

## Brave new world: the satellite industry in the Middle East and North Africa (MENA)

---

### Briefing note

Author: Sonya Shaykhoun

Date: January 2010

---

---

### Contents

- Introduction
  - History of Satellites
  - A brief overview: Satellite facts
  - Brief survey of the law and regulation of satellites
  - Conclusion
- 

---

### Published

This article was first published in BIG Magazine.

---

### Introduction

The multi-billion dollar satellite industry is an area that has seen phenomenal growth in the private and public sectors in the last fifty years and is expected to continue to grow for the foreseeable future. What makes such growth particularly remarkable is that the satellite industry is extremely expensive: satellite projects (i.e., manufacture, launch and insurance of one satellite) typically require upfront investment of at least one hundred million US Dollars. The commercial satellite industry is particularly active. While North America and Western Europe have the largest commercial satellite transponders, the MENA Region, South Asia and Latin American markets, and to a certain extent emerging markets such as China, Brazil and Indonesia, are fast developing. In light of these rapid developments, this article provides a snapshot of the satellite industry with a particular focus on the commercial telecommunications sector in the MENA region and a survey of the pertinent international and regional legal and regulatory framework.

### History of Satellites

The “Space Age” began in the mid-1950s. The Russians launched the first satellite, Sputnik 01, in October 1957 and sent Laika, a dog, into orbit less than a month later. Intelsat launched the first communications satellite, the “Earlybird”, in 1965 and a mere four years later, the first man landed on the moon on July 21, 1969. During the 1970s and 1980s, Japan, China, the UK, Brazil, Mexico and Luxembourg all launched their first satellites.

In 1985, the first satellite launched in the MENA region was Arabsat-1A by the Arab Satellite Communications Organisation (Arabsat), which was founded by the twenty-one members of the Arab League in 1976. Arabsat owns and operates four satellites in the MENA region at 26° and 30.5° East – touted as the youngest and fastest growing satellite fleet in the MENA region, launching one satellite per year over four years from 2008.

Nilesat, the Egyptian Satellite Company, has two satellites, Nilesat 101 and Nilesat 102 at 7° West and has additional space capacity on Nilesat 103 (Atlantic Bird 4) at the same orbital position. Both Arabsat and Nilesat, the mainstays of the MENA satellite industry, provide the gamut of satellite services, as does relative new-comer Noorsat, a global communications company headquartered in Bahrain. By 2011, SmartSat, a recently formed alliance between a Jordanian and a Kuwaiti company, hopes to have launched the MENA region’s first privately owned satellite.

### A brief overview: Satellite facts

A satellite is an object that has been placed into orbit through human effort using a launch vehicle from a country authorised to launch spacecraft. A communications satellite comprises dozens of transponders, which are wireless devices that pick up and automatically respond to an incoming signal and typically has a “lifespan” of up to fifteen years. Upon its expiration, it could be replaced with a new satellite and the original satellite is relocated to a higher orbit (hence the term “space junk”). According to statistics published by NASA, the US space agency, there have been about 4000 satellite

launches, several hundreds of which are reportedly still active.

Satellites serve a variety of purposes including military / espionage, earth observation, all manner of communications, navigation, weather and research. Satellites are even used to monitor global warming. In January 2009, Japan launched the Ibuki satellite, a satellite tasked with monitoring gases in the Earth's atmosphere, from the Tanegashima Space Center on an island south of Kyushu in southern Japan. In February 2009, NASA launched the Orbiting Carbon Observatory (OCO) designed to monitor carbon dioxide in the Earth's atmosphere, however, it failed to reach orbit.

In a communications context, satellites facilitate live digital TV broadcasts (including HDTV), emergency communications and real time communications to and from ships at sea and airborne aircraft alike. Because satellites have a large "footprint" (i.e. the ground area that the satellite transponder covers) and require less infrastructure than cable and other traditional telecommunications networks, satellite communications systems can reach even the most remote geographical areas without negatively impacting the environment (i.e. satellites use solar energy and emit zero carbon).

Commercially speaking, uses such as direct-to-home (DTH), broadband and video services are driving the growth while cellular backhaul, maritime and other mobile services are coming to the fore. There has also been an increased demand for broadband and fixed satellite services (FSS) provision. The International Telecommunications Union (ITU), the leading UN agency for information and communication technology issues, reported that commercial capacity leasing will cause revenues to grow and that an estimated 83 per cent of transponders leased in the future will be for video distribution and DTH services and occasional use by television broadcasters. Research shows that the satellite industry generated USD 8.33 billion in 2007 which is expected to grow to USD 12.90 billion in 2017. In the MENA region alone, commercial satellite-lease revenues have grown 17 per cent per year since 2003.

