# Will net neutrality nuke the Internet?

The FCC is making a massive U-turn on its net neutrality policy at the behest of President Obama – this could be a very costly mistake for the USA.

On Thursday the U.S. Federal Communications Commission (FCC) is voting on proposals to implement so-called 'net neutrality'. The details have not yet been made public – but we have hints in a speech by President Obama on 10th November and public comments by the FCC Chair, Tom Wheeler, earlier this month. They flag a major change in FCC policy that has huge implications for both fixed and mobile networks.

Since December 2010, the FCC had been pushing for just three basic rules for net neutrality. As explained in this column in May last year (see "Knotted in net neutrality"), Tom Wheeler sought to make a distinction between the customer access network and interconnection with edge (content) providers and to allow reasonable discrimination (including paid prioritisation; like the Netflix deals with major carriers). This light-handed approach is to be dumped.
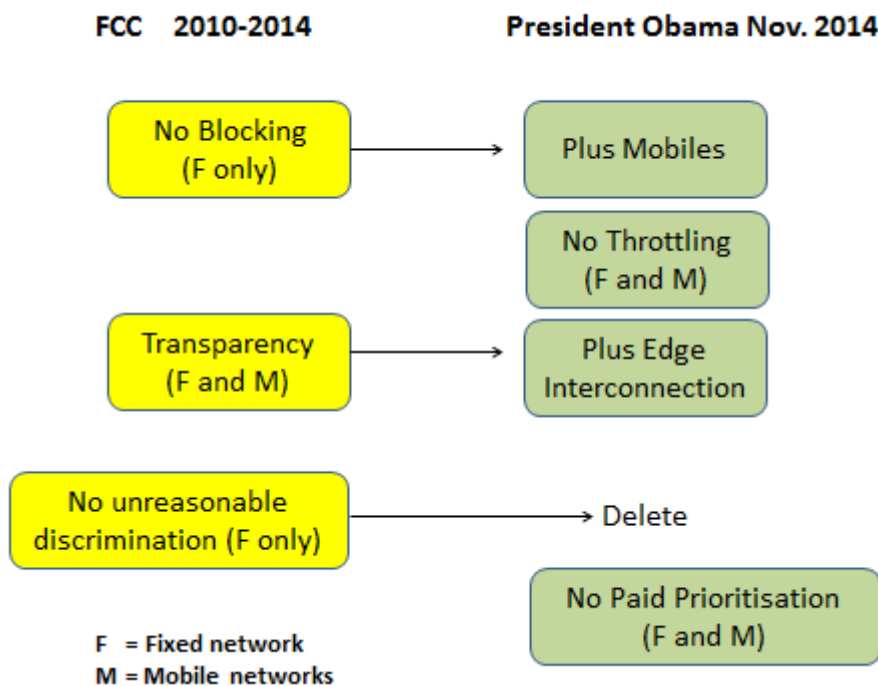
The catalyst appears to be President Obama's intervention. The changes are illustrated here.

First, while only one of the original rules proposed by the FCC was to apply to mobile networks, now any proposed rules would apply to both fixed and mobile networks.

Second, "no (speed) throttling" has been added. Of course, throttling has been a common means of enforcing data cap allowances in Australia. In the USA, throttling is probably used against file sharing to enforce fair use policies, but data caps will become common.

Third, the President has insisted (contrary to Tom Wheeler's position last year) that interconnection between ISPs and content providers should be subject to the same rules that apply between the ISP and its customers.

Fourth, the President has asked the FCC not to allow "commercially reasonable" discrimination and, in fact, to outlaw paid prioritisation (e.g. of the kind that Netflix currently has with some carriers). Again, it looks like Tom Wheeler will comply: "Originally, I believed that the FCC could

assure internet openness through a determination of 'commercial reasonableness' under Section 706 of the Telecommunications Act of 1996," wrote Wheeler in Wired Magazine, recently.

"While a recent court decision seemed to draw a roadmap for using this approach, I became concerned that this relatively new concept might, down the road, be interpreted to mean what is reasonable for commercial interests, not consumers"

On my reading, the President is not saying that every byte is sacred. He may be saying only that the network protocols used to guarantee the quality of voice calls should be transparent and apply across the whole internet chain in the USA. If so, that is good.

The fact is that not all bytes are equal. Packet switching was designed for digital file transfers between computers and then adapted for email and Web pages. Now it will be applied to voice (and the FCC wants to see all fixed voice migrate to IP) and soon other time-sensitive applications which will emerge with the Internet of Things (e.g. real time data for autonomous vehicles). Some packets are more perishable than others.

The FCC has taken nearly four million public submissions on net neutrality – it is a vexed and emotional issue. One the one hand, some net-advocacy groups see fast toll-ways and virtual dirt roads emerging on the internet without network neutrality and so threatening the human right to receive information without interference.

On the other hand, operators ask why Netflix, which accounts for a third of peak traffic should get a free ride.

Throttling was mentioned as a common practice in Australia that may be prohibited in the USA. But, what about the "zero rating" of some content as done by BigPond and others here? That practice would probably fall foul of the proposed new rules in the USA.

In his new sales pitch for "fast, fair and open" broadband, Tom Wheeler draws a parallel with his own experience in the mid-1980s. His start-up company, NABU, provided "the then blazing speed of 1.5 Mbit/s" over unregulated cable while AOL was delivered over the regulated copper network. NABU went broke.

I sympathise. But I am not sure how it explains his approach to net neutrality. He believes that his revised proposal "assures the rights of internet users to go where they want, when they want, and the rights of innovators to introduce new products without asking anyone's permission".

I think it is more likely to lead to regulation that requires the FCC to rule on exceptions for new services. FCC Commissioner Ajit Pai certainly thinks so. On a quick reading of the President's secret 332 page plan given to the FCC on 5th February, he says that "net neutrality proponents are already bragging that (the proposals) will turn the FCC into the 'Department of the Internet'".

But Wheeler is right to say that "both human nature and economic opportunism act to encourage network owners to become gatekeepers that prioritize their interests above the interests of their users". But it is not clear that the post-Obama rules to be decided on Thursday will control that. But, whatever is decided on Thursday will inevitably wind up in court anyway - again.

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