Oberwallis

A Swiss region leads with an FTTH project for its 67 communities

Municipality-owned DANET Datennetzgesellschaft Oberwallis AG is planning, building, operating and maintaining a comprehensive fibre optic network which will be completed by 2025

Back in 2009, the Regional Association of Oberwallis, part of the Swiss canton Wallis, had the vision of this forward-looking FTTH project. They commissioned a study from RW Oberwallis AG (Regions- und Wirtschaftszentrum Oberwallis) to evaluate the feasibility of providing a future-proof fibre optic network for all of its communities in the region. As a result of the study and RW Oberwallis's recommendation to deploy a FTTH infrastructure, DANET Datennetzgesellschaft Oberwallis AG (DANET) was founded in November 2012. This independent company – owned by all of the communities in the region and some private investors – is responsible for planning, building, operating, and maintaining the fibre optic network, which remains in the ownership of the communities.

The 67 communities of the Oberwallis region are located on terrain ranging from 581 to 4,634 metres above sea level. Similarly, each community differs from the others in structure and financial strength. The total geographic area covers 2,621 km^2. In the final stage of deployment around 40,000 fibre optic connections are expected to serve the population of roughly 80,000. The FTTH infrastructure terminates at each residential unit with four fibres strands, which is in accordance with the nationwide model recommended by the Swiss regulator BAKOM. DANET is responsible for building layer 1 of the network, which is then activated by a provider selected by the customer.

"The total cost of the project is estimated at CHF 200 million (€ 200 million). And the complete area should be covered by 2025 or earlier," explains Martin Nanzer, CEO of DANET. "We are on track with deployment and have started offering services in Gampel-Bratsch, Eyholz (Visp) and Eischoll since the end of November 2014. DANET and Swisscom together are investing CHF 40 million (€ 40 million) in the first phase of the project. In this phase the building cooperation will reach 16,000 households and business units."

Deployment

Size of network:
A total of 40,000 connections are planned for a population of roughly 80,000 inhabitants.

Technology/architecture:
Passive FTTH infrastructure in point-to-point topology. At this time activated by two providers: Swisscom and Valaiscom. Negotiations with other providers are in progress.

Third party access:
Open Access

General Information

Infrastructure/network owner:
Passive network components: DANET Datennetzgesellschaft Oberwallis AG or Swisscom.
Feeder generally provided by Swisscom. Drop cable and needs-oriented inhouse cabling built by DANET or Swisscom. Network activated by particular provider.

Location:
67 communities in the region Oberwallis (Canton Wallis), covering an area of 2,621 km^2 with terrains ranging from 581 to 4,634 metres above sea level.
Taking into account the Swisscom built utilization units in Glis plus the three DANET building areas of Gampel-Bratsch, Eyholz, and Eischoll,10 % of all Oberwallis households were connected in November 2014; the remaining 64 communities to be connected gradually over next 10 years.

Network status:
Partially operational

At the beginning of the project, when it assigned RW Oberwallis AG with implementation, the regional board of Oberwallis defined the following five targets:

1) The fibre optic network should cover the whole region;

2) The network should allow for competition;

3) Expensive parallel investments should be avoided;

4) All major players of the region should be included in the project;

5) Financial expenditures for the communities should be minimized.

These objectives are still the most important guidelines for the project management.

Business Case

Investment:

Total cost is estimated at CHF 200 million (€ 200 million). State aid and public funding have not been claimed.

Business model:

DANET plans, builds, operates, and maintains the fibre optic network. The infrastructure (four fibres into each home according to the Swiss nationwide standard) is built in cooperation with Swisscom AG and local utility companies. Swisscom and Valaiscom are providing services

To finance this project without any state aid a solid model was established. If the total cost of the project were shared amongst the population of Oberwallis, the cost for each inhabitant would have been CHF 1,000. According to targets this amount had to be minimized. As a result, the expected revenues to be generated by operating the network were estimated. For this task the provider Valaiscom AG – also fully owned by the communities – has played a significant role. Valaiscom activates the network and generates revenues through the usage of the network. However, calculations demonstrated that without a strong financial partner the communities could not realize the project by themselves. Therefore, the local utility companies agreed to build and operate the network for DANET without investing into the network, and, after comprehensive negotiations, Swisscom AG agreed to partner for investments and constructions. Swisscom has always been a reliable partner and supported the initiatives and approach in Oberwallis. It promised to participate with 50 - 60% investment in phased implementations. DANET is only building the layer 1 infrastructure, together with Swisscom; the particular provider then activates the network.

End-user Services

Business customers:

For business customers tailored solutions will be provided. Pricing depends on the services chosen.

Private customers:

Portfolio of Valaiscom in the village of Glis
• All-in-One Basic 30 Mbps symmetric DL/UL € 99 (CHF 99)
• All-in-One Complete 80 Mbps symmetric DL/UL € 119 (CHF 119)
• All-in-One Supreme 200 Mbps symmetric DL/UL € 149 (CHF 149)

All pricing includes Internet access with 5 – 15 GB of cloud space, flat rate telephony into all Swiss fixed and mobile networks, HDTV including Set-Top-Box and up to 230 channels, and Mobil-TV for PC, tablet, and smartphone.

New customers receive the first three months for free.

Independent of the actual development costs in centre villages and remote communities, each community is paying CHF 400 per inhabitant. This amount is split as follows: each community invested CHF 50 per inhabitant as a basic contribution to the share capital of DANET. As soon as the community steps actively into the project a fee of CHF 350 per inhabitant is due for the development costs. In addition, DANET is financing its share in the network by generating loan capital.

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