

The FCC's Network Neutrality Ruling in the *Comcast* Case: Towards a Consensus with Europe?

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Abstract: In August 2008, the FCC found that Comcast's restrictions on peer-to-peer upload transmissions were unreasonably discriminatory, arbitrarily targeted a particular application, and deprived consumers of their rights to run Internet applications and use services of their choice. The *Comcast* ruling represents a significant change in the FCC's direction: given the FCC's past decisions that broadband Internet access services do not fall within the "common carrier" category, it is notable that the agency has now imposed nondiscrimination requirements on these services. This Article shows that the rationales articulated in the FCC's *Comcast* order, stressing both (i) concerns about protecting competition and (ii) concerns about protecting consumers from disruption of their ability to communicate freely and privately, are rooted in centuries of Anglo-American law defining the obligations of "common carriers." The FCC appears to be moving away from its traditional emphasis on the competition policy concerns, which justify asymmetrical regulation of dominant providers for the sake of enabling competition, and toward an emphasis on the consumer protection issues, which justify symmetrical regulation of all service providers regardless whether they have market power. These developments in the U.S. echo the discussion now going on in Europe in the context of the package of proposals on a new common regulatory framework for telecommunications, released by the European Commission on Nov. 13, 2007, and which is now being debated by the European Parliament and Council. On both sides of the Atlantic, a trend is emerging to permit network discrimination only if the discrimination is narrowly tailored to achieve legitimate objectives.

Key words: network neutrality, discrimination, common carrier, network management, Comcast, European Directives.

The U.S. Federal Communications Commission's landmark ruling regarding Comcast's violation of network neutrality principles¹ could have profound effects on Internet operators' network management practices, not only in the U.S. but also in Europe and around the world. The rationale articulated by the FCC is particularly instructive for European

¹ *Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications; Broadband Industry Practices; Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," Memorandum Opinion and Order, 23 FCC Rcd 13028 (released Aug. 20, 2008) ("Comcast Order").*

regulators and network operators, and has many points in common with proposed modifications to the European Framework Directive that would deal with "net freedoms." This major U.S. decision on network neutrality inevitably will affect developments in Europe (and elsewhere) due to the globalized nature of the Internet economy, just as ongoing policy decisions in Europe will affect developments in the U.S. On both sides of the Atlantic, a consensus appears to be emerging among policymakers that discriminatory handling of different categories of Internet transmissions of applications will not be allowed unless it is narrowly tailored to achieve an important and legitimate objective. Discrimination for anti-competitive purposes would be prohibited.

■ The Comcast Decision

The facts in the *Comcast* case are well known. Comcast is a cable television operator that offers its subscribers facilities-based broadband Internet access service. The FCC found that Comcast, purportedly in order to control congestion on its last-mile access network, was blocking or delaying consumers' upload transmissions for peer-to-peer applications such as BitTorrent, by inserting false "reset packets" into the TCP transmission stream. According to the FCC's ruling, Comcast did not disclose this practice to consumers or applications providers, and initially denied that it was doing so. Moreover, the FCC concluded that Comcast was interfering with peer-to-peer uploads not only during periods of peak network traffic or in locations where congestion was occurring, but regardless of the location, level of congestion, or time of day.

The FCC condemned this practice in a controversial order adopted by a narrow 3-2 vote, with Republican Chairman Kevin J. Martin joining the two Democratic commissioners in the majority, and the other two Republican commissioners dissenting. In particular, the FCC majority concluded that Comcast's practice violated the principles set forth in the FCC's 2005 *Internet Policy Statement*,² and that the FCC had authority to enforce these principles under the Communications Act of 1934. According to the order, Comcast's practice of using "deep packet inspection" to determine whether transmissions are peer-to-peer uploads and use of "reset" packets to disrupt

² *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Policy Statement*, 20 FCC Rcd 14986 (2005) ("*Internet Policy Statement*").

such connections was "invasive and outright discriminatory" because it arbitrarily and selectively targeted a particular application. The FCC determined that this conduct deprived consumers of their rights to access the lawful Internet content of their choice and to run applications and use services of their choice. The Commission stated that, in order to show that such a practice constitutes "reasonable network management," an Internet service provider has the burden of proving that "its practice should further a critically important interest and be narrowly tailored to serve that interest."³ While the FCC did not dispute that easing network congestion is a critically important interest, it found that Comcast's practice was not minimally intrusive, and therefore declared it unlawful.

