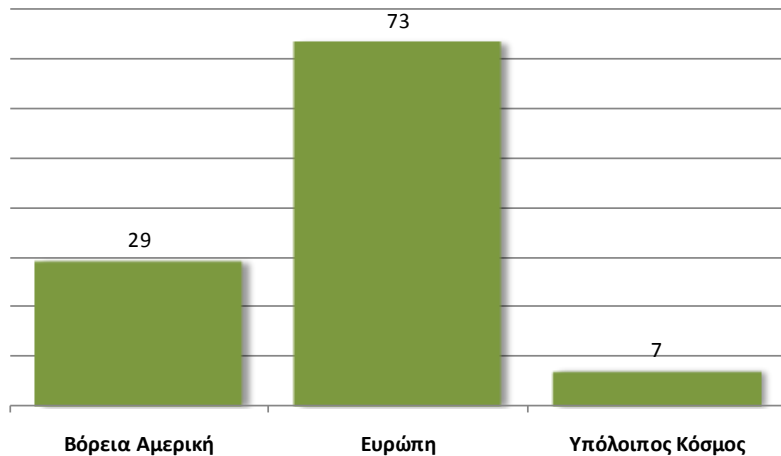
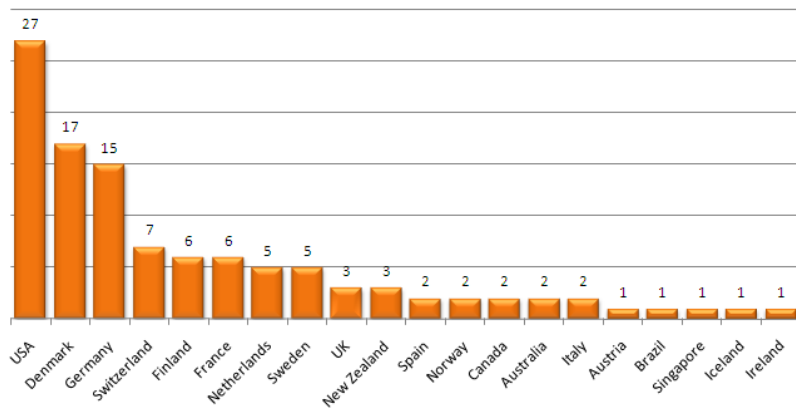


Municipal Fiber Access: Myths & Realities

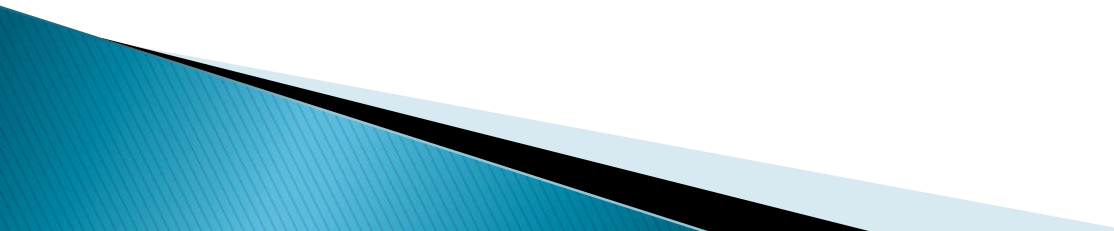
Costas Troulos
InfoStrag Seminars
Syros - 2010

The Identity of the Study

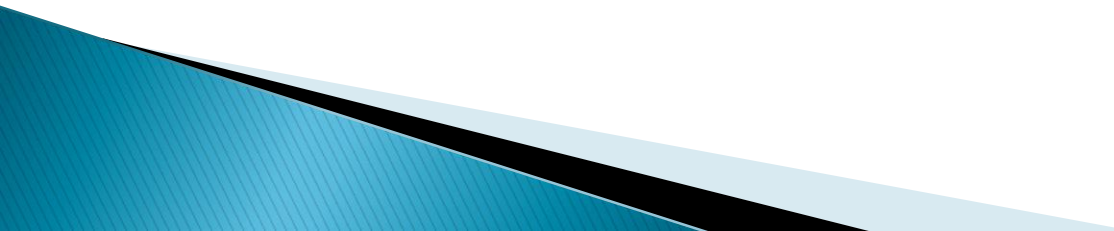


Statistical	City
	Country
Demographics /Coverage	Population
	Homes connected/passed
	Homes connected/passed (planned)
	Coverage Plan: Region/City
Deployment	Cost/Household
	Architecture
	Topology
	Business Model
Public Involvement	Gov.MANs
	Policy
	Demand aggregation
	PPP
	Public participation in AO
	Public funding
	Co-op
	Public Utilities
Private Involvement	Housing Firms
	Operators
	Consulting
	Banks

