

## CASE STUDY

# ewl, LUCERNE: 10 YEARS, 3000 KM, MANY EXTRAS

In Lucerne ewl energie wasser luzern set up a FTTH network jointly with Swisscom. Among other things ewl relied on product solutions from Datwyler.

Ten years ago, ewl, the energy service provider for the city of Lucerne, decided to implement a city-wide fibre optic network to homes. For this purpose, ewl formed a joint venture with Swisscom. The Fibre to the Home (FTTH) network was to provide telephone services, fast Internet and high resolution television.

During implementation ewl built all the household connections. This means that fibre optic cables were run from the basement into each home. In the basements the fibres of the outdoor cables, those leading from the distribution centre – the Point of Presence – into the building, had to be spliced together with the cable laid in the home. In order to access the telecommunications outlet in a home with optical fibre ewl needed a slim cable with bend-optimised fibres, as existing duct systems are mainly used for installation.

### Almost 3000 kilometres of cable

At the time the decision was made to use Datwyler products. The decisive factor was not the physical close-ness of the factory, but the manufacturer's experience, quality and expertise – as well as the trust which could be established.

Construction began in 2010. In the years that followed Datwyler produced for ewl around 2900 kilometres of "FO Indoor" FTTH cable with four bend-optimised fibres, the external diameter of which was only 2.8 millimetres. It was terminated in the homes in special surface-mounted telecommunications outlets, around 23,500 of which Datwyler delivered between 2010 and 2012.

The cable was supplied on easy-to-manage plywood reels each carrying 1000 metres. It was installed by ewl-ap-



proved companies. This meant that a very high quality could be maintained even during laying and installation.

ewl implemented the FTTH network on the 4-fibre model based on the guidelines issued by BAKOM, the Swiss Federal Office of Communication. In this context one of the four fibres remains the property of Swisscom.

### Error rate: 0.03%

The project was completed at the end of 2019. Until then Datwyler had always delivered exactly the correct amounts at the right time. The manufacturer always had a ready solution even when there were bottlenecks. Only one of 2900 reels delivered was rejected. Because of the short distance from the construction site this issue was quickly and easily solved.

Hardly surprising, then, that ewl is very satisfied. In March 2020 Otmar Krauer, ewl Project Leader, expressed his appreciation of Datwyler's fantastic 10-year collaboration.

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