

Oman's HD future

In his first-ever, full-fledged media interview, Mohammed Al Marhouby, Director General of Engineering – Ministry of Information, Sultanate of Oman, shares with Vijaya Cherian the vision of the MOI, its challenges and what lies ahead

You have been associated with Oman's Ministry of Information for a very long time. Can you chart the progress of Oman TV and Radio and share some of its milestones with us?

Sultanate of Oman Television began broadcasting for the first time from Muscat in 1974 and separately from Salalah in 1975. In 1979, the two stations at Muscat and Salalah were joined by satellite link to form a unified broadcasting service. Oman TV's broadcasts are transmitted through a network of stations spread across the country in both populated and remote areas to overcome the natural obstacles created by the mountainous terrain.

Presently, there are 119 transmitters in operation - 29 'main stations' and 90 'Transposers'.

Oman TV operates two national channels – a 24/7 general entertainment channel and a sports-oriented channel that broadcasts eight hours a day.

It broadcasts its programmes around the world via Arabsat, Nilesat, AsiaSat Optus B3, Telestar, NSS7 and Hot Bird among others. Since 1997, it has also begun broadcasting its programmes through its website.

Radio Sultanate of Oman began broadcasting on a 1KW transmitter on July 30th, 1970. In 1972, a new medium wave station was inaugurated and in 1979, the Muscat and Salalah stations were linked by satellite. The number of Arabic transmission hours increased from four hours a day in 1970 to round-the-clock transmission from November 1, 1998.

The Arabic programmes are broadcast by MW and FM stations spread across the country and via Radio Sultanate of Oman's own channel on the Arabsat, Nilesat, and Hot Bird as well as via the internet.

FM English, Classic music, Youth and the Holy Qur'an programmes are also available on terrestrial as well as on satellite and internet.

When did you join Oman's MOI?

After doing my Masters in Electrical & Electronics

Engineering from IUT, Montpellier-France, I joined the Sultanate of Oman Ministry of Information (MOI) in 1983 as an OB engineer. Then I worked my way up the corporate ladder. In 2000, I was appointed Director General of Engineering at the Ministry of Information and have continued in that capacity to date.

I hear you are the Vice President of the Arab HDTV Group as well? What is the role of this organisation?

Yes, in 2006, I was elected Vice President of the Arab HDTV Group, which was formed by the Arab States Broadcasting Union (ASBU).

The Arab HDTV Group was created to devise a strategic plan to introduce HDTV in the Arab World, taking into account all aspects of feasibility and economy for the broadcaster as well as the viewer. The group stressed the need to promote HD as the future of television for the public.

As one of its first recommendations, the Group adopted the progressive scan as the format to be used in the Arab world, both in production and most likely in transmission. The present and near future projects are to use the 720p format with a migration path to 1080p when the technology is ready to use in the entire studio chain. It has further adopted the MPEG-4 ITU-H264 as the preferred compression standard for HDTV transmission.

All TV broadcasters in the Arab World, Broadcasting Unions, Arab satellite operators, and equipment and receiver manufacturers are eligible to be members of the Arab HDTV group.

Oman made international headlines when it undertook a major HD project. Can you share with us more details about this project?

The Ministry of Information wanted to establish a new digital TV studio complex in Muscat that would serve its two national TV channels. Channel One is ▶





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for general purpose programming while Channel Two is dedicated to Sports, in addition to the news section of the four associated radio channels.

The Ministry of Information felt the need to build a state-of-the-art system based on High Definition Television since it is the future of broadcast.

We hope to complete this project and go on air in November 2011 to mark Oman's 41st National Day celebrations. The main contractor for this project is Sony Professional Solutions. They are executing the project under the supervision of consultant MASTERS. The key suppliers to the project are Sony, Avid, Tedral, Canon, Studer, ARRI and many others. This project was also a big dream so we are looking forward to its successful completion.

What is the aim of this project?

The new studio complex has been designed to work using the most advanced digital HD technology. We will use a largely IT-based infrastructure and utilise as few tapes as possible. The full system infrastructure will be built to migrate towards the 1080p standard and the entire networking infrastructure will be 3Gbps compatible.

Nevertheless, as it cannot be proved that the full system can be built without any risk or speculation about ready-to-come products, in 1080p at the date of integration, the system will be built to support the 720p standard, over a 1080p compatible infrastructure.

Will you be producing everything in HD?

Once the project is completed, the production and transmission will be in both SD and HD, since most of the viewers do not have HD receiving equipment yet.

Why did it take so long for the MOI to decide to build an HD facility?

When HDTV was launched, there were two standards: 720p and 1080i, and then, along came 1080p. It looked like there were some differences of opinion on what common standard to adopt and

which would be the best format globally. Now that everyone seems to have agreed on 1080p, we decided it was time to invest. We are the first country in the world perhaps to implement 1080p across the entire chain. Some parts of the workflow may not be 1080p but at least 95% will be in this format by the time this project is completed.

Also, we had to construct a brand new building to accommodate our new complex and this had to be ready before the systems integrator could begin work.

Do you have any archival projects in mind given that you have decades of content that need to be digitised?

We have been working on this project since 2004. We have 180 engineering staff between our Muscat and Salalah operations so we undertook this as an in-house project and have been converting all the material on our old tapes to digital. Even our old 16mm and 35mm tapes are being cleaned, edited and digitised in-house. About 40% of the work has been completed. On the audio side, we have been working with NETIA to digitise our tapes.

