BOOK REVIEW

'NET NEUTRALITY: TOWARDS A CO-REGULATORY SOLUTION'

Christopher T. Marsden

London: Bloomsbury Academic, 2010, 320 pp, £60, ISBN 978-1-84966-006-8 (hbk).

Net neutrality, explains Christopher T. Marsden on the second page of this book,

is about the rules of the road for Internet users, and about the relationship between the owners of those roads and the users. Government is asked to make a decision as to which users have priority and whether road charging should be introduced, ostensibly to build wider and faster roads in future.

On 20 October 1999, the IDT Corporation, then a big a New Jersey based Internet service provider, blocked all email from the UK because some of its customers had received a large number of offensive unsolicited emails. These appeared to come from a UK address, but the spammer had actually exploited a security hole in a UK university system, making it appear as if the bulk emails were originating there. Just before Christmas 2004, Verizon reportedly¹ blacklisted and blocked email coming from IP addresses allocated to a collection of UK and European ISPs. IDT did not, allegedly, contact the University (of Leeds) before the action was taken. The blocking continued for several weeks. The response – to cut off a whole country - was a bit drastic, even if the emails had come from the UK. Given congestion on the network, traffic management is standard practice for ISPs everywhere, though there is a dearth of independent empirical research as to the extent, the precise pattern or the nature of such activity. We simply have no idea whether countrywide lockdowns or similar widespread filtering are commonplace or rare.

I mention the IDT story in particular because it was in 1999 that Chris Marsden began his residential fellowship at Harvard Kennedy School, where the seed that was to grow into his excellent book, 'Net Neutrality: towards a co-regulatory solution', was planted. It was the beginning of 10 years of globe trotting research and engagement with a who's who of the smartest minds in the business: legal and technical scholars, practitioners and cross disciplinary polymaths who helped to shape the author's ideas on this complex but hugely important subject.

The first and most important thing to say about this book is that it should be compulsory reading for policymakers everywhere. It manages to serve the dual purpose of being a primer on the subject for the general reader while also being an essential handbook for the specialist and the policymaker. Dr Marsden gets to the heart of the key issues of net neutrality:

¹ J Gartner, "Verizon's E-Mail Embargo Enrages", 1 October 2005, available at http://www.wired.com/techbiz/media/news/2005/01/66226.

- Network economics
- Vertical integration and oligopolistic market evolution and concentration
- Traffic management and quality of service
- Civil rights speech and privacy
- Conflicting needs of the large spectrum of Net users
- Regulators' limitations
- Intermediary liability
- Commercial and political forces driving the internet towards a future of control
- European law
- The absence of individual Net user influence on policymakers
- Co regulatory policy proposals

And indeed many more. It is probably the single most comprehensive analysis of net neutrality you will find between the covers of a single volume.

If I had one generic criticism of the book it is that the author does not provide enough detail in relation to the engineering and technology of networks. I think there is real value in regulators and policymakers understanding the difference between circuit and packet switching, for example, and this could avoid a lot of confusion. But I *would* say that, because I am an engineer. In conversation with the author, he pointed out to me that the literature on technology and engineering in this area is already rich, which is true, but it is unlikely to be perused by many non technical policymakers. That is, however, a minor criticism. Dr Marsden had no choice but to leave out vast swathes of material that he would no doubt have liked to have included – that is the nature of a monograph.

Tom Standage, digital editor at *The Economist* magazine, recently criticised the concept of net neutrality as being 'silly' and too vague – if you get three geeks in a room you will get four different definitions of the concept (which is probably true!) – and that thing that gets invoked by anyone complaining about something they dislike about the Internet. Geeks and consumer advocates have been arguing that the law should guarantee net neutrality, thereby disabling network operators' power to engage in discriminatory practices. Mr Standage is concerned that attempts to write net neutrality into law on both sides of the Atlantic will just end up making matters worse. The Internet is not neutral now, and there are lots of things that we do not want to be neutral. For example, it is desirable that spam is blocked, or gamers might want superfast low latency broadband services that they would be prepared to pay extra for. The danger of saying that things must stay as they are is that you fossilise the Internet in its current state. A simplistic net neutrality law might just do that, making illegal a lot of useful things that are presently being done. So the best legislation in relation to net neutrality is none.

