

TILEC – TILBURG LAW AND ECONOMICS CENTER

Network neutrality in the EU

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- Impulsion for the paper – Another UFO landing in Europe
- Main question
 - > Are the issues making up “net neutrality” sufficiently addressed using current EC law instruments?
- Outline
 - > What is network neutrality?
 - > Concerns related to access-tiering as such
 - > Concerns related to market power
 - > Conclusion

What is network neutrality?

- Currently: best-efforts routing
 - > Equality of – less than perfect – Quality of Service (QoS)
 - > End-to-end principle
 - > Intelligence at the edge
 - > Network of networks (interconnected) model: cloud
- Concerns of BAPs:
 - > Commoditization of transmission, while major investments need to be carried out (fiber in local network)
 - > Imbalance caused by P2P traffic

What is net neutrality?

- Solution: branch into QoS offerings, essentially delivery guarantees and prioritization
 - > Break away from best-efforts model
 - Differentiation in QoS
 - Intelligence in the core
 - New services
 - > Hope to avoid commoditization and turn broadband transmission into a real two-sided platform
 - > Hope to be able to degrade P2P traffic at the lower QoS tier

What is net neutrality?

- Concerns arising from these plans:
 - > Broadband Access Provider (BAP) has control over access to End-User because of routing in local path
→ Market power?
 - *Discrimination* between Content Providers
 - > Examples
 - *Blocking* traffic between User and Content Provider
 - > Concrete examples: Madison River, ComCast
 - > Potential for disaster: YouTube and Pakistan

What is network neutrality ?

- Concerns arising from these plans
 - > Best-efforts model is abandoned in favour of differentiated QoS model
 - Is it desirable?
 - Keyword in literature: *access-tiering*

What is network neutrality?

- Differences between US and EU as regards infrastructure policy
 - > Information services vs. communication services
 - > No “Trinko”-style constraints in EU
 - > Infrastructure policy: Monopoly profits to innovate vs. ladder of investment approach
 - Evolution in EU: separation, regulatory holidays?
- Impact on
 - > Market power analysis
 - > Feasibility of access-tiering

Access-tiering

- Technical: inherently linked to degradation
- How big a threat is it?
 - > When discrimination/blocking are dealt with already
 - > Feasibility
 - Experience: VPNs, DiffServ, IntServ
 - Coordination between the two sides of the platform

- How big a threat is it?
 - > Feasibility
 - Scenario 1: Dissolving the cloud
 - Scenario 2: Coordination
 - > QoS different from interconnection
 - Scenario 3: Extortion
 - Different scenarios for US and EC ?
 - Outcome: the end of the Internet as we know it??
 - > Alternatives: more capacity, but how?

- How big a threat is it?
 - > Desirability
 - Static efficiency
 - > Reallocation of resources: Pareto-efficient
 - > What if it does not occur?
 - > Use of revenue to invest in QoS and capacity
 - Dynamic efficiency:
 - > Intelligent vs. dumb networks
 - > Private islands vs. public network
 - Coordination undervalued? 3G
 - EU different from US?
 - > Investment in infrastructure
 - Vision of the Internet: towards broadcasting?

- Regulatory responses
 - > Reversibility as threshold issue
 1. Allow with minimal intervention and keep monitoring
 - Excessive degradation → Transparency obligations
 - General interconnection regime
 - > Commission proposal
 - Internal Market fragmentation
 - > Use EU standardization policy ?
 - Extortion: competition law
 - Market power (discrimination and blocking): see later
 - Infrastructure development: Regulatory deal ?

