

Cisco identifies key considerations for success of Metro Ethernet Broadband business models

Aims to help utilities, municipalities and service providers understand major success factors for establishing next-generation Metro Ethernet broadband in specific cities

LONDON, November 7, 2002 - Cisco Systems today unveiled the results of a major research project across Europe to understand the key economic drivers for deploying Metro Ethernet in Metropolitan areas. The study confirms that a Metro Ethernet-based business model can be economically viable in several major urban areas in EMEA that have high density of residential and business customers in Multi Dwelling Units. Furthermore, with the additional involvement of a utility company or local municipality, the business model could also be viable in a large number of smaller cities across Europe. In both cases population density, cost of laying fibre, market penetration and operational costs are key factors in the success, whereas equipment capital expenditures play a far less crucial role in the overall financial equation.

The study investigated the economic viability of establishing an 10/100/1000 Mbps Ethernet based business in a selection of cities around Western Europe. The attractiveness of several types of business models was evaluated for different cities through detailed 'bottom-up' business modelling, based on detailed data-gathering on a wide range of key economic drivers:

- Demographic factors - from population density, average household income, to small business density.
- Regulatory barriers - including requirements to install new wires in urban houses and use existing dark fibre or ducts for connections between buildings
- Network Deployment Factors - from availability of fibre, cost to lay/lease fibre, building access costs, regulatory issues through to labour rates.
- Revenue Factors - including competitive service pricing, likely take-up rates, to revenue sharing agreements.
- Financial Factors - investigating cost of capital, minimum acceptable rates of return through to payback periods.
- Service Factors - understanding profitability generated in delivering Voice, Video, Data (as single separated services and as a bundle offer to business and residential Customers)

Key inputs and final results were calibrated using two existing business models where Ethernet over fiber broadband has already been widely deployed - [Fastweb](#) in Italy and [Bredbandsbolaget \(B2\)](#) in Sweden and key lessons from other operators that are already deploying Metro Ethernet in different countries.

The results indicate that the business model can be a viable financial prospect in a number of cities around EMEA, and, with the additional involvement of a utility company, could be made to work even more widely. The results also highlight the advantages of working in tandem with both a utility company, to facilitate the laying of last mile fiber to end customers, as well as securing the participation of the local municipality or government authority for getting access to rights-of-way.

However, the business model must naturally be tailored to the specific characteristics of each city and type of player and many factors affect the likelihood of success of a potential service provider. What is clear from the results is that the right population density, cost of laying fibre, market penetration and operational costs are key factors in the success of any such venture, whereas network capital expenditure costs play a far less crucial role in the overall financial equation. The financial success of the project also depends on the expectation of the organisation driving the project. For example, a typical service provider generally sets financial return rates higher, rather than a provider working in tandem with a utility company or a municipality, who usually take a more 'long term' view of projects.

"We are releasing the major findings of this study to help local governments, utilities and entrepreneurs understand that bringing Ethernet as next-generation broadband to their city is quite feasible," commented Mark de Simone, VP technology and solutions marketing, EMEA for Cisco. "The attractiveness of a region for business investment and skills is greatly enhanced when next-generation broadband is available in the local area. To bring advanced services such as video on demand, flat rate voice over IP, IP video surveillance, network recording to consumers around EMEA, an Ethernet over fiber model is a pre-requisite."

About Cisco Systems

Cisco Systems, Inc.(NASDAQ: CSCO) is the worldwide leader in networking for the Internet. Cisco news and information are available at <http://www.cisco.com>. Cisco equipment in Europe is supplied by Cisco Systems International BV, a wholly owned subsidiary of Cisco Systems, Inc.

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