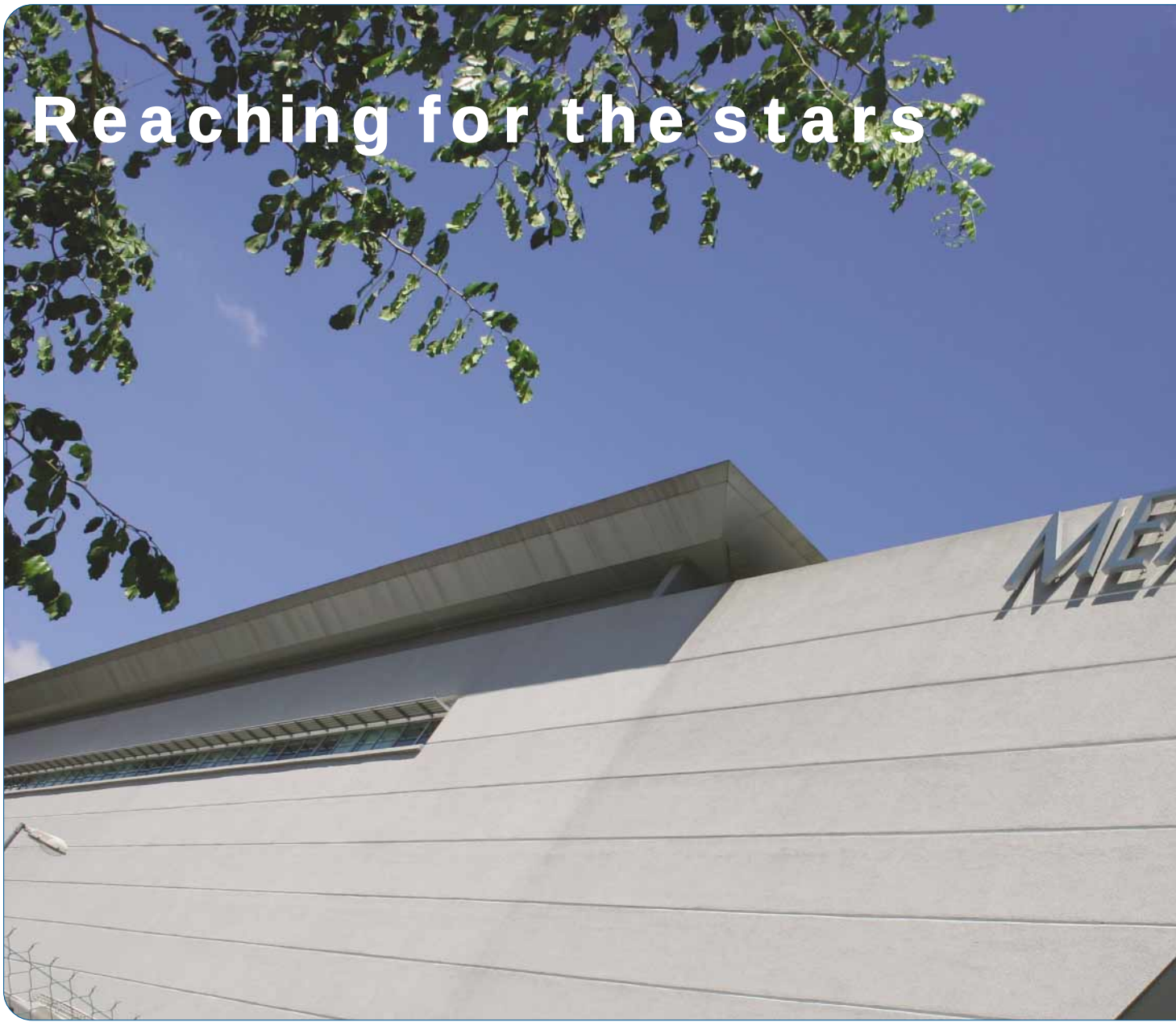
Reaching for the stars



MEASAT is a core element in Malaysia's Information and Communication Technology (ICT) industry. Photo Giovanni Verlini.