The *Comcast* decision represents an extraordinary change of direction in FCC policy. The FCC had previously determined that broadband Internet access service, whether provided by cable operators or telephone companies, falls into the category of "information service" that is not subject to the "common carrier" requirements of the Communications Act that apply to "telecommunications service."⁴ The core obligation of common carriers is the obligation not to engage in unreasonable discrimination. Over the past decade, the FCC has determined that cable operators are not subject to such common carrier obligations when they provide broadband Internet access service,⁵ and removed or relaxed most of the anti-discrimination requirements, such as unbundling and "open network architecture," that formerly applied to incumbent local exchange carriers' (ILECs') provision of broadband transmission.⁶ The four principles in the FCC's 2005 *Internet Policy Statement* pointedly did not specify a nondiscrimination obligation for Internet service providers – and was criticized on that basis.⁷

³ *Comcast Order*, ¶ 47.

⁴ See 47 U.S.C. §§ 153(20) (definition of "information service"), 153(10) (definition of "common carrier"), 153(43) (definition of "telecommunications"), and 153(46) (definition of "telecommunications service").

⁵ *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, Declaratory Ruling, 17 FCC Rcd 4798 (2002), *aff'd*, *National Cable & Telecommunications Ass'n v. Brand X Internet Services*, 545 U.S. 967 (2005).

⁶ See, e.g., *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, Report and Order and Notice of Proposed Rulemaking, ¶¶ 76, 79 (2005) ("*Wireline Broadband Order*"), *aff'd*, *Time Warner Telecom, Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007).

⁷ See, e.g., *Comcast Order*, Statement of Commissioner Michael J. Copps, p.53 ("While today's Order represents important movement forward, it is not a full substitute for the fifth principle that I believe we must adopt. A clearly-stated commitment of nondiscrimination would make clear that the Commission is not having a one-night stand with network neutrality, but an affair of the heart and a commitment for life."). The four principles of the Internet Policy Statement are as

Yet in the *Comcast* decision, while the FCC carefully avoided referring to Comcast's service as a "common carrier" telecommunications service, the main violation it identified was the operator's unreasonable and unjustified discrimination against users of peer-to-peer applications. The FCC indicated that such discrimination was troubling for competitive reasons: "Peer-to-peer applications, including those relying on BitTorrent, have become a competitive threat to cable operators such as Comcast because Internet users have the opportunity to view high-quality video with Bit Torrent that they might otherwise watch (and pay for) on cable television."⁸ In other words, in the FCC's view, Comcast's discriminatory conduct raised particular concerns relating to the company's vertical extension of market power – its abuse of control over the network access pipes to interfere with its competitors' ability to provide video-on-demand (VOD) services that competed with Comcast's own services. Yet in the recent past the FCC has expressed confidence about the emergence of vigorous competition among broadband Internet access providers such as cable operators and telephone companies.⁹

The FCC also appeared particularly troubled by the invasiveness of Comcast's conduct with regard to users' transmissions and Comcast's disruption of consumers' expectations of being able to access Internet applications and content of their choice. The FCC compared the practice to a postal carrier who is expected to carry mail from one point to another, but who instead opens the mail and treats different packages differently based on the content. "Comcast determines how it will route some connections based not on their destinations but on their contents; in laymen's terms, Comcast opens its customers' mail because it wants to deliver mail not based on the address or type of stamp on the envelope but on the type of letter contained therein."¹⁰ FCC Chairman Kevin Martin, in his separate statement, appeared particularly disturbed by this invasion of customers' privacy: "Would it be OK if the post office opened your mail, decided they didn't want to bother delivering it, and hid that fact by sending it back to you

follows: "To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet, consumers are entitled to [i] access the lawful Internet content of their choice; ... [ii] run applications and use services of their choice, subject to the needs of law enforcement; ... [iii] connect their choice of legal devices that do not harm the network; ... [iv] competition among network providers, application and service providers, and content providers. The principles we adopt are subject to reasonable network management." *Internet Policy Statement*, ¶ 4 & n.15 (emphasis in original).

