Network Neutrality after Comcast v FCC

**Warning:** no “easy” answer/facts here!

- definition/understanding/enforcement of “network neutrality” is still evolving
  - ...as is FCC’s jurisdiction
- what is network neutrality:
  - collection of theoretical “net neutrality principles” mainly, protecting innovation, free speech, and competition on the Internet
  - set of legal rules and policies that the FCC enforces
**FCC: jurisdiction**

- Telecommunication Act 1934/96:
  - **Title II:** imposes “common carrier duties” on *telecommunications services*: reasonable rates, non-discrimination (regulated)
  - **Title I:** applies to *information services*:
    - no common carrier duties (not regulated)
    - grants FCC authority to “perform any and all acts, make such rules and regulations, and issue such orders ... as may be necessary in the execution of its functions”.

- Telecommunications Act 1996, section 706:
  - directs the FCC to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”

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**FCC and ISPs: jurisdiction**

- Telecommunication Act 1934/96:
  - **Title II:** imposes “common carrier duties” on *telecommunications services*
  - **Title I:** applies to *information services*:
    - grants FCC authority to “perform any and all acts, make such rules and regulations, and issue such orders ... as may be necessary in the execution of its functions.”

- Telecommunications Act 1996, section 706:
  - directs *What laws provide FCC jurisdiction?*
    - Is a cable network, or a DSL network, or a backbone ISP a telecommunication service or an information service provider?
    - and timely basis of advanced telecommunications capability to all Americans.”
FCC and ISPs: pre-2010 jurisdiction history

- **Circa 2000:** DSL, cable ISPs regulated by FCC as Title II telecomm services with common carrier duties
- **Circa 2003:** Cable re-classified by FCC as Title I information services (deregulation!)
  - DSL re-classified to Title I circa 2006
- **2005** Supreme Court case
  - Title I classification of cable ISP upheld
  - “Information service providers . . . are not subject to mandatory common-carrier regulation under Title II, though the Commission [FCC] has jurisdiction to impose additional regulatory obligations under its Title I ancillary jurisdiction to regulate interstate and foreign communications.”

Network Neutrality: principles (theory)

- **transparency:** ISPs should disclose how they manage their networks
- **protects innovation:** Internet as an innovation platform
  - role of innovating new services, content, and applications to end-users rather than to ISPs
- **protecting free speech:**
  - e.g., if text/video with Tea Party POV loaded slower than Socialist POV
- **maintaining competition:**
  - among ISPs
  - In market for content, services and applications
Reasonable Network Management

- Dropping/scheduling traffic, when a technical necessity (e.g., during overload)
  - a “reasonable network management”
  - not a network neutrality violation

**FCC Internet Policy Statement** [2005]

Consumers are entitled to (subject to “reasonable network management”):

[1] . . . access the lawful Internet content of their choice;
[2] . . . run applications and use services of their choice, subject to the needs of law enforcement;
[3] . . . connect their choice of legal devices that do not harm the network; [and]
[4] . . . competition among network providers, application and service providers, and content providers
Net neutrality law: Madison River

- 2005: ISP (Madison River) dropped Vonnage VoIP packets while letting its own VoIP packets through not just during congestion, but at all times
- not “reasonable network management”
- restraining competition
- lack of transparency

... ended with early settlement, Madison River stops dropping Vonnage packet, pays a fine

Net neutrality law: Comcast v FCC

- Comcast actions:
  - detects BitTorrent traffic
  - creates (de novo) TCP RESET packet and sent them to BitTorrent clients to close connection
- Comcast:
  - Initially: “we don’t do it”
  - Then: “OK we do it, but it’s reasonable management”
- DC circuit Court finding:
  - Not “reasonable network management”
  - Comcast must disclose network management practices, amend discriminatory practices and disclose new practices
Round 2
Net neutrality law: Comcast v FCC

- Comcast appeals on jurisdictional, procedural and due process ground ("Comcast: FCC has no legal basis to regulate us this way")
  - DC Circuit court: FCC lacks sufficient statutorily-mandated responsibility under Title I
  - earlier finding against Comcast vacated

FCC post Comcast v FCC (1)

FCC issues "Open Internet Rules" regarding broadband ISP operation:

- [Transparency rule:] … shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings
- [No blocking rule:] … shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.
- [Non discrimination rule:] .. shall not unreasonably discriminate in transmitting lawful network traffic over a consumer’s broadband Internet access service. Reasonable network management shall not constitute unreasonable discrimination
FCC post Comcast v FCC (1)

- FCC asserts jurisdictional authority under Section 706 of 1996 Telecom Act:
  - directs the FCC to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”
- Verizon and Metro PCS file complaints challenging Open Internet Rules (2012)
  - 1996 Telecomm Act prevents FCC from applying regulation to broadband access;
  - FCC doesn't have the authority to enact these rules;
  - FCC order itself violates the first and fifth amendments;
  - FCC rules are arbitrary and capricious.

Conclusion

- The “conclusion” has yet to be written!
- opinion:
  - concept of reasonable network management calibrates net neutrality principles to technical realities of Internet
  - reasonable network management: whether or not discriminatory practice is technically necessary, and, if not technically necessary, by discrimination’s effect on net neutrality principles
  - With strongly enforced transparency, some forms of discrimination could be “reasonable network management”. This could include certain types of QoS guarantees, ... with transparency, ISPs would then compete to define QoS in a way that conforms to consumers’ preferences.