



# Singapore

## Broadcast and Telecom Market Brief

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### Summary

Singapore is one of the most wired countries in the world, with a nation-wide network of fiber optic cables. The World Economic Forum's Global Information Technology Report ranked Singapore fifth in the world in 2008, while the Economist Intelligence Unit (EIU) E-readiness Report ranked Singapore sixth in the world in 2007 and 2008. The Government of Singapore plays an important and active role in promoting the adoption of ICT in the country. It was ranked number one in Accenture's e-Government Customer Service Maturity Ranking 2007.

Despite the worldwide economic downturn, there are still good opportunities for U.S. vendors to sell applications and solutions to Singapore and through Singapore. It is a leading adopter of state-of-the-art technologies in the region and a major entrepot. Singapore is dependent on imports and U.S. products are traditionally well received. Best prospects include equipment, content, software and technologies for broadband, wireless broadband, 3G, and IPTV.

### Market Demand

Telecommunications and Internet facilities in Singapore are state-of-the-art. Third generation (3G) mobile networks and services were rolled out in the country in early 2005. Consumers currently receive wireless data through their mobile phones at speeds of up to 7.2 megabits per second (Mbps). In March 2009, Starhub, one of Singapore's three mobile operators announced that it had completed upgrading its mobile broadband network to support download speeds of up to 21 Mbps. The other two operators reported they will also launch their 21 Mbps service in 2009. 3.5G networks based on the HSDPA standard as well as WiMAX networks have been deployed in the country.

'Cyber cafes' are popular and Internet connections are available in most hotels. Internet users can go online for free at more than 7,500 Wi-Fi hot spots island-wide. The wireless broadband service dubbed Wireless@SG enables people to go online at public places such as shopping malls, town centers and the business district. Users need only sign up for a free account with any of the three Wireless@SG operators (<http://www.infocomm123.sg/wireless>).

Besides a nationwide broadband network infrastructure, Singapore is well connected by multiple satellite and submarine cable systems with more than 30 Tbps of potential capacity supporting international and regional telecoms connectivity. It has more than 100 Gbps of direct international internet connectivity to economies such as the US, China, Japan, India, as well as some countries in Europe and ASEAN.

Major Telecom Indicators (December 2008)

Fixed-Line		Cellular Phone		Broadband Internet		Wireless Broadband	
Number of Subscribers	Household Penetration Rate	Number of Subscribers	Penetration Rate	Number of Subscribers	Household Penetration Rate	Number of Subscribers	Penetration Rate
1.86 million	93.5%	6.34 million	131%	4.71 million	99.9%	3.74 million	78.5%

Source: Infocomm Development Authority (IDA) website  
<http://www.ida.gov.sg/Publications/20080904150745.aspx>

According to IDA's Annual Survey on Infocomm Usage by Enterprises, the penetration rate of computers and the Internet including broadband access was 100% for companies with more than 200 employees in 2008. For companies with less than 10 employees, computer usage rate was 71%, internet usage rate was 67% and broadband usage rate was 59%. Although the digital divide remains between the larger companies and the smaller enterprises, there is a general rise in infocomm usage among SMEs, with the largest growth in the area of broadband usage. The top Internet applications/services used by Singapore businesses remained sending/receiving emails, information search, followed by activities involved with dealing with government

agencies such as downloading of government forms, on line payment, obtaining information from government agencies, etc. The most common mode of Internet connection is xDSL (54%), followed by Wireless Access1 (42%), Cable Modem (24%), Dedicated Private Leased Line (16%), Analog Modem (13%) and ISDN (6%). More than half of the enterprises with 50 or more employees accessed the Internet wirelessly while 4 out of 10 smaller enterprises accessed the Internet wirelessly. Overall, the most popular mode of Wireless Access is via Wi-Fi. The services most commonly accessed wirelessly using mobile devices are Email, Internet Browsing and Instant Messaging. Laptops remain the most widely used mobile devices for wireless access, followed by 3G mobile phones. Survey details can be found at [http://www.ida.gov.sg/doc/Publications/Publications\\_Level3/20090218140311/InfocommUsage2008Rpt.pdf](http://www.ida.gov.sg/doc/Publications/Publications_Level3/20090218140311/InfocommUsage2008Rpt.pdf)