⁸ *Comcast Order*, ¶ 5.

⁹ See, e.g., *Wireline Broadband Order*, ¶¶ 76, 79.

¹⁰ *Comcast Order*, ¶ 41.

stamped 'address unknown – return to sender?'"¹¹ The FCC also expressed irritation with Comcast's use of secretive and deceptive means to avoid disclosing its practice and the company's earlier false statements about the practice, and even cited one commenter who deemed the practice a "possible case of consumer fraud."¹²

Comcast has appealed the decision on the ground that the FCC lacks legal authority to impose nondiscrimination requirements on entities that are not "common carrier" providers of telecommunications service. (This view is echoed by the Republican FCC commissioners who dissented from the order.)¹³ The FCC takes the position that it has "ancillary authority" to impose these requirements on non-common carriers.¹⁴

Comcast also objects to the FCC's use of *ex post* adjudication here in the absence of any specific, enforceable *ex ante* rules defining what conduct is and is not permissible – or even clarifying whether non-common carriers may be subject to such rules. The FCC defends its use of adjudication rather than regulatory rulemaking to enunciate and enforce new policies.¹⁵

■ "Common Carriage" and the rationale for nondiscrimination regulation

The FCC's rationale in the *Comcast* case requires a further examination of the concepts of common carriage and nondiscrimination in U.S. law and regulation. The common carriage concept encompasses both (i) concerns over competition policy and (ii) concerns over protecting consumers from disruption of their ability to communicate freely and invasion of their privacy. Common carriers are defined as entities that (i) hold out their services to the public for hire, without making individualized decisions whether and on what terms to deal, where (ii) such services constitute transmission only, without

¹¹ *Comcast Order*, Statement of Chairman Kevin J. Martin, p. 38.

¹² *Comcast Order*, ¶ 46.

¹³ See, e.g., Dissenting Statement of Commissioner Robert M. McDowell, pp. 61-63.

¹⁴ *Comcast Order*, ¶¶ 14-22.

¹⁵ ¶¶ 28-39.

any interaction with the contents of the transmission.¹⁶ Courts have held that "the primary *sine qua non* of common carrier status is a quasi-public character, which arises out of the undertaking to carry for all people indifferently;" and a "second prerequisite to common carrier status" is that "customers transmit intelligence of their own design and choosing."¹⁷ Thus, common carriers must be "common" – *i.e.*, offer services to the public on a nondiscriminatory basis – and must be "carriers" – *i.e.*, merely transmit data without acting upon, changing, or interfering with the content of the information received and delivered.

Most U.S. regulatory policies over the past decades have been motivated by the first prong of the common carrier definition. The FCC and other authorities have restricted unreasonable discrimination by common carriers due to concerns that dominant operators could harm competition by extending their significant market power (SMP) from their primary markets into vertical markets. For example, a common carrier could use its leverage over the transmission facilities to discriminate in favor of its own content or applications (or those from a favored contract partner), and could discriminate against those of competitors, thus unfairly harming competition in the adjacent market. Thus, as competition emerged in the provision of data-processing applications over communications networks in the early 1980s, the FCC required the telecommunications common carriers (at the time, the Bell operating companies with monopolies over local transmission facilities) to make available "open network architecture" and "comparably efficient interconnection" to competing information service providers.¹⁸

The second prong of the common carrier definition is sometimes overlooked, but is also critical. It is the basis for the Communications Act's definitions that distinguish between "information service" (a "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications") and "telecommunications" ("the transmission, between or among points specified

¹⁶ *National Association of Regulatory Utility Commissioners v. FCC*, 525 F.2d 630, 641 (D.C. Cir. 1976) ("NARUC I"); *National Association of Regulatory Utility Commissioners v. FCC*, 533 F.2d 601, 609 (D.C. Cir. 1976) ("NARUC II").

¹⁷ *Southwestern Bell Telephone Co. v. FCC*, 19 F.3d 1475, 1480 (D.C. Cir. 1994) (quoting *NARUC II*).

