MEASAT antenna farm. Photo courtesy of MEASAT.

Big demand for DTH

The Asian market is witnessing an explosion in demand for TV and video services. Globalisation is creating demand that has previously not been so evident, especially in poorer regions of Asia. Satellite Evolution uncovers the demand for DTH services and how it is being met by regional and international operators.

Convergence is something that we are hearing more and more about in the satellite industry all the time. And it is something that Direct-to-Home satellite providers are considering more than ever today. DTH remains one of the strongest growth drivers of the satellite industry worldwide. DTH is a very reliable revenue generator and, certainly in the Asian region, will continue to be strong in the future due to a mix of developing and developed countries that are becoming significantly wealthier and seeing steady economic growth. Countries such as Japan, a highly evolved DTH market, presents the largest market for DTH due to its advanced infrastructure, high disposable income and market penetration. However, the fragmented nature of the Asian countries means that they are all at different stages of development and the need for DTH services is at different stages of recognition, which means that there are still many markets that remain untapped providing a great amount of opportunity for DTH service providers.

I have started by touching on convergence. This will be an important word in the future of DTH in the Asian region, and worldwide. The introduction of triple play services is offering the opportunity for new revenue and is helping to establish DTH providers in the homes of their customers. As hardware costs come down, DTH becomes ever more popular and incentives such as universal service obligations (USO) are helping to bring the services to more and more people across the continent. DTH presents the service providers with a perfect opportunity to gain a slice of the market share pie from the terrestrial service providers and the Internet and IP have presented them with a great chance to expand their service offerings.

DTH in Asia

Perhaps, to begin with, we should look at China. Along with India, China is the biggest Asian market. There are a massive 370 million TV households in the country today and only 150 million of those homes are covered by cable. That leaves a total of 220 million that require an alternative service in order to receive their TV. Satellite is

an obvious solution. This demand is driving the construction of five new satellites and the creation of dozens of new channels. In Asia, DTH is very important. The sheer size of the continent and the dispersed nature of the population means that there are many, many villages and towns located far away from the cities and areas of concentrated population, where these services are readily available.

So, DTH is a very popular choice in Asia and the sector is experiencing significant growth. In India alone, the DTH market has doubled in the past two years. Satellite offers many benefits to a country like India or China. It can be deployed anywhere at all, no matter how remote. It needs no prior infrastructure. It is a cheap method of delivery. It is also very reliable. Cable is often very expensive to roll out and this can take a long time to complete. There is little or no chance of terrestrial infrastructure for those rural areas. Satellite, therefore, becomes the de facto method of delivery.

Tata Sky – a leader in pay TV

Tata Sky, the DTH satellite television provider in India, announced that it had crossed the two million connections milestone in May. Tata Sky remains the fastest-growing pay-TV provider in the nation since its launch in 2006, having added two million subscribers in just 20 months.

Commenting on the milestone, Mr Vikram Kaushik, Managing Director & CEO of Tata Sky said, "We continue to see significant growth to our subscriber base - a testimony to our continual efforts in providing customers with the best TV experience in the industry. We attribute the record sales numbers to our ongoing focus on providing cutting-edge technology, the most comprehensive channel lineup, innovative interactive services and top quality customer service.

Tata Sky has also established a reputation as an innovator in the Indian pay-TV industry. In 2006, it introduced gold standard customer service in the payTV industry by setting up three high-end 24x7 call centres in Hyderabad, Mohali and Pune supporting 11 languages. The company was also the first to offer interactive services for every member of a family -- ranging from education, cooking, quizzing, sports to 24x7 darshan of leading temples of the country. Today nearly 500 leading schools across India are using Tata Sky's educational services as a teaching aid within the classroom. The company has also announced its plan to launch its high-end personal video recorder (PVR) later this year.

Photo courtesy of iStockphoto.com.

Tata Sky announced a dramatic reduction of 50 percent in its hardware price. The rapid subscriber ramp-up in a short span of 16 months has resulted in large cost savings for the company, which it has decided to pass to its customers. This move, combined with the recent introduction of attractively priced subscription packages (starting at Rs 200 per month), continues the company's endeavour to make digital quality television viewing possible for every family in India.

