



ACS leads the way with Flexenclosure's eCentre

Background

Angola Comunicações e Sistemas (ACS) is one of Angola's leading providers of IT solutions and corporate network connectivity. Its core business is the provision of private networks and hosted data and Internet services – via both satellite and broadband wireless technologies – for public sector and enterprise customers, with a key focus on the banking sector.

With its business rapidly expanding, ACS was fast out-growing its main data centre facility in the centre of the Angolan capital Luanda. But not only was it too small, its antiquated construction made it unsuitable to house highly sensitive ICT equipment.

Further, the construction of many larger buildings around it was causing line of sight problems for their VSAT antennae – a significant issue with many of ACS' corporate banking clients relying on ACS for mission critical VSAT services.

The solution would require ACS to move its entire operation to an entirely new facility that would serve as a high-redundancy hub for both fibre and satellite communication; that would bring enhanced security for banking transactions and data traffic; and that would enable ACS to plan for long-term business and data colocation service expansion without the need to relocate again in the foreseeable future.



The Challenge

ACS identified a large green-field site in Benfica – the rapidly expanding new business and commercial area of Luanda – at which to establish their new data centre facility.

However, while ideal in terms of space, the site had absolutely no existing infrastructure – water, power, telecoms connectivity, not even a road to get to it. In fact, before any building could begin, the soil itself would need to be improved in order to give it adequate load bearing capability.

These challenges were compounded by the fact that high quality materials, tools and expertise were all in very short supply locally. And the site's somewhat remote location meant that security would be a major concern – both during construction of the facility and on-going once it was complete and fully operational.

And ACS wanted the facility to be manned 24/7, therefore requiring not only the data centre white space but also a full network operations centre (NOC), office space and associated facilities to be available for its staff.

The Solution

Flexenclosure's prefabricated eCentre data centre was selected as the ideal solution.

- A detailed design study was first carried out to make sure that the facility would meet ACS' needs both immediately and for the future. Flexenclosure then took on ownership of the project as a full turnkey operation including not only the data centre but also the entire site, including the civil works, telecom tower, VSAT farm, NOC, office space, personnel facilities and site infrastructure.
- Security is state-of-the-art, with a guardhouse and perimeter laser detection system securing entry to the site. Active PTZ CCTV cameras monitor the entire facility while entry to the data centre, NOC and office space is controlled by an advanced biometric access system.
- The DCIM system provides real-time monitoring of all critical systems including generators, fuel, cooling, UPS,

switchgear, fire suppression and alarm systems, enabling early detection and fast resolution of any technical issues. And the racks are also fully monitored with sensors on their front and rear doors logging every time the servers are accessed.

- The tiered NOC includes a video wall allowing all systems to be visually monitored simultaneously. Office space, a reception area, kitchen and bathroom facilities allow the site to be staffed in comfort 24/7.
- There is no single point of failure with fully redundant and highly energy efficient power systems securing network uptime for mission critical financial services.
- And with the 880sqm floor space 1.25MW data centre designed to sit effortlessly within a beautifully landscaped site, the result is a facility that will secure ACS's future as a leading player in the Angolan ICT services market.

“We have built the most advanced telecommunications facility in Angola and it positions ACS to take an undisputed leading position in the delivery of mission critical voice and data communications services to the corporate market. I am very proud of what ACS and Flexenclosure have achieved together.”

Carlos Carvalho, Chief Technology Officer,
Angola Comunicações e Sistemas



The Flexenclosure Advantage

By working with Flexenclosure, ACS was able to capitalise on a number of significant eCentre differentiators:

- The initial design study helped establish a close and collaborative working relationship between ACS and Flexenclosure that was vital to ensure the success of this very complex project.
- Flexenclosure was able to manage the entire project as a full turnkey solution, custom-designing every element of the facility to precise ACS requirements.
- Maximum preparation, configuration and testing of the eCentre modules in Flexenclosure's factory in Sweden ensured the extreme level of quality and reliability required of this mission critical facility before its delivery to Angola.

- The same team that built the eCentre in Sweden travelled to Benfica for its installation and final commissioning, thus ensuring the precise attention to detail found in all eCentre facilities.
- eCentre's modular construction allows for the expansion of any existing eCentre site without interrupting on-going data centre operations.

And with extensive experience deploying prefabricated data centre and technical facilities in the most challenging environments in over 50 countries worldwide, Flexenclosure is always able to bring creative ideas, fully tested solutions and total peace of mind.