¹⁸ See, e.g., *Amendment of Section 64.702 of the Commission's Rules and Regulations*, 77 FCC 2d 384 (1980) ("Computer II"), *aff'd*, *Computer & Communications Industry Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982); *Amendment of Section 64.702 of the Commission's Rules and Regulations*, 104 FCC 2d 158 (1986) ("Computer III"), *vacated*, *California v. FCC*, 905 F.2d 1217 (9th Cir. 1990), subsequent history omitted.

by the user, or information of the user's choosing, without change in the form or content of the information as sent and received").¹⁹

The obligation of "common carriers" to enable users to transmit the content of their own choosing and to avoid interfering with the content of users' transmissions has a long history not only in the regulatory context, but going back centuries in the Anglo-American legal system. Historically, in the context of the law of bailments (the responsibility of persons entrusted with the goods of others), common carriers had a higher duty of care with respect to goods entrusted to them than other entities. (Note that the term "common carriers" refers not only to entities that transmit telecommunications but also to entities that transmit goods, such as railroads and oil pipelines, and historically referred to operators of ferries and wagon delivery services.) Common "carriers" carried or moved goods from one place to another, and had an obligation to transport goods but not to "break bulk" – *i.e.*, tamper with the goods entrusted to them. Indeed, a common carrier could be subject to criminal liability for breaking bulk and misappropriating the goods inside.²⁰ Carriers had to "carry" the packets entrusted to them without opening them to inspect or act upon the content of the packets ("deep packet inspection" would have been unthinkable in that context!). This concept carries forward into modern regulatory law in requirements that communications common carriers do not intercept, monitor or disclose the content of customers' calls except upon legal process from a law enforcement agency, as well as requirements that common carriers protect the privacy of customers' transmissions and other information.²¹ Significantly, these obligations apply regardless whether or not the common carriers are monopolies or possess market power.

¹⁹ 47 U.S.C. §§ 153(20), 153(43).

²⁰ Oliver Wendell Holmes, *The Common Law*, p.177 (1881) (Howe ed. 1963); A. Harding, *A Social History of English Law*, p.310 (1966); Sir. William Jones, *An Essay on the Law of Bailments* (London, 1781) (3d ed., Nichols, ed., London 1823) (available in Library of Congress Law Library). These sources cite *Southcote v. Bennet* (1601), *Coggs v. Bernard* (1705), and other English cases. See also *Bingham v. Cabbot*, 3 U.S. (3 Dall.) 19, 35 (1795) (statement of counsel for plaintiff in error discussing distinction between standards of care required of common carriers and those required of others).

²¹ See Electronic Communications Privacy Act, 18 U.S.C. §§ 2510-2522; Communications Assistance for Law Enforcement Act, 47 U.S.C. 1001-1010; Telecommunications Act of 1996, § 702 - Privacy of Customer Information (adding 47 U.S.C. § 222).

■ Asymmetrical regulation to protect competition vs. symmetrical regulation to protect consumers

The FCC's action against Comcast's discrimination against peer-to-peer applications appears to have been motivated in part by concerns over vertical competition, but perhaps even more critically by concerns over protecting consumers' ability to access the applications of their choice and prevent a network operator from interfering with those choices. The FCC stressed the latter rationale in finding that "the company's discriminatory and arbitrary practices unduly squelches the dynamic benefits of an open and accessible Internet and does not constitute reasonable network management."²²

What roles do the nondiscrimination and "common carrier" concepts have in the broadband Internet world? Network neutrality rules or other forms of regulation may be motivated, on the one hand, by concerns over abuse of market power by dominant operators that, unless controlled, would have the ability and incentive to harm competitors by leveraging their dominance over one market sector vertically into other related sectors. On the other hand, regulation may be designed to protect consumers from unfair practices by network operators, especially intrusions into consumers' privacy or interference with the content of their communications. The first of these concerns logically applies only to operators with market power. Accordingly, as a conceptual matter, regulatory measures to address this concern should be applied "asymmetrically" only to dominant service providers and not to their competitors. By contrast, the second issue – consumer protection – plausibly could apply "symmetrically" to all service providers, regardless whether they possess market power.