If ambition is a measure of a company's worth, then MEASAT of Malaysia, a satellite company originally founded as a domestic operator, is certainly one of the most remarkable in the world.

At present MEASAT is a regional satellite operator supporting a distinctive customer base of Direct-To-Home (DTH), broadcasting and telecommunications customers across Southeast Asia. Over the past few years, however, the company has been trying to establish itself as a major regional player: major investments in the company's ground and space infrastructure are set to significantly enhance the company's capabilities, eventually enabling it to compete directly with global North American and European satellite operators across the Asian market.

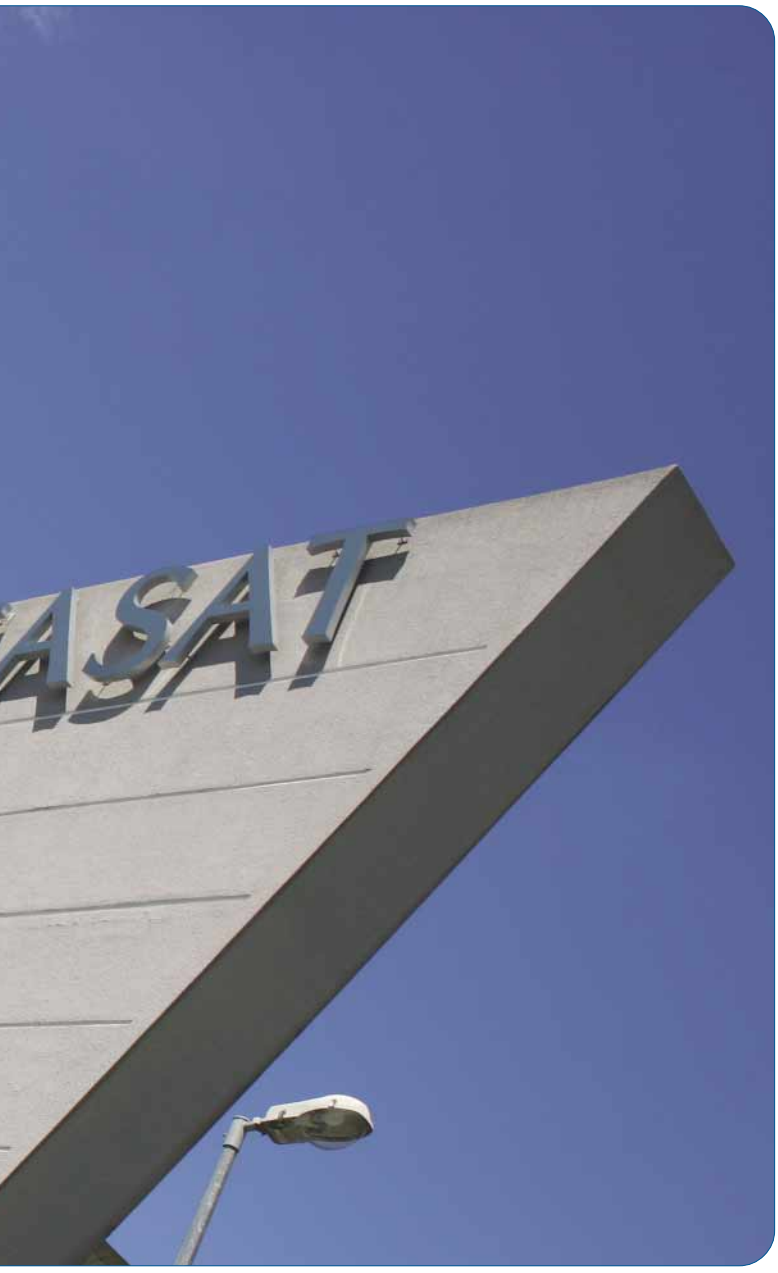
But the company's plans are not limited to the continent of origin. With rights to 16 orbital slots around the world, MEASAT is also looking for opportunities to expand its fleet into new regions such as Africa and the Middle East.

For the moment, however, the company's efforts are directed at the development of the MEASAT-1R satellite platform and, above all, the recent launch of the MEASAT-3 satellite, which, at the time of writing, is Asia's newest commercial spacecraft.

