



Swisscom using alternative fibre-optic technologies – now in Fribourg

Digital applications such as HD streaming, UHD TV and teleworking are becoming increasingly important for the residents of Switzerland. The Canton of Fribourg is just one of many cantons in which data volumes are constantly on the rise – these volumes double in size every 16 months in the Swisscom fixed network alone. This growth has brought about the need to quickly expand the required broadband infrastructure. Alternative fibre-optic technologies, such as Fibre to the Street (FTTS) and Fibre to the Building (FTTB), facilitate the speeding up of network expansion. Thanks to an amendment to the contract agreed between cooperation partners ftth fr and Swisscom, these fibre-optic technologies will also be used more in the Canton of Fribourg.

There have been rapid advances in network technology in recent years, which has enabled fibre-optic and copper lines to be used in combination to provide bandwidths that will be able to deal with the growing data volumes today and over the coming years. “Ten years ago, every engineer would have said that achieving speeds of over 20 Mbps would never be possible with copper lines,” explained Markus Reber, Head of Swisscom Network Expansion. “Here at Swisscom, we have now proven that transmission rates that are twenty-five-times faster than the hypothesised speed can be achieved. Thanks to Fibre to the Street (FTTS) and Fibre to the Building (FTTB), we are now recording bandwidths of up to 500 Mbps when used in combination with the latest G.fast transmission technology. We are confident that using this fibre-optic technology is the right way to promptly satisfy the rapidly growing needs of our customers, for example in the Canton of Fribourg,” says Reber, looking to the future. As Swisscom does not install fibre-optic lines all the way to the sockets at the customer end, the company is providing high bandwidths throughout Switzerland much more quickly and on a more cost-efficient basis.

Swisscom turning to a mix of technologies

In its efforts to modernise the fixed broadband network infrastructure across Switzerland, Swisscom is turning to a mix of different fibre-optic technologies. This strategy makes it possible to provide high bandwidths quickly and cost-effectively throughout the country – even outside of urban areas. In the



medium term, Swisscom is aiming to modernise the network in every Swiss municipality. By the end of 2020, 85% of all homes and offices will benefit from having a broadband connection capable of achieving speeds of at least 100 Mbps.

The different technologies are all based on fibre-optic solutions that are increasingly closing the distance to the customer. In contrast to FTTH however, the FTTC, FTTS and FTTB fibre-optic technologies use the copper cables already in place over the last few metres of the connections.

Conclusion of agreement allows for the use of alternative fibre-optic technologies

In 2012, ftth fr and Swisscom signed a partnership agreement to provide the whole of the Canton of Fribourg with comprehensive broadband coverage until 2027 using the Fibre to the Home (FTTH) network technology. This partnership has over the past four years provided some 46,000 homes and offices with FTTH connections, which equates to approximately one-third of all of the homes and offices within the canton.

In summer 2016, Swisscom informed ftth that it did not want to provide any further areas within the canton with FTTH technology as part of the partnership. Instead, Swisscom is making use of alternative fibre-optic technologies, such as FTTC, FTTS and FTTB more frequently and at its own expense, and as a result is speeding up the expansion. After six months of negotiations, the two partners have now concluded an appropriate agreement which stipulates that the maintenance of the entire network and the contractually agreed projects that have already begun will continue to be carried out on a reduced scale.

First few municipalities benefitting already – more to follow

A total of six municipalities, e.g. Châtillon and Morlon, are already benefitting from being connected to the FTTS/FTTB network. Progress is quickly being made on the network expansion, with construction work already started in seven municipalities. There are plans to provide approximately 30 other municipalities, such as Misery-Courtion, with this technology in 2018 and 2019.



Major investment in broadband provision throughout Switzerland

In 2016, Swisscom invested over CHF 1.7 billion in its IT and infrastructure. In total, Swisscom connected more than 3.4 million homes and offices with ultra-fast broadband by the end of September 2016 – of which more than 2.4 million were with the latest fibre-optic technologies. The phrase “the latest fibre-optic technologies” is used by Swisscom to refer to fibre-optic technologies, such as Fibre to the Curb (FTTC) with vectoring, Fibre to the Street (FTTS), Fibre to the Building (FTTB) and Fibre to the Home (FTTH).

In the medium term, Swisscom intends to modernise the fixed broadband network infrastructure in all Swiss municipalities. By doing so, some 85% of all Swiss households and businesses will benefit from a bandwidth of at least 100 Mbps by the end of 2020. According to the latest Akamai Report¹, Switzerland takes the top spots across Europe and worldwide in terms of broadband coverage, and is No. 3 in Europe for high bandwidth coverage (>10 Mbps).

Berne, 01 February 2017

Link

Press release from 27 June 2012 on the FTTH Fribourg partnership

https://www.swisscom.ch/en/about/medien/press-releases/2012/06/20120627_MM_Glasfaserausbau_Freiburg.html

The Swisscom network

<https://www.swisscom.ch/en/about/company/portrait/network.html>

Fast lines for increasing data volumes (Swisscom Stories)

<https://www.swisscom.ch/de/stories/zahl/die-zahl-bandbreite.html>

¹ “The State of the Internet” (2nd quarter 2016): <http://www.akamai.com/stateoftheinternet>