In addition, to ensure that it constantly brings the latest in television entertainment to India, Tata Sky has also announced its plan to launch its high-end personal video recorder (PVR) this year. The PVR device will help subscribers pause live television, record multiple programmes and enjoy true video-on-demand. Tata Sky's parent company, Newscorp, has already launched PVR very successfully in the UK, Italy and Australia.

Mr Vikram Kaushik, Managing Director & CEO, Tata Sky Ltd. said, "It is the confidence shown by the customers in our service that has helped us achieve the unparalleled feat of 1.5 million connections within 16 months of launch. Hence, it is more than fair that we share the benefits of this feat with them. With our hardware priced at Rs 1,499, our world-class service will now be affordable for consumers across all strata of the society. We are confident that this pricing will catapult the process of digitisation across the country and will help boost the government's efforts to digitise India by 2010 for the Commonwealth Games."

Tata Sky is now available in almost 5,000 towns, making its distribution network the widest offered by any DTH company in India. The company has also recently added newly launched channels like 9X, NDTV Imagine, UTV Bindass, NDTV MetroNation taking its offering to over 150 TV channels and services. Actve Darshan, Actve Learning and Actve Stories are amongst the recently launched interactive services, ensuring entertainment for every member of the family.

Meeting the niche demand

The huge array of channels available to DTH subscribers has increased and continues to increase. If we take a closer look at the composition of population across Asia, there are a plethora of different languages, cultures and religions living side-by-side. These different pockets all have different specific requirements when it comes to television programming and channel choice. These bouquets of channels are also extremely popular with expatriates of countries across the world. No matter where they now reside, they may still gain access to the programmes that they would receive in their country of birth.

For example, the United States is seeing a big increase in demand for Chinese content and China Central Television (CCTV), the national broadcaster for the People's Republic of China, has renewed a multi-year contract on Intelsat's Galaxy 3C satellite for Ku-band capacity to distribute its regional direct-to-home (DTH) services in the United States.

China Central Television became the world's first global Mandarin Chinese television provider when it expanded its services internationally via the Intelsat 3R satellite located at 43 degrees West in 1995. Since then, this long-standing relationship spanning nearly 14 years has delivered CCTV's programming to every region of the world. Intelsat continues to provide CCTV with full time program distribution services via the Intelsat 1R satellite located at 45 degrees West, the Intelsat 9 satellite located at 58 degrees West and the Intelsat 10 satellite, located at 68.5 degrees East.

"We have witnessed an increased demand for Chinese content among US viewership," said Zongjiu He, Vice President of CCTV.

Photo courtesy of iStockphoto.com.

"Intelsat's industry-leading Galaxy 3C satellite is the ideal platform for CCTV, enabling us to seamlessly reach that targeted DTH customer base."

Compression techniques

The advent of new compression techniques has helped DTH service providers to achieve very high quality transmission and the ability to transmit more channels with no loss of quality. Dish TV of India is the first DTH provider in the region to start using MPEG-4 compression technology. Also in India, Bharti Telemedia, a subsidiary of Bharti Airtel Ltd., has chosen TANDBERG Television's market-leading advanced IP head-end for the launch of a new Direct to Home satellite TV service in India. Bharti Telemedia's state-of-the-art DTH system will use a range of TANDBERG Television's proven solutions including the iSIS 8000 IP head-end and MPEG-4 AVC standard definition encoders. The system is one of the first satellite DTH platforms in the world to benefit from the compression efficiencies of standard definition MPEG-4 AVC, significantly increasing transponder capacity and potentially doubling the amount of available channels.

"We are excited to be deploying such advanced technology and infrastructure to offer a best-in-class DTH service to our customers. To launch this service we needed more than a technology supplier, we looked for a television partner. TANDBERG Television was a clear choice as the company brings a strong combination of market-leading IP and MPEG-4 AVC technology, coupled with more than a decade of experience of enabling some of the world's largest DTH satellite operations," says N Arjun, Executive Director, Bharti Telemedia.

The DTH services will be launched nationally across India and Bharti is setting up a state-of-the-art infrastructure near Gurgaon (Haryana) for the purpose of uplinking and broadcast. By using the latest MPEG-4 AVC video compression, and IP technologies, Bharti can cost-effectively deliver more channels in less bandwidth, while still maintaining high quality pictures.

