

CASE STUDY

A BIG STEP TOWARDS A “GREEN” CITY

In the city of Mandaluyong, which is located directly east of the Philippine capital Manila, a “greener” and more “intelligent” city district is being created thanks to the help provided by the FTTx solutions developed by Datwyler.

A voice-activated light switch; music that starts to play and turns off again when you simply clap your hands; or how about a fully functional home-automation system that can be centrally controlled using just a mobile telephone. Doesn't that just sound “cool”?!

Well these are just a few of the features that are currently being realised in the modern high-rise buildings in the Greenfield District in Mandaluyong. The district that is being developed by the Greenfield Development Corporation (GDC) is well on the way to becoming the first “intelligent”, completely interconnected city district in the Philippines. The GDC has made the commitment to transform the district into a “smart community” – and is willing to use the very best and most modern technology to do so.

The GDC is a pioneer when it comes to the construction of top-quality private-apartment and office buildings, and who uses GPON technologies (Gigabit-capable Passive Optical Networks) for the connection between the high-rise buildings. Instead of the traditional infrastructure that is offered by various service providers, GDC decided to put its own fibre-optic network in place, and in doing so, create an “open access” communication backbone.

Full interoperability

The bidders for the contract to construct the fibre-optic network were made up exclusively of the leading players on the market. Datwyler was able to ensure that it got the nod ahead of the other bidders thanks to its offer of the first end-to-end-GPON infrastructure for the “Zitan” tower – to-



gether with its American partner Calix and the local system integrator Actionlabs.

A proof-of-concept followed, with which the full functionality of the system solution and its “neutrality” with respect to the various services on offer – CATV, IP-telephony, CCTV and others – could be demonstrated. The proof-of-concept also showed that the Datwyler solution is also interoperable with the existing GDC network components.

The new network combines FTTx cabling from Datwyler with Optical Line Terminals (OLT) and Optical Network Units (ONU) from Calix.

Energy savings of up to 75%

The GPON infrastructure chosen by GDC does not just simplify the communication backbone of the entire building, it also means that the company takes a big step in the “green” direction at the same time.



“Green buildings” are often characterised in accordance with measures aimed at saving energy and through energy efficiency. Thanks to the FTTx solutions offered by Datwyler, the GDC will be able to reduce the amount of electricity its IT infrastructure uses by as much as 75%.

Simple migration

A further advantage of the FTTx solution from Datwyler is its future viability and security. As soon as the next generation of PON technology is available to be used commercially, GDC will simply be able to migrate to it without being required to renew the infrastructure.

The Greenfield Development Corporation wants to build more than 30 further top quality residential and commercial high-rise buildings in the city district that contains this future-oriented “Open Access” broadband infrastructure by 2020. Datwyler has recently also been awarded the contract for the second Twin Oaks Place Tower 2.

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