



# **Telecoms Regulation in Europe – Competition in Broadband Services**

ASEAN-EC Workshop – Singapore, 16-17 June 2008

**James Thomson**

Cullen International

[james.thomson@cullen-international.com](mailto:james.thomson@cullen-international.com)

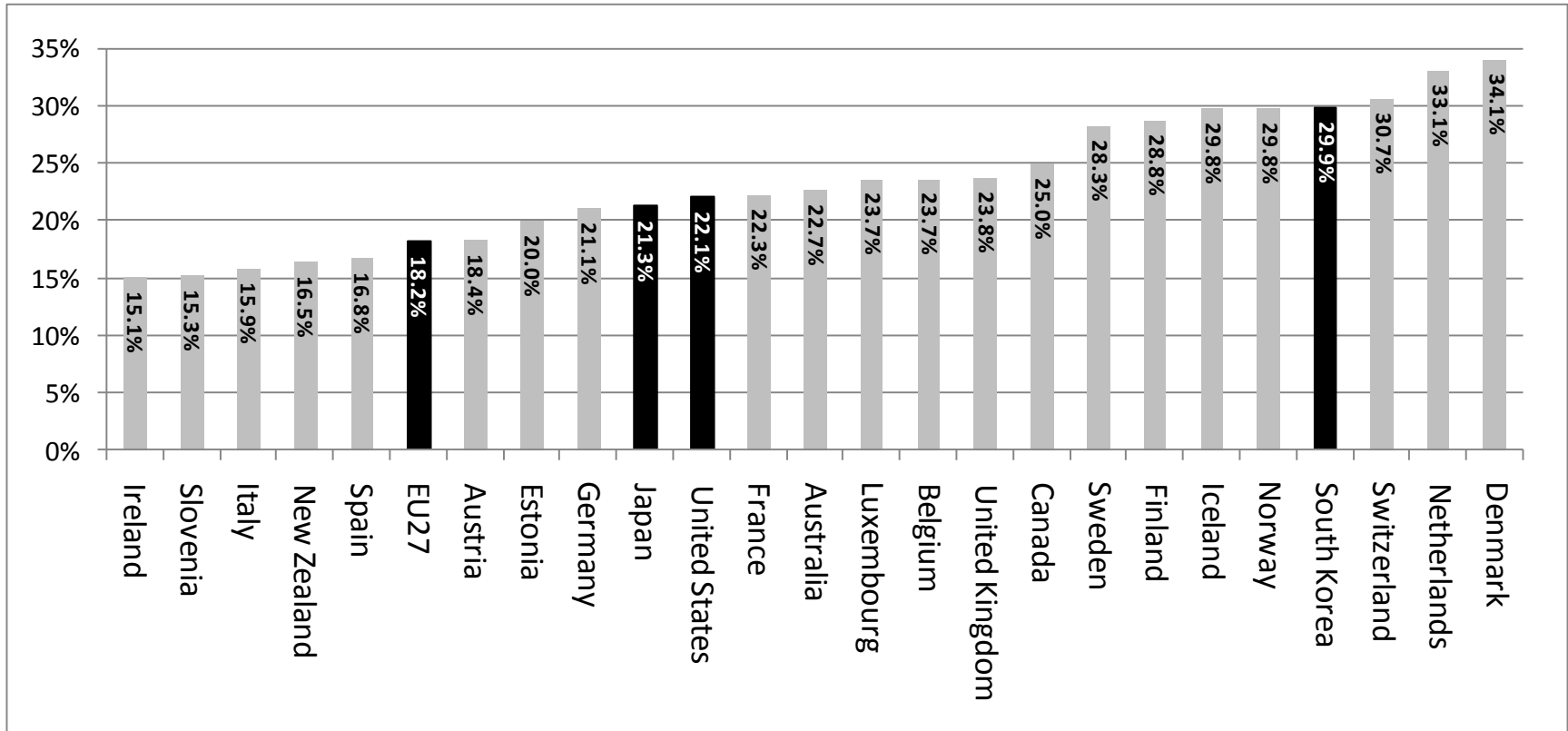


# Outline

- Broadband take-up in Europe
- EU regulatory framework
- Next Generation Access
- State aid