According to the IDA’s Annual Survey on Infocomm Usage in households, 80% of Singaporean households had access to a computer at home in 2008 while the access rate rose to 94% for those households with school-going children. Seventy six percent of households had home Internet access and 99% of these households are connected to the Internet via broadband. Survey details can be found at [http://www.ida.gov.sg/doc/Publications/Publications\\_Level3/20090218183328/HH2008Rpt.pdf](http://www.ida.gov.sg/doc/Publications/Publications_Level3/20090218183328/HH2008Rpt.pdf)

The Government of Singapore (GOS) plays an active role in developing the ICT industry in the country. The GOS will partly fund the construction of the Next Generation National Broadband Network (Next Gen NBN) estimated to cost US\$2 billion and slated to be completed by 2012. Business users can expect to have ready access to ultra high-speed broadband connectivity of 1 Gbps or more to support data-intensive transactions such as real-life high-definition video conferencing and graphics-based data visualization. Small and medium enterprises will be able to tap into grid computing applications and data storage facilities at competitive rates while students will be able to make use of visually immersive and interactive learning applications for a richer and deeper educational experience. Sixty percent of homes and offices are expected to have access to this new, pervasive, all-fiber network in 2010. More information can be found at <http://www.ida.gov.sg/Infrastructure/20060919190208.aspx>. Next Gen NII also called for a wireless broadband network (Wireless@SG) which went online in December 2006 and is available gratis until 2009. (<http://www.ida.gov.sg/Infrastructure/20060816192935.aspx>).

Major Broadcasting Indicators

TV		Cable TV	
Number of licenses issued	Penetration Rate	Number of subscribers	Penetration Rate
965,000	85%*	524,000	46%

\*estimate

MediaCorp TV, Singapore’s only terrestrial broadcaster, provides six terrestrial free-to-air channels to homes in the country. StarHub Cable Vision is the main provider of paid television in Singapore with 524,000 households subscribing to cable TV -- a market penetration of 46%. The only pay-TV competitor to StarHub is SingTel’s IPTV service called mioTV that is delivered over a broadband connection. To facilitate the growth of IPTV services in Singapore, the Media Development Authority announced a two-tier license framework for IPTV in January 2007. More information can be found at <http://www.mda.gov.sg/wms.www.thenewsdesk.aspx?sid=770>. With the almost 100% household broadband penetration rate in Singapore, Pay TV industry is expected to grow in the country.

Singapore adopted the European standard DVB-T for digital TV along with all other ASEAN countries, and Eureka-147 Digital Audio Broadcasting System. Singapore is expected to deliver all TV channels digitally in the next few years and the radio industry is being upgraded from analog to digital technology as well.

The GOS aims to transform Singapore into a global vibrant media city and the Media21 blueprint envisions developing the country as Asia’s leading media marketplace and financing hub, producing high quality content and digital media development. Details of the blueprint can be found at <http://www.mda.gov.sg/wms.ftp/media21.pdf>.

In line with its vision, the GOS announced in December 2008 the designation of a dedicated area in Singapore for the development of the media and film industries. Called Mediapolis, the 19 hectare plot of land is envisaged to be a hub that will house a media ecosystem comprising soundstages with green screen capabilities; digital production and broadcast facilities; interactive digital media (IDM) and R&D activities; Computer-generated Imagery and visual effects; post-production, games and animation; industry-response digital media schools, business parks, work lofts and incubators; intellectual property (IP) creation and digital rights management. Local media production firm Infinite Frameworks announced in December 2008 that it will invest between US\$53 million to US\$80 million to build Singapore's first purpose-built soundstage complex in the Mediapolis. With such facilities available, Singapore hopes to attract foreign studios to shoot movies here and encourage its local fledgling film-making industry to make larger, more complicated movies.

