationally. Likewise, ANATEL's latest announcement regarding SCM licenses mentioned that the operator, Life Soluções EM Internet S/C Ltda., had been granted a license to provide SCM for an indefinite term on a non-exclusive basis to subscribers throughout Brazil and internationally. This company announced that it plans to use its SCM license with the purpose of providing "corporate network services, intranet, extranet, Internet access, web server hosting, e-mail, and video conferences, among others".

²³ AT&T Latin America and Global Crossing made public announcements on their respective SCM licenses.