I share the concerns of the author about the complexity and the dangers of getting it wrong. On the other hand, the vagueness and complexity of the concept and its multiple advocates is not necessarily a bad thing. Just as James Boyle has invoked the environment and environmentalism in his call to protect the public domain, perhaps net neutrality can serve a similar function in relation to the open Internet. After all, 'environment' is quite a vague term with many meanings, but it is also an articulation

² BBC Radio 4, 'Click On', Monday 18 October 2010.

of a shared interest that brings that interest into being.³ The hunter and the animal rights activist may dislike each other intensely, but they have a shared interest in protecting the ecology and habitat of the animals they are interested in.

In any case, you will not find any over-simplified, table-thumping advocacy in Chris Marsden's book - of either the 'cure it with net neutrality' or 'cure it with market forces' variety. This is despite the fact that the introductory chapter begins with a quote from Barack Obama that concludes: "We can't have a situation in which the corporate duopoly dictates the future of the Internet and that's why I'm supporting what is called net neutrality." Dr Marsden, on the contrary, provides a comprehensive and pragmatic analysis of the state of net neutrality and its regulation and expects both free market fundamentalists and net neutrality purists to disagree with his suggested co-regulatory way forward.

You get an idea of the scope of the book through the Introduction, which provides a whistle-stop tour of: net neutrality, network economics, European digital television regulation, interoperability, Microsoft litigation, Napster, Skype, mergers and acquisitions, EU telecoms liberalisation (and the variability in the effectiveness of national regulatory authorities in ensuring local loop competition), GERT (Group of European Regulators in Telecoms),⁴ the 2001-2002 unravelling of the universal service commitment in the US, Machiavellian incumbent power games, the need to recognise broadband infrastructure as public works, the ruthless competition and government direction in Korea, the end to end principle, transparency failures, absence of empirical research, quality of service guarantees, 3G in Japan, traffic management, deep packet inspection, and the inevitability of discrimination where architecture permits it.

All that and more – including a passionate assertion (with which I wholeheartedly agree⁵) that the creation, operation and monitoring of open Internet policy is too important to be left to the experts, since it is about fundamental human rights and consumer welfare, necessitating a balanced approach to net neutrality – in an introduction, before he even outlines the structure of the book, leaves you in little doubt that although it is written in an accessible style, this is a tome that will require the full concentration of the reader. It is clear that net neutrality resides firmly in the realm of what Russel L Ackoff would have described as a 'mess', a collection of complex problems interacting with other complex problems and therefore part of a set of interrelated problems, or a system of problems.⁶

It is important to point out that Dr Marsden distinguishes two separate nondiscrimination commitments in net neutrality, something which itself would likely illicit gnashing of purists' teeth. What he calls 'net neutrality lite' and something that

³ J Boyle, "The Second Enclosure Movement and the Construction of the Public Domain" (2003) 66:33 Law and Contemporary Problems, 33 -74.

⁴ Note that between the editing and publication of the book the Group of European Regulators in Telecoms (GERT) was renamed the Body of European Regulators for Electronic Communications (BEREC).

⁵ R Corrigan, *Digital Decision Making: Back to the Future* (London: Springer-Verlag, 2007), at chapters 9 and 10.

⁶ RL Ackoff, *Redesigning the Future: Systems Approach to Societal Problems* (New York: John Wiley & Sons Inc, 1974).

ultimately forms a central plank of his co-regulatory way forward, relates to ensuring that ISPs are not allowed to engage in opaque and discriminatory traffic management to the detriment of Internet users of any class. 'Positive net neutrality' on the other hand is about ensuring a balance whereby investment in future broadband infrastructure is not discouraged. Network owners would be allowed to offer access to better services – the fast lane – for higher prices, as long as those services are offered on fair, reasonable and non-discriminatory (FRAND) terms to everyone. FRAND theoretically checks the inclination of service providers, content owners and vertically integrated behemoths of both to engage in exclusive deals, disadvantaging ordinary Internet users and commercial entities not party to those deals. It is an explicit recognition of the notion that genuine competition cannot exist in an unequal world. Much of the first three chapters of the book are given over to exploring these issues in depth.

The first three chapters and the regulatory soup of European law in Chapter 5 may well prove to be the most challenging for the general reader. My advice would be to stick with it, however, without worrying too much about following all the twists and turns of detailed economic and legal analysis. Persistence will pay off. If a general reader was to come away from the book with a simple realisation that much of what passes for public debate on net neutrality is what Dr Marsden describes as a "dialogue of the deaf" – net neutrality absolutists versus net neutrality refuseniks – then the reading time invested will have been worthwhile. Traffic management on congested networks is a fact of life and to suggest otherwise, as net neutrality purists do, is to invite easy criticism. Yet the promise of better quality of service 'next year', by those claiming that competition will cure network service problems, predates by about a decade the awakening of the public consciousness to the wiles of the Internet. Said promise is thus wearing a bit thin, and until we break the Gordian knot on large scale investment - from the public and private sectors – in universal super fast broadband infrastructure, congestion problems are going to be increasingly present.