Several foreign media related firms have set up offices in Singapore, including Britain's special effects company Double Negative, U.S.'s LucasFilm Animation, Linden Lab, and EA, and France's Ubisoft. Italian animation studio Rainbow announced in November 2008 that it will invest US\$16 million in a new studio in Singapore to create virtual world based on its popular Winx Club fantasy franchise.

### **Market Data**

According to the latest survey by the IDA, Singapore's total domestic infocomm revenue in 2007 grew by 10.3% to about US\$12.6 billion. Telecommunication services accounted for 32% of the revenue followed by hardware (29%), IT services (24%), software (9%) and content services (5%). However, in terms of growth, the two top performers were IT Services and Hardware that grew 51.9% and 25.5% respectively. Survey details can be found at:

[http://www.ida.gov.sg/doc/Publications/Publications\\_Level2/20061205092557/ASInfocommIndustry07.pdf](http://www.ida.gov.sg/doc/Publications/Publications_Level2/20061205092557/ASInfocommIndustry07.pdf)

Despite the economic turmoil, Singapore offers a stable market for U.S. vendors and is a key regional trading center. The Singapore government is expected to accelerate spending in ICT projects including the building of the Next Gen fiber-to-the-home network costing over US\$1.4 billion. Singapore is dependent on imports and U.S. products are traditionally well received in the country as the United States is seen as the source for new technologies and applications. Singapore also serves as a major distribution center for companies interested in selling to the region as reflected by re-export data. Over 70% of telecommunication and broadcast products imported into Singapore are re-exported for third-country consumption.

### **Best Prospects**

There are excellent opportunities to sell new applications and solutions to Singapore as the country is the leading adopter of such technologies in the region. Best prospects include equipment, content, software and technologies for broadband, wireless broadband, 3G, and IPTV.

The Singapore government's plans to build a next generation ultra fast national broadband network and wireless broadband network offer U.S. vendors the opportunity to participate in developing the new telecom infrastructure in Singapore. There are three distinct layers in the Next Gen NBN. The tender for the Network Operator was awarded in June 2008 and the successful consortium is responsible for designing, building and operating the passive infrastructure, such as dark fiber and ducts. In 2009, the GOS will award the tender for the Operating Company that will provide wholesale network services over active infrastructure, comprising switches and transmission equipment. The final layer: Retail Service Provider (RSP) will sell services to end-users (businesses, institutional and residential). It will be fully competitive and will cover markets like high speed Internet access, voice-over-IP telephony and IPTV. In July 2007, the IDA launched the Expressions of Interest (EOI) initiative to gather and assess the level of RSPs' interest in deploying services on the Next Gen NBN network and to obtain inputs on developing feasible broadband services in Singapore. U.S. companies interested in deploying services on the broadband network can contact the IDA directly. To facilitate industry collaboration and networking, a list of EOI and RSPs can be found at [http://www.ida.gov.sg/doc/Infrastructure/Infrastructure\\_Level2/20070716182420/NGBNRSPCONNECTList.pdf](http://www.ida.gov.sg/doc/Infrastructure/Infrastructure_Level2/20070716182420/NGBNRSPCONNECTList.pdf).

The Singapore media market is expected to import more equipment with new investments under the Mediapolis initiative such as the building of the new sound stage that will require state-of-the-art equipment and systems. There are also opportunities for foreign companies and talent to collaborate in co-production projects initiated by the Media Development Authority of Singapore.

### **Key Suppliers**

In the telecom market, major U.S. suppliers that have set up operations in Singapore include Motorola, Verizon, Lucent, Cisco, and Linksys. Vendors from other countries include Alcatel, Nortel, Samsung, ZTE, Nokia, Huawei, Ericsson, and Agilent. Many of these offices have regional responsibilities.