At the heart of the Bharti head-end is the TANDBERG iSIS 8000 which includes best-in-class video encoding, IP multiplexing and new receiver/decoders. The system is brought together under a single control and management system, nCompass. The TANDBERG MX8400 IP Multiplexer, is a next generation DVB-S2 ready solution which will provide Bharti with an open standards, IP based head-end with support for up to four independent multiplexed outputs from a single unit. The combination of Reflex statistical multiplexing and this advanced multiplexing architecture ensures maximum usage of available bit-rate.

Further bandwidth efficiencies are achieved by the use of the TANDBERG EN8030 MPEG-4 AVC SD encoders, based on the company's next-generation compression platform. The TANDBERG EN8030 use a comprehensive tool-set of advanced compression video processing features, combined with new pre-processing techniques. It delivers the industry's leading picture quality versus performance through bandwidth improvements of up to 50 percent over traditional MPEG-2 based DTH services

ProtoStar

The demand for DTH is spurring operators to build and launch more satellites. ProtoStar is the latest operator to place a dedicated DTH satellite into orbit, ProtoStar I. In addition, ProtoStar also announced, in April 2008, that funding has been secured for ProtoStar II which will be another addition to the constellation, expected to be ready for launch in early 2009. The fact that financing was secured in the current financial climate is reinforcement of ProtoStar's position and DTH demand in the market. Philip Father, President and CEO of ProtoStar remarked, "This is surely one of the more challenging financings in the satellite sector given the market's current difficulties, and the fact that we were able to pull this together is a strong endorsement of the market opportunity for ProtoStar. With a large percentage of the funding coming from Asian investors, it reflects the region's commitment to support the next generation of television services in Asia and the strength of ProtoStar's business plan." The footprints of ProtoStar I and II across Asia have been customised to meet the immediate and long-term needs of its anchor DTH operator customers and will pro-

vide coverage to South East Asia, South Asia and IndoChina – an area with a population of over three billion.

And ProtoStar is not alone. Another regional operator, Asia Broadcast Satellite (ABS) is set to build and launch a dedicated DTH satellite in the near future.

Asia Broadcast Satellite

Asia Broadcast Satellite (ABS) owns and operates the ABS-1 satellite at the 75 degrees East location serving 4/5th of the world's population and four continents. Headquartered in Hong Kong, ABS serves a global customer base with representative offices in Asia, the Middle East, Europe and North America. Supported by a team of highly experienced professionals, ABS offers a wide range of services, including DTH and CATV distribution as well as IPLC, IP backbone, GSM backhaul and VSAT services.

The ABS-1 satellite is a high-powered Lockheed Martin A2100 AX spacecraft that was launched on a Proton on September 1999 from Baikonur. With on-board fuel for more than 17 remaining years of life, the ABS-1 satellite connects Asia, Australia, the Indian Subcontinent, CIS, Middle East, Europe and Africa. The satellite has 44 transponders composed of 16 Ku-band and 28 C-band transponders.

In early 2007, Asia Broadcast Satellite (ABS) and Trinity Broadcasting Network (TBN) announced that they had entered into an agreement to distribute TBN's family of channels on the Southern Ku-band beam of the ABS-1 satellite at the 75E orbital location. TBN's bouquet of channels are uplinked from ABS's Hong Kong-based digital multiplex, distributed throughout the Asia-Pacific region extending from Mongolia to the South of Thailand and across Eastern Europe, Asia and Japan reaching a potential audience of several billion viewers.

Later in 2007, ABS and MTI transmitted the F1 Australian Grand Prix on ABS-1 and then in April of the same year, entered into a three year partnership to broadcast the Three Angels Broadcasting Network into Asia with RRSAT Global Networks.

Satellite Evolution Asia spoke to Tom Choi, CEO of ABS at CommunicAsia 2008. He revealed to us that ABS-2 is in development and will be launched in the first quarter of 2011 or sooner, depending on the chosen vendor and the ultimate configuration of the satellite. He said “we have done 80-90 percent of the work that is necessary to secure the financing for ABS-2, as well as the anchor customers and we are hoping to sign a contract in the very near future.”