#### **Brief survey of the law and regulation of satellites**

Original pre-Space Age legislation concerned the use of the radio-frequency spectrum and the emphasis vis-à-vis frequency management on an international basis was on national sovereignty. In the Space Age, the United Nations aimed to establish a global principle ensuring that the benefits of space exploration and use should be extended to all mankind without reference to wealth or might, a concept that is encapsulated in Article 1 of the Outer Space Treaty adopted by the General Assembly in its resolution 1962 (XVIII) of 13 December 1963. Article 1 informs the current regulation of satellite communications with regard to the use of radio spectrum and orbital positions. The regulation of the satellite industry, which is increasingly commercial, is a delicate balance between public and private interests and is inherently political.

Satellite regulation is a complex enterprise with international, regional and national layers. The regulation of the technical aspects of radio-frequency use falls under the ambit of the ITU. Government representatives must go through the ITU with respect to negotiation, agreement and monitoring of technical matters such as satellite positions and frequencies. Other layers of regulation are based in the constitution of international

organisations, such as the International Mobile Satellite Organisation (IMSO), EutelSat IGO and the International Telecommunications Satellite Organisation (ITSO), providing satellite telecommunications.

In the MENA region, there are a few organisations that provide guidance and regulate the satellite telecommunications industry. In the past, the Arab Telecommunications Union (ATU), which became defunct in 1980 in conjunction with Egypt's ejection from the Arab League for political reasons (although Egypt was readmitted in 1989), aspired to unify Arab telecommunications policy. As regards the ITU, MENA countries fall into Regions D (Africa) and E (Asia and Australasia) in terms of regulation of radio communications, a split that was accepted in 1997 by a meeting of Arab ministers in Damascus, presumably for tactical reasons.

Other bodies that participate in the regulation of satellites/telecommunications in the MENA region are the ITU's Arab Regional Office (ARO) in Egypt, established in 1991; Arabsat and the Arab States Broadcasting Union (ASBU) which give certain rights and responsibilities that are tantamount to regulation.

ASBU, a not-for-profit professional organisation, promotes a range of initiatives, including the development of "the spirit of Arab brotherhood", representing member-organizations, coordinating and defending the positions and interests of Arab states in the international arena. ASBU's activities focus on engineering, radio, sports and television broadcasting, as well as inter-Arab and international cooperation. With regard to inter-Arab cooperation, ASBU both cooperates with the Arab League's specialised agencies and monitors the progress of joint projects and implements resolutions and recommendations issued by the Arab Information Ministers Council and the Arab Information standing Committee issue.

The Arab League, founded in Cairo in 1945, is a voluntary organisation, comprised of independent primarily Arabic-speaking countries, whose self-proclaimed objective is to "build ties among the member states, coordinate their policies and promote their common interests." The Arab League is involved in programs of a political, economic, cultural and social nature of interest to its members. Recently, this interest extended to satellite TV broadcasting, an area which had, until recently, escaped regulation.

In February 2008, the Arab League met in Cairo and produced the Arab League Satellite Broadcasting Charter to provide guidelines for the ever-increasing number of free-to-air and encrypted satellite channels broadcasting in MENA (e.g. from 13 in 1993 to 400 in 2008). All Arab League states signed the Charter except for Qatar and Lebanon (decisions of the Arab League are only mandatory for those members who sign them). The Charter's aim is to provide "the frameworks and principles required for organising broadcasting and audio visual satellite reception in the Arab world". The Charter sparked controversy because, although it advocates broad principles such as the right to "express opinions, preserve Arab culture and promote cultural dialogue through satellite broadcasting" (Article 1) and requires compliance with "religious and ethical values of Arab society and maintain its family ties and social integrity" (Article 6), it does have teeth as a non-compliant broadcasting entity risks losing its licence in its home country.

Dissenting views bemoaned the threat to public freedoms they believed the Charter poses, particularly given the wide interpretation governments can give to these core principals. In the two months immediately after the signature of the Charter, Egypt closed down three satellite TV channels and confiscated satellite transmission equipment thus preventing the broadcast of forty channels, including Al Jazeera, Dubai TV and France TV.

### Conclusion

The satellite industry is as diverse as it is complicated. In the MENA region, the satellite communications industry is a booming industry that owes its development not only to globalisation but to cultural, technical, financial and geographical factors. As more satellites are launched and more services are available to a wider audience, regional satellite regulation may very well undergo further adaptation to reflect the crowded brave new world of satellite TV, radio and Internet as well as the possible necessity of introducing competition laws as the industry continues to develop at its current quickened pace.

---

#### More information

---

Sonya Shaykhoun

---

+973 17 133 200

---

[sonya.shaykhoun@charlesrussell.co.uk](mailto:sonya.shaykhoun@charlesrussell.co.uk)

This information has been prepared by Charles Russell LLP as a general guide only and does not constitute advice on any specific matter. We recommend that you seek professional advice before taking action. No liability can be accepted by us for any action taken or not taken as a result of this information. Charles Russell LLP is not authorised under the Financial Services and Markets Act 2000 but we are able in certain circumstances to offer a limited range of investment services to clients because we are members of the Law Society. We can provide these investment services if they are an incidental part of the professional services we have been engaged to provide.