Giovanni Verlini, Editor of Satellite Evolution Asia, travelled to Kuala Lumpur to visit one of the rising stars of the satellite industry of the Asia-Pacific region: Malaysia's MEASAT.

MEASAT-3: mission accomplished!

MEASAT- 3 satellite was successfully launched on 12 December atop a Proton Breeze M launch vehicle which took off from the Baikonur



MEASAT and Astro Sign Transponder Lease Agreement for Measat-3 Capacity

MEASAT Satellite Systems Sdn. Bhd. has signed an interim Transponder Lease Agreement (TLA) with MEASAT Broadcast Network Systems Sdn Bhd (Astro) for initial Ku-Band transponder capacity on the recently launched MEASAT-3 satellite.

Under the agreement, Astro will lease an initial 5 Ku-band transponders in the Malaysian Ku-Band beam from the commencement of commercial operations of the MEASAT-3 satellite, expected 1 February 2007. The interim agreement was signed pending finalisation and Astro's shareholder approval of the long term TLA for MEASAT-3 satellite capacity which lays out Astro's broader requirements for capacity over the 15 year satellite life.

The state-of-the-art MEASAT-3 satellite provides C-band coverage to over 100 countries, representing more than 70 per cent of the world's population; and the most powerful Ku-band Direct-to-Home (DTH) coverage for over 160 million TV households in Malaysia, Indonesia and South Asia.

"MEASAT-3 has been designed in part to support the aggressive growth plans of our existing customer base," said Paul Brown-Kenyon, MEASAT Chief Operating Officer (COO). "We are delighted to effectively double the capacity used to support the Astro DTH service in Malaysia from the start of commercial operations of the MEASAT satellite allowing this dynamic company to begin to expand its Malaysian services," he concluded.

"The signing of the TLA is yet another landmark for us as we gear up to roll-out new products and services for 2007. Viewers can look forward to refreshingly new and entertaining programmes to consolidate our position as the number one choice for total home entertainment," said Rohana Rozhan, Chief Executive Officer (CEO), Astro TV.

Cosmodrome, Kazakhstan, successfully placing the MEASAT-3 satellite into the 91.5 degrees East orbital location.

The successful launch of MEASAT-3, the first MEASAT satellite to be launched in a decade, will pave the way for a new era of enhanced communication and broadcasting services for MEASAT customers. Providing 300 percent more capacity at the key 91.5 degrees East orbital location, the satellite has been designed with a C-Band payload capable of reaching over 100 countries, representing 70 percent of the world's population, and the most powerful Ku-band DTH coverage for over 160 million Television (TV) households in Malaysia, Indonesia and South Asia.

The launcher lifted off at 5:28AM local time (6:28PM. Monday EST, 23:28 Monday GMT). The mission lasted nine hours and 12 minutes before MEASAT-3 was released into a Geosynchronous Transfer Orbit (GTO). This was the fourth Proton launch of the year for ILS. ILS has exclusive rights to market and manage missions on the Russian Proton vehicle for commercial satellite customers worldwide. "This is the first satellite to be launched for MEASAT in a decade, and we are pleased that ILS and Proton have played a part in this important event," said ILS President Frank McKenna. "We are proud of the accuracy with which Proton delivered the satellite to orbit. Today's successful performance validates MEASAT's confidence in our vehicle, and we hope to convert this confidence into additional opportunities to work with MEASAT."

Designed by satellite manufacturer Boeing Satellite Systems (BSS), working closely with MEASAT engineers, MEASAT-3, based on a BSS 601 platform, was built at the Boeing El Segundo facility, Los Angeles, US. The Proton Breeze-M launcher was built by Khrunichev State Research and Production Space Center of Russia and launched in collaboration with International Launch Services (ILS), their US partner.

"The launch of MEASAT-3 will enhance our ability to support all customers. It will not only augment capacity and significantly expand the reach of our network, but it will also enhance redundancy capabilities for customers using the MEASAT-1 satellite," said MEASAT Chief Operating Officer (COO), Paul Brown-Kenyon. "Planning is already underway for the launch of MEASAT-1R, scheduled for end 2007/early 2008, which is being developed to support and sustain future growth requirements for existing and prospective customers," he added.

