



Apollo Towers rolls out national tower network in Myanmar with Flexenclosure's eSite

Background

In 2013, after decades without competition or technology investment, Myanmar announced it would be opening its telecommunications market to companies interested in investing in and establishing new mobile telephony networks.

Norway's Telenor won one of the new licences and chose Apollo Towers to host many of its cellular base stations in its new national network. With absolutely no infrastructure already in place and a goal of increasing network coverage from just 10% of the population to over 80% by 2018, this was to be the largest green-field network rollout in history.

The Challenge

Telenor had extremely high network uptime expectations so one of the biggest issues that Apollo Towers faced was how to dependably power hundreds of new base station sites across the country given that grid power was, in most places, either highly unreliable or completely non-existent.

The economics of deploying an entirely new mobile network were also extremely challenging in a country with very low average revenue per user. Rolling out a new network on this scale would therefore be prohibitively expensive if using diesel generators alone to power the base stations, so a state-of-the-art green power solution would be needed that could reduce diesel-related costs and thus make this initiative financially viable and environmentally acceptable.

Further, Apollo had an extremely short time window to establish its tower sites if Telenor was going to be able to launch Phase 1 of its new national cellular service on time. And the problems didn't end there, with extreme environmental issues and an often-inadequate road infrastructure seriously hampering access to many of the sites.

These challenges were certainly not for the faint-hearted.



The Solution

Flexenclosure's green eSite hybrid power system was selected by Apollo to tackle the problem, with Flexenclosure taking on full turnkey project responsibility for all site power-related equipment and installation.

eSite's single product versatility allows it to be deployed in any site scenario. Upgradable to harvest solar energy if needed, eSite is also multi-tenant capable, thus allowing Apollo to host additional mobile operators over time.

With all product assembly and testing being done in Flexenclosure's factory in Sweden prior to shipping, installation time was reduced to less than a day for each tower site, thus maximising the efficiency of the rollout teams across the country.

In this way eSite was successfully deployed at hundreds of Apollo's tower sites in both urban and remote rural areas, enabling Apollo to meet Telenor's strict target launch date requirement.

The Flexenclosure Advantage

By working with Flexenclosure, Apollo Towers was able to capitalise on a number of significant eSite differentiators:

- eSite delivers 24/7 network uptime and market-leading diesel-related cost savings and emissions reductions
 - With many of Apollo's sites not easily accessed, eSite's fully integrated eManager application suite allows remote monitoring, system upgrades and control of the eSite, generator, fuel logistics and other site assets from any PC anywhere, thereby saving significant time and resources through not having to cover such a huge nationwide network manually
 - eManager also enables reliable collection of the site data needed for Apollo to accurately charge Telenor (and other hosted operators) for site power
 - eSite is a "one size fits all" solution, flexible enough to be used across all site scenarios – no grid, bad grid, good grid, with and without solar, etc.
 - eSite is also fully modular, enabling a tower company to start small and expand their business easily and simply as more mobile operator tenants are added
- Completing the manufacturing and testing process in Sweden prior to shipping minimised the potential for on-site technical issues during installation – a crucial requirement given the remoteness of many of Apollo's sites
 - Flexenclosure established a local office and team of over 40 fully trained and certified personnel to manage every aspect of the rollout and Apollo's on-going service and support requirements
 - And Flexenclosure worked closely with EKN (the Swedish Export Credit Agency) to arrange vital EKN-backed financing for Apollo's tower network rollout

Flexenclosure's eSite has thus been a critical enabler in Apollo's establishment as one of the leading tower companies in Myanmar and the rollout and provision of new and affordable mobile services across the country.



"We were under enormous pressure to meet an extremely tight launch deadline, and given Myanmar's limited power and transport infrastructure, the practical challenges of achieving this cannot be overstated. However, Flexenclosure's rollout capability, along with eSite's operational performance and efficient realtime monitoring allowed us to meet our own commitment to Telenor."

Philippe Luxcey, CEO, Apollo Towers