Authority for Consumers & Markets





WIK Seminar - November 18, 2014

The Dutch business markets

Market view

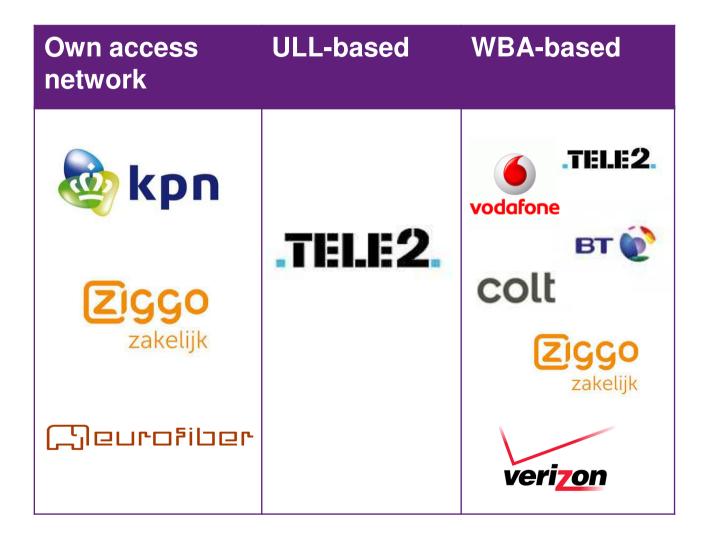
- ✓ Market players active on various segments with various business models
- ✓ Transition towards modern techniques and infrastructures (IP-based)
- Many investments in fixed and mobile and business solutions

Regulatory view

- ✓ Market definition
 - ✓ Separation between business (HQ) and residential (LQ) market
 - ✓ Market is national in scope



Business market players



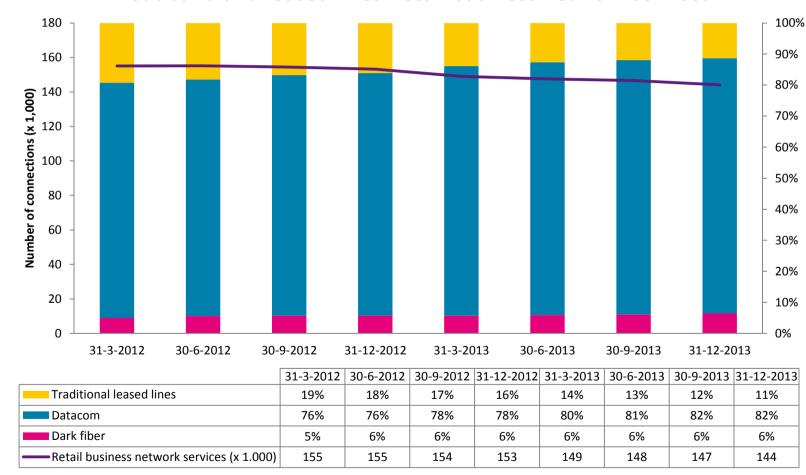


Business market developments

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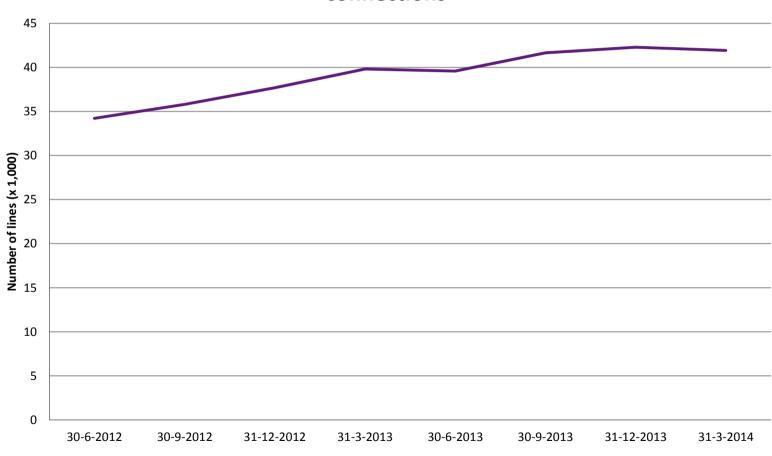
#1 The number of leased lines is decreasing