# International Broadband Penetration Rates

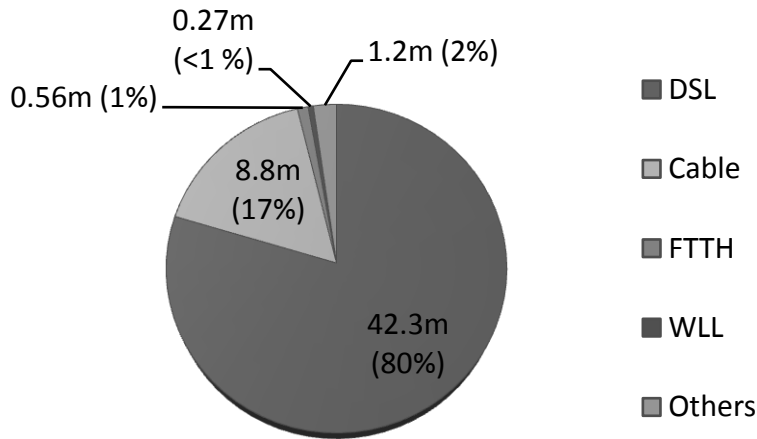
July 2007 (Source: OECD)



- Some European countries are world leaders
- But 25%+ separates European countries with highest and lowest broadband penetration rates

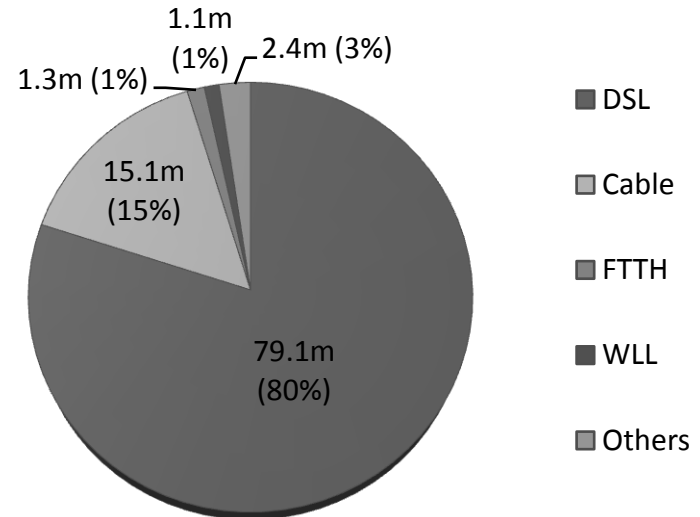
# Total Broadband Lines in Europe

1 October 2005



Total broadband lines: 53.13m

1 January 2008



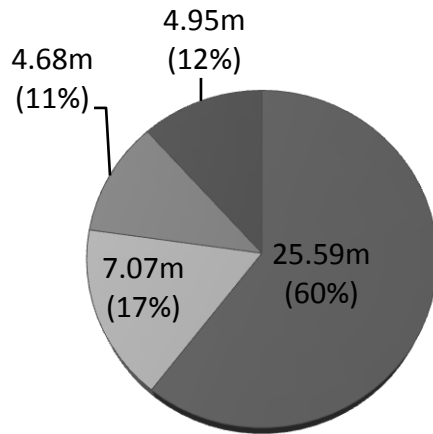
Total broadband lines: 99.05m

- ADSL/ADSL2+ over copper local loops accounts for 80% broadband lines in Europe
- Cable broadband is strong in a few European countries (e.g. Belgium, Netherlands)

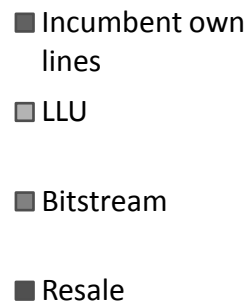
(Source: European Commission)