The first of these rationales (market power) may justify economic regulation such as price controls and resale/unbundling obligations. The FCC, however, has recently removed most price controls, unbundling obligations, and other forms of economic regulation that formerly applied "asymmetrically," only to incumbent local exchange carriers (ILECs) providing broadband Internet access transmission facilities.²³ Chairman

²² *Comcast Order*, ¶ 1.

²³ See, e.g., *Wireline Broadband Order, Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, 20 FCC Rcd 2533 (2005) ("Triennial Review Remand Order"), *aff'd*, *Covad Communications Corp. v. FCC*, 450 F.3d 528 (2006); *Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from*

Martin emphasized that the *Comcast* decision did "not address pricing, unbundling, or other economic regulation."²⁴ On the other hand, the FCC indicated that the *Comcast* ruling was consistent with prior FCC rulings that, even in the absence of market power, "we will not hesitate to adopt any non-economic regulatory obligations that are necessary to ensure consumer protection and network security and reliability in this dynamically changing broadband era."²⁵ For example, in a recent line of decisions the FCC has imposed regulations regarding universal service payments, emergency dialing, assistance to law enforcement, customer privacy, numbering, disability access and other obligations "symmetrically" to all providers of voice telephony over the Internet (VoIP), regardless whether they possess market power.²⁶

It is also significant that the market power rationale is designed to protect competition, and indirectly competitors, as well as the consumers who benefit from a competitive marketplace. By contrast, the drive to protect consumers' access to the content of their choice without interference by network operators only addresses the interests of consumers, not competitors. The FCC's 2005 *Internet Policy Statement* focuses on consumers' entitlements to access content, run applications, connect devices, and benefit from competition – but does not explicitly mention the interests of competing service providers. The *Comcast* decision mentions the competition issue, but as discussed above, focuses mainly on the consumer protection rationale.

Title II and Computer Inquiry Rules with Respect to Its Broadband Services, 22 FCC Rcd 18705 (2007).

²⁴ *Comcast Order*, Martin statement at 40.

²⁵ *Comcast Order*, ¶ 39 (emphasis added), quoting *Wireline Broadband Order*, 20 FCC Rcd at 14915, ¶ 11.

²⁶ See, e.g., *IP Enabled Services; E911 Requirements for IP-Enabled Service Providers*, 20 FCC Rcd 10245 (2005); *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, 21 FCC Rcd 5360 (2006); *Universal Service Contribution Methodology*, 21 FCC Rcd 7518 (2006); *Implementation of the Telecommunications Act of 1996; Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information* 22 FCC Rcd 6927 (2007); *IP-Enabled Services; Implementation of Sections 255 and 251(a)(2): Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment By Persons With Disabilities*, 22 FCC Rcd 11275 (2007).

■ U.S. and European approaches

In that regard, it is interesting to compare U.S. and European approaches. On Sept. 30, 2008, FCC Chairman Kevin Martin and EU Commissioner for Information Society and Media Viviane Reding appeared together as keynote speakers at a conference on network neutrality in Copenhagen. Both leaders expressed strong support for maintaining an open and inclusive Internet, and both stated that government intervention will be necessary in some circumstances to prevent abusive or anti-competitive conduct by network operators. Chairman Martin reiterated the four consumer-based principles of the 2005 *Internet Policy Statement*, as well as the *Comcast* decision rooted in those principles.²⁷ Chairman Martin discussed consumers' rights to access applications and services, but did not address the interests of providers of applications or services. On the other hand, Commissioner Reding emphasized her concern over the need "to ensure that the Internet remains open from the point of view of service providers wanting to deliver new, innovative services, AND open from the point of view of consumers wanting to access the services of their choice and create the content of their choice."²⁸

In her speech, Commissioner Reding stated her belief that competitive forces and consumer demands would compel Internet service providers not to restrict consumers' choices, and stated that existing rules "already provide us with helpful tools to deal with uncompetitive situations, should these occur." She also set forth her view that network management and traffic prioritization are legitimate and beneficial in many cases:

"[t]he Commission's vision of an open and competitive digital market does allow for traffic prioritisation, especially for providing more innovative services or managing networks effectively. We have to allow network providers to experiment with different consumer offerings. In the end, it will be up to the consumers to decide to change to a provider that offers them what they would like."