Chapters 4, 5 and (to some degree) 6 tackle the primary concerns of digital rights activists relating to freedom of speech, personal privacy, creativity (e.g. remixing) and innovation. These in turn are intimately entangled in questions about intermediary liability and notice and takedown regimes, with particular concerns about architectural and legal control eroding the current legitimate ability of ISPs to avoid responsibility for user-generated content or traffic on their networks. When the ability to discriminate, control, block and invade privacy (through DPI or disclosing personal details to content owners on request) is built into the network, then all those facilities will be activated, regardless of any formal rules or procedures in place to prevent such discrimination or the undermining of personal freedoms. If the power to lay down the rules for such activities is to be devolved to senior government ministers and national regulatory authorities (NRAs) such as Ofcom, as it is, for example, in the UK Digital Economy Act 2010, it is important that they understand the complexity of the measurement of actual ISP operations and net user harm. The temptation, therefore, would be for an independent auditor (the NRA?) to choose metrics which are easy to measure rather than those that provide truly informative indicators of sector practice. Dr Marsden pulls no punches in relation to the variable performance and failings of NRAs in this regard, despite his inclination to settle on a co-regulatory approach, the option which he begins to outline in chapter 6.

Chapter 7 deals with the unique issues of the mobile Internet, and Chapter 8 concludes with what the author admits is an imperfect, best effort compromise, based on his net neutrality lite idea that ISPs should not be allowed to engage in opaque and discriminatory traffic management, to the detriment of Internet users. Net neutrality lite would be policed by some combination of agreed industry codes and NRA monitoring and enforcement. He sums up:

Co-regulation is a prevalent but awkward compromise between state and private regulation, with constitutionally uncertain protection for end-users and a worryingly large latitude for private censorship, which has been increasing throughout the last decade...Any solution needs to be holistic, considering ISPs' roles in the round, including their legal liabilities for content filtering...This is a policy area with no right answers that offer perfect solutions...I am happier limiting my solution to emphasize the complexity of the problem than trying to claim a one-size-fits-all solution. Net neutrality is an issue with potentially profound consequences, and cannot be entirely left to market actors, however neutral or benign their motives.

Internet services now form an integral part of the way that many people access education, employment, government and commercial services and a world of entertainment, in addition to a personal printing press, and electronic tools facilitating creativity and communications that most of us would not have dreamed of 25 years ago.

Cyber law and technology geeks understand that the Internet grew almost by accident, due to the fortunate coming together of a number of related things:

- 1. general purpose computers which can be programmed to do anything and are not controlled (post sale) by the vendor/manufacturer;
- 2. the open network which was open to everyone, and not just trusted sources like the existing conventional media giants; and
- 3. telecoms liberalisation a regulatory regime which meant that it could grow on the back of the telephone network, and before governments or teleos really noticed.

All of this - the general purpose computers, the open network and the lack of control led to an explosion of commercial, social and cultural creativity. Enterprises like Amazon, the World Wide Web itself, Wikipedia, Google, Facebook etc. grew. And because of the absence of concentrated control of the platforms or network *none of the instigators of these entities had to ask anyone for permission. No permission was required.*

Now, however, governments and commerce (including network operators) are very much aware of power of the Net and energetically attempting to assert control over it. These combined forces are leading to a closing down of the Net and an evolution towards a future of fragmentation (walled gardens and national firewalls) and control. That in turn kills the facility for innovation and creativity and leads to a creeping erosion of personal liberty.

So when Chris Marsden writes about a co-regulatory solution to net neutrality, he is not just dealing with some obscure, abstract technical concept, of interest only to technical specialists and policy wonks. In 'Net Neutrality: towards a co-regulatory solution' he makes a hugely important contribution (though he himself admits it is an

"awkward compromise") to improving the regulation of the default electronic constitutional architecture which will shape the future of our information society. The author is also to be commended for negotiating with Bloomsbury to make the work available under the Creative Commons Attribution Non-Commercial Licence.

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⁷ Full disclosure: I was an external examiner on Dr Marsden's PhD awarded by Essex University for his work on this book.