In the broadcast market, the U.S. is dominant in providing the key editing and production equipment in both the radio and television market. Equipment such as non-linear editing software/systems, audio production equipment, news scripting systems, and microphones are among the areas where American products are dominant. Key companies competing in the market include Avid, Harris, Tektronic, Mackie, Associated Press, Omneon, Belden, Dolby, StorageTek (Sun Microsystems), Wohler and RCS. The U.S., however, does not dominate all aspects of the broadcast market. Japanese suppliers are the leaders in cameras and videotape recorders.

### **Prospective Buyers**

The GOS is a major buyer of ICT products and services. It will issue 391 new ICT tenders worth US\$830 million for the fiscal year (FY) 2008 starting April 1, 2008 to March 31, 2009. A press release on the tenders can be found at <http://www.ida.gov.sg/News%20and%20Events/20080514091646.aspx?getPagetype=20>.

There are also good opportunities for U.S. equipment manufacturers to supply to the telecom service operators in Singapore. A list of the existing operators can be found at: <http://www.ida.gov.sg/Policies%20and%20Regulation/20060424172641.aspx> and <http://www.ida.gov.sg/Policies%20and%20Regulation/20060424160337.aspx>.

For the enterprise market, the sectors with high infocomm adoption and usage are Information & Communications; Financial and Insurance; and Professional, Scientific & Technical industry.

Besides MediaCorp and other existing broadcasters, pre-production, production and post-production houses, there will be good opportunities for U.S. vendors to serve new prospective buyers under the GOS' new Mediapolis initiative. A list of media companies in Singapore can be found at the MDA website, <http://www.smf.sg/MediaDirectory/Pages/OrganizationProfileList.aspx?param=pubProfile>

### **Market Entry**

A good way for equipment manufacturers to enter the Singapore market would be to work with local distributors and system integrators who are well versed with local conditions. U.S. global telecommunication service providers should consider collaborating with the service providers in Singapore who can provide them with interconnect related services, domestic and international leased circuits, network infrastructure and local marketing expertise. Alliances eliminate heavy investment in infrastructure outlay as well as provide immediate marketing reach due to their existing networks. This is an attractive approach which most foreign companies adopt to penetrate and reach end-users in Singapore. With the liberalization of the Singapore telecom and media market, U.S. service providers can apply for licenses from the IDA and the MDA.

There is no special legislation in Singapore covering agency agreements. Mercantile laws in Singapore are based on English laws. The contract sets the terms of agreement between vendors and buyers. The parties involved draw up a satisfactory contract that determines the conduct of both parties during the contract period including the terms of cancellation. U.S. firms interested to enter the Singapore and Asian markets should consider participating at CommunicAsia and Broadcast Asia, -- the largest ICT show in Asia -- it attracts over 50,000 visitors and more than 2,000 exhibiting companies annually. CS Singapore will actively support and provide value added services to the U.S. exhibitors at the show that will be held from June 16-19, 2009. More information on the two shows can be found at [www.communicasia.com](http://www.communicasia.com) and [www.broadcast-asia.com](http://www.broadcast-asia.com).

## Market Access & Obstacles

The World Bank's "Doing Business 2009" report ranked Singapore as the easiest country in which to do business. Singapore is generally a free port and an open economy and maintains one of the most liberal trading regimes in the world. There is no duty on the import of ICT products into Singapore. However, individuals are not allowed to import satellite-receiving dishes. Telecommunication equipment suppliers are required to register their equipment for sale and use in Singapore. Details are given in the document entitled "Guide for Registration of Telecommunication Equipment" that is available online at

[http://www.ida.gov.sg/doc/Policies%20and%20Regulation/Policies\\_and\\_Regulation\\_Level2/20060421172414/EQRGuide.pdf](http://www.ida.gov.sg/doc/Policies%20and%20Regulation/Policies_and_Regulation_Level2/20060421172414/EQRGuide.pdf)

Singapore became the first country in Asia, and the third in the world (after the European Union and Canada), to operate a Mutual Recognition Arrangement (MRA) on telecom equipment certification with the U.S. The MRA provides for direct entry of telecommunications into either market without the need for additional testing and certification. Under the Asian Pacific Economic Cooperation (APEC) Telecommunications MRA implemented between the U.S. and Singapore, products can be tested and certified in the United States for conformance with Singapore's technical requirements. A list of the recognized U.S. testing and certification agencies can be found at: <http://www.ida.gov.sg/Policies%20and%20Regulation/20060609145118.aspx>. U.S. suppliers will still require a local representative (dealer) who will be responsible for the import and sale of telecommunication equipment in Singapore. For security purposes, voice scramblers, military equipment, scanning receivers/transmitters that could be used by unauthorized persons for unlawful transmissions, interception and jamming of signals are prohibited from entry into Singapore unless prior approval by the IDA has been obtained.