# DSL Broadband Lines in Europe

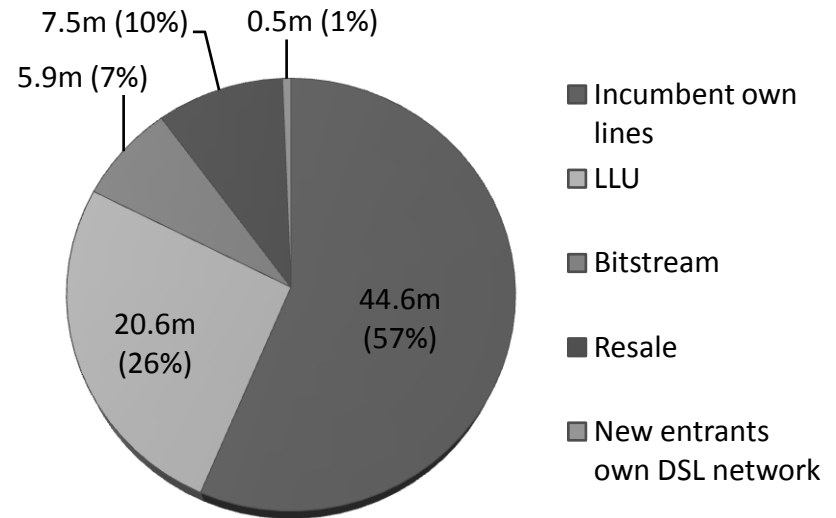
1 October 2005



Total DSL lines: 42.29m



1 January 2008



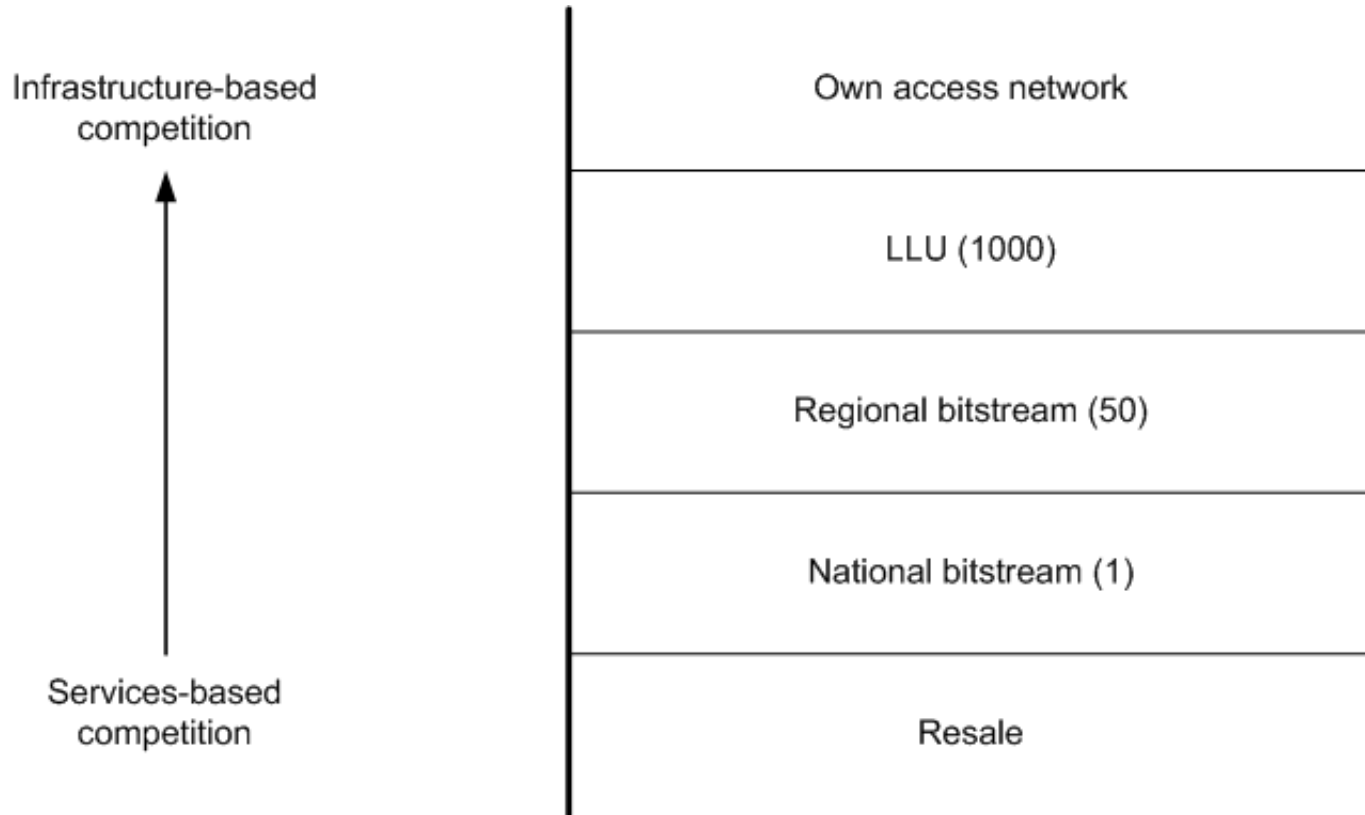
Total DSL lines: 79.1m



- Local Loop Unbundling (LLU) has taken-off showing that alternative operators are climbing the “investment ladder” (at least in some countries...)

(Source: European Commission)