Right now, the objective is merely to transfer everything to a digital medium.

However, we have not pinned down the format in which we would like all this content archived eventually. This is one of the objectives of coming to CABSAT this year. We will be looking at archiving standards for both audio and video.

I hear Oman MOI has also invested heavily in some radio projects?

In the last two years, the Ministry of Information has launched some tenders for new MW and FM radio transmission. There are plans for more projects in this area in the future.

The Ministry is also planning to migrate from analogue terrestrial TV transmission to DVB-T (digital TV) transmission. This is a five-year plan that will begin later this year. We intend to work with an outside consultant for this. ▶

RECENT PROJECTS

- FM radio transmitting station for Holy Quran programme
- Radio automation and digital media archive system

IN THE PIPELINE

- Migration from analogue to DVB-T transmission
- New MW & FM transmission
- Refurbish radio studios and master control room
- Full HD complex



MARHOUBY

- Masters in Electrical & Electronics Engineering from the International University of Technology, Montpellier-France
- 1983- Joined the Sultanate of Oman Ministry of Information as OB engineer and later promoted to Director of Oman MOI's OB arm.
- Enrolled for a series of specialised courses with the BBC in Wood Norton Evesham which was held over a duration of three years, and became a certified "Broadcast Engineer".
- In 2000, Marhouby was appointed Director General of Engineering at the Ministry of Information, Sultanate of Oman.
- 2006 - Elected VP of the Arab HDTV Group, formed by Arab States Broadcasting Union (ASBU).
- Marhouby is an honorary member of the European Broadcast Union (EBU).



What are some of the most recent projects you have completed for broadcast?

One project that has literally just been handed over to us is an FM radio transmitting station for our Holy Quran Programme. It was a two-year project and has been completed by Rohde & Schwarz. The objective was to ensure that our Holy Quran programme would be made available across the country to all listeners. Another project that is nearing completion is a radio automation and digital media archive system. We have also recently awarded a contract for the renovation of our radio studios and the master control room. Our radio studios were created in the 70s. They will continue to operate out of our old building but we will work with NETIA and Studer to make it state-of-the-art and digital.

The Ministry is also presently evaluating a tender to develop the infrastructure for a fully operational web-based information and service portal for the Government of Oman.

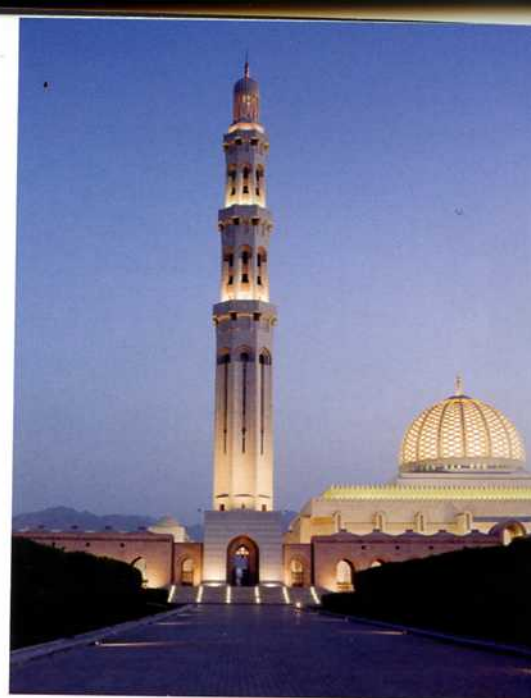
What is the vision of the MOI?

As per the Royal Decree issued recently in October 2010, a new entity called The Public Authority for Radio and TV will be formed. The idea, I believe, is to give Oman Radio and TV more flexibility and power to run its activities on a commercial basis and in a more competitive environment. It will mean more commercial production of programmes and running the station like any other commercial entity.

What are some of the merits of working in Oman?

We have been very lucky that we have had no limitations in terms of issuing tenders and have had the opportunity to work with some of the best international players on our projects. We award our tenders according to WTO standards. Cost is important but adherence to international best practices is also a prerequisite to awarding tenders.

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Are new media platforms part of your new plans?

New interactive media platforms will play a big role in the future of TV and we are aware of this. We are studying the available standards and the need of our people and have plans to introduce such services in the future once we have a more clear understanding of their efficacy.

What are some of the key challenges Oman MOI faces and how are these being addressed?

Like all broadcasters, we see huge changes in technology and with so many global formats, it's sometimes difficult to make the right choice on what new technology to adopt. That's the challenge.

What training provisions do you have in Oman presently to upgrade the skills of your employees?

First of all, I am very proud to point out that more than 90% of our engineering staff in the Ministry of Information are Omanis. We will continue to train them on all new technologies. We have a standard contract with most companies with whom we sign up projects to conduct extensive training for our engineers at their international premises. We also have a training centre in Muscat that is designed to train media and engineering graduates in the basics. Those who show potential are then sent abroad to learn more. Some of them join us at our facility for hands-on experience.

Any last words?

I believe that all broadcasters in this region should sit together and agree to adopt one common standard. For instance, I hope all the regional broadcasters can agree to deploy one set-top box for conditional access reception in the Middle East rather than making different choices. It would work in the interest of all parties concerned eventually. **PRO**