



Photos courtesy of ILS, and Thuraya.

# A force to be reckoned with

Giovanni Verlini, Editor of Satellite Evolution EMEA, takes a look at how satellite operators from the Middle East are establishing themselves as the new powerhouses in their region and beyond.

**For a long time, the Middle East has had** a reputation of being a region of buyers of satellite capacity. It just so happened that international satellite operators from Europe, the US or Asia, were the 'only kids in town', and that local companies in need of satellite capacity would have to resort to leasing transponder space from them.

Sometimes, even so-called 'regional operators' would be local only in name, as in the case of the now-defunct Europe\*Star – whose name did not sound too Middle Eastern anyway. The company had satellite capacity at located at 45 degrees and 47.5 degrees East of longitude, but was run by international staff based in London.

The situation, however, has never been as clear-cut as someone might think, as the Middle East has long been able to boast world-class satellite operators. The Arab Satellite Communications Organization (Arabsat), headquartered in Riyadh, Saudi Arabia, was founded in 1976 in order to design, execute and operate the first Arab space system. The first satellite, Arabsat 1A, was launched in 1982. Today, Arabsat operates a fleet of five satellites placed in two

orbital locations.

The other leading satellite operator to emerge from the Middle East is Thuraya, a company that stunned the world when in 1997 it came up with the idea of delivering satellite-based, mobile telephony services to handheld receivers. Thuraya now is a leading company in its market segment, with plans to expand its coverage area to the Asia-Pacific region.

## Arabsat

The year that has just ended, will be remembered as an important one for Arabsat. In fact, in 2006 the Riyadh-based satellite operator managed to expand its satellite fleet as well as grow its operations by signing new clients and co-operation deals.

On 9 November 2006, a Russian-built Proton Breeze M vehicle provided by International Launch Services (ILS) successfully launched Arabsat's BADR-4 satellite.

The spacecraft will carry Direct-To-Home (DTH) television services, together with voice and broadband services, across the Middle East, North Africa and parts of Europe.

The BADR-4 satellite was built by Astrium, which contracted for the launch on behalf of Arabsat.

"This was the third ILS Proton flight in 2006, and we are proud to say we delivered the satellite on target," said ILS President Frank McKenna. The satellite is a Eurostar E2000+ model. Protons also have launched five of the heavier Astrium Eurostar E3000 spacecraft.

Antoine Bouvier, Astrium Chairman and Chief Executive Officer (CEO), said: "I am delighted that Arabsat's BADR-4 has been injected into transfer orbit by ILS. Astrium has worked tirelessly to ensure that this latest significant step in the development of Arabsat's business is a resounding success. We look forward to continuing our fruitful relationship with Arabsat."

"The successful launch of BADR-4 represents the realisation of



a critical milestone in Arabsat's new strategic deployment, as well as the company's steadfast commitment to consolidating its historical position as the leading operator of DTH services in the Middle East and North Africa region," said Khalid Balkheyour, Arabsat's CEO.

"Thanks to the superb combined performance of the Proton launcher and Astrium design and manufacturing, BADR-4 is now the most state-of-the-art satellite to serve the region, providing the 130 million viewers watching our 26 degrees East video 'hot spot' with an unrivalled level of in-orbit reliability and back-up, as well as unprecedented reach serving all of the 324 million inhabitants now fully covered from Morocco and Algeria to the Arabian Gulf with the highest power ever," Balkheyour said.

### Partnership agreement around the world

In 2006, Arabsat also managed to sign a significant partnership agreement with a company long considered to be a competitor. In fact, Arabsat and the Egyptian Satellite Company (Nilesat) signed a strategic partnership agreement enabling Arabsat to establish a new 'Arabsat Media Gateway' (AMG) from Cairo, located in Nilesat's Sixth of October City free zone area premises.

Balkheyour and Amin Basyouni, Nilesat's Chairman, have expressed their great mutual satisfaction and happiness towards having reached this key agreement in the satellite broadcasting field which will benefit millions of Arab viewers, considering it as a critical first step towards a further constructive and mutually beneficial co-operation.

This new Media Gateway will enable Arabsat to provide the Egypt-based Broadcasters with direct access to a comprehensive range of video services such as uplink and turnaround onto Arabsat's 26 degrees East 130 million viewers neighbourhood, full digital platform management, as well as extensive content processing such as playout, store and forward, transcoding, and more.

