Ebe Raso June 2006

MARKET OVERVIEW

Brazil has the largest telecommunications sector in Latin America. In 2005 the sector generated revenues of approximately US\$35.6 billion, a 23 percent increase over 2004. Services, including carriers, accounted for \$27.8 billion of net revenue, while product suppliers (hardware & software) have generated \$6.8 billion. The broadcasting market represents approximately 10 percent of the total telecommunications market.

Like most fixed-line players in telecommunication markets worldwide, Brazilian operators are looking to the "triple play" offering of bundled voice, internet and TV services. Telemar, Telefónica, and Brasil Telecom have so far benefited from inflation-based price adjustments and deployment of new product lines to create revenue growth. The year 2005, however, was a turning point for the industry as previous marginal growth in lines-in-service turned negative, long-distance revenues fell sharply, and incumbents began to feel the effects of mobile substitution. 2006 is expected to bring little relief, as the mobile base will continue its brisk growth, and a new tariff-adjustment mechanism will keep price changes below the inflation rate.

Due to the convergence of digital technology, this report will focus on the Pay TV, Broadband TV and Radio markets. Convergence is dramatically changing the broadcasting industry, making it difficult to distinguish precise boundaries between broadcasting and non-broadcasting related business sectors.

Pay TV: According to the Brazilian Pay TV Association (ABTA), Brazil's Pay TV market generated net revenues of US\$2.1 billion in 2005, a 23 percent increase over 2004 (US\$1.7 billion). The total number of subscribers as of December 2005 was 4.1 million, and expectations are that there will be a 10 percent increase by year-end 2006.

Broadband via cable is increasing significantly, with 629,000 subscribers in 2005 (17 percent more than the previous year). For 2006, the Pay TV broadcasters expect to see an estimated 8 percent increase over the previous year.

The Pay TV industry in Brazil began later than in other markets, and remains relatively small, particularly when compared with neighboring countries such as Argentina. Three technologies are used for distributing Pay TV signals: cable, MMDS (terrestrial microwaves) and satellite DTH. Cable is the most common distribution system, with 61 percent of the market, followed by Direct to Home (DTH) with 35 percent and Multichannel Multipoint Distribution Service (MMDS) with 4 percent. At the very beginning the Pay TV signal distribution networks were designed to serve mainly homes, but evolution of the technology soon proved that the access to residential and corporate markets opened the possibility of extending services, especially voice, data communications and high-speed access to the Internet. The largest Cable TV companies operating in Brazil are NET Serviços; TVA; Canbrás; Horizon; ITSA; TV Cidade; Big TV; RTC Fortaleza; Master Cabo; W@y Brasil; Image Telecom; ESC 90 and TVC Marília.

In March 2005, Telmex acquired a 37 percent stake in Net Serviços de Comunicação, the biggest pay TV player in Brazil, controlled by the Globopar media group. In May 2006 the Ministry of Telecommunications approved the merge of the DTH largest operators Sky Brasil and DirecTV.

Broadband: According to the International Data Corporation (IDC), broadband access in Brazil grew by 8 percent during the first quarter of 2006, reaching 4.3 million subscribers. By the end of 2006 the number of high-speed Internet connections is expected to grow 48 percent over 2005, reaching approximately 6 million subscribers. The major challenge of currently facing telecom cable TV companies is to provide service while continuing to cut prices.

Internet use and PC penetration in Brazil are the highest in Latin America. In fact, the Internet is having a profound effect on Brazil, and Brazilians have rapidly become Latin America's leaders in technological innovation and Internet applications. Today, Brazilian users are ranked even higher than Europeans in time spent and relative usage of audio-visual content, e-banking and e-commerce.

Brazilian fixed operators are preparing to deploy television services via DSL (*digital subscriber line*), a service otherwise known as IPTV. Regulatory constraints, though, have meant that offerings will at first be limited to video-on-demand services. This regulatory constraint, the development of digital terrestrial television (DTT) and a strong native broadcast industry will negatively impact IPTV's development. As a result, fixed operators must act quickly to resolve pending regulatory issues and to begin offering 'triple-play' services of voice, internet and television.

Free on the Air (FTA) TV: Almost all Brazilian households own a television set and the vast majority watch FTA television. There are seven FTA television stations with countrywide operations - Rede Globo, TV Record, Rede Bandeirantes, SBT – Sistema Brasileiro de Televisao, Rede TV and TV Gazeta. Some states own a TV station, normally referred to as TV Educativa.

Revenues in the FTA market are generated through advertising. These TV stations have affiliates that usually update their equipment individually. As of June 2006, approximately 60 percent of the TV stations had digitalized their studios (especially in cities with more than 500,000 inhabitants).

Rede Globo ("Globo Net") is Brazil's biggest television network (50 percent market share) and the world's largest producer and provider of Portuguese language television programming. Rede Globo has 121 stations (seven owned and 114 affiliates) covering 99.84 percent of Brazil's 5,043 municipalities. It is recognized as the world's largest TV network in terms of territory, and world's third largest network, watched by an estimated 80 million people a day. Rede Globo has a main production complex in Rio de Janeiro, named Projac, where most shows are produced. This is one of the world's largest TV production centers and the biggest in Latin America.

SBT, (Sistema Brasileiro de Televisão) is Brazil's second largest TV network in terms of market share (18 percent). SBT is owned by Silvio Santos, a popular Brazilian TV host, and has 108 affiliates covering 95 percent of the Brazilian territory. The third network is TV Record (14 percent market share), which owns 8 TV stations in Brazil and has 23 affiliates.

