Pitting the Web’s Users Against Its Gatekeepers — NYTimes.com

BERLIN — With the majority of Internet traffic expected to shift to congestion-prone mobile networks, there is growing debate on both sides of the Atlantic about whether operators of the networks should be allowed to treat Web users differently, based on the users’ consumption.

Proponents of the current system — called network neutrality — see that principle as a kind of civil rights declaration of the digital age, one that requires the gatekeepers of the global Internet to treat all users equally, regardless of application, source or download limit.

While operators have never been required to maintain neutrality, the industry has created that expectation largely by charging users a flat rate for unlimited Internet access.

But there is a big flaw in the concept, according to the operators: Networks have never been neutral. They have always been actively managed to some extent since their inception in the 1980s to ensure that all customers get a basic “best effort” level of service.

If an operator could not restrain bandwidth hogs, who typically make up 15 percent of customers but who generate 80 percent of the traffic, most Internet users would experience poor service.

“The Internet has never been a neutral environment left to develop freely on a first-come, first-serve basis,” said Stuart Orr, the head of the telecommunications group in Europe, Africa and Latin America for Accenture, a U.S. software services consultant.

The arcane issue of network management, and the free speech and competition issues it raises, has taken on broader political importance as operators have increasingly micromanaged the flow of data, favoring some users over others as they have sought to handle exploding levels of traffic or deliver premium broadband service at guaranteed speeds to heavy users and businesses.
In the United States, users of the BitTorrent file-sharing service, a large generator of broadband traffic, last year challenged a cable operator, Comcast, that had blocked the service by identifying and disabling a common protocol used by BitTorrent users.

The Federal Communications Commission ordered Comcast to stop the blocking. Comcast challenged the ruling. On April 6, an appeals court in Washington sided with the operator, saying the F.C.C. could not tell Comcast how to manage its network.

In Brussels, the European commissioner for the digital agenda, Neelie Kroes, plans to hold a public consultation on net neutrality this summer, which could lead to a push for new laws or regulations for operators.

Earlier this year, Ms. Kroes warned mobile operators not to block or hinder Internet voice services like Skype from their networks.

Operators are worried that any rigid legal mandate that forced them to observe net neutrality standards would be unworkable and make the economics of high-speed wireless broadband less attractive, which could limit future investment and improvement to the networks.

“We have no interest as an industry in policing individual surfing habits or acting as the gatekeeper for information,” said Frederic Gastaldo, the head of strategy and innovation at Swisscom. “Historically, our industry has resisted attempts to force operators to act as the personal gatekeepers of information. That would be a very negative marketing approach. However, customers who do excessively use our data network are a big challenge for us.”

Congestion is more problematic for mobile than landline broadband operators because wireless broadband capacity is limited by the ability of individual base stations to process the Web activities of hundreds of users simultaneously. The more users per station, the less performance for each user.

To avoid bottlenecks, operators use techniques like “traffic shaping,” which sorts traffic to ensure basic service for all, or “throttling,” which applies a general brake on large streams of data.

Kabel Deutschland, the largest German cable TV operator, has one million broadband customers. Its coaxial and glass-fiber network is so far able to satisfy all customers without restrictions, said Georg Merdian, director of the company’s infrastructure regulation.

But he said that the number of its broadband customers was doubling each year. “We anticipate we will soon have to use some kind of management techniques,” Mr. Merdian said.

For most mobile operators, traffic management is a fact of life.

Vodafone, one of the largest mobile operators in Europe and a part owner of Verizon Wireless, the No.1 wireless operator in America, routinely alerts its customers when they exceed the download limits of their service packages. Like all other operators, Vodafone uses sophisticated software that can pluck users or applications from the digital clamor.

“We use a form of network management to say, ‘I’m sorry, you are not going to be able to get the same level of service unless you decide to top up,’” said Richard Feasey, Vodafone’s public policy director in London.
As data traffic levels rise, some executives, like César Alierta, the chairman and chief executive of the Spanish operator Telefónica, and Vittorio Colao, the Vodafone chief executive, have floated the idea of charging not only customers but also Web sites that generate lots of data traffic, like Google, Amazon and Facebook, for faster, guaranteed service.

Web businesses, which depend on fast Internet paid for by individual customers, oppose the idea and have been pushing lawmakers in Brussels and Washington to adopt restrictions preventing operators from making deals with content providers.

Prohibitions like that would make an operator’s business untenable, eventually reducing cable and phone networks to unprofitable, crowded data freeways, said Robert Mourik, the director of Telefónica’s regulatory policy in Europe.

“We have an explosion of traffic, but our revenues have not been growing at the same pace or staying flat,” Mr. Mourik said. “We are not looking at content on the Internet. We are not trying to police the network. What we are looking to do are commercial deals.”

Whether operators can successfully sell preferred Internet access to big Web businesses remains to be seen. Such a move would drastically alter the economics of the Internet, forcing content providers, in effect, to pay a toll, and perhaps a heavy toll, for access.

Naturally, none of the big Web sites are interested in doing that.

In February at an industry convention in Barcelona, Eric Schmidt, the chief executive of Google, was asked to comment on statements made by Mr. Colao of Vodafone, who had called for the right to clinch commercial deals with big Web businesses like Google.

Mr. Schmidt, who during a speech that day had stressed Google’s role in helping network operators build their wireless broadband businesses by attracting consumers to the mobile Web, declined to comment, adding that Mr. Colao was a friend.