²⁷ Chairman Kevin Martin, Keynote Remarks, Network Neutrality Conference – Implications for Innovation and Business Online (Copenhagen, Sept. 30, 2008), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-285830A1.pdf (as prepared for delivery).

²⁸ Viviane Reding, EU Commissioner for Information Society and Media, "Network neutrality and Open Networks – Toward a European Approach," Network Neutrality Conference – Implications for Innovation and Business Online (Copenhagen, Sept. 30, 2008), available at <http://www.europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/08/473&format=HTML&aged=0&language=EN&guiLanguage=EN> (as prepared for delivery) (emphasis in original).

Her statements were consistent with the European Commission's relatively narrow proposals on this topic in its package of proposals on a new common regulatory framework for telecommunications, released on Nov. 13, 2007. The Commission's proposals include a statement echoing the FCC's 2005 Internet Policy Statement:

"End-users should be able to access and distribute any lawful content and use any lawful applications and/or services of their choice".²⁹

Also, the Commission's proposals would authorize the national regulatory authorities to prevent degradation of quality of service by setting minimum quality levels for network transmission services for end-users. Where appropriate, the Commission could adopt implementing measures to ensure a minimum level of harmonization in this area.³⁰ The package of proposals of the Commission must be adopted by the European Parliament and Council before they become new law.

In its first reading, on September 24, 2008, the European Parliament voted for amendments that would authorize regulators to impose:

"[t]ransparency obligations on public communications network providers to ensure end-to-end connectivity, including unrestricted access to content, services and applications, . . . disclosure regarding restrictions on access to services and applications and regarding traffic management policies and, where necessary and proportionate, access by national regulatory authorities to such information needed to verify the accuracy of such disclosure."³¹

Another amendment would require that "any restrictions to users' rights to access content, services and applications, if they are necessary, shall be implemented by appropriate measures, in accordance with the principles of proportionality, effectiveness and dissuasiveness."³² Operators would also

²⁹ § 8.2b) of the Framework Directive, as revised by the proposed amendment.

³⁰ § 22 of the Directive on Universal Service, as revised by the proposed amendment.

³¹ See European Parliament Legislative Resolution of 24 September 2008 on the proposal for a directive of the European Parliament and of the Council amending Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and Directive 2002/20/EC on the authorisation of electronic communications networks and services (COM(2007)0697 – C6-0427/2007 – 2007/0247(COD)) (Codecision procedure: first reading), Amendment 121.

³² 28 2 a) of the Directive on Universal Service, as added by the proposed amendment.

be required to provide clear information on possible restrictions of access to content and services, to enable end-users to make an informed choice.³³

These amendments' emphasis on transparency and disclosure of traffic management policies echoes the concerns expressed by the FCC in the *Comcast* decision over Comcast's lack of candor regarding its restrictions of peer-to-peer transmissions. The emphasis on end-to-end connectivity and access to content, services, and applications is quite similar to the FCC's Internet policy principles. In her Sept. 30 speech, Commissioner Reding commended the Parliament's action and did not take issue with the network neutrality amendments. The ball is now in the court of the Council of Ministers, which will review and perhaps modify the proposals in November.

In the U.S., the FCC and Congress may well modify policies course following the 2008 Presidential elections. Nonetheless, it seems clear that the approaches taken by U.S. and European policymakers are converging toward a net neutrality policy that emphasizes symmetric regulation designed to protect consumers, with a tolerance for network discrimination measures only to the extent that the measures are proportionate and seek to achieve a legitimate objective.

■ Implications of the *Comcast* Decision for "reasonable network management" practices

The FCC's *Internet Policy Statement* and the *Comcast* order recognize that network management is necessary and beneficial. It is beyond doubt that all network operators, including providers of Internet access facilities as well as operators of IP "backbone" transmission deeper in the network, must engage in network planning, monitoring traffic flows, dynamically routing traffic to achieve load balancing, prioritizing certain traffic, and controlling network security. But the *Comcast* decision breaks new ground in defining which network management practices will be considered "reasonable" and ordering an end to practices deemed to be "unreasonable." The FCC held that, while controlling traffic flows to ease network congestion is not objectionable in itself, it was unreasonable for Comcast to do so by detecting peer-to-peer uploads and sending TCP "reset" packets to interrupt such transmissions. The FCC ruled that by doing so, Comcast had unreasonably

³³ 21 of the Directive on Universal Service, as revised by the proposed amendment.

discriminated against a particular type of Internet application. Comcast's failure to disclose this practice – *i.e.*, its lack of transparency – further compounded the harm, according to the FCC.