Expanding

As mentioned earlier in this article, MEASAT is a core element in Malaysia's Information and Communication Technology (ICT) industry, boasting a strong and growing regional customer base in broadcasting (constituting a so-called strong video neighbourhood), while

MEASAT Vice President Elected to ITU Radio Regulations Board

MEASAT's Vice President of Engineering & Operations, Dr. Ali R. Ebadi, has been elected to a prestigious seat on the International Telecommunications Union's (ITU) Radio Regulations Board (RRB).

The RRB is an international panel of experts under the ITU who convene to oversee the application of the world's Radio Regulations, a set of internationally agreed guidelines for the use of the radio spectrum across the world. The RRB is made up of only 12 members from the 191 Member States of the ITU representing the world's five ITU regions (Americas, Western Europe, Eastern Europe, Africa, Asia and Australasia). Dr Ebadi was voted first in the ITU's Asia and Australasia region with a total of 117 votes during the ITU's Plenipotentiary Conference recently held in Turkey. He was elected ahead of candidates from countries such as India, Pakistan and New Zealand.

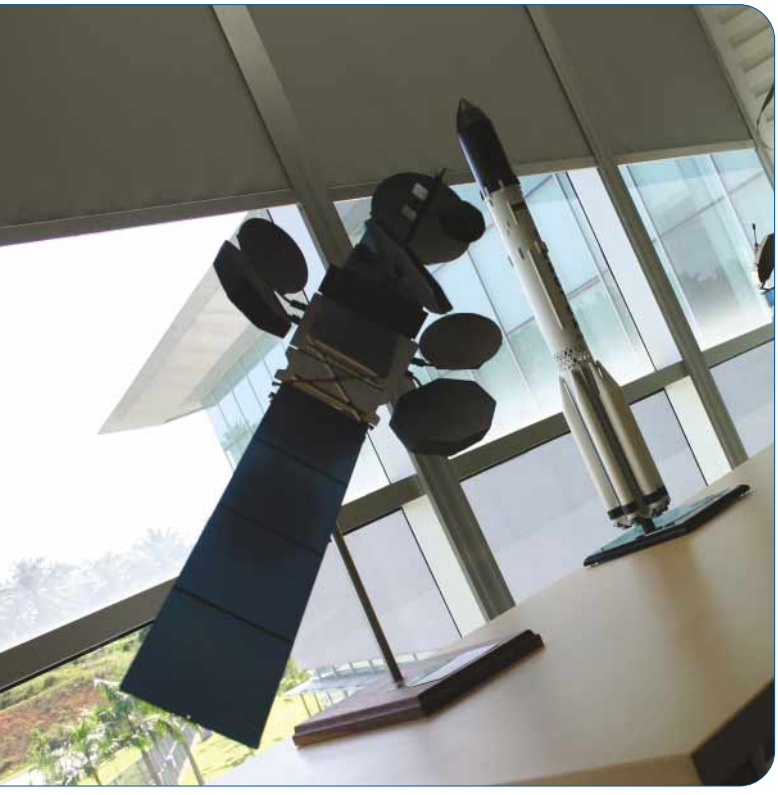
Dr. Ebadi has actively participated in, and submitted several papers to, the ITU and other international conferences for more than 20 years. These have included, inter alia, ITU's World Radiocommunications Conferences (WRCs), Plenipotentiary Conferences (PPs), Radiocommunications Assemblies, Study Groups, ITU Councils and Plenipotentiary preparations. He has also been actively involved in drafting several documents for ITU's WRCs and PPs. His expertise in satellite communications and interference resolution will be of importance to the RRB.

