



## International South America

**Client**  
VTR GlobalCom

**Location**  
Chile

## HFC Network Engineering Design

### Project Highlights

- Hybrid fiber/coax (HFC) network design
- Design of 400,000 homes passed within a year; reached production design of 40,000 homes passed monthly
- Quickly mobilized technical resources and prepared local professional to design the first 15,000 homes passed in only 2 months to meet an aggressive schedule

### Project Description

VTR GlobalCom, an affiliate of United GlobalCom (USA), is one of Latin America's prominent cable operators with almost 450,000 clients and 50 percent market participation in a field constituted by two companies.

To enhance its network coverage through an Accelerated Expansion Plan in 2001, VTR GlobalCom awarded CH2M HILL a contract to develop detailed engineering for the HFC network crossing all of Chile. The contract included design of 400,000 homes passed within a year. It also established CH2M HILL as VTR GlobalCom's preferred provider in Latin America for engineering and project management services.

The project was carried out by our telecommunications personnel in Santiago, Chile. In only 2 months, CH2M HILL mobilized all technical resources to design the first 15,000 homes passed. Ramp up and initial quality control were supervised by our design center in Madrid, Spain, one of the world's largest HFC network design centers.

CH2M HILL's depth of resources for the project, along with high technical motivation, was the key that allowed CH2M HILL to reach a design production of 40,000 homes passed monthly.

The biggest challenge for the project was to establish procedures and criteria to design a network that combines telephony, Internet, and TV services along with a new network design and the upgrade of the legacy. CH2M HILL developed a design manual that articulated procedures and criteria to meet this challenge.

The project included gathering survey data and updating the landbase, node planning, design, and delivery of the Bill of Materials.

To warrantee the design quality for the future construction of each HFC node, CH2M HILL established strict quality procedures.

The project allowed VTR GlobalCom to become the leading broadband services operator of HFC networks.