# “Investment Ladder”

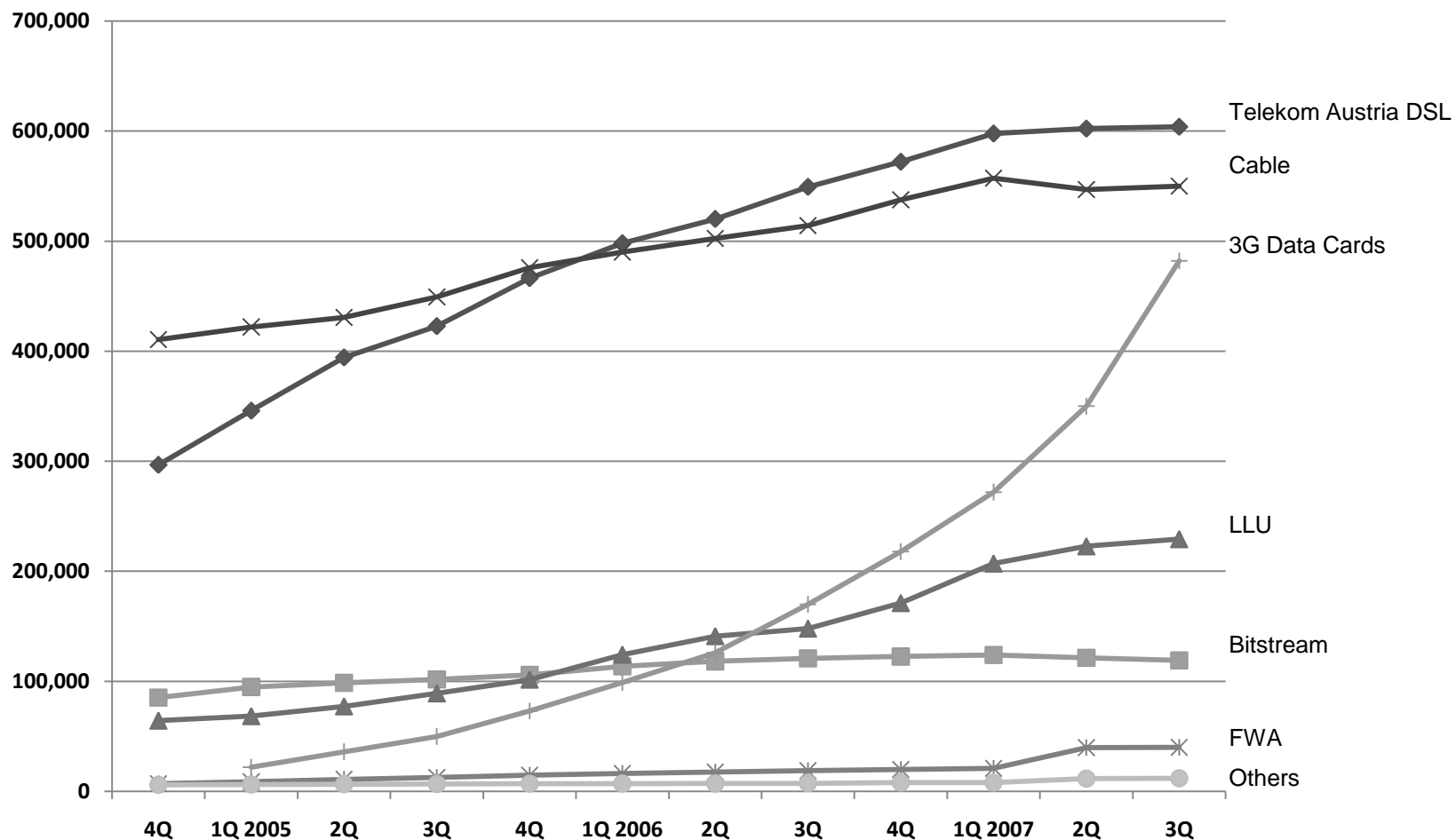


# Market Analysis

	Local Loop Unbundling		Wholesale Broadband Access	
Market definition	2003: Wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services	2007: Wholesale (physical) network infrastructure access (including shared or full unbundled access) at a fixed location	2003: Wholesale broadband access	2007: Wholesale broadband access Non-physical or virtual network access including bitstream access at a fixed location
SMP	All fixed incumbent operators	All fixed incumbent operators	All fixed incumbent operators (Except KPN Netherlands)	UK: BT no SMP in area covering 70% UK households where competition from LLU
Regulatory obligations	<ul style="list-style-type: none"> <li>- LLU copper loops</li> <li>- Cost-based pricing</li> <li>- NRAs taken different approaches to costs</li> </ul>	Same + Some NRAs propose to add access to ducts (France, Spain)	“Bitstream access” NRAs taken different approaches to: <ul style="list-style-type: none"> <li>- Handover points</li> <li>- Pricing rule (retail minus, cost orientation, non-discrimination)</li> </ul>	Same + some NRAs propose BSA should apply to VDSL or FTTH networks  Austria: Obligations withdrawn from Telekom Austria in urban areas

# 3G Data Cards in Austria

Typical offer: 3 GB / 24 euro per month (24 month contract)



