



Providing services to over 150 countries

MEASAT was founded in 1992 to advance the development of Malaysia's communication infrastructure through satellite technology. The company launched its first two satellites, MEASAT-1 and MEASAT-2 in 1996; since then it has played a major role in evolving Malaysia's telecommunications and broadcast industries. Today, MEASAT provides satellite service to customers across Asia and Africa. Amy Saunders spoke with Yau Chyong Lim, Chief Operating Officer at MEASAT to find out more about the company's activities, market development, and expectations for 2017 and beyond.

Question: Can you provide an overview of MEASAT's development over the years?

Yau Chyong Lim: With MEASAT-1 and MEASAT-2 we began services, providing Malaysia with key communications infrastructure for video broadcasting and telecommunications. We also pioneered Ku-band DTH (Direct-To-Home) services in the high-rainfall Southeast region. With excellent operational track records, MEASAT-2 is still providing service to customers today.

MEASAT then made significant investments to launch MEASAT-3 and

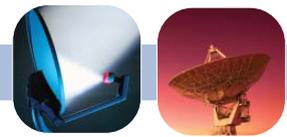
MEASAT-3a in 2006 and 2009, respectively, collocated at 91.5°E. This was to develop Asia's premier HD video neighbourhood, accomplished by engaging in a risk-sharing model with key partners like Globecast, Encompass and MX1. Today, the 91.5°E slot is one of the hottest C-band video distribution platforms for HD channels in Asia.

MEASAT-5 in 2011 further strengthened Malaysia's communications infrastructure in support of government programs to bridge the digital divide. For example, MEASAT successfully rolled out WIFI Komuniti

(WK) project in East Malaysia (Sarawak) in collaboration with the Malaysian Communications and Multimedia Commission. The WK project increased broadband penetration in one of Malaysia's largest rural areas.

MEASAT expanded further with AFRICASAT-1a in 2013, which provides high-powered C-band services with excellent coverage across Africa and in Europe.

We then launched MEASAT-3b in 2014 to support service expansion of DTH customers in Malaysia, Indonesia and India. Currently the MEASAT-3/3a/



Yau Chyong Lim, Chief Operating Officer at MEASAT



3b constellation at 91.5°E supports six DTH platforms with 21m subscribers served.

MEASAT also launched the region's first linear UHD channel in 2015 and currently leads distribution in this sector, further cementing 91.5°E as Asia's video neighbourhood.

With six spacecraft, MEASAT provides services to over 150 countries representing 80 percent of the world's population across Asia, Middle East, Africa, Europe and Australia.

Question: MEASAT has come a long way since its foundation, moving from serving Malaysia to Asia and Africa. Which end users and geographical markets are key to the company's operations, and how have these developed?

Yau Chyong Lim: MEASAT's key geographical markets are Asia and Africa. In Asia, the video segment is key for us, especially DTH and video distribution. Malaysia will also be a key satellite broadband market for us. In Africa, we focus on building partnerships with teleport operators to provide broadband connectivity in the region in addition to video distribution.

Question: Where do you see the most room for growth for MEASAT going forwards?

Yau Chyong Lim: MEASAT will focus on growing:

- **DTH in Asia.** DTH is still preferred in many Asian countries due to the ability of satellite to 1) cover large geographical areas with a single spacecraft; and 2) provide a highly reliable delivery platform with costs

independent of geographic location or number of users. Opportunities in the DTH sector continue to be healthy in MEASAT's core markets of Malaysia, India and Indonesia. Operators are looking for ways to enhance their market competitiveness, leading to them increasing the number of localized and vernacular channels as well as adding more HD content.

- **C-band video distribution across Asia in HD and UHD.** Whilst HD distribution continues to be our main focus, we see good potential for UHD, which is still in initial stages as the ecosystem develops. Once UHD technology is more widely adopted throughout the supply chain, from production to consumption, we expect consumer demand for linear UHD content to accelerate.
- **Satellite broadband in Malaysia.** MEASAT was an early advocate of HTS satellites through our MEASAT-5 capacity, which provides high speed broadband across Malaysia. This capacity has been used by the Malaysian government to support initiatives to deliver broadband services to rural areas, providing access to remote education, telemedicine, online marketing, and others. Most recently we rolled out 438 broadband VSAT sites in East Malaysia (Sarawak) and look forward to continue supporting rural broadband connectivity across Malaysia.

Question: MEASAT plays a big role in educating students on satellite technology through regular work-

shops. Do you think enough is being done around the world to bring new talent into the industry, and how might more be achieved?

Yau Chyong Lim: MEASAT believes talent is core to success, and more can be done to pull dynamic innovative talent to the industry. Our thoughts on activities that can help achieve this include:

- Delivering the message that satellite and space industries are exciting. There is a host of new technologies, markets, and players which are shaking up the industry and will have a large impact – reusable rockets, mission extension vehicles, and satellite constellations providing ubiquitous seamless connectivity, to name a few.
- Building more public awareness, especially among school-goers who have not yet decided a career path. This includes localized targeted PR, hosting facility visits, community outreach programmes, CSR activities, and working with government and educational institutions.
- Making the company more attractive to top talent. This means building a great company culture with focus on employee development, incentives and rewards – both financial and social.

Question: With broadcast being a major part of MEASAT's business, how has the advent of 4K affected operations, and do you expect 8K to become a part of your business in the future?

Yau Chyong Lim: UHD, which encom-





passes 4K and 8K, is an area MEASAT is well-prepared for given our commitment to supporting customers with the latest broadcast technology. Since 2014, we have been adopting and showcasing the latest in UHD technology as proof-of-concept demonstrations at exhibitions and tradeshow. Working with leading global partners in hardware and software, we pioneered multiple regional-firsts in live UHD services using the latest compression and transmission standards.

Although currently limited, we can expect the number of UHD channels in Asia-Pacific to grow as the technology matures, production and delivery costs continue to decrease, and UHD TV adoption and end-consumer exposure to UHD offerings continue to rise. The move towards mass-market UHD adoption is expected to accelerate in the next few years.

Most current UHD content is in 4K and MEASAT looks forward to supporting 8K.

We will continue working with our leading technical partners to provide cutting-edge broadcasting solutions for Asia.



Question: OTT services have grown to envelope a very significant consumer base in Europe and North America. How have those services developed in Asia, and do you see them as competition or as complementary technology?

Yau Chyong Lim: Netflix, Amazon Prime, and closer to home iflix have been introduced to Asia over the past year or so. It is too soon for us to say what impact these new entrants will have on more traditional viewing

methods and DTH in Asia, but we are monitoring closely.

Many parts of Asia need faster internet speeds to stream OTT video; in these markets, satellite DTH remains the preferred choice and continues to grow. For example, Nepal and Pakistan are looking to launch national DTH operators. MEASAT believes DTH will continue to be the key delivery mechanism for video in its key core markets of Malaysia, India and Indonesia. ■