The burden of proof articulated by the FCC will be influential in future decisions involving different network management practices in the U.S., Europe, and elsewhere. The FCC held that, in cases where network operators apply disparate treatment upon particular applications, the operator has the burden of demonstrating that the "practice should further a critically important interest and be narrowly tailored to serve that interest."³⁴ This raises a host of questions about what network management practices will be deemed reasonable in the future, and what network operators will need to demonstrate to prove that their conduct is "narrowly tailored" to serve a "critically important interest."

Would Comcast's practices have been justifiable if Comcast had fully disclosed them to consumers and applications providers? Presumably not: while the order stresses Comcast's failure to disclose its practices, it seems clear that some practices would be deemed unreasonable even if disclosed. The FCC held the practice itself to be unreasonable and ordered Comcast to end it, not just to disclose it. Moreover, the disclosure of a network management practice in densely worded "terms of service" on a website may not satisfy the FCC's or other regulators' expectations, and it is not clear what type of disclosure would.

The FCC found it was unreasonably discriminatory for Comcast to selectively block peer-to-peer uploads using TCP "reset" packets. But would it have been reasonable for Comcast to have managed congestion by sending TCP "reset" packets to interrupt all high-bandwidth transmissions in a non-discriminatory manner, not just peer-to-peer uploads? To what extent does the discrimination rationale really matter?

Most significantly, the *Comcast* ruling begs the question of what types of conduct will be deemed unreasonably discriminatory. In what circumstances may network operators prioritize certain types of traffic over others? Some network neutrality advocates argue that it is inherently discriminatory for any types of traffic or applications to be prioritized, since giving a higher priority to some transmissions means that others will be given lower priority. The *Comcast* case does not explicitly endorse this view; to the contrary,

³⁴ *Comcast Order*, ¶ 47.

Chairman Martin indicated that providers could legitimately prioritize VoIP calls.³⁵ However, the case leaves open the question of what showing network operators will need to make to demonstrate that prioritization is "narrowly tailored" to serve a "critically important interest."

Is it unreasonable for a network operator to prioritize traffic where a particular content or applications provider has paid a premium amount for higher Quality of Service (QoS) guarantees? Such practices are common today and could well become even more widespread in the future as applications are developed that require lower latency. Will the uncertainties generated by the *Comcast* decision hamper such developments? Or can operators rely on Chairman Martin's statement that the decision does "not address pricing, unbundling, or other economic regulation?" Could this be interpreted as an indication that discrimination involving blocking or interfering with traffic will not be tolerated, but that disparate pricing will be reviewed more leniently?

In the *Comcast* case and the 2005 *Madison River* case³⁶ (the only other FCC determination regarding network management, focusing on the blocking of ports used for VoIP service), the FCC has examined network management practices only in the context of wired broadband Internet access "tails" reaching mass market consumers. It is unclear whether the same principles apply to other types of network facilities or service providers. In the AT&T/BellSouth merger case, the merging parties were required to comply with the *Internet Policy Statement*, but enterprise managed IP services and Internet Protocol television services were specifically exempted from this obligation.³⁷ A broad dispute (beyond the scope of this article) is now raging over whether and to what extent wireless services should be subject to network neutrality obligations.

Does the nondiscrimination obligation in the *Comcast* case imply that network neutrality or nondiscrimination obligations could be extended to Internet backbone transmission operators at a higher level in the network?

³⁵ *Id.*, Martin statement, p. 40.

³⁶ *Madison River LLC and Affiliated Companies*, Consent Decree, 20 FCC Rcd 4295 (Enforcement Bur. 2005).

³⁷ *AT&T Inc. and BellSouth Corp. Application for Transfer of Control*, 22 FCC Rcd 5562, Appendix F, slip op. p. 154 (2007) ("*AT&T/BellSouth*"). See also *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, 20 FCC Rcd 18290, Appendix F, slip op. p. 125 (2005) ("*SBC/AT&T*") (imposing network neutrality condition with no carve-out); *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, 20 FCC Rcd 18433, Appendix F, slip op. p. 130 (2005) ("*Verizon/MCI*") (same).