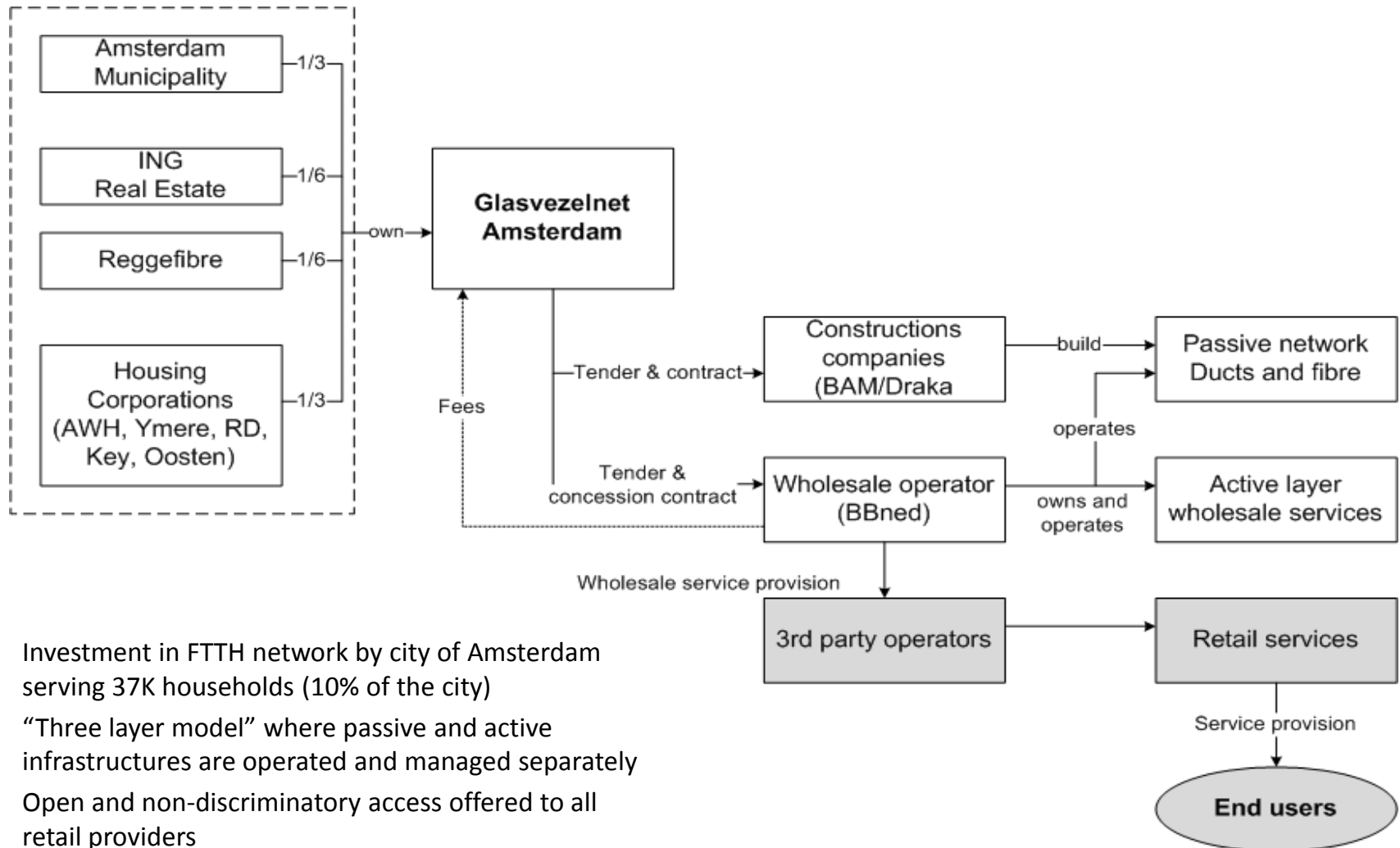
(Source: RTR)



# European Telcos with “aggressive” NGA deployment plans before 2010

Operator	Country	NGA	Coverage	Total households
Belgacom	Belgium	FTTC + VDSL/VDSL2	Spring 2008: 60% households	4.5m
TDC	Denmark	Hybrid mix of FTTC + VDSL2 and cable	End 2010: 90% households with 20Mbps and 75% households with 100Mbps	2.5m
France Telecom	France	FTTH (GPON)	End 2008: 1m homes passed	27.4m
Free	France	FTTH (Point-to-Point)	End 2012: 4m homes passed	
NeufCegetel	France	FTTH (Point-to-Point)	End 2009: 1m homes passed 250K customers	
Deutsche Telekom	Germany	FTTC + VDSL	End 2008: 50 cities (approx. 25% of German households passed)	39.2m
Telecom Italia	Italy	FTTC + VDSL2 FTTB	2010: 52,600 FTTx cabinets passing 2m customers	23.9m
Fastweb	Italy	FTTH in Northern Italy LLU from TI	FTTH customers peaked at 300K. New connections mainly based on LLU from TI.	
KPN	Netherlands	FTTC + VDSL2 FTTB/H (new build housing)	Complete PSTN switch-off 2010	7.2m
Telefonica	Spain	FTTH (GPON)	End 2010: 3m FTTH lines	15.4m
TeliaSonera	Sweden	FTTC + VDSL2	2013: Up to 2m households	4.4m

# Public Funding of Broadband Amsterdam “Open Access” Model



- Investment in FTTH network by city of Amsterdam serving 37K households (10% of the city)
- “Three layer model” where passive and active infrastructures are operated and managed separately
- Open and non-discriminatory access offered to all retail providers
- European Commission decided no State aid