

A Telia view of Fiber in the access network

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A Telia view on Fiber Access

Incumbent Teleoperator in Sweden

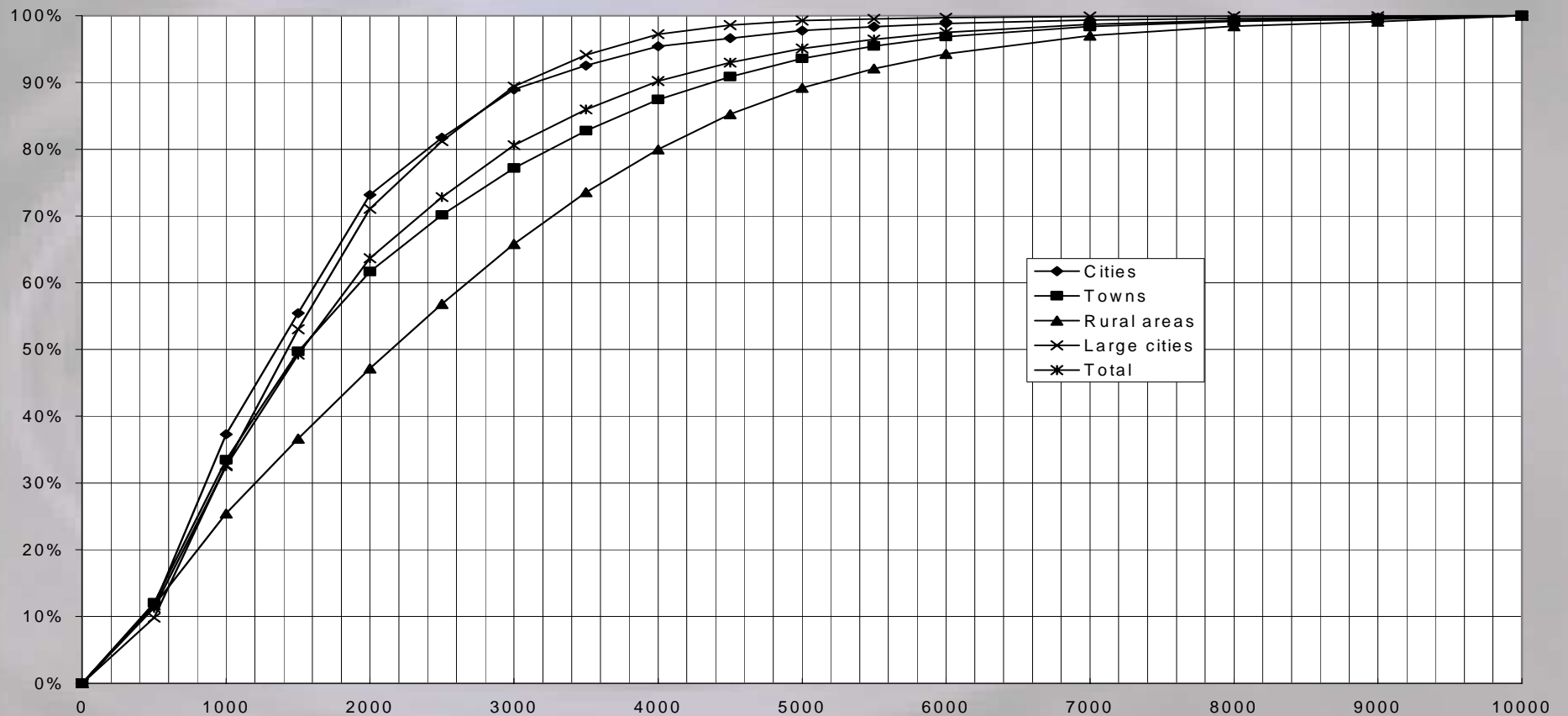
Provide everyone in Sweden with telephony

Broadband via XDSL

Looking at fiber access in Greenfield area

- **Cost**
- **All services over fiber access**

Loop Length in Telia Access Network



P2P or PON

Pont to Point

- 😊 Individual bandwidth
- 😊 Simple transmission equipment
- 😊 High eavesdropping security

- 😞 High fibre cost
- 😞 Much fiber at CO

PON

- 😊 Lower fibre cost
- 😊 Less equipment at CO

- 😞 Cost of planning and upgrade
- 😞 Shared bandwidth
- 😞 More complex system
- 😞 Security

Bandwidth Requirements

Near future

PAL(AnalogTV)	18	Mbit/s (3 channels á 6 Mbit/s)
Internet	2	
<u>Telephony</u>	<u>2</u>	
	22	Mbit/s

In 5-10 years period

HDTV(Digital TV)	60	Mbit/s (3 channels á 20 Mbit/s)
Internet	6	
<u>Telephony</u>	<u>4</u>	
	70	Mbit/s

Ethernet

- ☺ Low cost per switch port
- ☺ Common subscriber interface
- ☺ Bit rates: 10/100/1000 Mbit/s
- ☺ Already nearly available

- ☹ Lower QoS
- ☹ Lack of standard for 100 Mbit/s on SM-fiber

Short term need for FE-SM in Telia

Green field Area

Upgrade from ADSL

Summary

Point-Point SM, < 10 km

100 Mbit/s enough for 5-10 years period

All services over the same media
(Looking for a cost effective way to provide
telephony over fiber)