Will peering arrangements and other forms of Internet backbone interconnection now be subject to regulatory scrutiny? Will operators be called upon to provide justification to the FCC if they provide more favorable arrangements to some interconnecting networks (*i.e.*, peering exchange of traffic with no charge) and less favorable arrangements to others (*i.e.*, interconnection fees)? To what extent will the non-discrimination argument become a source of leverage for smaller operators in negotiations over peering arrangements with larger backbone providers? Significantly, in the AT&T/BellSouth, SBC/AT&T, and Verizon/MCI merger cases, the parties were required to maintain a specific number of discrete settlement-free peering arrangements for Internet backbone services, due to concerns over vertical integration between ILECs and large Internet backbone operators.³⁸

In Europe, how will symmetric net neutrality obligations relate to asymmetric non-discrimination obligations imposed on SMP operators under article 10 of the Access Directive? Will symmetric net neutrality regulations weaken the European philosophy that remedies should be imposed only where market analysis reveals a competition problem?

Chairman Martin emphasized in the *Comcast* case that the FCC's Internet principles do not protect "illegal content, such as child pornography or content that does not have the appropriate copyright."³⁹ This could be viewed as an invitation to network operators to screen for such illegal content and block it. On the other hand, Chairman Martin expressed serious concerns about the reasonableness of "deep packet inspection" in the context of Comcast's practices. Comcast used "deep packet inspection" to monitor customers' usage in order to control peer-to-peer uploads. Martin compared "deep packet inspection" with the post office opening your mail and "looking inside its subscribers' communications (reading the 'packets' they send)" – in other words, a problematic invasion of consumers' privacy.⁴⁰ Deep packet inspection is already used by operators to help identify applications that are to receive priority treatment in the context of corporate networks. The idea of prioritizing certain traffic will become more and more prevalent with new generation networks that manage different qualities of service. In new networks, deep packet inspection and prioritization of traffic will be commonplace. DPI has recently come under scrutiny in the U.S. Congress because of the technology's ability to detect

³⁸ *AT&T/BellSouth*, p.155; *SBC/AT&T*, p.124; *Verizon/MCI*, p. 130.

³⁹ *Comcast Order*, Martin statement, p. 39.

⁴⁰ *Id.*, pp. 38, 40.

particular websites and content consulted by end-users for purposes of behavioral advertising.

The *Comcast* decision does not resolve the question of when "deep packet inspection" will be deemed reasonable or unreasonable. What justification is needed to show that "deep packet inspection" is used in a "narrowly tailored" manner to serve a "critically important interest?" Is it reasonable to invade customers' privacy when screening for child pornography or pirated content, but not when screening for disfavored applications? Does it matter whether customers have given their consent to screening? This is closely related to questions in the U.S. and in Europe regarding behavioral advertising and targeting, as well as potential collaboration between Internet service providers and content providers to screen and block file transfers that violate copyright laws.

■ Conclusion

While the FCC's *Comcast* decision and parallel initiatives by European policymakers have their roots in the historic obligations of "common carriers," the question of net neutrality and the right of operators to discriminate is now also very much linked to the right of the consumers to access content and services of their choice. Net neutrality can be viewed from the angle of asymmetric "SMP" regulation, designed to prevent anti-competitive vertical leveraging, or from the angle of symmetric "consumer protection" regulation, designed to prevent undue limitation of consumer's choice. The current tendency in the U.S. and Europe is to emphasize the symmetric, consumer protection angle. On that front, there seems to be emerging a consensus that discrimination or prioritization measures would be tolerated only if they are narrowly tailored to achieve a legitimate objective. Regulators will need to advance with care, however, when imposing symmetric remedies, so as not to invade the space of so-called "economic" remedies, which in Europe at least require a market analysis and identification of an operator with SMP before remedies can be imposed. Like any symmetric regulation, net neutrality rules may have a tendency to expand and creep into new areas previously more appropriately treated by asymmetric regulation.