The IDA is the government regulator authorized to establish standards, codes and regulations to be observed by operators of telecommunications systems and services and to regulate the conduct of telecommunications licensees in the provision of telecommunications systems and services. Information on the various Acts and regulations can be found at <http://www.ida.gov.sg/Policies%20and%20Regulation/20060418214814.aspx>. The IDA is also responsible for the management, allocation and use of the radio frequency spectrum. Singapore's spectrum allocation chart and the master spectrum allocation plan can be found at: <http://www.ida.gov.sg/Policies%20and%20Regulation/20060421164253.aspx>

Formed in 2003, the Media Development Authority of Singapore (MDA) plays a vital role in transforming Singapore into a Global Media City and positioning it at the forefront of the digital media age. It spearheads initiatives that promote developments in film, video, television, radio, publishing, music, games, animation, media services and Interactive Digital Media. It also formulates and administers regulatory policies and guidelines for the industry.

The media industry in Singapore is regulated by various legislation and codes of practice and they can be found at the MDA website, <http://www.mda.gov.sg/wms.www.devpolicies.aspx?sid=153>. Media businesses or professionals need to be licensed in order to provide services in Singapore. The various types of licenses required can be found at <http://www.mda.gov.sg/wms.www.devpolicies.aspx?sid=218>. Currently, the MDA issues the TV Receive-Only (TVRO) System licenses to organizations that need to access time-sensitive information for business decisions. Direct-to-home (DTH) transmission is not allowed.

The U.S. Singapore Free Trade Agreement (USSFTA) went into force on January 1, 2004. This agreement, the United States' first FTA with an Asian nation, makes Singapore one of the strongest Intellectual Property Rights (IPR) regimes outside of the United States thus giving strong IPR protection to American firms doing business in Singapore. The USSFTA includes state-of-the-art protection for trademarks, including government involvement in resolving dispute between trademarks and Internet domain names; extended terms for copyright protection; strong anti-circumvention provision to prohibit tampering with technologies that are designed to prevent piracy; criminal penalties for companies that use unlicensed software; and protection for encrypted program-carrying satellite signals. The USSFTA also includes special provisions dealing with electronic commerce, competition policy and state enterprises, and customs cooperation. In addition, the agreement contains provisions for transparency and dispute settlement. Information on the USSFTA can be found at [http://www.ustr.gov/Trade\\_Agreements/Bilateral/Singapore\\_FTA/Final\\_Texts/Section\\_Index.html](http://www.ustr.gov/Trade_Agreements/Bilateral/Singapore_FTA/Final_Texts/Section_Index.html)

## Trade Events

CommunicAsia/BroadcastAsia, June 16-19, 2009, Singapore  
<http://www.communicasia.com>, <http://www.broadcast-asia.com>

## Resources & Contacts

Infocomm Development Authority of Singapore [www.ida.gov.sg](http://www.ida.gov.sg)  
Singapore Infocomm Technology Federation <http://www.sitf.org.sg>  
Association of Telecommunications Industry of Singapore (ATiS) <http://www.atis.org.sg>  
Market research portal <http://www.export.gov>

## For More Information

The U.S. Commercial Service in Singapore can be contacted via e-mail at: [sweehoon.chia@mail.doc.gov](mailto:sweehoon.chia@mail.doc.gov); Phone: 65 6476-9403; Fax: 6476-9080 or visit our website: [www.buyusa.gov/singapore](http://www.buyusa.gov/singapore).

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