At MEASAT, Dr Ebadi oversees the development of Malaysia's sole fleet of communications satellites. He was in-charge-of the procurement and launch of the MEASAT-1 and MEASAT-2 satellites in the 1990s and has been overseeing the procurement and manufacture of the MEASAT-3 satellite which was launched in mid-December from the Baikonur Cosmodrome. MEASAT-3 will extend the reach of the MEASAT fleet, to enable customers to reach over 100 countries, representing more than 70 percent of the world's population. Honoured with his election to the RRB, Dr Ebadi said, "I am grateful for the support of Datuk Seri Dr Lim Keng Yaik, the Minister of Energy, Water and Communications (MEWC); his Ministry officials and the Malaysian Communications and Multimedia Commission (MCMC), in helping to secure this election." He also thanked the ITU Member States for their trust and confidence in electing him; and pledged full, transparent and unbiased commitment in carrying out the responsibilities of the RRB.

managing to secure anchor DTH customers in the region. In fact, while already supporting pay-TV, DTH platforms in countries such as Malaysia, Vietnam, Australia and Indonesia, the company is already in discussion with potential partners in South Asia, and it is hopeful of building a customer base there.

However, this seems to be only a base upon which to build far-reaching, truly global operations. According to Brown-Kenyon, MEASAT's long-term expansion plan is two-fold:

- Investing to build scale to compete globally; and
- Building relationships with other operators in Africa and the Middle East to expand the MEASAT fleet.



The company's current focus is on the launch of MEASAT-1R in 2007/2008, with rights to 16 orbital slots around the world. Photo Giovanni Verlini.

At the heart of this philosophy then, there is a conscious decision to invest and expand the company's scale. As Brown-Kenyon, speaking to your correspondent, said: "Scale is fundamental in the satellite business." Interestingly, MEASAT has decided to pursue its expansion plans through organic growth. "My job is operational, and that is what I am here to do: expand the company through organic growth," he commented.

While, in this sense, the company's current focus is on the launch of MEASAT-1R in 2007/2008, with rights to 16 orbital slots around the world MEASAT is also looking for opportunities to expand its fleet into new regions. According to Brown-Kenyon, in fact, MEASAT is in discussion with operators in other parts of the world to extend the network's reach and customer base.

In Southeast Asia, MEASAT has recently singed a Memorandum of Understanding (MoU) with PT Telkom of Indonesia for the joint development of slots and regional business. This alliance is focused on DTH and Very Small Aperture Terminal (VSAT) applications.

In India, MEASAT is the only operator that has succeeded in establishing a Joint-Venture (JV) with the Indian Government through the India Space Research Organisation (ISRO), which was approved by the Indian Cabinet in 2004. The JV was made to jointly develop new satellites and market each other's capacities.

In Africa, MEASAT is in talks with possible local partners to develop and launch a satellite dedicated to the African continent and the Middle East. The satellite is to be located at a MEASAT orbital slot of 5.7 degrees or 46 degrees East and will be integrated into the MEASAT global satellite network. The idea seems to place a medium-sized satellite of 12 C-band and 12 Ku-band transponders to serve national and regional interests. The satellite will be used for applications such as DTH, video distribution and Global System for Mobile Communications (GSM) backhaul.

Asked about the issue of landing rights in foreign markets, Brown-

Kenyon replied: “The issue of landing rights is a complex subject. Our approach is to work with local companies and establish a relationship with them. This makes our lives much easier.”

The move into solutions

No one could deny the importance of building critical mass, but in today’s satellite market size is far from being everything: value-added services are also of paramount importance. In this sense, MEASAT’s evolution from simple capacity wholesaler to provider of communications services was central to the company’s decision to build a new teleport in Cyberjaya.

MEASAT’s new facility, the MEASAT Teleport and Broadcast Centre (MTBC), was opened in 2005 and was designed as a world class teleport facility. The idea was to have the MTBC as a centre for introducing a range of customer satellite solutions. These included the following:

- Video services – video turnaround to/from satellite or fibre; video playout; occasional usage;
- Co-location services – VSAT hub; IP POP; Data centre;
- VSAT services – Hub-based VSAT; Satellite-based end-to-end solutions; Video conferencing, voice, others; and
- IP services – IP connectivity (SCPC, DVB/IP); Voice termination (VoIP); IP multicasting.

In other words, there is no need for customers to build their own teleport when they can lease capacity from MEASAT. At present, for example, MEASAT is leasing space in the facility to Malaysian DTH operator Astro (which has a redundant uplink site there) and to a number of VSAT operators. ■

There is no need for customers to build their teleport when they can lease capacity from MEASAT. Photo Giovanni Verlini.