Broadband and leased lines: retail business network services



#2 The number of fiber connections is increasing

Broadband and leased lines: Retail business active fiber connections



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Regulatory Framework

LLU/VULA (FttH, MDF and SDF access)

High-quality WBA + wholesale leased lines

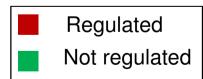
Low-quality WBA

Leased lines, IP VPNs, Ethernet VPNs, dark fiber and Internet VPNs

Authority for

Internet access services

- ✓ Additional regulatory measures include:
 - √ Tariff differentiation prohibition
 - ✓ Margin squeeze prohibition
 - √ Transparency obligation
 - ✓ Nearnet obligation (fiber)



Near-net obligation (fiber)

- ✓ Near-net obligation: obligation to provide nearnet access (dig <250m) to wholesale customers</p>
 - ✓ Closest supplier can offer cheapest connections →
 Large advantage for incumbent
 - Unconnected users constitute a large part of the total potential market
 - ✓ Competition for unconnected end-users as well as connected users
- ✓ Danish case: near-net FttH
 - ✓ European Court of Justice found that Danish regulator could require TDC to dig <30m at request of competitors



The market for high quality WBA and leased lines

Product market

✓ Distinction between low and high-quality WBA (boundary at oversubscription of 1:20)



✓ High-quality WBA and wholesale leased lines belong to the same product market

Geographic market

- ✓ Similar competitive conditions
- ✓ Regional differences not large and durable enough → Market is <u>national</u> in scope

High-quality (>1:20) vs. low-quality WBA (<1:20)

- ✓ Oversubscription of 1:20 corresponds with other factors:
 - ✓ Products based on ATM offer a minimum oversubscription of 1:20
 - ✓ Correlates with SLAs, availability guarantees
 - ✓ Products for business use vs. residential use
- ✓ However, times are changing
 - ✓ ATM-based products are being replaced by Ethernet-based products
 - ✓ Quality of the internet improves
 - ✓ Use of internet VPNs increases



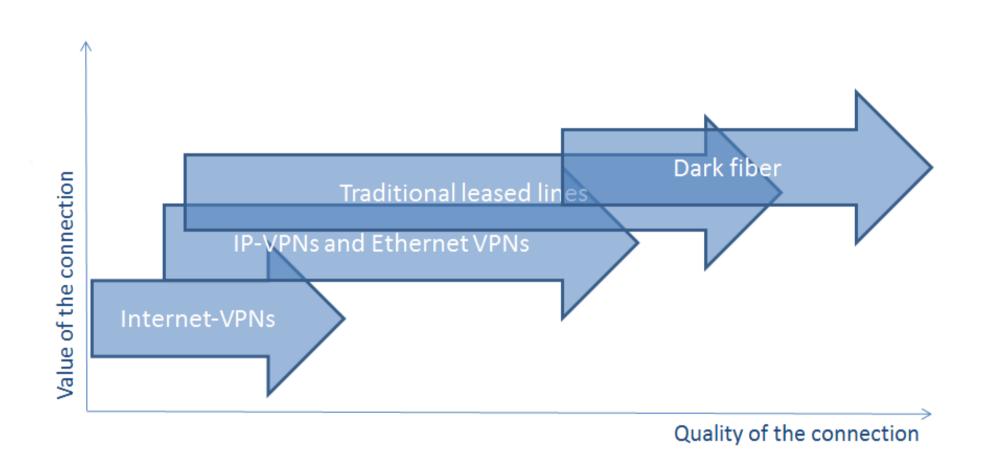
The market for business connectivity services

Product market Traditional leased lines + IP & Ethernet VPNs + dark fiber + internet VPNs