As part of its strategic move towards getting closer to its customers' locations, this ninth AMG from Arabsat will complement the ones already serving the MENA region from Amman-Jordan, Beirut-Lebanon, Bonn-Germany, Dubai-UAE, Madrid-Spain, Riyadh-KSA, Sharjah-UAE and Tunis-Tunisia.

Naturally, the span of Arabsat's agreements has not been limited to the Middle East. On the occasion of the visit to the France 24 premises, by Balkheyour, and Abdelhafid Harguem, CEO of the ASBU (Arab States Broadcasting Union), the Management Board of France 24, chaired by Alain de Pouzilhac, reasserted its intention to actively collaborate with its partners in the Arab world, led by the satellite operator Arabsat and the ASBU.

At the end of their meeting, France 24's Chairman of the Board, Alain de Pouzilhac, stated that: "I am happy to count Arabsat and the ASBU among France 24's pro-active partners. Thanks to them, the channel will be well-established throughout the entire North Africa and Middle East region. With the Arabic version of our Internet website going live early December, and our Arabic programming scheduled to air on France 24 in the first half of 2007, this collaboration with Arabsat and the ASBU is essential to our development."

"We are very impressed with the technical infrastructure of France 24, as well as its ambitious strategy for soon broadcasting in three different languages. We feel truly honoured to have been selected for broadcasting France 24 over the whole Arab world via BADR-4, our brand new state-of-the-art satellite," declared Balkheyour.

Harguem, concluded by specifying that: "the ASBU is ready to consider prospective cooperation with France 24, in particular with respect to current events in the Arab world. It is expected that a collaboration agreement will be signed in the weeks ahead. In any event, we wish France 24 great success."

The English-language version of FRANCE 24 is now distributed and broadcast over the whole Arab world via Arabsat's BADR-4 satellite where it will join its bouquet of 240+ TV channels and 90+ Radio stations already broadcasted by Arabsat's constellation of BADR satellites co-located at its 26 degrees East video 'Hot Spot'. With its

unmatchable stretched coverage and high power over the MENA region, BADR-4 will allow the channel to immediately reach an audience of 130 million viewers, from Morocco to the Gulf, as well as to most of Europe.

Arabsat is also active in a number of partnerships of a technical nature. During the 2006 International Broadcasting Convention (IBC), Arabsat, ASBU and Newtec announced they had signed a major partnership for the progressive deployment of their Multimedia Exchange Network Over Satellite (MENOS) project.

The ASBU, which is currently operating a large international radio and television satellite exchange network on the Arabsat satellite fleet, has awarded a contract to Newtec for the supply and installation of a revolutionary broadband IP-based satellite network for the exchange of multimedia services to be operated on Arabsat's BADR-4 satellite.

The MENOS system that will be proposed to ASBU members and Arabsat customers as a result of this partnership will definitely open amazing and exciting new horizons for satellite-based content exchange throughout the Arab world - and beyond, by providing the region with a truly ground-breaking project at the forefront of cutting-edge technologies. MENOS will be the largest and fastest ever feed and file exchange network for Broadcasters and Corporates, encompassing the entire Middle-East/North-Africa (MENA) and Europe.

Uniquely combining the power and flexibility of IP-based communications with the most advanced satellite transmission and data compression technologies, the MENOS system fully exploits the bandwidth efficiency of the DVB-RCS, DVB-S2 and MPEG-4 standards. It has been developed by Newtec specifically to match the particular requirements of the ASBU members for media files exchange within the MENA region.

Balkheyour enthusiastically welcomed the official launch of this major project on which Arabsat and the ASBU have already been actively working together with Newtec for two years as part of Arabsat's strategy to rapidly expand its offering of Value-Added Services (VAS) throughout the MENA region: "We are extremely proud to have been able to reach this stage hand-in-hand with such remarkable organizations as ASBU and Newtec, introducing together into the Middle East this unique and amazing combination of IP and cutting-edge satellite transmission technologies" he commented, confirming Arabsat's strong commitment to always remain at the forefront of state-of-the-art technology and service offering. "We are honoured by their trust in our system and confidence in the unbeatable performance of Arabsat's constellation of BADR satellites at our 26 degrees East primary video location" he concluded.

In the first phase of its deployment, this system will be used daily by the 25 full members and associated members of ASBU to exchange real-time broadcasting content via a central HUB and 52 remote terminals; Ultimately, ASBU members have already planned to use up to 450 remote terminals within MENA. "The MENOS concept offers exactly what broadcaster and satellite operators are looking for: More services and less satellite costs. MENOS will offer the technology required for our members and as well as other potential users in the region to build their own VPNs for their own national and regional operations. We are pleased with the partnership with Arabsat in this project that will allow us to continue our successful cooperation with them. We relied on Newtec's expertise in the past for the successful digitalization of our radio and television networks and trust they will show the same high level of innovation, quality and service for this project" said Harguem.

