

# DigiWorld



analysis  
collection

# FTTx Economics

## Conditions for profitability

- Global level of Very High Speed deployment
- Analysis of major projects
- Main decision-making criteria for VHS industry players
- Potential drivers / roadblocks for VHS players
- Operation simulations on fiber networks and business models
- Deployment economy of VHS access networks according to different scenarios
- Key factors and main obstacles for Very High Speed profitability

**IDATE**  
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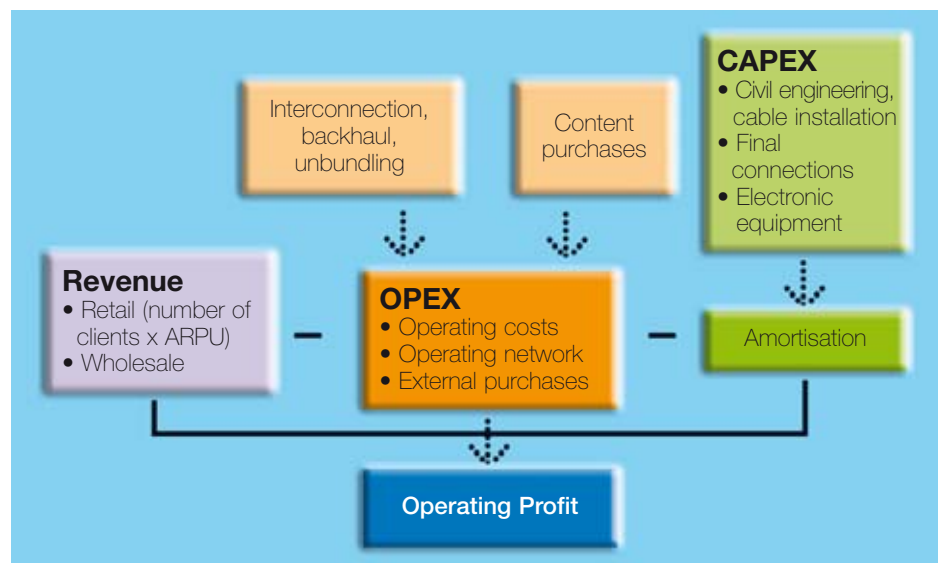
## ➤ Overview

Following Japan and the United States, massive deployment projects for Very High Speed networks are envisioned for Europe. The majority of these projects are apparently still held back by a number of factors: regulations (optical loop unbundling?), technology (fiber to the customer?) and demography (target only large cities and areas that allow easy access to passive infrastructures?). These factors illustrate the uncertainty that looms above the economic elements of these projects, which entail a considerable investment.

Using a schema of the different costs and revenue, particularly investment expenses, the study measures how a certain number of variables could affect the deployment of these access networks: population density, technical architecture and penetration rates. These measures are then sub-divided according operator category (incumbent, new, alternative and utility operators). More generally, it is important to create an overall picture, including a few general market factors (size, level of competition, price, etc.), which would allow the balance of operations on a large scale to be tested.

Most importantly, these different calculations will enable us to pinpoint the key business model parameters for the different types of operators and subsequently, the conditions required for a successful Very High Speed access deployment .

### General presentation of the model



Source : IDATE

## ➤ Key questions

- Are the current deployments truly significant?
- What are the main lessons to be learned?
- What criteria do industry players use before deciding to enter into VHS?
- Which are the key factors of the VHS access economy?
- How do the different adjustment variables of the model affect deployment?
- Which architectures are best suited to the different possible configurations?
- What is the minimum market share required in order to be profitable?

## ➤ Projects studied

AT&T	Mälarenergi
B2 (Telenor)	Stadsnat
Belgacom	Neuf Cegetel
Deutsche	NTT
Telekom	Nuonen
Fastweb	Portaal
France Télécom	Telecom Italia
Free	Verizon
KPN	

# Conditions for profitability

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- 2.2 The model
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  - General hypotheses
- 2.3 Effect of adjustment variables
  - Architectural choices
  - Types of infrastructure locations
  - Rate of deployment
  - Categories of the industry players and methods of access to passive infrastructures
  - Structure of competition

### 3 Summary and analysis

- 3.1 Deployment economy of VHS access networks according to the different scenarios

- FTTH from very dense areas to moderately dense areas
  - Shared FTTC
  - Nationwide VDSL
- 3.2 Key factors and main obstacles for VHS profitability

### Appendix: Project technical sheets

**Descriptive technical sheets including technical, demographic and financial data for each project analysed.**

- Japan: NTT
- United States: AT&T, Verizon
- Sweden: B2 (Telenor), Mälarenergi Stadsnat
- The Netherlands: KPN, Nuonen, Portaal
- Italy: Fastweb, Telecom Italia
- Germany: Deutsche Telekom
- France: France Télécom, Free, Neuf Cegetel
- Belgium: Belgacom

#### Technical data

- Technology implemented
- Technical details
- Partners

#### Demographic data

- Targeted clientele
- Number of connectable buildings
- Number of clients

#### Financial data

- Total investment
- Cost per connection
- Cost per client
- ARPU
- ROI

## Who should read this report?

### Telecom operators

- What are the advantages for incumbent, new and alternative operators?
- What are the difficulties they have to face?
- What are the conditions for profitability for telecom operators?

### Energy suppliers

- Does VHS truly represent an opportunity?
- What are the major advantages for energy suppliers compared to other industry players?

### Equipment manufacturers

- Does VHS equipment represent a new source of growth for equipment manufacturers?

### Investors and analysts

- What level of investment is at stake?
- What are the potential repercussions of competition?

### Regulators

- Are regulations an important deciding factor for the players involved in VHS?
- What are the conditions for success for each player?

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