

Network

The network infrastructure is the foundation of all Sunrise services. In order to meet the growing demand for broadband services and further increase customer satisfaction, Sunrise made continuous and sizeable investments in this network to enhance and expand it.

Network Infrastructure

Sunrise provides mobile services over its own network using GSM/GPRS/EDGE, UMTS/HSPA and LTE/LTE-A technologies. On the landline side, Sunrise leverages more than 600 points of presence in its fully-invested local loop unbundled network (LLU), covering approximately 85 % of households in Switzerland. Sunrise benefits from a 10,800km long, Swiss-wide, state-of-the-art fiber optic network. The company has full access to the most advanced, next-generation fiber optic technologies such as vectoring, fiber-to-the-street, fiber-to-the-building and fiber-to-the-home thanks to its long-term agreement with Swisscom and the strategic collaboration with Swiss Fibre Net AG (SFN), the joint venture of local energy providers in Switzerland, as well as with the local utilities.

In 2015, Sunrise focused its efforts on supporting, managing and developing its network infrastructure. Specific investments were carried out to further improve network quality, availability, stability and security. Expansion of LTE technology continued, with coverage of 98 % reached by the end of 2015. Growing data traffic and demand for mobile and landline broadband services as well as maintaining and expanding the customer experience are key drivers for the company's network activities.

Mobile

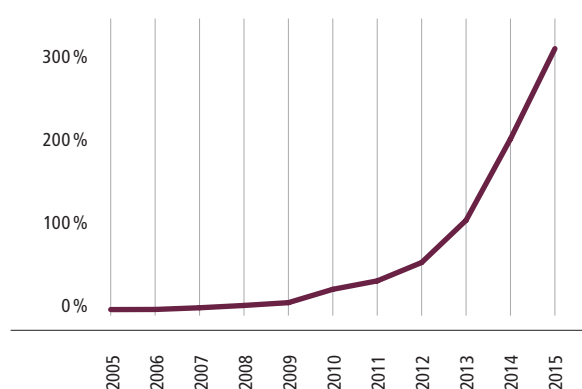
To improve its infrastructure, Sunrise has partnered with Huawei, one of the leading technology companies in the world. Huawei supports Sunrise with its latest technology as a showcase for the European market. To accommodate the exponential growth in data traffic, Sunrise is continuously enlarging its bandwidth capacities. In the area of mobile infrastructure, Sunrise significantly increased its 4G/LTE coverage over the last year from 85 % to 98 % by

the end of 2015 allowing Sunrise to provide customers with mobile bandwidths of up to 150 Mbps. Sunrise already introduced LTE Advanced with speeds of up to 225 Mbps.

Together with Salt, Sunrise conducted a pilot project that included an analysis of how network sharing could potentially work.

Data traffic in %

Immense increase in data traffic over the past ten years.



Sunrise further expanded its 3G network and maximized indoor coverage by using the lower 900 MHz frequency. Sunrise also introduced the very latest features such as crystal voice and optimizations in call setup procedures, leading to improvements in speech quality and call setup time.

A network app launched in May 2015 allows Sunrise customers to provide direct feedback about their experience with the Sunrise mobile network. The input is forwarded immediately to the network planning and optimization department, allowing Sunrise to respond to problems in real time. By the end of 2015, Sunrise had received 5,200 feedback submissions and 25,100 pro-actively triggered Speedtest submissions from customers, from which various improvements were implemented.

For the second time in a row, the independent magazine connect recognized Sunrise, Switzerland's largest private telecommunications provider, as having the best network for mobile telephony. In the mobile telephony category, Sunrise outperformed not just the other Swiss mobile operators but all providers in Germany and Austria as well. The Sunrise mobile network earned an overall score of "very good" in the three-country comparison, landing in second place closely behind Swisscom.

Sunrise 4G/LTE coverage

(as of December 2015)



The strong focus on network expansion means that Sunrise now provides 98 % of Swiss residents with 4G high-speed internet for mobile usage.

Our customers as mobile network testers

Our customers continuously help enhance our mobile network through use of the mobile network app.

Landline

Sunrise significantly increased its fiber optic footprint in 2015 by strengthening its strategic collaborations with SFN, ewz Zurich and iwB Basel. By using the partners' infrastructure to complement its own network, Sunrise is able to provide fiber optic access across Switzerland with ever-growing coverage. By harmonizing and centralizing processes and platforms with SFN and local utilities, Sunrise has reduced lead times and increased customer satisfaction and loyalty. Thanks to the availability of all access technologies (copper, fiber and vectoring), Sunrise is able to provide all internet and TV services throughout Switzerland.

Core

By further upgrading its core network with the latest technology, Sunrise is ensuring a future-ready end-to-end network for its customers. Its core network is the "intelligence" or "brain" behind its mobile and landline services. Migration of the network to All IP and the merging of two separate Core Network technologies into a single one supporting all mobile and landline services were key focus areas. Sunrise introduced the IP Multimedia System (IMS) solution to replace its legacy core platforms. IMS supports various access modes and offers an array of different security functions, ensuring a highly reliable, geo-redundant solution for both Sunrise residential and business customers. All Sunrise landline and virtual IP PBX (Private Branch Exchange) business customers have been seamlessly migrated to the IMS solution.