Arabsat and the ASBU have entered into a Joint-Venture agreement for the MENOS space segment whereas Ku-band will be used from the new Arabsat BADR-4 satellite.

"The implementation of MENOS by ASBU and Arabsat will offer numerous opportunities for ASBU members and other Arabsat customers to access new services or improve existing business models. Newtec considers it as a privilege being able to support ASBU and Arabsat to strengthen their leading position in the Arab world" added



Serge Van Herck, Newtec CEO.

In a second phase, MENOS will be made available to any Arabsat customers for either Media content file exchanges or to large Corporations, Enterprises, and SMEs for high-speed data file exchange. The network operational readiness is expected by mid-2007.

### Business as usual

Despite a frantic activity on Arabsat's part to expand its range of action, the company has also been busy signing up new clients.

Recently, the company announced the new broadcast of 11 TV channels Iraqi Bouquet on the BADR-3 satellite of the Arabsat fleet.

The digital distribution platform in Ku-band will allow the Iraqi Bouquet to directly access Arabsat's extensive Middle Eastern and North African audience of a 130 Million viewers via its constellation of four BADR satellites at 26 degrees East.

The new bouquet includes: Al-Blad, Ashour, Al-Dyar, Nahrain, Rafedain, Al-Bagdadia, Ashtar, Al-Masar, Al-Salam, Turkomania, Kordistan.

Balkheyour welcomed the launch of the Iraqi Bouquet as part of the Arabsat rapidly expanding offering of channels, wishing them every success. Confirming Arabsat's strong commitment to help its customers succeed and steadily support their growth throughout the region, "We are very proud to have earned their trust in our system and honoured by their confidence in the extensive penetration of Arabsat's constellation of BADR satellites at our 26 degrees East primary fast growing DTH neighbourhood" he concluded.

In the meantime, Arabsat and PEACE TV have also announced a three-year agreement to broadcast the Peace TV channels on the BADR-3 satellite of the Arabsat fleet. Uplinked from Arabsat's strategic partner Jordan Media City, the digital distribution platform in Ku-band will allow Peace TV to directly access the extensive Middle Eastern and North African audiences via Arabsat's constellation of BADR satellites.

Balkheyour welcomed the launch of the Peace TV set of programmes as part of the Arabsat rapidly expanding offering of channels, wishing them every success. "Peace TV is a religion channel and we are proud to be their partner in this exciting launch, delivering them immediate reach to an audience of 130 million individuals in the MENA region alone, and much more beyond," he commented, confirming Arabsat's strong commitment to help its customers succeed and steadily support their growth throughout the region.

Dr Zakir Naik, GM of Peace TV, added: "We are very pleased to broadcast through Arabsat and to collaborate with Balkheyour and his team. This global and long-term agreement will ensure that Peace TV is widely seen around the Middle East, Maghreb regions and Europe."

### Looking to the future

While busy filling up capacity on its existing constellation of satellites, Arabsat is already looking to the future. The company has recently announced that Alcatel Alenia Space will provide the communication payload for the fourth-generation BADR-6 'Full Moon' satellite, with prime contractor EADS Astrium. The new satellite is expected to be operational in 2008.

The BADR-6 satellite will be used by the Arab League's telecommunications organisation to expand and optimise capacity for direct TV broadcasting, telephony and data transmissions over a coverage zone encompassing the entire Middle East and North Africa region, from Morocco to the Gulf, and a large part of sub-Saharan Africa.

This satellite will be co-located at 26 degrees East, with the other Arabsat satellites. It is fitted with 44 transponders, 24 C-band and 20 Ku-band for a power of 6kW (end of life). The payload, developed in Alcatel Alenia Space facilities in France, will be integrated on the EADS Astrium E2000+ spacecraft.

Blaise Jaeger, General Manager, satellite telecommunication activities, Alcatel Alenia Space, said: "This contract strengthens Alcatel Alenia Space's leading position in the worldwide telecommu-

nication payload market."