- ✓ Migration from traditional leased lines to Ethernet VPNs
- ✓ Inclusion of Internet VPNs
- ✓ Chain of substitution

The chain of substitution



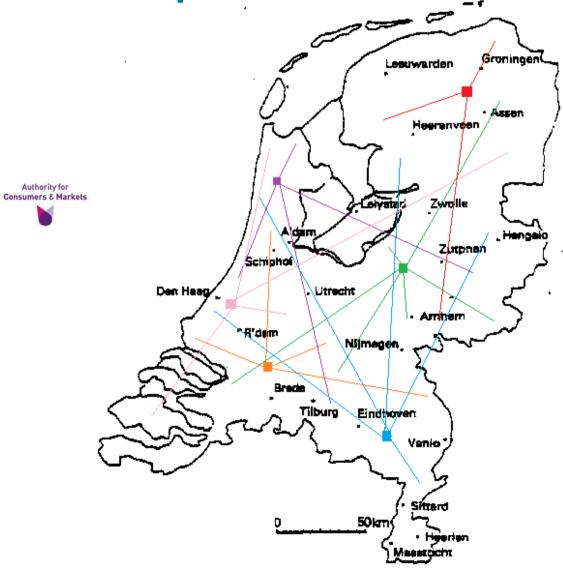
The role of multi-site

The multi-site characteristics of business markets play an important role when analysing:



- 1. The geographic scope of the market
- 2. The level of competition

The role of multi-site (1): Geographic scope of the market



✓ Multi-site demand structure leads to national market

The role of multi-site (2): Competition analysis

No. of multi-site client locations					
Network coverage	2	5	8	10	50
10%	1%	0%	0%	0%	0%
20%	4%	0%	0%	0%	0%
30%	9%	0%	0%	0%	0%
40%	16%	1%	0%	0%	0%
50%	25%	3%	0%	0%	0%
60%	36%	8%	2%	1%	0%
70%	49%	17%	6%	3%	0%
80%	64%	33%	17%	11%	0%
90%	81%	59%	43%	35%	1%
100%	100%	100%	100%	100%	100%

Probability of connecting all client locations:

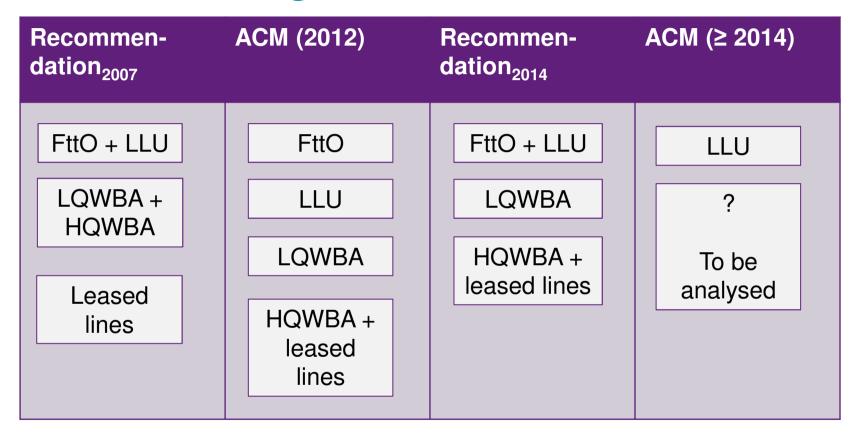
- Declines quickly when no. of client locations increases
- Increases quickly with larger network coverage

→ Advantage for incumbent player

Table: probability of connecting a multi-site client



Recommendation and regulation, forward looking





Conclusion

- ✓ Business markets evolve
 - ✓ Through innovation and investment in networks, products become better & more affordable and businesses become more productive



- ✓ Gap between "business" and "residential" will narrow in the future
- ✓ Third party access is (still) key
- ✓ New recommendation on markets takes this into account, and adds VULA
- ✓ Discussion will be on migration, harmonisation of products (EU-wide), QoS, investments, choice