

ASTERA ENGINEERING

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BIG AMBITIONS

Michel Maalouf, managing director of Astera Engineering, talks to Jayne Alverca about the company's exponential success within Africa's fastest growing telecoms market





Racks connected by power and data cables ready to receive the servers

Nigeria is one of the biggest and fastest growing telecoms markets in Africa. Last year, the sector was estimated to be worth in the region of \$10 billion; and there is still enormous scope for growth after the success of a far-reaching liberalisation programme. This created a new level playing field for operators who now compete to cut costs for the consumer, and has acted as a major driver of growth.

The West African country has already overtaken South Africa to become the continent's largest mobile market, but is still at relatively low levels of market penetration. Rural areas have particular growth potential and the roll-out of a new national fibre optic backbone, supplemented by satellite technology, is expected to transform the communications infrastructure.

This is the dynamic backdrop against which Astera Engineering operates. The company was founded in 2008 to provide complete turnkey solutions to the infrastructure needs of telecoms network operators with a service proposition that takes in site construction, the supply of all necessary equipment and the delivery of a subsequent maintenance programme if needed.

In the global scheme of things, Astera Engineering is a relatively small company with approximately 250 permanent staff, but

it can already point to big achievements—and it has big ambitions for the future.

“Although we are a small company by sector standards, we invested very heavily at the outset to give us a competitive edge over other similar operators. From the company's inception we aimed to introduce a new level of professionalism to the sector,” explains managing director Michel Maalouf, who holds a master's degree in business administration. His personal focus is on engineering within a communications

context and he has a long track record providing consultancy services to some of the world's largest industrial groups, including Siemens Lebanon, TASC Sudan, Kahramaa Qatar, Total Iran, Elf Dubai, Total Yemen and Ondeo France.

He believes that his background, and that of other senior management colleagues, provided an ideal

springboard to launch a company capable of performing to the highest international standards. “For example, our processes are certified to the ISO 9001 standard to give our clients the confidence that we will provide them with the best quality, most cost-effective solutions. From the outset, the company has also been highly computerized. Compared to our competitors, we have a very powerful internal information system, which gives our clients the edge in managing their wireless sites by tracking each site in a meaningful and actionable way.”

**\$10
BILLION**
.....
**Estimated worth of
Nigerian telecoms
market last year**

He stresses that the focus is on the passive, rather than the active aspect of network operations. “For example, we take care of the entire supporting infrastructure and the towers that house the radio, which is the active component of the network. All licences, permits, design, civil works and site preparation fall under our remit. We also act as suppliers of all the equipment we install as well as the power source

it depends on. All a network operator needs to do is come along and plug in the radio. Then when the transmission tower becomes operational, we offer ongoing site maintenance and operational support if the client requires it. It is a truly one-stop solution that we have developed.”

Since the company’s formation, the corporate story has been one of continuous growth, both in staff and revenues, giving

“WE OFFER ONGOING SITE MAINTENANCE AND OPERATIONAL SUPPORT IF THE CLIENT REQUIRES IT”



Inside the data centre during installation of the server racks



Installation of a hybrid controller on BTS site which reduces the diesel consumption of the generators

the business the confidence to expand into new areas.

Astera can now lay claim to having designed and built the biggest data centres in Nigeria, a project which involved two data centres that were provided for Airtel, one in the city of Lagos and one in the city of Abuja. Airtel currently has over 50 million customers and is targeting 100 million by 2015. It is one of Africa’s biggest network operators and operates in partnership with IBM, which is responsible for the implementation and maintenance of a standard operating

environment along with all platforms, tools and management processes.

With each data centre comprising a massive 2,000 square metres of server area and able to accommodate 500 server racks, Maalouf is extremely proud of Astera’s success in winning the contract and the way it was implemented. “Each of the data centres cost US\$25 million, so it was a contract with a very substantial value and also a new technical challenge. These data centres incorporate the new generation of integrated system design which does away with the old system of discrete servers for

Telecom transmission tower and VSAT



different purposes and brings together the management of all applications, data centre operations, servers, storage and desktop services,” he explains.

“It was a big contract for a company of our size, involving the co-ordination of many diverse technical specialists and it stands as a great testament to our expertise in data centre-related engineering fields,” he adds.

Astera’s role in the Airtel project included architectural design and all structural works as well as the design of a sophisticated fire protection and detection system. The company also undertook all aspects of the ventilation and air conditioning system as well the design of the main electrical service to each data centre, including emergency back-up provision. Finally, Astera installed a state-of-the-art security and communications system featuring the latest CCTV technology.

Another new revenue stream is being generated through a growing involvement in fibre optic cable installation which is expected to facilitate a massive uptake in broadband usage in Nigeria. “Already, we have tackled a project which involved maintaining a 4,500 kilometre stretch of fibre optic cable, which is the complete Airtel network in Nigeria. Again, a project



Telecom engineer testing the signal to identify the loss of signal location along the fibre optic route

on this scale is a major achievement for a company of our size,” he declares.

At present, Astera Engineering operates only in Nigeria, but Maalouf hopes that the company’s success in Nigeria can be replicated elsewhere on the continent. “We have registered companies in South Africa, Ghana and Kenya; and there is a general manager in place who is working to make us operational in South Africa. We have shown what we can achieve here in Nigeria and see great scope to develop our service proposition elsewhere,” he concludes. **BE**

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