Since the 1980s, Alcatel Alenia Space has delivered two fourth generation satellite payloads to Arabsat, three first-generation satellites, two second-generation satellites and one third-generation satellite. Besides, Saudi Arabia-based Arabsat has also announced it has selected Arianespace to orbit its BADR-6 relay satellite. This tenth contract signed by Arianespace with Middle East customers calls for the BADR-6 payload to be launched by Ariane 5 during the first half of 2008 from Europe's Spaceport in French Guiana.

### A satellite in your hands: Thuraya

Thuraya was founded in the UAE in 1997 by a consortium of leading national telecommunications operators and international investment houses. The company offers cost-effective satellite-based mobile telephone services to nearly one third of the globe. Through its dynamic dual mode handsets and satellite payphones, Thuraya enhances freedom of movement and connectivity. After the successful development of a customer base in the Europe, the Middle East and Africa (MEA) marketplace, the UAE-based Mobile Satellite Service (MSS) operator has unveiled plans to expand its service to the Asia-Pacific region in 2007, and inaugurated its presence in the region by displaying the world's smallest satellite phone during the ITU Telecom World 2006 exhibition and conference.

In addition, Thuraya is soon to launch a new satellite, Thuraya 3, to be deployed at 98.5 degrees East, to cover East Asia. Among the countries benefiting will be China, Indonesia, South Korea, the Philippines, Singapore, Malaysia and Australia. "We expect to be able to roll out commercial service to our new subscribers in East Asia within months from the launch date," said Al Sayed, who anticipates that the Company will acquire approximately 30,000 subscribers in the Fourth Quarter (Q4) of 2007.

### A technology company

Interestingly, Thuraya's expansion in the Far East, and its technological advancements seem to go hand-in-hand.

The company achieved a milestone when engineers made a high-speed Internet connection using a handheld satellite phone. It was the world's first such call and yet another feat for the rapidly expanding regional company that has the largest subscriber base for satellite handsets with more than 250,000 users.

Project Manager Ahmed Mansoor Al Abd and his team made the first successful 'packet call' on the SO-2510 handset. Packet call refers to the data transmission technology known as General Packet Radio Service (GPRS). Until now, such connections were only possible through the latest Global System for Mobile Communications (GSM) phones or special satellite kits like ThurayaDSL, which provides high-speed data service.

"We were able for the first time to browse the Internet and download files," Mansoor Al Abd said.

His team used Thuraya's second-generation handset, which is the world's smallest and lightest satellite phone, to go online. Thuraya SO-2510 offers you mobility and a choice to stay connected with Thuraya satellite services in places where terrestrial and GSM communications are unavailable. In addition, the Global Positioning System feature in the handset facilitates 'location tracking' while roaming in remote and unconnected areas in Thuraya's network. The Internet feature will bolster Thuraya's penetration in markets where GSM services are not available. In addition to making voice calls, handset users can download information at speeds of up to 60kbit/s and upload at about 15kbit/s while ThurayaDSL subscribers can send or receive data at speeds of up to 144kbit/s.

### Thuraya's activity in the region

While the company is busy developing new markets and technologies, Thuraya's focus on its customer base in the EMEA region remains strong. This, it has to be said, it is not of any detriment to the company's commitment to humanitarian and social goals.



**“Our service launch in Angola is the latest among several recent launches in African markets that signify our focus and commitment towards Africa,”**  
**Thuraya CEO Yousuf Al Sayed**  
**said at the time.**

From providing crucial communications support to election officials in the Democratic Republic of Congo to meeting the mobile satellite service needs of the African Union peacekeepers in Sudan's volatile Darfur region, Thuraya has been playing a major role in changing the way Africans communicate.

In the six years Thuraya has been operating there, the region has witnessed excellent growth in the telecom sector with the Company making rapid inroads into the market. Much of Thuraya's success in Africa was due to the high affordability and reliability of its products and services.

For many African rural and remote communities Thuraya's Payphones and Public Calling Offices provide the only link with the outside world while the popular handsets are mainly used by corporate clients. The agreement to provide support for the election in the DRC was one of several important steps Thuraya took last year to increase the Company's focus on the vast, yet untapped, African market. They included the launching of a new tariff plan called AfricaTalk, beginning of commercial services in Angola, opening of a regional office in Kenya and the inauguration of a subsidiary in Algeria.

AfricaTalk offers highly competitive call charges for prepaid subscribers in 18 countries. It is aimed at enabling more people to benefit from advanced satellite telecom services, and strengthening Thuraya's position as a telecom partner in the continent.

In Angola, Thuraya is providing satellite-based solutions for mobile, rural telephony and broadband services.

