



# Net neutrality: a Regulatory Perspective

Malcolm Webb  
Partner, Webb Henderson

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# Net neutrality: a regulatory perspective

## Net neutrality and traffic management

### What is net neutrality?

**Abstract:** A formal interpretation of network neutrality, for routing purposes, is the principle that all electronic communication passing through a network is treated equally. That all communication is treated equally means that it is treated independently of (a) content, (b) application, (c) service, (d) device, (e) sender address, and (f) receiver address. Sender and receiver address implies that the treatment is independent of end user and content; application/service provider.

## Traffic management

- It is widely accepted that *incentive* traffic management is necessary and efficient
- This *incentive* pure net neutrality is rare
- Some traffic management practices have raised concerns
- Which leads to the two big questions
  - which traffic management measures require a response; and
  - what that response should be.

Which traffic management measures require a response?

- **Blocking** a rival's content or applications
- **Throttling** a rival's content or applications
- Exclusively **prioritizing** (through access tiering) the ISP's own content or applications
- **Degrading** so much capacity that remaining "best efforts" service is **degraded**

**Thank you.**

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## Regulatory responses to net neutrality

**Cautious observation**

- Considered not to display national colours and not to feature a specific company
- Instead rely on **competitive, neutral and local market**
  - If the ITO does not purchase 100% of the goods that it already ordered by private, management will then use an ITO with more favourable terms, management practices
- Many countries have already implemented measures to control multinational market power and promote small competition
  - **open access obligation**
  - **anti-trust national rules**
  - **limits on foreign ownership ability to invest national**

### Tentative refinement

- After consultation, WPAs may decide the existing regulatory environment for the particular financial market does not entirely address the sustainability concerns
- Related policy advice will remain a useful reference
- competence**, as OJ and, and can be used to justify:
  - regulatory powers of a particular financial services institution
  - relevant **marketing** issues, so that, and more generally issues of satisfactory results
  - power to impose **minimum OJ**

Active reform

- **Blocking of lawful transfers, applications, services or use** on **non-lawful devices** (e.g., USA FCC rule)
- **where direct-to-airplane transfers, which might be reasonable or, where not enough blocking, render lawful transfers, applications or services effectively unusable or infeasible** (e.g., USA FCC rules, China, Singapore)
- **may be subject to reasonable efforts to protect** (except in ...)

## Recommendations

- **Review** existing telecommunications regulation and competition laws to determine whether the regulatory tools are already in place to adequately address the competition issues in the retail broadband market that tend to impact on the principle of net neutrality.
- Traffic management practices should be made **transparent** through clear and useful consumer information.
- Customers should be able to quickly and efficiently end their contract without high **switching costs**.
- ISPs should be transparent over their use of **DPI/DFI**.
- Regulators should possess the power (held in reserve) to impose **minimum QoS** requirements on Internet access services where over-prioritization degrades the "best efforts" Internet.
- If concerning traffic management practices continue, regulators should consider **specific targeted regulatory remedies**, including restrictions on blocking and unreasonable discrimination.

### What is net neutrality?

BEREC:

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[www.webbhenderson.com](http://www.webbhenderson.com)  
[malcolm.webb@webbhenderson.com](mailto:malcolm.webb@webbhenderson.com)

### Cautious observation



- Consider net neutrality issues and choose not to make a specific response
- Instead rely on **competitive retail broadband market**
  - if the ISP does not possess SMP, end users that are adversely affected by traffic management will shift to an ISP with more favorable traffic management practices
- Many countries have already implemented measures to control wholesale market power and promote retail competition
  - open access obligations
  - non-discrimination rules
  - forms of separation (particularly in fixed markets)

## Regulatory responses to net neutrality

### Tentative refinement



- After consideration, NRAs may decide the existing regulatory environment for the retail broadband market does not entirely address net neutrality concerns
- Relatively minor refinements may be necessary:
  - **transparency**, so that end users can see the traffic management practices of a particular Internet access service
  - reduced **switching costs**, so that end users can easily leave an unsatisfactory service
  - power to impose **minimum QoS**

### Active reform



Specific restrictions against:

- **blocking** of lawful content, applications, services or (on occasion) non-harmful devices (e.g., USA FCC rules)
- other **discriminatory practices**, which may be unreasonable or, while not outright blocking, render lawful content, applications or services effectively inaccessible or unusable (e.g., USA FCC rules, Chile, Singapore)
- usually subject to **reasonable traffic management** exception

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