Objectives

- ▶ Analyze international best practices so as to conclude for the (lacking confidence) Greek case
 - ▶ Identify the practical differences that make each case unique
 - ▶ Do not focus only to the internationally acclaimed municipal projects; Identify the characteristics that can assist in developing broadband for Greece
- 

Difficulties

- ▶ Collection and cross checking of available information and media coverage
 - ▶ Assessment and identification of inherent biases
 - ▶ Conclusions about what happens after the announcements
 - ▶ The study is about only the case that municipalities have active involvement in FTTH/B/C projects
- 

Municipal Broadband Infrastructures

- ▶ Local and regional initiatives
 - South Europe: Municipal cooperation – regional plans (Greece, Spain – Xarxa Oberta, Pau)
 - North Europe & North America: Developing networks within the city limits (Sweden, North France, Netherlands, Burlington, Lafayette)
 - Rest of the world: limited activity in municipal FTTH
- ▶ Service mix
 - The majority of cities offer open access and many offer unbundling
 - North European cities (with electric utilities in participation offer triple play – not necessarily open access) – Germany, Denmark
 - North America: Triple play & open access

International Evidence (I)

- ▶ Broadband becomes a part of political campaigns
- ▶ Financing of projects
 - North Europe & North America (Tax, Debt, Investment firms – private investor principle)
 - South Europe (EU state aid)
- ▶ Creation of national champions with international exposure
- ▶ Reactions from the telecom industry are strong and well articulated. EC is more friendly to municipal projects than FCC

International Evidence (II)


▶ Success factors

- **Municipal involvement is only a fraction of a broader plan**
- Cooperation with local organizations, universities, commercial associations etc. (Driving demand)
- Solving the backhaul problem (E.g. National backhaul carriers (in France))

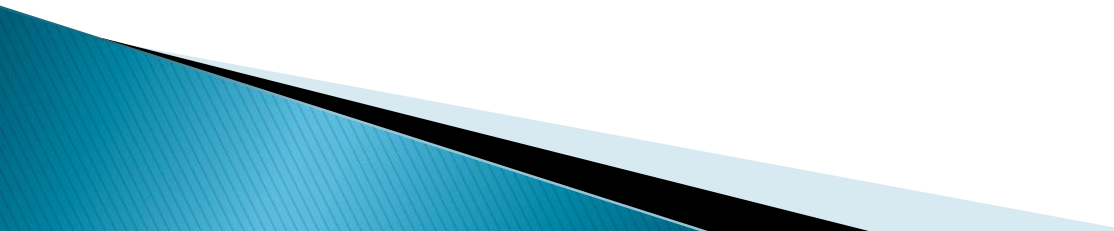
▶ Expansion strategies

- **North America & North Europe:**
 - Pilot projects -> city coverage -> regional expansion
 - Synergies with public utilities
- **South Europe:**
 - Delays: trying to apply a solution for an entire region
- Expanding unconditionally the infrastructure by installing ducts on every occasion

The role of the private sector

- ▶ Real Estate Companies (driving demand)
 - ▶ Public utilities (existing infrastructures – economies of scope)
 - ▶ Telecom operators (existing infrastructures – economies of scale)
 - ▶ Construction companies (technical knowhow)
 - ▶ Investment Houses (financing)
 - ▶ *Incumbents (as an over taker – do municipal networks end up to the hands of the incumbents?)*
- 

The Greek case

- ▶ The digital strategy has not yet achieved the anticipated social preparedness:
 - Low levels of digital innovation
 - Limited use of ICT from the citizens
 - ▶ There is no appropriate framework to encourage ICT initiatives by the municipalities
 - ▶ Greece is not lacking basic broadband infrastructures
 - ▶ Municipal interest strongly expressed
- 

Conclusions

- ▶ All that glitters is not gold
 - Amsterdam (a pilot project with limited penetration)
 - Denmark (broadband provided by electric utilities)
- ▶ Municipal initiatives are directly affected by the central and regional government's actions
- ▶ Main reasons shaping the local broadband strategies
 - Participation of electric public utilities
 - Regulatory framework – geographical markets
 - Level of preparedness of both the private sector and the society
- ▶ International exposure is a “Good Thing”
- ▶ Dilemma: National network vs. interconnected regional networks

Q&A

“Never underestimate the powers you are faced with”

Municipal Project Executive