“Our service launch in Angola is the latest among several recent launches in African markets that signify our focus and commitment towards Africa,” Thuraya CEO Yousuf Al Sayed said at the time.

Earlier in the year Thuraya opened a regional office in Nairobi, aimed at serving the East African market comprising Kenya, Angola, the DRC, Sudan, Ethiopia, Tanzania and several other countries in the region. The Nairobi office is working as a regional operations and logistics centre for Thuraya, supporting its wide distribution chain of Service Providers and International Service Providers. Thuraya already had a strong partnership alliance in Kenya through its local Service Provider, Indigo Telecom, which offers Thuraya products in the local market.

Thuraya entered the Ethiopian market last year and appointed a Service Provider in what is considered a major success for the Company.

“Ethiopia has some 74 million people and less than one million land lines and around a half million GSM subscribers,” said Sultan Al Ghafli, Thuraya's Chief Commercial Officer.

Sudan is another country that has a great potential for growth. Thuraya has five Service Providers and more than 10,000 active customers there. The Company signed a deal to supply payphones to the African Union for use in Darfur.

In June 2006, the Company established Thuraya Satellite Algeria, a fully-owned subsidiary based in the capital Algiers. The new firm allows Thuraya to work closely with the Algerian telecom sector in enhancing telecom services throughout the country.

Thuraya Satellite Algeria serve as a new hub for the North African region that includes Libya, Tunisia, Morocco, Niger and Mauritania. The choice of Algeria to host the new company showed Thuraya's

keen interest and long-term commitment towards this key market.

#### **ITU and Thuraya forge partnership for portable satellite terminals**

Thuraya's commitment to social and humanitarian goals has arguably reached its peak with an agreement between the company and the International Telecommunication Union to provide portable satellite terminals to assist countries in disaster mitigation and relief.

Thuraya is contributing handheld satellite terminals along with solar chargers; ITU will pay for airtime at discounted rates offered by Thuraya and cover the transportation costs of telecommunications equipment to and from disaster-hit areas. ITU will also provide its expertise in technical and operational training for government officials involved in rescue missions.

In the light of a spate of natural disasters and calamities in recent times, the World Telecommunication Development Conference (WTDC-06) meeting in Doha in March 2006 called upon ITU to develop ICT-based solutions in emergency telecommunications directed at improving early-warning communication, disaster preparedness and mitigation.

This is a critical area of concern especially for countries with fragile economies and special needs, such as least developed countries and small island developing states.

“The tsunami that wreaked havoc in south East Asia, the Kashmir earthquake, the Suriname floods, and the Indonesia earthquake have demonstrated the power of emergency telecommunications in saving lives and coordinating efforts during rescue operations such as the setting up of telemedicine links,” said ITU Secretary-General Yoshio Utsumi.

Access to information is of paramount importance in the immediate aftermath of a disaster for relief agencies to coordinate search-and-rescue, medical intervention and rehabilitation efforts. There is an urgent need to establish effective and comprehensive communication links between the affected area, national disaster response facilities, and with the larger international community. Ironically, terrestrial communication links are almost always disabled and disrupted during the first hours of a major disaster. The Thuraya terminals, which support voice and data applications and remote location determination services via GPS, will help provide that vital link via satellite. When regular cellular networks are available, the GSM-enabled Thuraya handsets can switch to the terrestrial network for greater affordability.

“One of the pillars leading to the success of our work in this area rests on multi-stakeholder partnerships,” said Cosmas Zavazava, ITU Focal Point for Emergency Telecommunications. “It is in this respect that we welcome the contribution by Thuraya Satellite Telecommunications Company, a Member of ITU's Development Sector.”

Al Sayed agreed that the responsiveness of relief efforts can be made more effective through such partnerships. “As a leading multi-regional mobile satellite operator, Thuraya is committed to contributing towards world needs during rescue and emergency operations, and we are pleased to partner and work closely with ITU and concerned UN agencies to provide urgent communications support in disaster-hit areas,” Al Sayed said. “The responsiveness of relief efforts can be made much more efficient through such partnerships.” ITU will provide the Thuraya satellite handheld terminals to rescue teams, government authorities and humanitarian agencies to establish vital communication links for relief and rehabilitation efforts. The communication link will also help victims locate their families and seek personal assistance.

#### **Conclusion**

These are exciting times for the satellite operators of the Middle East. From a region of clients shopping around for bandwidth, in fact, this part of the world has evolved into a true contender on the world's stage, boasting world-class companies that are establishing themselves as real innovators in the business.