MEASAT turns to HDTV

Demand for the clarity that HDTV brings to our screens is on the up. Although it has not seen a rocketing demand, the requirement is growing. MEASAT and the National Geographic Channel Asia announced in June an agreement for the National Geographic Channel HD and two other standard definition channels to be distributed on the MEASAT-3 satellite to PayTV operators across the Asia-Pacific, Middle East and Africa regions. The National Geographic Channel HD gives viewers award-winning documentaries in amazing detail, with vibrant colours and theatre quality Dolby Digital 5.1 channel surround sound.

The 24-hour National Geographic Channel HD is available in Asia-Pacific in Singapore and Hong Kong on StarHub and PCCW nowTV services. Mr. Zubin Gandevia, Managing Director and Executive Vice President of National Geographic Channel Asia explained, “Broadcasting high-definition channels requires more transmission capacity and a higher level of compression technology as compared to standard definition channels. Our partnership with MEASAT has given us the technical advantage to introduce our high-definition channel cost-effectively and rapidly across the Asia-Pacific, India, the Middle East and Africa.”

MEASAT is yet another example of a regional operator gearing up for the launch of a new satellite. MEASAT-3a is now slated for launch on 21st August 2008. It will be placed into its orbital position on a LandLaunch Zenit 3SLB rocket and will help the company to further expand its thriving DTH and video distribution services.

AsiaSat

BIG Broadcasting from Reliance Anil Dhirubhai Ambani Group, one of India’s top three private sector enterprises, has joined AsiaSat 3S for its bouquet of television channels which will be serving millions of Indians. An agreement has been signed for one C-band transponder on AsiaSat 3S.

In an effort to boost and strengthen the Group’s presence in the media and entertainment space, Reliance Anil Dhirubhai Ambani Group is making its foray into India's broadcast sector by using the entire C-band transponder to broadcast its bouquet of channels. Services will include general entertainment channels, movie channels, and music channels across languages and a host of other differentiated offerings.

"One of our key objectives is to bring to our audience a unique, world class and unprecedented TV viewing experience. Placing our satellite television services on AsiaSat 3S, Asia’s premium platform for satellite television enables us to establish in the shortest time possible a seamless broadcast network accessing all our targeted cable homes," said Ashutosh, COO of Reliance BIG Broadcasting Private Limited.

"By using AsiaSat 3S, the most popular satellite platform for the Indian media market, we gain immediate access to all cable head ends across India. We are proud to have AsiaSat as our partner as it has a powerful satellite fleet offering the most comprehensive coverage and largest audience access that fully support our aggressive broadcast plan in India," Ashutosh added.

"BIG Broadcasting is an impressive addition to AsiaSat's expanding list of blue-chip customers. We are thrilled to be selected as the satellite partner of one of India's most dynamic and biggest broadcast ventures. It is evident that AsiaSat offers real value to premium broadcasters who look for service quality and access to their target markets in the Asia-Pacific," said Peter Jackson, Chief Executive Officer of AsiaSat.

"India’s media sector is flourishing at an astonishing pace. AsiaSat has been serving the Indian media market since the early 90s and continues to play a contributing role in its rapid expansion. The potential of the Indian market is enormous as we all know, while the country’s economy continues to flourish, our clients will expand and diversify their service offerings, our commitment to providing premium service to Indian broadcasters shall remain in the years to come,” added Mr. Jackson.

A perfectly poised market

The Asian market holds a great deal of promise for DTH satellite operators and service providers. The sheer number of potential customers combined with expanding and increasingly wealthy economies will create great demand for the entertainment that is provided by DTH TV and other services that come with it. The demand for choice, cost effectiveness and flexibility is what customers are looking for and DTH can offer this to them even in very rural areas that are not touched by cable or fibre connectivity. On the other side of the coin, DTH is the perfect solution for those living in areas of high population density such as high rise flats. As we have seen, India’s DTH market is booming and stands out as one of the most promising with take-up of DTH services exceeding all expectations. So the demand is there.

There is no question. However, for DTH providers now, the emphasis must be on providing the best quality of service and also additional services such as triple play, that will attract and maintain customer loyalty and give added value. The competition with terrestrial is fierce but the benefits that satellite can offer can easily rival the cable and telecommunications companies already in the game of TV delivery. ■