

## Bavarian municipality builds its own FTTH network

*Within the framework of an exemplary public-private partnership project, all households in the municipality will be connected directly to fibre networks.*

The poorly connected municipality of Oberhausen was not satisfied with the offer from Deutsche Telekom for upgrading the existing infrastructure, because the incumbent operator had asked for excess construction costs of more than half a million euro, while only offering data rates up to 6 Mbps. When cable TV operator Kabel Deutschland announced that it too was not willing to upgrade its existing infrastructure for high-speed Internet access, a feasibility study was ordered. The results were presented in March 2009.

### General Information

**Project name:**

Unser Ortsnetz-Oberhausen (Our local Network)

**Infrastructure owner:**

SBO GmbH, a company 100% owned by the municipality of Oberhausen

**Location:**

Municipality of Oberhausen and the community of Bergen near Neuburg an der Donau

**Network status:** Operational

The conclusion of this study was, in short: "Every action that has a FTTH network as intended outcome, is a correct action ...". In June 2009, the town council decided to make a European-wide call for tender for the deployment of a multimedia broadband network with data rates of at least 50 Mbps for all households. The tender specification required non-discriminatory and technology neutral access to the network for third parties, as well as a detailed financial model. After receiving an offer that matched all their requirements, the town council decided in December 2009 to go ahead with the deployment. In February 2010, a contract to build the complete network was signed with the supplier.

### Business Case

**Investment:**

About €4 million was financed by Raiffeisenbank Ehekirchen-Oberhausen, a co-operative bank. State aid and public funding have not been claimed.

**Business model:**

Public-private partnership - [www.oberhausen-donau.de/Gewerbe/Glasfaser-in-Oberhausen](http://www.oberhausen-donau.de/Gewerbe/Glasfaser-in-Oberhausen)



A precondition for starting the deployment was a minimum take rate of 75% for these 1150 households. This goal was achieved in a short length of time by assigning "knowledge multipliers" to the task. About 70 women and men from the village committed themselves to support the municipality to realise the project – in the picture the team of village district Unterhausen. They:

- sacrificed their free time (in total around 2000 hours of voluntary work)
- spread information in the community;
- delivered the necessary work to convince subscribers;
- collected over 800 contracts from local citizens, and
- supported them when completing the contracts.

On 3 June 2011 the first subscriber connection became operational. By the end of 2011 the roll-out of the entire infrastructure should be completed. In December 2011 already 1 050 households out of the 1 150 households in Oberhausen were connected to the future-proof multimedia network and are now enjoying the available services in the highest quality.

### Deployment

**Size of network:**

Out of a total of 1150 homes passed 1050 are connected in Oberhausen, in addition 150 households are connected in Bergen.

**Technology/architecture:**

FTTH in an active Ethernet configuration

As well as the municipality of Oberhausen, 150 households in the district of Bergen near Neuburg an der Donau are connected to the fibre network, because Bergen is immediately located on the route of the backbone connection between Oberhausen and Neuburg.

“The community project ‘Deployment of a multimedia broadband network’ was and is marked by technological vision, an unbelievable solidarity between the village districts and a real sense of community in the municipality of Oberhausen,” commented Fridolin Gößl, Mayor of the municipality of Oberhausen. “I hope and wish that ‘Unser Ortsnetz-Oberhausen’ will run smoothly for decades and consequently contribute to a better quality of life.”



With the infrastructure for the broadband multimedia network completed, the municipality of Oberhausen is prepared to meet future demands. With the local data centre as a starting point, ducts have been deployed across the entire area, allowing for on-demand upgrades in the future. For each connected household, two fibres have been allocated. In the main fibre routes, spare capacity of 10% has been allowed for future expansion.

As background information, Gößl lists the following data points: “For the construction of the network, we needed to ask for 12 rights of way to cross streets, the river Danube and private properties. So far:

- about 55 km of civil works were carried out;
- 62.5 km fibre-optic cable were deployed;
- a 11.5 km backbone was installed towards Neuburg an der Donau, which also connects to the district of Bergen;
- more than 100 km of ducts were deployed and 70 access and distribution cabinets installed; and
- a locally owned data centre (POP) was built, which houses all the active and passive components.”

A special challenge when deploying the backbone fibre cable was posed by the crossing of the river Danube, but this was easily mastered with the help of THW (Bundesanstalt Technisches Hilfswerk – Federal Agency for Technical Relief).

## End-user Services

### Business customers:

Tailor-made offers with data rates up to 10 Gbps

### Private customers:

(monthly fee inc. VAT based on 24-month contract)

#### Single package:

Telephone Standard analogue €15.90

Telephone Premium (flat rate into German fixed network) €25.90

TV €16.90

Internet €25.90

#### Double package:

Telephone Premium & TV €39.90

Telephone Premium & Internet €49.90

Internet & TV €41.90

#### Premium package:

Telephone Premium & Internet & TV €59.90

Written in December 2011

Photos provided by the municipality of Oberhausen

Contact us on [info@ftthcouncil.eu](mailto:info@ftthcouncil.eu)