



## PROJECT SUMMARY

### Organization

Kabel Noord

### Solution

Communications

### Project Objectives

- Migrate from GE Energy's Smallworld GIS to a Bentley GIS and engineering platform
- Improve data quality
- Improve access to the engineering data via light clients
- Integrate the new Bentley system with the ERP and CRM systems

### Products Used

MicroStation®, Bentley Fiber, Bentley Geo Web Publisher, Bentley® PowerMap Field

## FAST FACTS

- Noord is now able to extend the use of its engineering information to all departments
- Browser-based access to the intelligent network model empowers customer services representatives to respond more quickly to queries from customers
- Bentley Fiber has improved the productivity of the FTTH build-out substantially
- Bentley PowerMap Field ensures that field technicians always have access to the intelligent network model

# Kabel Noord Builds Out New Network Infrastructure Using Bentley Communications Network Engineering Tools

## A SUCCESSFUL OPERATOR IN THE NORTH OF THE NETHERLANDS

Kabel Noord is one of the fast-growing communications service providers delivering multiple services over broadband to homes and businesses in the north of the Netherlands. Kabel Noord offers analogue TV, digital TV, telephone services, and Internet access to its more than 23,000 customers. Kabel Noord has been in operation for more than 30 years and is owned jointly by 5 local authorities. Kabel Noord has built an extensive network with a fiber backbone and the final 500m from the 80 distribution points being built with coax.

## ONE SIZE DOES NOT FIT ALL

Prior to using the Bentley GIS and engineering tools Kabel Noord had outsourced all its network engineering to the gas utility called Eneco. Eneco was using GE's Smallworld platform and although this was suitable for a gas company it did not provide the right network information and functionality for Kabel Noord. Anton van der Hoek of Kabel Noord explains, "For us, GE Smallworld was not the right solution. The system was slow, the graphics were not adequate for our needs and it was difficult, if not impossible to store the right attributes for our network infrastructure in the Smallworld data repository. At this point, we started to look for something new that would better suit our needs."

## NEW PROJECTS REQUIRE NEW TOOLS

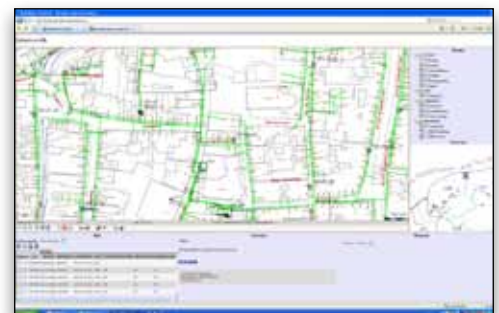
As Kabel Noord focused on building out its FTTH infrastructure they needed tools which were perfectly suited to this class of infrastructure. They started looking at what was available in the market and soon found that Bentley's communications products were being used widely by both owner-operators and civil engineering contractors in the Netherlands. As Anton van der Hoek adds,

"In a small country like the Netherlands word-of-mouth is very important. Once we started asking the question of what tools were available to us, Bentley's name was mentioned many times. We took a close look at the Bentley tools and found that they were exactly what we needed."

Kabel Noord needed software which would allow them to engineer in coax and fiber using a single interface and where the resulting data could be stored in an Oracle database. They also needed tools which would suit users both within the company and among the contractors to whom the network builds are outsourced. Kabel Noord does not undertake any of its own construction. Kabel Noord found that the Bentley products were as easily adopted by their contractors as the in-house staff.



An amplifier tap list displayed in a MicroStation XFM environment.



The network represented in Bentley Geo Web Publisher for use by customer services representatives.

*"We have found Bentley to be excellent in supporting the needs of a service provider focused primarily on building and operating fiber infrastructure."*

#### ABOUT BENTLEY

Bentley Systems, Incorporated is the global leader dedicated to providing comprehensive software solutions for sustaining infrastructure. Architects, engineers, constructors, and owner-operators are indispensable in improving our world and our quality of life; the company's mission is to improve the performance of their projects and of the assets they design, build, and operate. Bentley sustains the infrastructure professions by helping to leverage information technology, learning, best practices, and global collaboration – and by promoting careers devoted to this crucial work.

For more information, visit [www.bentley.com](http://www.bentley.com)

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#### THE INTELLIGENT NETWORK MODEL IS USED BY MANY DEPARTMENTS

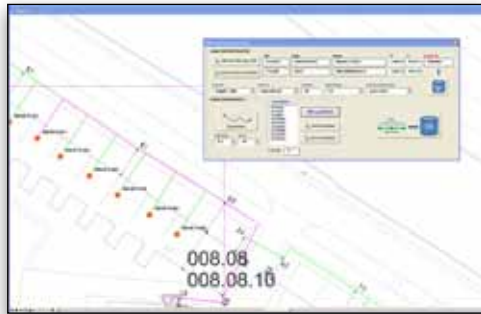
One of the advantages of using the Bentley products is that the data, once created, can be used by many departments. The products are used by engineering design, by construction crews in the field and by those engineers supporting fault recovery. Increasingly, the data is being used to drive capacity planning operations as well. Many of the users of the network information access it through a browser – and this is made possible by Bentley® Geo Web Publisher™. Bentley Geo Web Publisher publishes the spatial data and supports all kinds of queries through a simple, intuitive interface used by customer services and other departments. The value of the data is further enhanced by integration with the CRM and ERP systems.

#### BENTLEY DELIVERS INCREASED PRODUCTIVITY AND EASE OF USE

The Bentley solution delivered both increased productivity and ease of use. The data created in the Bentley engineering tools like Bentley® Fiber and Bentley® Coax is easily taken into the field with

Bentley® PowerMap Field for Communications and the powerful and intuitive graphics make design much easier. Anton van de Hoek found that, "the quality of our data has also improved – because the users like working in the Bentley environment we're finding that designers and construction engineers are staying within the workflows and committing all changes to the as-built in the correct way." It is also easier to run reports and spatial queries with the Bentley products and to access and manipulate the extensive data stored in the spatial data repository.

Overall, Kabel Noord has lowered the cost of running a GIS-based network inventory and engineering platform and at the same time increased the quality of data and ease of use for the engineers. Anton van der Hoek concludes, "It's all about having a system that is nimble and just the right size for our operation. We have found Bentley to be excellent in supporting the needs of a service provider focused primarily on building and operating fiber infrastructure. We look forward to extending the use of Bentley products in our organization and to profiting from Bentley's industry and technology expertise as we move forward."



*MicroStation enables you to automatically route cables from a distribution point to the customer premises.*



*The Kabel Noord network in Dokkum displayed in Bentley Fiber.*