> Regulatory responses

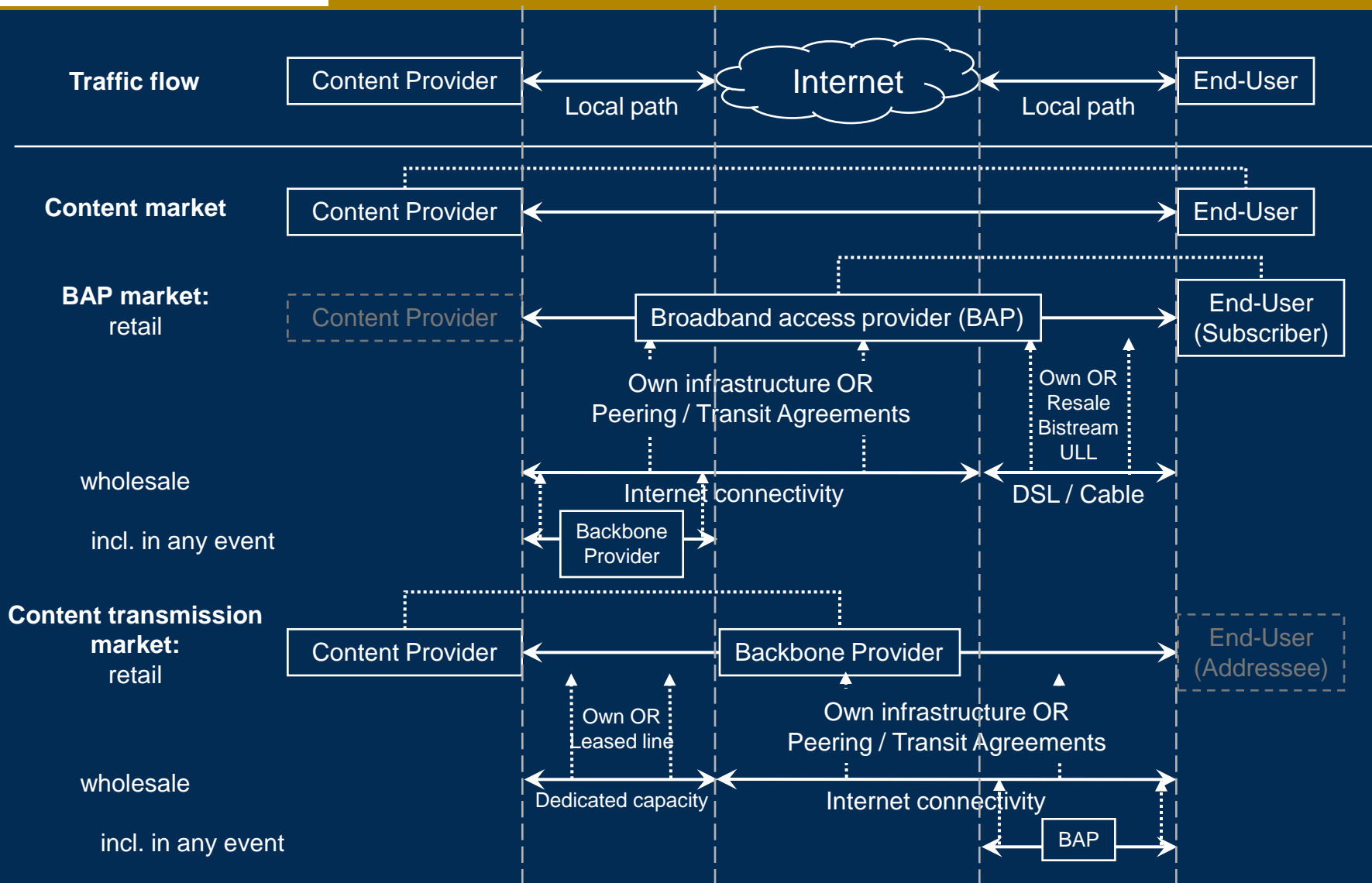
2. Prohibition ?

- Not through competition law or SMP as it is now
- Price control under reformed SMP regime
 - > Adequacy and proportionality ?
- Infrastructure development

- Relevant market definition
 - > Retail
 - Market for content
 - Broadband access provision (BAP market)
 - Market for transmission of content (from provider to end-user)
 - > Wholesale
 - Wholesale BAP
 - > Different US and EC infrastructure policies
 - Wholesale market for transmission of content

- Two competitive concerns
 - > Market power on the retail BAP market (probably arising out of control of underlying infrastructure (DSL, cable) at wholesale level), possibly leveraged on to content provision market
 - > Market power on the wholesale market for transmission of content to end-users arising from BAP control over termination to end-user

Concerns related to market power



←→ Traffic
 Main contracts
 - - - - - Sub-contracts (or self-provision)

- *Discrimination*
 - > In favour of own subsidiary or between different content providers
 - > Why?
 - Desire to integrate vertically
 - Differentiation: Turning BAP into two-sided platform
 - > Is it a problem?
 - Depends on whether the BAP market is competitive
→ Less of a concern in the EU (but mind switching costs)

- *Discrimination*
 - > Main lesson – It pays to keep retail BAP market competitive, even through wholesale regulation
 - > If there is still a problem
 - > Caught by Article 82 EC in substance
 - > Enforcement is key...
 - > Sector-specific regulation (SMP) – Could be useful but updated Recommendation still does not cover these markets
 - > Retail BAP
 - > Termination on wholesale market for transmission of content to end-users

- *Blocking*:
 - > Outright blocking, leaving aside discrimination
 - > Competition law or SMP regulation
 - Depends on market analysis (termination model?)
 - How to characterize the abuse / competitive concern
 - > EFD: *Bronner* as relevant precedent

- *Blocking*
 - > Basic interconnection rule: 5(1)(a) of the Access Directive
 - Public policy instead of market power perspective
 - > BAPs control access to end-users
 - > Necessary for end-to-end connectivity
 - > “Unreasonably restrict end-user choice to access Internet portals and services”
 - > → Applicable to all BAPs

General conclusions

- In Europe, different outlook than in US
 - > Current legal framework by and large adequate for discrimination and blocking: no need for NN legislation
 - BUT: Enforcement by whom and when?
 - > At the same time, situation in Europe impacts policy issues arising with respect to access-tiering as such
 - Beyond competition law and sectoral regulation: network neutrality as “right” ??
 - Hard to justify intervention now, save for limited aspects (transparency)
 - Potential internal market issue
 - > Lesson for infrastructure policy and “regulatory holidays”