Other television networks include Rede Bandeirantes (10 percent market share – 10 stations owned and 22 affiliates); Rede TV (four percent market share with five owned stations and 33 affiliates). There are 16 State owned TV networks that are dedicated to cultural subjects, but at times also have news, sports and entertainment.

Radio broadcasting: The largest radio networks operating in Brazil are, Radio Bandeirantes, owned by Grupo Bandeirantes de Comunicação, and Sistema Globo de Radio, owned by Rede Globo. Brazil has AM/FM radios and the radio industry, like television, is switching to digital technology. In September 2005 Brazil officially launched HD Radio in Brazil by using the US standard IBOC (Radio In-Band, On-Channel). Today Brazil has approximately 1,700 radio stations, 15 of which already deploy HD Radio, and the others expected to upgrade over the next five years. Retrofitting a single station to digital standards costs an estimated US\$70,000 to US\$150,000.

BEST PROSPECTS

Though the Japanese digital television standard won out recently against U.S. and European competition, most U.S. OEMs contacted for this report mentioned that they can provide products independently of the standard adopted. Most of the US companies active in the sector like Harris Corporation, Broadcast Corporation (BE), Chyron Corp., and Avid Technology, Inc. already have a presence in Brazil through distributors/representatives.

Market sources estimate that HDTV sets sales may reach US\$65 billion in ten years (at US\$1,000 per set). Investment by the broadcasters in codification hardware, multiplexes and digital modulators may reach US\$2 billion in ten years. Investment in transmitters, antennas and cabling may reach US\$1.2 billion. On the industry side HDTV sets manufacturers will have to invest about US\$100 million in production lines, workers training and licenses fees.

Brazil produces quite a large number of TV receivers and also exports to other Latin American countries. In 2005, the country produced approximately US\$9.5 million in equipment for local consumption. Most other broadcast equipment is imported.

Mobile TV remains one of the hottest topics of debate in both the broadcast and mobile sectors. Convergence strategies are gaining popularity in Brazil, and several companies have adopted the triple play strategy. Fixed-line incumbents Telemar and Brasil Telecom plan to launch broadband TV (IPTV) in 2006.

Best prospects in the Telecom/Broadcasting market include: Set-top decoder boxes; transmitters for digital radio and TV, encoders, multiplexes, automation systems, studio TV cameras, video servers, IPTV solutions, digital transmitters for High Definition Television (HDTV), wireless technologies for radio studios, microwave systems among others.

Brazilian Imports of Broadcasting Equipment - (U.S. Dollar Million)

	2003	2004	2005
HS 8428: Traveling Lifting Mobile Equipment	47.4	37.4	45.9
HS 8525: TV Cameras	4.8	5.7	9.4
HS8528: TV receivers	12.7	21.4	54.7
HS 8529: TV Cameras and receiver parts	737.7	1,180.7	1, 551.4
HS 8537: Board, consoles, panels	150.7	173.6	147.9
HS 8540: TV Cameras tubes	259.4	406.3	467.8
HS 8705: TV Vehicles	0.6	0.2	4.8
	1,213.3	1,651.6	2,281.9

Source: Ministry of Industry & Commerce - Secex.

DISTRIBUTION CHANNELS

Foreign firms wishing to supply to government agencies or government-owned entities need to work with a local Brazilian company in order to bid for projects or tenders. For private sector projects the traditional distribution starts from suppliers / manufacturers to importers / agents / representatives / dealers who would then sell to the end users.

BARRIERS TO ENTRY

Most of the telecom/IT products that are not manufactured in country are subject to an average import tax of 15-18 percent. In cases where there is no similar product manufactured in country the import tax can go to zero.

MAJOR TRADE SHOWS



Broadcast & Cable 2006

Int'l Fair of Technology in Equipment and Services for TV Engineering, Broadcasting & Telecommunications August 23-25, 2006 Sao Paulo - Brazil

Website: http://www.broadcastcable.com.br/



ABTA 2006

Pay TV Exhibition and Convention August 1-3 , 2006 Sao Paulo – SP

Website: http://www.abta2006.com.br/

TRADE ASSOCIATIONS

SET – Sociedade de Engenharia de Televisão e Telecomunicações Brazilian Society of Television and Telecommunications Engineering Rua Jardim Botânico 700 sala 306 22461-000 - Rio de Janeiro – RJ - Brazil Phone 55/21 2512-8747 - Fax: 55/21 2294-2791

Website: www.set.com.br

ABERT - ASSOCIAÇÃO BRASILEIRA DE EMISSORAS DE RÁDIO E TELEVISÃO

Brazilian Radio and TV Association SCN Qd.4 Bl.B Sala 501 Centro Empresarial Varig 70714-900 Brasilia – DF – Brazil

Phone: 55/61 2104-4600 Website: www.abert.org.br

ABTA - Associação Brasileira de TV por Assinatura

Brazilian Pay TV Association Rua Paes de Araújo, 29 - cjs 181/182 04531-090 - Sao Paulo – SP - Brazil

Phone/Fax: 55/11 3078 9307 Website: www.abta.com.br

For more Information about export opportunities in Brazil please contact US Commercial Service Trade Specialist Ebe Raso at : ebe.raso@mail.doc.gov - Phone: 55/11 5186-7339 - Fax: 55/11 5186-7246 or visit our website: www.buyusa.gov/brazil

For additional information regarding the telecommunications market in Brazil please visit our website www.buyusa.gov/brazil

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